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

**Bronx**, New York

Prepared For:



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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**

PARSONS

SECTION 1 INTRODUCTION1-1
1.1 SITE CHARACTERIZATION STUDY OBJECTIVES 1-1
1.2 REPORT ORGANIZATION1-1
SECTION 2 SITE BACKGROUND
2.1 SITE OVERVIEW
2.2 ADJOINING PROPERTY DESCRIPTION
2.3 SITE HISTORY
2.4 TOPOGRAPHY, REGIONAL GEOLOGY, AND HYDROGEOLOGY 2-1
SECTION 3 SITE CHARACTERIZATION ACTIVITIES
3.1 SITE INSPECTION AND PRELIMINARY INVESTIGATION ACTIVITIES3-1
3.2 UTILITY CLEARANCE
3.3 SOIL BORING INSTALLATION
3.4 MONITORING WELL INSTALLATION/DEVELOPMENT
3.5 SURVEYING
3.6 GROUNDWATER SAMPLING
3.7 MANAGEMENT OF INVESTIGATION-DERIVED WASTE
3.8 DATA VALIDATION AND REPORTING
SECTION 4 SITE CHARACTERIZATION RESULTS 4-1
4.1 SITE GEOLOGY
4.2 FORMER GAS WORKS STRUCTURES
4.3 SITE HYDROGEOLOGY

# TABLE OF CONTENTS (CONTINUED)

#### Page

4.4 SOIL SAMPLE RESULTS
4.5 GROUNDWATER SAMPLE RESULTS 4-2
SECTION 5 EXPOSURE ASSESSMENT
SECTION 6 CONCLUSIONS AND RECOMMENDATIONS
SECTION 7 REFERENCES

# LIST OF TABLES

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

Sample Summary

Table 1

## TABLE OF CONTENTS (CONTINUED)

# LIST OF APPENDICES

- APPENDIX A SOIL BORING AND MONITORING WELL LOGS
- 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, 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

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.

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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  $\mu$ 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.

#### REFERENCES

- Hygienetics. 1997. Phase II Investigation Report of Hunts Point Produce Market Complex Parcels "A, B, C, D, and E", Bronx, New York. December 2, 1997.
- LMS, 1999a. Investigation Report for the Operating Unit portion of Parcel C, Bronx, NY, Hunts Point Food Distribution Redevelopment Plan. Lawler Matusky & Skelly Engineers LLP, November 1999.
- LMS, 1999b. Investigation Report for the Operating Unit portion of Parcel E, Hunts Point Food Distribution Redevelopment Plan, Lawler Matusky & Skelly Engineers LLP, August 1999.
- LMS, 2001. *Investigation Report for the Operating Unit Portion of Parcel B*, Lawler Matusky & Skelly Engineers LLP, May 2001.
- NYSDEC, 1998. NYSDEC Technical and Operational Guidance Series 1.1.1. NYSDEC, June 1998.
- NYSDEC, 2006. 6 NYCRR Part 375 Environmental Remediation Programs, New York State Department of Environmental Conservation. NYSDEC, December 2006.
- NYSDEC, 2010. DER-10 Technical Guidance for Site Investigation and Remediation: DEC Program Policy. New York State Department of Environmental Conservation, Albany, New York.
- Parsons, 2003. Hunts Point Offsite Manufactures Gas Plant Site History Report, Bronx, New York. Parsons, February 2003.
- Parsons, 2011. Site Characterization Work Plan for the Former Hunts Point Gas Works Marine Transfer Station (MTS) Parcel, Bronx, New York. Parsons, December 2011.
- RETEC, 2007. Characterization of Soil Background PAH and Metal Concentrations, Manhattan, New York. RETEC, March 2007.
- USEPA, 1999. United States Environmental Protection Agency CLP National Functional Guidelines for Organic Data Review, USEPA, October 1999.
- USEPA, 2004. United States Environmental Protection Agency CLP National Functional Guidelines for Inorganic Data Review, USEPA, October 2004.
- USEPA, 2006. Validation of Metals for the Contract Laboratory Program (CLP) based on SOW ILM05.3, SOP # HW-2, Rev. 13. USEPA, Region 2, September 2006.
- USEPA, 2008a. Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-846 Method 8260B, SOP # HW-24, Rev. 2. USEPA Region 2, August 2008.
- USEPA, 2008b. Validating Semivolatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-846 8270D, SOP # HW-22, Rev. 4. USEPA Region 2, August 2008.

P:\ConEd\448994 - Hunts Point MTS\WP\SCR\Hunts Point MTS - RIR 8-14-15\_FINAL.DOCX August 17, 2015

**TABLES** 

# Table 1Sample SummaryFormer Hunts Point MTS Gas WorksConsolidated Edison Company of New YorkSite Characterization - October 2014

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

X - Indicates sample was analyzed

\* - Indicates a duplicate sample

#### PARSONS

# Table 2Summary of Groundwater ElevationsFormer Hunts Point MTS Gas WorksConsolidated Edison Company of New YorkSite Characterization - October 2014

Monitoring Well Number	Total Well Depth (feet)	Top of Casing Elevation (feet AMSL)	Depth to Water (feet) <sup>(1)</sup>	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

Values         Values         Sample ID: Lab Sample Values         Num (17-9)-014100         Num (2,57-2)-014100         Num (2,57-2)-01400         Num (2,57-2)-01400 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>Field Duplicate of MW-4</th></t<>													Field Duplicate of MW-4
bits - 31 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -						MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-4	MW-4A
DEF   F-LI         Part (1)         (7, 6)         (32, 23)         (1, 1, 7)         (1													
Determine whether beneficiency is and is a second of the second													
Bandam Subjudi         Fraction													
Name         Source         Source <td></td>													
UNDER LOG 2000         UNDER LOG 2000        UNDER LOG 2000        UNDER LOG	Exceedan	ces inginighteu											
NAME         Uncentency         Uncency         Uncentency         Uncentency			NVSDEC Part 375	NVSDEC Part 375									
Disk Die Condenition         Same mark													
Mathem         mp         mp <th< td=""><td>CAS NO.</td><td>COMPOUND</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	CAS NO.	COMPOUND											
NYAM         NYAM <th< td=""><td></td><td>VOLATILES</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>		VOLATILES											
Default         Desc         Desc <thdesc< th="">         Desc         Desc         &lt;</thdesc<>	71-55-6	1,1,1-TRICHLOROETHANE	680	1000	mg/kg	ND	0.0043 J	ND	ND	ND	ND	ND	ND
51-56         QUEX	XYLMP		0.26	1000	mg/kg						ND		
00414         TUTLENZENCE         1         790         mp         mpic         ND	67-64-1		0.05	1000									
88-83         NOPPOPUPALINAZINA               NOP         NOP        NOP         NOP <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
BAS3         BITTY, ETTY, ET			1	780									
08872         METHYLYLOBIEXANE <td></td>													
59-20         EntryLink CHL080EP         0.05         0.05         0.001 /			0.12	1000									
bs-fs         OxTERNA (LINENATION PARAMENERS)         Or.g         Mode         ND         ND <td></td>													
Instruct         Out of the set of													
IMPOUND LATE         Image	9,5=47=0	O-XTEENE (1,2-DIMETHTEBENZENE)	0.20	1000	iiig/kg	ND	ND	ND	ND	ND	ND	ND	ND
IMPOUND LATE         Image					mg/kg	0.0441	0.0214	0.0223	0.0368	0.0234	0.1293	0.0235	0.0288
55-29         CEXAMPTITENE         20         1000         mg/k         ND         ND <td> </td> <td>SEMIVOLATILES</td> <td></td> <td> </td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		SEMIVOLATILES											
Bases         CEXAMITIVILINE         100         mg/sg         ND         ND </td <td>91-57-6</td> <td></td>	91-57-6												
Display         Display <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
55-53         BEXZ00ANTHRACENSE         1         11         mp/kg         0.0.1         ND         0.0.1         ND         ND         0.0.1         ND         ND         0.0.1         ND         ND         0.0.1         ND													
99.3-38         BX2001/FYRENE         1         1.1         me <sup>1</sup> / <sub>2</sub> 0.41         ND         ND         0.13         ND         ND         ND         0.23           91.352.01         LLAUPERTLENE         100         1000         me <sup>1</sup> / <sub>2</sub> 0.53         ND         ND         0.151         ND         ND         ND         0.151         ND         ND         0.071         ND         ND         0.071         ND         ND         0.071         ND         ND         0.035         0.053         ND         0.071         ND         ND         0.071         0.035         0.053         0.053         0.053         0.055         0.053         0.055         0.053         0.055         0.05													
BS2500         BEX2000 FLUCRANTHENE         1 <td></td>													
19/12-26         INCODE (LLIP GREAT LINENE         0.00         1000         mg/sg         ND													
9270-98         INEXDAX FLUCIALY INTRELAT         0.8         110         m <sup>1</sup> / <sub>2</sub> ND         ND         ND         ND         ND         ND           184-09         LINYLANT         1         10         mg kg         0.01         ND         ND         ND         ND         ND         0.023         0.023         0.023           184-09         LINYLANT         -         -         mg kg         ND			-										
113410         BISC-ETTIVLIMENTYLIMENTYLIMENTYLIMENTYLIMENTYLIMENTYLIMENTYLIMENTYLIMENTYLIMENTYLIMENTYLIMENTYLIMENTY           mage         0.10         ND         ND         0.11         ND         ND         0.035													
18:04:0         11         100         m <sup>2</sup> /m <sup>2</sup> /m <sup>2</sup> 0.01/J         ND         N	117-81-7												
84-66         DICTINUL PITTIALANTE           mg/kg         ND         ND <th< td=""><td>218-01-9</td><td></td><td>1</td><td>110</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	218-01-9		1	110									
1311-13         DMETHYL PHTHALATE           mpkg         0.61 J         0.53 J         0.53 J         0.53 J         0.53 J         0.54         0.05 MD         0.01 J         0.02 J         0.03 J           657.5         RLOGENE         30         1000         mpkg         ND	84-66-2												
86-73         FLUORENE         90         1000         m <sup>1</sup> / <sub>2</sub> ND         ND <td>131-11-3</td> <td>DIMETHYL PHTHALATE</td> <td></td> <td></td> <td></td> <td>0.61 J</td> <td>0.35 J</td> <td>0.53 J</td> <td>0.5</td> <td>0.4</td> <td>0.41 J</td> <td>0.57</td> <td>0.39</td>	131-11-3	DIMETHYL PHTHALATE				0.61 J	0.35 J	0.53 J	0.5	0.4	0.41 J	0.57	0.39
1993-95NDEENCL23-CL9PYRENE0.511mg/kgND	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
1-20-3         NAMPITI-ALLENC         12         1000         mgkg         ND         ND<	86-73-7		30	1000	mg/kg	ND	ND	ND	ND	ND			ND
Scill a prescription         000 mg/kg         0.2 mg/kg         0.2 mg/kg         0.2 mg/kg         0.0 mg/kg													
D18952         PHENCL D100         0.03 mg/kg         ND D100         ND mg/kg         ND D.7.1         ND ND         ND ND         ND D.2.31         ND ND         ND ND         ND ND         ND D.8.8         ND D.8.													
129-000PYRENE1001000mgkg0.71.JND0.19.J0.23.JNDNDND0.18.J0.48.J1006-8276-1 200 (ARC CDR 120)0767.160.540.897.220.680.80ND </td <td></td>													
rel         rel <td></td>													
Chs         ND           1065-22         CP-1250 (ARCLOR 1260)               ND	129-00-0	FIRENE	100	1000	mg/kg	0.71 J	ND	0.19 J	0.25 J	ND	ND	0.18 J	0.48 J
IDB/S (RD-1260 (AROCLOR 120))         0.1         25         mg/kg         0.088         ND					mg/kg	7.16	0.54	0.89	2.32	0.68	0.51	1.65	3.69
METALS													
JLUMNUM           mgkg         6130         7200         6730         9300         1420         60030         8030         7780           740-364         ATMMONY          mgkg         ND         ND         0.537 J         0.607 J         ND         ND         ND           7440-382         ARSENIC         13         16         mgkg         3.07         1.32         3.29         3.02         3.47         5.49         2.17         2.48           7440-382         ARKUM         350         10000         mgkg         178         7.5.2         7.3.8         9.2         18.1         44.3         84.8         84.4           440-17         BEKYLLUM         7.2         200         mgkg         ND         ND </td <td>11096-82</td> <td></td> <td>0.1</td> <td>25</td> <td>mg/kg</td> <td>0.088</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td>	11096-82		0.1	25	mg/kg	0.088	ND	ND	ND	ND	ND	ND	ND
440-360ANTMONYmg/kgNDNDND0.5370.607 JNDNDNDNDND440-382ARSENIC	7429-90-4				mg/kg	6130	7320	6730	9300	1420	6030	8030	7780
14-0.38-2       ARSENC       13       16       mg/kg       3.07       1.32       3.29       3.02       3.47       5.49       2.17       2.48         V40-39.3       BARUM       350       10000       mg/kg       178       75.2       73.8       92       18.1       44.3       84.8       84.4         V40-39.3       BARUM       7.2       2700       mg/kg       0.404       0.381       0.442       0.496       0.142 J       0.426       0.596       0.536         V440-43       CALCUM         mg/kg       1760       1800       ND       ND <td></td>													
7440-39: BARUM       350       1000 $m_{g}^{k}k_{g}$ 178       75.2       73.8       92       18.1       44.3       84.8       84.4         7440-17.3       BERYLLIUM       7.2       2700 $m_{g}k_{g}$ 0.404       0.381       0.442       0.496       0.142 J       0.426       0.596       0.533       0.0700       12100       1240-0-2       20.444-07.3       61760       2.58       1.15       1.65       5.89       1.25       1.12       1440-59       20000       16700       2.2500       5560       11760       2.1700       19600         7439-954       MACRSHUM         mg/kg       6970       3780       18900       4770       5560       11760       2.1700       19600         7439-954       MACRSHUM         mg/kg       6970 <t< td=""><td></td><td></td><td>13</td><td>16</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>			13	16									
7440.4.39         CADMIUM $2.5$ $60$ $mg/g$ ND	7440-39-3	BARIUM											
$\gamma = 40.0 \circ 2$ CALCUM $\cdots$ $mg kg$ $17600$ $1800$ $35200$ $2680$ $14900$ $5330$ $10700$ $12100$ $\gamma = 40.47.3$ CHROMIUM, TOTAL $30$ $6800$ $mg kg$ $22.3$ $20.9$ $15.5$ $20.9$ $8.65$ $18.1$ $22.3$ $23.4$ $\gamma = 40.48.4$ COBALT $\cdots$ $\cdots$ $mg kg$ $7.93$ $11.9$ $7.58$ $11.5$ $1.65$ $5.89$ $12.5$ $11.2$ $\gamma = 40.98.6$ (RON $\cdots$ $-\omega$ $mg kg$ $200$ $18.5$ $16.6$ $17.5$ $8.8$ $18.6$ $17.4$ $18.5$ $\gamma = 49.95$ (MAGNESUM $-\omega$ $mg kg$ $200$ $16700$ $23500$ $550$ $1760$ $21700$ $19600$ $\gamma = 49.95$ (MAGNESUM $-\omega$ $mg kg$ $6670$ $3780$ $18900$ $4770$ $5870$ $4280$ $9300$ $9300$ $9302$ $\gamma = 49.95$ (MAGNESUM $-\omega$ $mg kg$ $144$ $ND$ $0.175$													
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           7440-48.4 COPFER         50         10000         mg/kg         20         18.5         16.6         17.5         8.8         18.6         17.4         18.5           7439-86 (RON           mg/kg         15400         20000         16700         23500         5560         17600         21700         19600           7439-95.4         MAGNESIUM           mg/kg         6970         3780         18900         4770         5870         4280         9300         9000           7439-95.6         MAGNESE         1600         10000         mg/kg         201         170         227         233         64.8         304         301         3224           7440-97         FORASUM          mg/kg         38.5         17.9         14.4         17.3         3.38         144			2.5	60	mg/kg								
r440-84       OBALT        mg/kg       7.93       11.9       7.88       11.5       1.65       5.89       12.5       11.2         7440-50-8 COPPER       50       1000       mg/kg       20       18.5       16.6       17.5       8.8       18.6       17.4       18.5         7449-50-8 (RON         mg/kg       15400       2000       16700       23500       5560       17600       21700       196000         7439-52-11 EAD       63       3900       mg/kg       112       4.17       87.8       35       41       63.2       76.6       113         7439-54       MACNESIUM         mg/kg       6970       3780       18900       4770       5870       4280       9300       9300       9000         7439-54       MACNESIUM         mg/kg       201       170       227       233       64.8       304       301       322         7440-02-0       NICKEL       30       10000       mg/kg       160       4280       1870       3080       338       14       45.2       30.7         7440-02-0       NICKEL       30       10000	7440-70-2	CALCIUM											
7440-05-8\COPPER         50         1000 $mg/kg$ 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         1760         21700         19600           7439-95-ILEAD           mg/kg         6670         3780         18900         4717         5870         420         9300         9000           7439-95-IMAGNEANESE         1660         10000         mg/kg         6670         3780         18900         4717         5870         4280         9300         9000           7439-95-IMAGNEANESE         1660         10000         mg/kg         201         170         227         233         64.8         304         301         3222           7439-97-6         MERCURY         0.18         5.7         mg/kg         38.5         17.9         14.4         17.3         3.38         0.145         0.064         0.064           7440-0-9         POTASUM          mg/kg         1760         4280         1870         3800         3337         1480			30	6800									
$\gamma 439-86$ (RON         mg/kg       15400       20000       16700       23500       5560       17600       21700       19600 $\gamma 439-954$ (MAGNESIUM         mg/kg       112       4.17       87.8       35       4.1       63.2       76.6       113 $\gamma 439-954$ (MAGNESIUM         mg/kg       6970       3780       18900       4770       5870       4280       9301       9302       9301       9300       9300													
7439-92-1       LEAD       63       3900       mg/kg       112       4.17       87.8       35       41       63.2       76.6       113         7439-95-4       MARGNESIUM         mg/kg       6670       3780       18900       4770       5870       4280       9300       9000       9000         7439-95-4       MARGNESIUM         mg/kg       201       170       227       233       64.8       304       301       322         7439-95-4       MERCURY       0.18       5.7       mg/kg       1.41       ND       0.175       0.053       0.038       0.145       0.064       0.064         7440-05       707ASSUM         mg/kg       3.85       17.9       14.4       17.3       3.38       1.4       45.2       307         7440-05       707ASSUM         mg/kg       76.6       4280       1870       3000       337       1480       24.0       2060         7784-02-2       SELENIUM       3.9       6800       mg/kg       1.07       1.1       1.12       1.52       0.296 J       1.61       1.41       1.25         7440-2				10000									
y439-954     MAGNESIUM       mg/kg     6670     3780     18900     4770     5870     4280     9300     9000       y439-956     MAGNESE     1600     1000     mg/kg     201     170     227     233     64.8     304     301     322       y439-956     MARGANESE     0.18     5.7     mg/kg     1.41     ND     0.175     0.053     0.038     0.145     0.064     0.064       y440-02-0     NCKEL     30     10000     mg/kg     38.5     17.9     14.4     17.3     3.38     1.4     45.2     30.7       y440-09-POTASSUM       mg/kg     1760     4280     1870     3800     337     1480     2410     2060       y782-92     SELENIUM     3.9     6800     mg/kg     170     1.1     1.12     1.52     0.294 J     1.61     1.44     1.25       y440-25     SODUM       mg/kg     765     952     911     2330     1120     1190     2209     2580       y440-25     SODUM       mg/kg     20.9     32     22.8     28.8     6.87     18.8     34.4     30       y440-66     <				3000									
V439-96-SIMARCANESE         1600         10000         mg/rg         201         170         227         233         64.8         304         301         322           V439-97-6         MERCURY         0.18         5.7         mg/rg         141         ND         0.175         0.053         0.038         0.145         0.064         0.064           V440-02-0         NICKEL         30         10000         mg/rg         38.5         11.9         14.4         17.3         3.38         14         45.2         30.7           V440-02-0         NICKEL         30         mg/rg         ND         0.51         0.0347         30.80         337         1480         2410         2060           V724-92-SELENIUM          mg/rg         ND         0.51         0.347         0.547         ND         0.474         0.547         ND         0.474         1.44         1.73         3.80         1.61         1.41         1.25           V440-25-SIODUM          mg/rg         1.07         1.1         1.12         1.52         0.261         1.61         1.41         1.25           V440-25-SIODUM          mg/rg         705         952	7439-92-1	MAGNESIUM		3900									
7439-97-6/MERCURY         0.18         5.7         mg/kg         1.41         ND         0.175         0.033         0.038         0.145         0.064         0.064           7440-02-0 NICKEL         30         1000         mg/kg         385         17.9         14.4         17.3         3.38         14         45.2         30.7           7440-05/POTASSUM           mg/kg         1760         4280         1870         3000         337         1480         24.00         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         0.294 J         1.61         1.41         1.25           7440-25-2 VANDUM           mg/kg         765         952         911         2330         1120         11900         2290         2580           7440-66-6 ZINC           mg/kg         20.9         32         22.8         28.8         6.87         18.8         34.4 <t< td=""><td></td><td></td><td></td><td>10000</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>				10000									
744-00-20 NICKEL     30     1000     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       7524-9-25 ELENUM     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       7440-23-5 SDOTUM     2     6800     mg/kg     1.07     1.1     1.12     1.52     0.296 J     1.61     1.41     1.25       7440-23-5 SDOTUM       mg/kg     765     952     911     230     2100 J     11900     2290     2580       7440-65 ZIV-C     1000     mg/kg     20.9     32     22.8     28.8     6.87     18.8     34.4     30       7440-66 ZIV-C     1000     mg/kg     155     43.9     81.9     72.3     28.8     105     85.9     89.6													
V440-09-IPOTASSUM       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     0.994 J     ND     0.743 J     0.466 J     0.478 J       7782-49-2 SELENIUM     2     6800     mg/kg     1.07     1.1     1.12     1.52     0.205 J     1.61 J     1.41     1.25       7440-23-5 SODIUM       mg/kg     765     952     911     2330     1120     11900     2290     2580       7440-6-6 ZVANADIUM       mg/kg     20.9     32     22.8     28.8     6.87     18.8     34.4     30       7440-6-6 GNC     109     1000     mg/kg     15     43.9     81.9     72.3     28.8     105     85.9     89.6	7440-02-0	NICKEL	30										
7782-49-2]SELENIUM         3.9         6800         mg/kg         ND         0.51 J         0.347 J         0.504 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           7440-66-62[NC          mg/kg         20.9         32         22.8         28.8         6.87         18.8         34.4         30           7440-66-62[NC         109         1000         mg/kg         155         43.9         81.9         72.3         28.8         105         85.9         89.6													
V440-22-43 LLVER         2         680         mg/kg         1.07         1.1         1.12         1.52         0.201         1.61         1.41         1.25           V440-23-550DUM           mg/kg         765         952         911         230         1120         11900         2290         2580           V440-23-550DUM           mg/kg         20.9         32         22.8         28.8         6.87         18.8         34.4         30           V440-66-62 INC         109         10000         mg/kg <b>155</b> 43.9         81.9         72.3         28.8         105         85.9         89.6           V4Hex           mg/kg <b>155</b> 43.9         81.9         72.3         28.8         105         85.9         89.6													
7440.62-2         NADIUM           mg/kg         20.9         32         22.8         28.8         6.87         18.8         34.4         30           7440-66-6         ZINC         109         1000         mg/kg         155         43.9         81.9         72.3         28.8         105         85.9         89.6           OTHER			2	6800	mg/kg								
7440-66-6ZINC         109         1000         mg/kg         155         43.9         81.9         72.3         28.8         105         85.9         89.6													
OTHER OTHER													
	7440-66-6		109	10000	mg/kg	155	43.9	81.9	72.3	28.8	105	85.9	89.6
	57 12 5		27	10000	malka	1.96	NID	0.104.7	0.228 1	0.221 7	0.056 1	0.205 1	0.245

Notes: (1) 6NVCRR 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) Jindicates an estimated concentration

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

0 0 1	D		1			<b>GD</b> 4	6D 1	6D A	6D A	an a	61D 0
Con Ed - H				Location ID:	MW-4	SB-1	SB-1	SB-2	SB-2	SB-3	SB-3
	Soil Analytical Data			Sample ID:	MW-4(49-51)-20141003		SB-1(17-19)-20141007	SB-2(9-11)-20141008		SB-3(15-17)-20141009	
October 20				Lab Sample Id:	F4241-05	F4241-12	F4241-13	F4241-14	F4241-15	F4241-16	F4241-17
SDG: F42				Depth:	49 - 51 ft	7 - 9 ft	17 - 19 ft	9 - 11 ft	39 - 41 ft	15 - 17 ft	35 - 37 ft
	ompounds only			Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
Exceedanc	es highlighted			SDG:	F4241	F4241	F4241	F4241	F4241	F4241	F4241
				Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		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
	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
	ETHYLBENZENE	1	780	mg/kg	ND	ND	ND	ND	0.047 J+	ND	ND
98-82-8	ISOPROPYLBENZENE (CUMENE)			mg/kg	ND	ND	ND	ND	0.0441 J+	ND	ND
78-93-3	METHYL ETHYL KETONE (2-BUTANONE)	0.12	1000	mg/kg	ND	ND	ND	ND	0.0329 J	ND	ND
	METHYLCYCLOHEXANE			mg/kg	ND	ND	ND	ND	0.0022 J	ND	ND
75-09-2	METHYLENE CHLORIDE	0.05	1000	mg/kg	0.0051 J	0.0049 J	0.0053 J	0.0058	0.0146	0.0027 J	0.0062
95-47-6	O-XYLENE (1,2-DIMETHYLBENZENE)	0.26	1000	mg/kg	ND	ND	ND	ND	0.0099 J+	ND	ND
			1								
	Total VOCs			mg/kg	0.0201	0.0135	0.0545	0.022	0.2815	0.0104	0.0174
	SEMIVOLATILES		1								
	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
	ACENAPHTHYLENE	100	1000	mg/kg	ND	ND	ND	ND	0.48 J	ND	ND
	ANTHRACENE	100	1000	mg/kg	ND	ND	ND	ND	1.4	ND	ND
	BENZO(A)ANTHRACENE	1	11	mg/kg	ND	ND	ND	0.88 J	2.1	ND	ND
	BENZO(A)PYRENE	1	1.1	mg/kg	ND	ND	ND	0.62 J	1.6	ND	ND
	BENZO(B)FLUORANTHENE	1	11	mg/kg	ND	ND	ND	0.8 J	1.5	ND	ND
	BENZO(G,H,I)PERYLENE	100	1000	mg/kg	ND	ND	ND	0.39 J	0.75 J	ND	ND
	BENZO(K)FLUORANTHENE	0.8	110	mg/kg	ND	ND	ND	0.46 J	0.62 J	ND	ND
	BIS(2-ETHYLHEXYL) PHTHALATE			mg/kg	ND	0.14 J	ND	1.3 J	ND	0.4	ND
	CHRYSENE	1	110	mg/kg	ND	ND	ND	0.78 J	1.9	ND	ND
	DIETHYL PHTHALATE			mg/kg	ND	ND	ND	ND	ND	0.38	0.32 J
	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
	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
	Total SVOCs			mg/kg	0.35	0.86	0.61	10.22	23.88	1.23	0.78
	PCBs										
11096-82-	PCB-1260 (AROCLOR 1260)	0.1	25	mg/kg	ND	ND	ND	ND	ND	ND	ND
	METALS										
	ALUMINUM			mg/kg	3160	7420	8130	6700	10100	1710	7730
	ANTIMONY			mg/kg	ND	ND	0.963 J	ND	0.998 J	ND	ND
7440-38-2	ARSENIC	13	16	mg/kg	0.789 J	2.73	3.54	3.4	21.6	1.23	1.83
7440-39-3	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	0.682	ND	ND
	CALCIUM			mg/kg	1160	1370	8590	34000	6130	785	2090
7440-47-3	CHROMIUM, TOTAL	30	6800	mg/kg	12	18.6	19.3	31.2	49.8	4.72	22.8
7440-48-4				mg/kg	4.81	11.7	8.31	7.17	10.47	1.95	10.83
7440-50-8		50	10000	mg/kg	7.16	18.5	21	31.1	150	4.04	21.6
7439-89-6				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			mg/kg	14.8	25.4	22.2	27.5	32.4	6.52	32.1
	ZINC	109	10000	mg/kg	20.6	71.5	96.1	162	551	16.2	41.3
7440-66-6											
	OTHER CYANIDE	27	10000		0.065 J	0.075 J	0.04 J	8.42	1.49	ND	0.13 J

Notes:

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) I 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

#### 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 - Hu	unts Point		Location ID:	MW-1	MW-1	MW-2	MW-3	MW-4
Validated G	roundwater Analytical Data		Sample ID:	MW-1-20141031	MW-11-20141031	MW-2-20141031	MW-3-20141031	MW-4-20141031
October 201	4		Lab Sample Id:	F4556-01	F4556-04	F4556-11	F4556-07	F4556-05
SDG: F455	6		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	10202011	11/2 // 2011	11/20/2011	1020201
	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	4.3 J	ND	ND	3.1 J
00 01 0	PCBs	0.09	ug/l	ND	ND	ND	ND	ND
<u> </u>	METALS	0.07						
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
7440-39-3	BARIUM	1000	ug/l	301	294	266	53.9	555
7440-41-7	BERYLLIUM	3	ug/l	ND	ND	0.72 J	ND	ND
7440-71-7	CALCIUM		ug/l	121200	119900	95000	153100	604600
7440-70-2	CHROMIUM, TOTAL	50	ug/l	4.44 J	10.48	35.2	ND	4.91 J
7440-47-3	COBALT		ug/l	ND	ND	11.9 J	ND	6.07 J
7440-48-4	COPPER	200		ND	2.45 J	35.6	8.12 J	9.7 J
7439-89-6	IRON	300	ug/l ug/l	3280	3400	16700	8.12 J 148	
7439-89-6	LEAD	25			5.97 J	16700	148 1.85 J	<b>6300</b> 11.2
7439-92-1 7439-95-4	MAGNESIUM	25 35000	ug/l	6.31 12600	12600	43000		
			ug/l				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							
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)

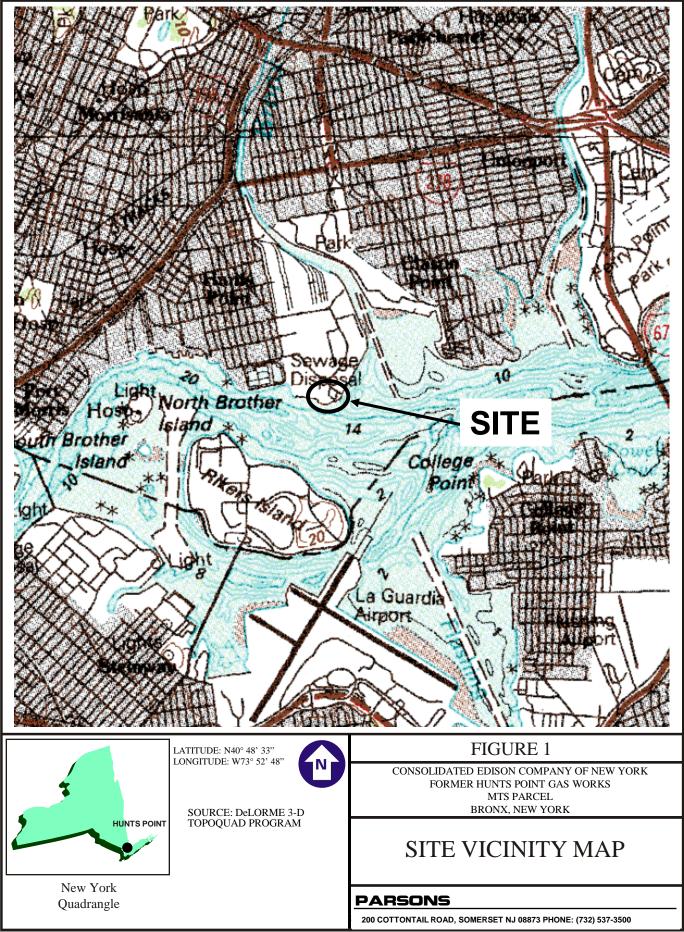
(2) -- indicates no standard or guidance value is available

(3) ND indicates compound was not detected

(4) J indicates an estimated concentration

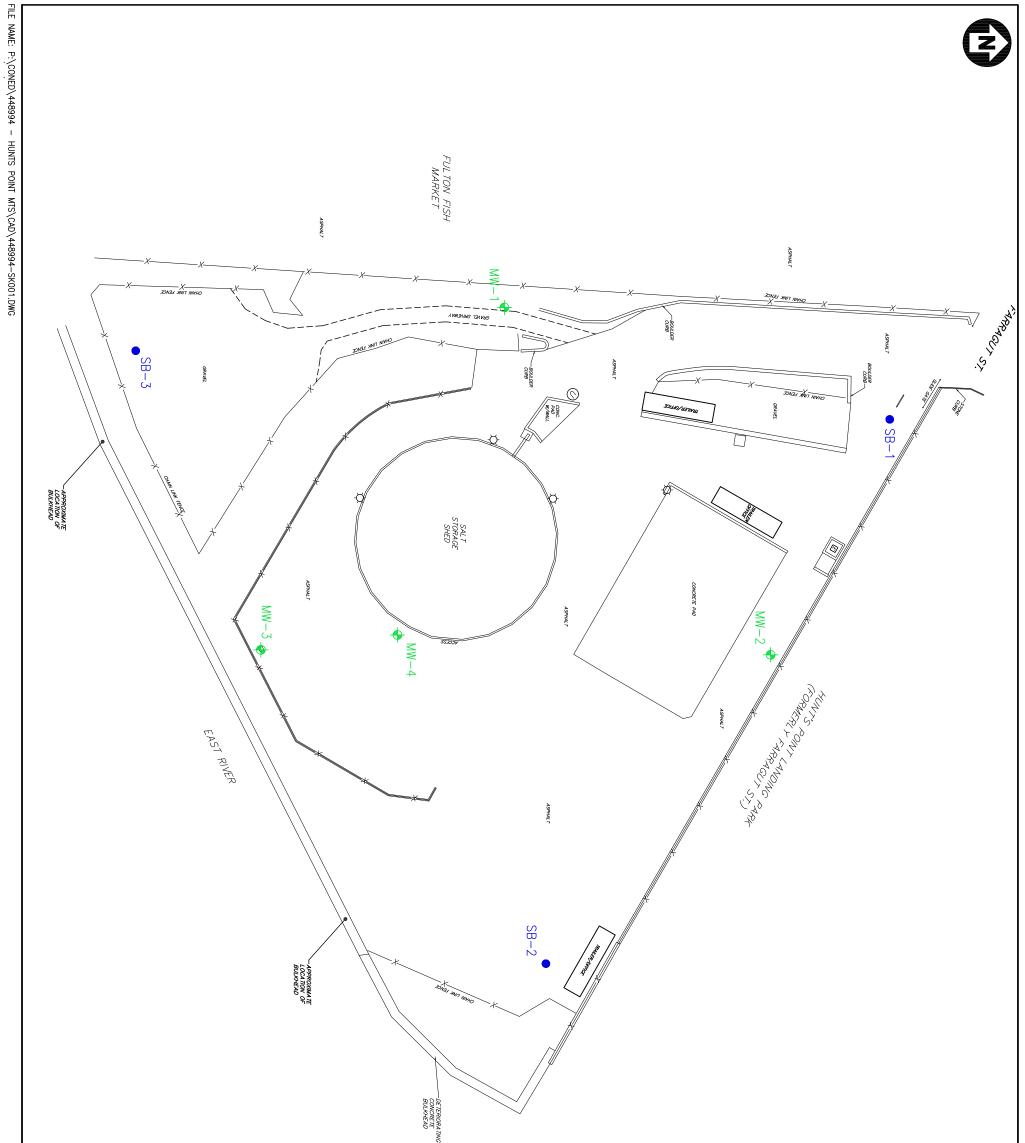
(5) Shaded values exceed NYSDEC Class GA Groundwater Standards and Guidance Values

FIGURES

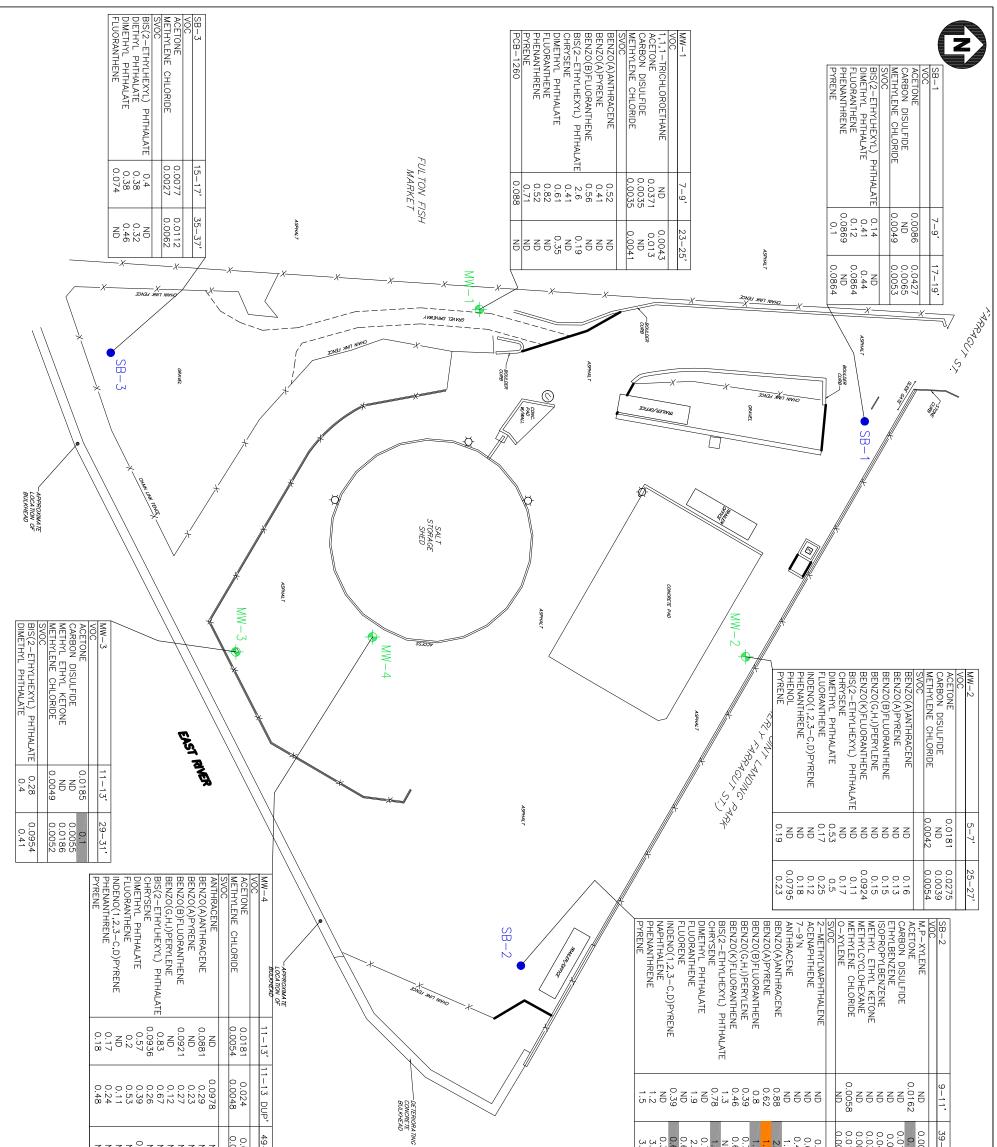


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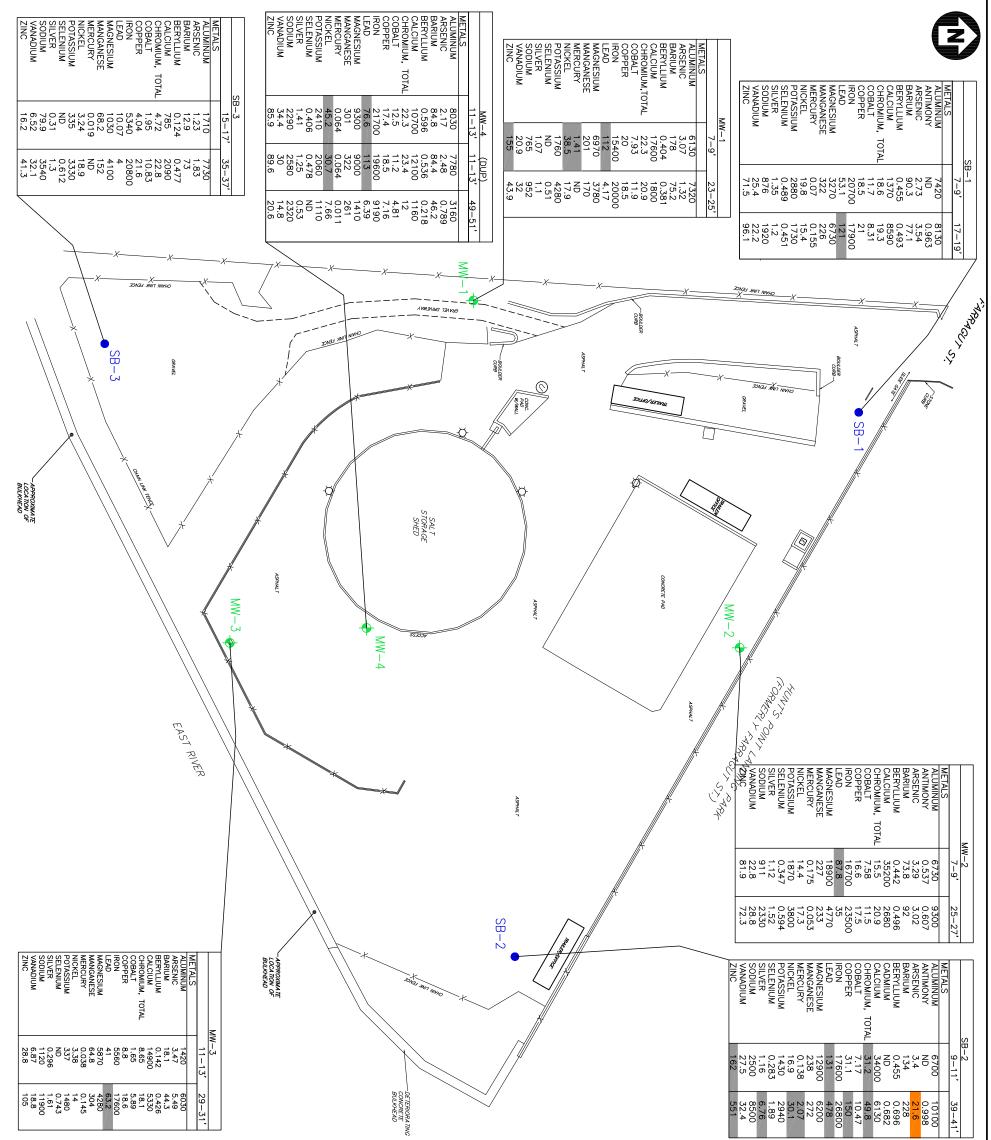


SCALE: 1"=60" FIGURE 3 con Edison Hunts point mts bronx, new york SAMPLE LOCATION MAP PARSONS 301 Planfeld road, suite 350, syracuse, new york 13212 Phone:315-451-9560	NOTE: MAP BASED ON ORIGINAL SURVEY COMPLETED BY CHAZEN ENGINEERING, LAND SURVEY, AND LANDSCAPE ARCHITECTURE CO., D.C.P. ON OCTOBER 9, 2014.	<ul> <li>SITE CHARACTERIZATION MONITORING WELL LOCATIONS</li> <li>SITE CHARACTERIZATION SOIL BORING LOCATIONS</li> </ul>



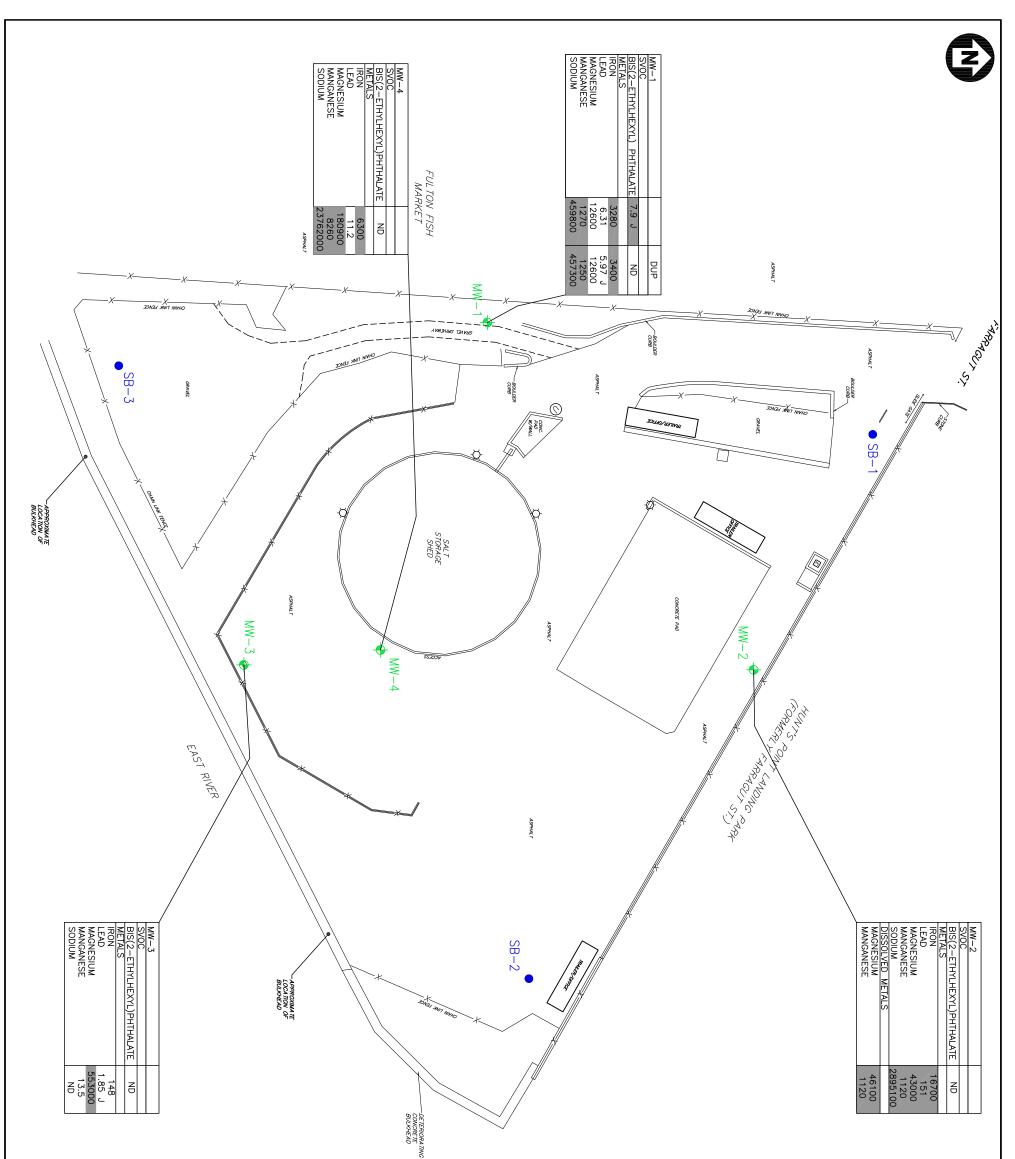
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	8888	9–51' 1.015 .0051	о		.2 \	-68 -68	ب 50 0 00 v	0.7 .61 .48 .2	0146 0099	047 0441 0329 0022	-41 <sup>*</sup> 0095	,
F VOCS, SUBSURF, NEW YO	SCALE: 1"=60'	60 30 60	4. ONLY COMPOUNDS DETECTED LOCATION ARE SHOWN.	3. ORANGE SHADED VALUES EXCEE BOTH THE 6 NYCRR PART 375 UNRESTRICTED AND RESTRICTED INDUSTRIAL SOIL CLEANUP OBJECTIVES.	2. GREY SHADED VALUES EXCEED 6 NYCRR PART 375 UNRESTRICTED CLEANUP OBJECTIVES.	1. ALL CONCENTRATIONS ARE PER MILLION (ppm)	NOTES:		ND NOT DETECTED	<ul> <li>SITE CHARACTERIZATION BORING LOCATIONS</li> </ul>	SITE CHARACTERIZATION MONITORING WELL LOCA	<u>LEGEND:</u>
RK SVOCS AND ACE SOIL RK 13212 PHONE:315-451-9560		120	CTED AT EACH	EXCEED RT 375 TRICTED P	XCEED 6 STRICTED SOIL	RE IN PARTS				ON SOIL	OCATIONS	



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∛   m≤ _ <sup>⊣</sup> õ	SCALE: 1"=60' FIGURE 5	30 0 60 120	3. ORANGE SHADED VALUES EXCEED BOTH THE 6 NYCRR PART 375 UNRESTRICTED AND RESTRICTED INDUSTRIAL SOIL CLEANUP OBJECTIVES.	2. GREY SHADED VALUES EXCEED 6 NYCRR PART 375 UNRESTRICTED SOIL CLEANUP OBJECTIVES.	1. ALL CONCENTRATIONS ARE IN PARTS PER MILLION (ppm)	NOTES:	ND NOT DETECTED	<ul> <li>SITE CHARACTERIZATION SOIL</li> <li>BORING LOCATIONS</li> </ul>	SITE CHARACTERIZATION MONITORING WELL LOCATIONS	LEGEND:



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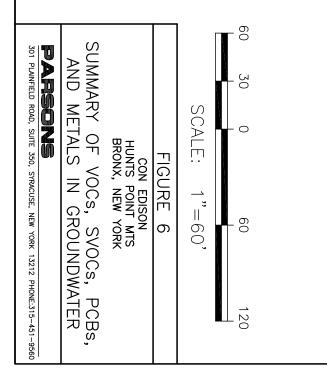
SITE CHARACTERIZATION MONITORING WELL LOCATIONS

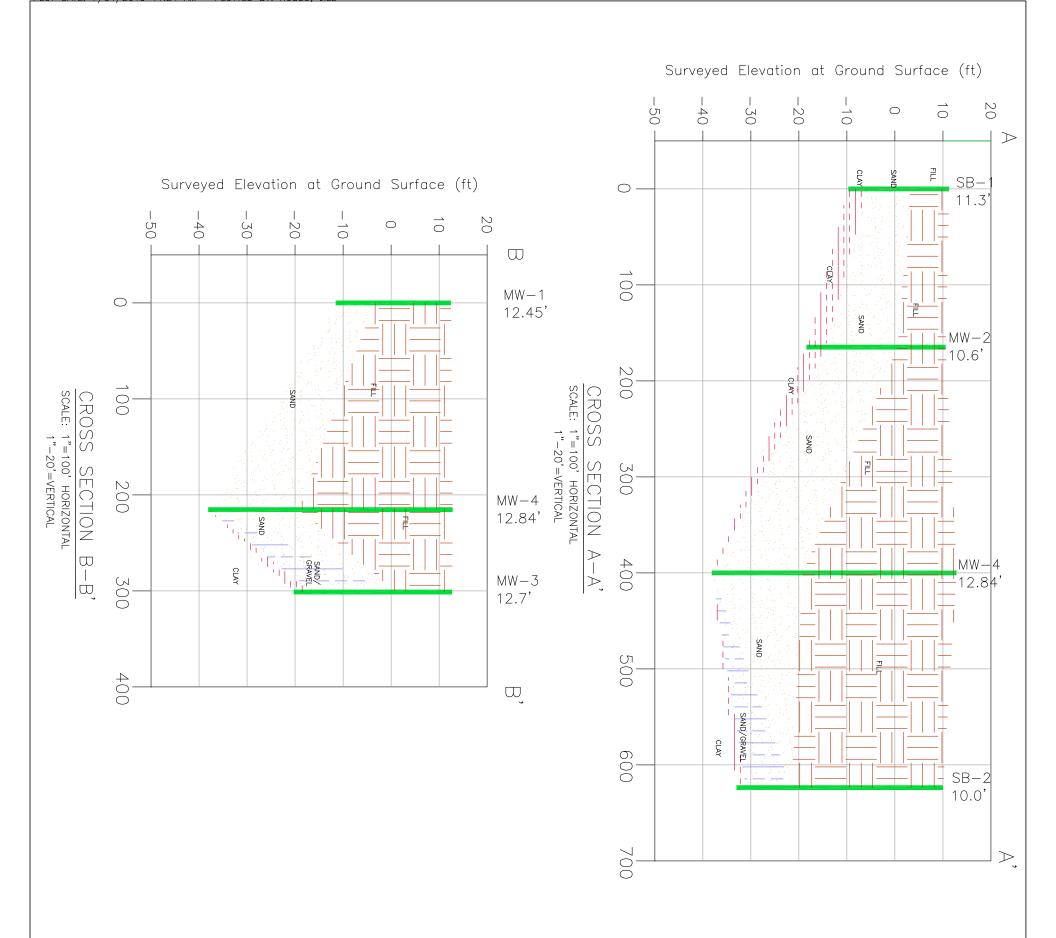
 $\blacklozenge$ 

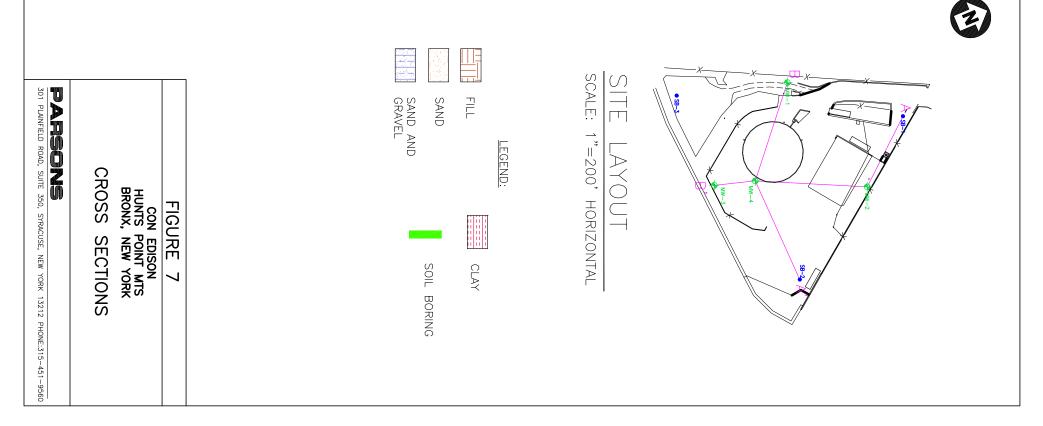
- SITE CHARACTERIZATION SOIL BORING LOCATIONS
- ND NOT DETECTED

NOTES:

- 1. ALL CONCENTRATIONS ARE IN PARTS PER BILLION (ug/L)
- 2. SHADED VALUES EXCEED NYSDEC AMBIETT WATER QUALITY CLEANUP OBJECTIVES.
- 3. COMPOUNDS THAT EXCEEDED NYSDEC AMBIENT WATER QUALITY CLEANUP OBJECTIVES IN ONE OR MORE GROUNDWATER SAMPLES SHOWN.
- 4. NO VOCS OR PCBS EXCEEDED NYSDEC AMBIENT WATER QUALITY CLEANUP OBJECTIVES.







# **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 driv	eway of the MTS property	
nspector:	Zohar Lavy			•	PROJECT NUMBER: 448994-01000		ž <u>1 1 ž</u>	
Rig Type:	Truck CME-7	5		•				
	GROUNDWATE	ER OBSERVAT	TIONS					
Vater	DTW	DTW			Weather: Clouds and Rain, up to high 60s			
evel	~11 ft bgs	9.9 ft bgs				See Sit	e Plan	
Date	10/1/14	10/10/14			Date/Time Start: 10/1/14 0950			
`ime	1013	900				1		
leas.					Date/Time Finish: 10/1/14 1500			
rom	Split Spoon	TOC						
Sample Depth	Sample I.D.	SPT	Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATI	C COMMENTS	
+1							Locking J-plug on	
		1		1	1		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	]		Cement/Bentonite	
3		Vactron		0.0			Grout (0' - 5')	
4		Vactron		0.0			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	┐┢╋╼┫┝┽╣	(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	7 100 10	Bentonite (5-7')	
8					fine sub-angular Gravel, trace Concrete, trace Silt; 6-18" Dry, dark brown, fine to medium	1 1001 10		
					SAND, trace Silt, trace Brick fragments			
9		5-3-3-3	0	NA	No Recevery		#1 Sand	
10		2244	22	0.0		┥╽┈╞╉╝	(7-19')	
12		3-3-4-4	33	0.0	Wet, dark grey/brown, fine to medium SAND, trace Silt, trace sub-round fine to medium Gravel	Ⅰ Ⅰ∷⊨∔∷		
13		1-2-3-6	33	0.0	Wet, dark grey/brown, fine to medium SAND, trace Silt, trace sub-round fine to medium	┥╽┈╞╉┈		
13		1-2-5-0	33	0.0	Gravel, trace Concrete			
15		3-5-6-24	25	0.0	Wet, dark grey/brown, fine to medium SAND, some Gneiss Cobble, trace Silt, trace sub-round	┨ [ः]⊨{ः	0.02-inch slot PVC	
16		5-5-6-24	25	0.0	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-	{  ∷ <del> {</del>	Weir Sciecci 2 -iib () - i))	
18		10 5 11 12	05	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,			
		1			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	1		
20						1		
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						4		
25		50/0"	0	NA	No Recevery	4		
					End of Boring at 25 ft bgs			
	SAMPLING METH	OD			COMMENTS:	-		
	WH = WEIGHT OF H				0-5 ft bgs was hand cleared			
HC = HAND CLEARED					5-25 ft bgs advanced utilizing hollow stem augers and split spoons			
	VC = VACUUM CLE							
	WOR = WEIGHT OF	RODS						

1 of 9

					PARSONS	BORING/WELL ID: MW-2 Sheet 1 of 1 Location Description: Along northeast property boundry			
					DRILLING RECORD				
ontracto	r: Advanced Dri	lling Technolog	y (ADT)						
riller:		German Torres			PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property				
spector: ig Type:		5			PROJECT NUMBER: 448994-01000				
ig Type:	GROUNDWATE		TIONS			+			
ater	DTW	DTW	IONS		Weather: Clear, up to low 70s				
evel	~ 7 ft bgs	7.28			······································	See Site Plan			
ate	10/6/14	10/10/14			Date/Time Start: 10/6/14 1440				
ime	1452	1220							
leas. rom	Split Spoon	TOC			Date/Time Finish: 10/7/14 1025	-			
Sample	Sample	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC COMMENTS			
Depth	I.D.	~	(%)	(ppm)					
+1						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	0.0-0.5' Cover and Concre			
2		Vactron		0.0	Gravel, trace Concrete debris	Bentonite (0-3')			
3		Vactron		0.0	4				
4				0.0	4				
	10000	Vactron			Moist, brown, fine to medium SAND, some fine to coarse angular to sub-round Gravel, little	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 Concrete debris, trace Silt	(0.5-5')			
6									
7		1-1-1-2	67	0.0	Wet, brown/orange, fine to medium SAND, little fine to coarse sub-angular Gravel, trace Silt,				
8					trace weathered Gneiss				
9		1-2-2-4	67	0.1	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	0 Wet, brown, fine to medium SAND, little fine sub-round Gravel, trace Silt	1 (23) 231   1 1 1			
12		2001	55	0.0		Well Screen 2"-ID (5' - 15')			
12		NUL 1 20 21	50	0.0	Wet, brown, fine to medium SAND, some weathered Gneissic Schist, little fine sub-round	wen screen 2 -in (5 - 15)			
-		WH-1-20-31	50	0.0	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 Gravel, trace Silt; 4-10" Wet, black, fine SAND and angular GRAVEL	0.02-inch slot PVC			
16			ļ			4			
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			ļ			_			
21		9-17-15-11	42	0.1	Moist, brown/grey fine to medium SAND and weathered GNEISSIC SCHIST				
22			ļ			_			
23		9-7-4-6	67	0.1	Moist, brown, medium SAND, little weathered Gneissic Schist				
24						<u> </u>			
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 METH	OD			COMMENTS:				
WH = WEIGHT OF HAMMER					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								

2 of 9

					PARSONS	BORING/WELL ID: MW-3		
					DRILLING RECORD		Sheet 1 of 1	
Contractor: Advanced Drilling Technology (ADT)						Location Description:		
Driller: Tom Sheerin, German Torres					PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property	Along southern edge of	MTS property.	
spector: Zohar Lavy					PROJECT NUMBER: 448994-01000			
ig Type:								
	GROUNDWATE		IONS					
	DTW	DTW			Weather: Clear, up to low 70s	a a: D		
evel	~ 9 ft bgs 10/3/14	8.45				See Site Pla	n	
ate	1415	10-10-14			Date/Time Start: 10/3/14 1130			
ime	1415	1415			D ( /T)' - F' ' I 10///14 1000			
feas. rom	Calls Carson	TOC			Date/Time Finish: 10/6/14 1000	-		
	Split Spoon	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC	COMMENTS	
Sample Depth	Sample I.D.	SF1	(%)	(ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC	COMMENTS	
	1.D.		(70)	(ppm)				
+1							Locking J-plug on	
							inner wall	
0		Vactron		NA	0-12" ASPHALT		Flush Mount Well	
1		Vactron		0.0	12"-3' Dry, grey, fine to medium SAND and medium to coarse sub-angular GRAVEL		0.0-0.5' Cover and Concrete	
2					3-5' Moist, brown, fine to medium SAND, little Wood, little medium to coarse sub-angular	▏₣▖▖▖▖		
		Vactron		0.0	Gravel, trace Concrete debris		Cement/Bentonite	
3		Vactron		0.0			Grout (0' - 7')	
4		Vactron		0.0			2-inch ID PVC Riser	
5		28-16-18-18	67	0.0	Dry, grey/brown, fine to medium SAND and CONCRETE debris, some coarse angular Gravel	1 🖊 M	(0.5-11')	
6		25-10-10-10	07	0.0			(011)	
		20.16.10.12			0 ("Des answherene fas te ending CAND and CONCRETE debie			
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 coarse SAND		Bentonite (7-9')	
					coarse SAIND			
9		14-10-11-6	50	0.0	Dry, grey/brown, fine to medium SAND, some fine to coarse angular to sub-round Gravel,			
10			50	0.0	little Concrete, trace Brick			
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,	╡╽┈╞╡┈┝	(9-21')	
		0-3-2-2	07	0.2	black, medium to coarse SAND, trace fine sub-round Gravel		(9-21)	
14								
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		1000	02	0.1	Wet, black, medium to coarse SAND, trace fine sub-round Gravel		Weinbereen 2 nb (11 21)	
		1-2-2-3	83	0.1	wet, black, includin to coarse SPEND, trace this sub-found Graver			
18								
19		7-4-2-2	75	0.1	Wet, black, medium to coarse SAND, trace fine sub-round Gravel			
20		İ			1		PVC End Cap (21)	
-			-		Wat dark arou medium to operas SAND troop firs when we defend	l produced	r vC End Cap (21)	
21		3-3-2-2	67	0.2	Wet, dark grey, medium to coarse SAND, trace fine sub-round Gravel	1	1	
22						1		
23		10-5-4-4	75	0.1	Wet, dark grey, medium to coarse SAND, trace fine sub-round Gravel			
24						1		
25		14-9-3-4	75	0.1	Wet, dark grey, medium to coarse SAND, trace fine sub-round Gravel	1		
26		14-7-3-4	1.5	0.1				
				_		4		
27		4-3-2-2	83	0	Wet, grey, medium to coarse SAND, trace fine sub-round Gravel, slight sulphur odor			
28				L		1		
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	1		
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		
		5-1-1-1	50	0.1	angular Gravel	1		
32						1		
33					End of Boring at 33 ft bgs			
	SAMPLING METHO	OD			COMMENTS:			
WH = WEIGHT OF HAMMER					0-5 ft bgs was hand cleared			
HC = HAND CLEARED					5-33 ft bgs advanced utilizing hollow stem augers and split spoons			
	VC = VACUUM CLE	ARED						
	WOR = WEIGHT OF	RODS						

3 of 9

					PARSONS	BORING/WELL ID: MW-4
-			· ·		DRILLING RECORD	Sheet 1 of 2
Contractor Priller:		lling Technolog			BROJECT NAME: Car Edian (Junta Daint Car Warks MTS Drawarts	Location Description:
rmer: ispector:		German Torres			PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property PROJECT NUMBER: 448994-01000	Adjacent to southern edge of salt storage structure
ig Type:	Truck CME-7	5			<b>TROJECT NOMBER.</b> 448994-01000	
8-71	GROUNDWATE		TIONS			
/ater	DTW	DTW			Weather: Cloudy, up to high 60s	
evel	~ 15 ft bgs	10.21				See Site Plan
	10/2/14 1034	10-14-14			Date/Time Start: 10/2/14 0910	-
ime Ieas.	1054	0845			Date/Time Finish: 10/3/14 1120	
	Split Spoon	TOC			Date/Time Finish: 10/3/14 1120	4
Sample	Sample	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC COMMENTS
Depth	I.D.		(%)	(ppm)		
+1						Locking J-plug on
						inner wall
0		Vactron		NA	0-16" ASPHALT	Flush Mount Well
1		Vactron		0.0	16"-4' Moist, grey, fine SAND and fine to coarse sub-angular GRAVEL, trace Silt	0.0-0.5' Cover and Concrete
2						
		Vactron		0.0	4.5' Wat arou fine SAND and fine to scores sub-secolar ODAUDI. But Oakilly of the	Cement/Bentonite
3		Vactron		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	(0.5-13')
6					Gravel, trace Brick; 6-20" Dry, dark brown, fine to medium SAND, some fine to coarse angular to sub-round Gravel, trace Brick	
					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	Bentonite (9-11')
10		10 10 51 17	/2		Brick; 8-22" Dry, brown, fine to medium SAND, little fine to coarse sub-angular Gravel, trace	
10					Silt	
11	1012 4 (11 12)	14.10.5.4	75	1.0	0-14" Dry, orange/brown, fine to medium SAND, little fine to coarse sub-angular Gravel, trace	
	MW-4 (11-13)	14-10-5-4	75	1.0	Silt: 14-18" Dry, orange/brown, fine to medium SAND, little fine to coarse sub-angular Gravel, trace	
12					Gravel, trace Silt, trace Brick, slight hydrocarbon odor	
13		15-9-6-4	58	1.0	Moist, dark grey, fine to medium SAND, little Silt, little coarse sub-angular Gravel, little	
14					Cobble fragments	
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 (23)=1231   2 7 7
18		7-7-0-7	100	0.5	Gravel, little Silt, trace Wood, striated staining	
-					Wet deale some medium CAND some medium to some somelar Coursel to as Cilt	4   001-4001
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						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						PVC End 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,	]
24					trace Wood	
25		4-6-4-8	75	0.1	0-16" Wet, dark grey, fine to medium SAND, some Silt, trace Wood; 16-18" BRICK	1
26				0.1		
20		6-5-5-5	0	NA	No Recovery	1
28		0-5-5-5	0	11/1		
28		6-8-7-8	67	0.1	Wet, dark grey, fine to coarse SAND, trace Silt	
-		0-0-/-8	0/	0.1	we, dark grey, the to coarse server, nace shi	
30					0.10" Wet deale mark firsts marking CAND, 10.20" DDICK	
31		6-5-5-2	83	0.0	0-18" Wet, dark grey, fine to medium SAND; 18-20" BRICK	
32						
	SAMPLING METH				COMMENTS:	
	WH = WEIGHT OF H				0-5 ft bgs was hand cleared	
	HC = HAND CLEAR VC = VACUUM CLE				5-51 ft bgs advanced utilizing hollow stem augers and split spoons	
	WOR = WEIGHT OF					

					PARSONS	BORING/WELL	ID: MW-4
					DRILLING RECORD		Sheet 2 of 2
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	Adjacent to southern e	dge of salt storage structure
Inspector:					PROJECT NUMBER: 448994-01000		
Rig Type:							
	GROUNDWAT		TIONS	-			
Water	DTW	DTW			Weather: Cloudy, up to high 60s		
Level	~ 15 ft bgs	10.21				See Site Pl	an
Date	10/2/14	10-14-14			Date/Time Start: 10/2/14 0910	-	
Time	1034	0845					
Meas.	a 11 a	<b>70</b> 0			Date/Time Finish: 10/3/14 1120	_	
From	Split Spoon	TOC	n				
Sample Depth	Sample I.D.	SPT	Rec. (%)	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL		COMMENTS
33		1/12"-4-4	100	0	0-16" Wet, dark grey, fine to medium SAND, little Silt; 16-24" Moist, tan/grey fine to medium		
34					SAND, some Silt, little fine to coarse sub-angular Gravel		
35		6-8-14-18	83	0.4	Moist, tan/grey fine to medium SAND, some Silt, little fine to coarse sub-angular Gravel, trace		
36		0-0-14-10	0.5	0.4	Mica		
37		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"		
38		1 11 27 52	100	0.1	Moist, orange/brown, fine to medium SAND, little fine to medium sub-round Gravel, trace Silt		
58							
39		4-18-21-23	92	0.2	0-12" Moist, grey, fine to medium SAND, little fine to medium sub-round Gravel, trace Silt;		
40					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		
42		NA	NA	NA	NA		Augered through
44		INA	INA	hA			boulder/impedance from approximately 42-45 ft bgs
45		WH-1-1-4	100	1.7	Wet, light brown, medium SAND	1	11
46		1					
47		6-6-10-12	100	1.5	Wet, light brown, medium SAND, trace fine to medium round Gravel	1	
48					1		
49	MW-4 (49-51)	5-9-12-14	100	1.5	Wet, light brown, medium SAND, trace fine to medium round Gravel	1	
50							
51					End of Boring at 51 ft bgs		
	SAMPLING METH				COMMENTS:		
	WH = WEIGHT OF F				0-5 ft bgs was hand cleared		
	HC = HAND CLEAR				5-51 ft bgs advanced utilizing hollow stem augers and split spoons		
	VC = VACUUM CLE						
	WOR = WEIGHT OF	RODS					

					PARSONS	BORING/WELL II	D: SB-1
					DRILLING RECORD		Sheet 1 of 1
Contracto Driller: Inspector: Rig Type:	Tom Sheerin, Zohar Lavy	lling Technolog German Torres	y (ADT)		PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property PROJECT NUMBER: 448994-01000	Location Description: Adjacent to MTS propert	y entrance
Level Date Time Meas. From	GROUNDWATE DTW ~ 9 ft bgs 10/7/14 1355 Split Spoon	DTW			Weather:         Clear, up to low 70s           Date/Time Start:         10/7/14         1330           Date/Time Finish:         10/7/14         1430	See Site Plan	
Sample Depth	Sample I.D.	SPT	Rec. (%)	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL		COMMENTS
+1		Vactron		NA	0-4" ASPHALT	-	
1 2		Vactron Vactron		0.0	4"-3' Dry, dark brown fine to medium SAND, some fine to coarse sub-angular Gravel, little Brick		
3		Vactron		0.0	3-5' Dry, dark brown fine to medium SAND and CONCRETE debris, some fine to coarse sub- angular Gravel, little Brick		
4 5 6		Vactron 2-4-4-3	75	0.0	Moist, dark brown, fine to coarse SAND, some Concrete debris, little Brick, little fine to coarse sub-angular Gravel, trace Silt		
7 8	SB-1 (7-9)	3-2-2-1	67	0.0	Dry, orange/brown, medium SAND, trace Brick		
9 10		3-2-1-2	58	0.1	Wet, dark grey, fine to medium SAND and SILT, little fine to medium sub-angular Gravel		
11 12		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 medium SAND, some Silt, trace fine sub-angular Gravel, trace Shell		
13 14		WH/12"-1-1	67	0.1	Wet, dark grey, fine SAND, little Silt, little fine to medium angular to sub-angular Gravel		
15 16		WH/18"-1	67	0.2	Wet, dark grey, fine SAND, little Silt, little fine to medium angular to sub-angular Gravel		
17 18	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 Gravel; 14-18" Moist, grey CLAY		
19 20		1-1-1-1	75	0.3	Moist, grey CLAY		
21					End of Boring at 21 ft bgs	1	
	SAMPLING METHO WH = WEIGHT OF H HC = HAND CLEARI VC = VACUUM CLE WOR = WEIGHT OF	AMMER ED ARED			COMMENTS: 0-5 ft bgs was hand cleared 5-21 ft bgs advanced utilizing hollow stem augers and split spoons	· · · · · ·	

						BORING/WELL ID: SB-2				
a					DRILLING RECORD		Sheet 1 of 2			
Driller:	Tom Sheerin,		y (ADT)		PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property	Location Description Adjacent to eastern edge				
inspector:					PROJECT NUMBER: 448994-01000					
Rig Type:	Truck CME-7		IONG							
Water	GROUNDWATI DTW	DTW	IONS		Weather: Partly cloudy, up to high 60s					
Level	~ 11 ft bgs	D1			Weather. 1 artiy cloudy, up to high oos	See Site Pl	an			
Date	10/8/14				Date/Time Start: 10/8/14 1030					
	1130									
Meas. From	Split Spoon				Date/Time Finish: 10/9/14 0850	-				
Sample	Spin Spoon Sample	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL		COMMENTS			
Depth	I.D.		(%)	(ppm)			000000000			
+1										
0		Vactron		NA	0-4" ASPHALT					
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						
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		0.0	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		7-20-17-20	0/	0.1	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	1				
8		12-12-20-20	28	0.2	round Gravel					
8	675 A (0 1 1)	4-7-2-3	17		Moist, brown, fine to medium SAND, little Silt, trace Brick, trace medium sub-angular Gravel	-				
· ·	SB-2 (9-11)	4-7-2-3	67	0.1	Moist, brown, the to medium SAND, fittle Silt, trace Brick, trace medium sub-angular Graver					
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										
15		5-6-1-2	75	0.4	Wet, brown, fine to medium SAND, some Silt, little weathered Gneissic Schist					
16										
17		2-2-3-2	83	0.1	Wet, brown, fine to medium SAND, some Silt					
18										
19		WH-2-8-7	0	NA	No Recovery		Schist Cobble in tip of cutting			
20							shoe			
21		8-6-5-5	42	0.0	Wet, brown, fine to medium SAND, some Silt, little weathered Gneissic Schist					
22										
23		4-2-7-6	42	0.1	Wet, brown/grey, fine to medium SAND, little Silt, little fine to medium angular to round					
24					Gravel, trace weathered Schist					
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					Gravel, trace weathered Schist					
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					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	1				
36										
	SAMPLING METH	OD	•		COMMENTS:	•	•			
,	WH = WEIGHT OF H	IAMMER			0-5 ft bgs was hand cleared					
	HC = HAND CLEAR				5-43 ft bgs advanced utilizing hollow stem augers and split spoons					
	VC = VACUUM CLE WOR = WEIGHT OF									

					PARSONS	BORING/WELL	D: SB-2	
					DRILLING RECORD		Sheet 2 of 2	
Contracto	r: Advanced Dri	lling Technology	y (ADT)			Location Description:		
Driller:	Tom Sheerin,	German Torres			PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property	Adjacent to eastern edge of MTS property		
Inspector:					PROJECT NUMBER: 448994-01000			
Rig Type:	Truck CME-7	5						
	GROUNDWATE		TIONS					
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	apa	n				0010 00100	
Sample Depth	Sample I.D.	SPT	Rec. (%)	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL		COMMENTS	
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			
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 II	D: SB-3
					DRILLING RECORD		Sheet 1 of 2
ontractor		lling Technology				Location Description:	
riller:		German Torres			PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property	Southwest corner of MTS	5 property
spector: ig Type:	Zohar Lavy Truck CME-7	5			PROJECT NUMBER: 448994-01000		
ig Type.	GROUNDWATE		IONS				
/ater		DTW	10110		Weather: Clear, up to low 70s, Breezy		
evel	~ 17 ft bgs					See Site Plan	
	10/9/14				Date/Time Start: 10/9/14 1030	-	
lime Meas.	1130				Date/Time Finish: 10/9/14 1500		
	Split Spoon				Date/Time Finish. 10/9/14 1500		
Sample	Sample	SPT	Rec.	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,		
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		Vactron		0.0	round Gravel, little Organics		
4		Vactron		0.0			
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		
7		15-15-14-11	33	0.0	COBBLE	1	
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	1	
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					trace Silt; 16-20" Dry, tan, medium to coarse SAND		
13		15-21-15-15	75	0.1	0-10" Dry, brown, fine to medium SAND, little fine to medium angular Gravel, trace Cobble,		
14		10 21 10 10	15	0.1	trace Silt; 10-18" Dry, tan, medium to coarse SAND		
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	55 5 (15 17)	5070	15	0.2			
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		5-4-4-4	92	0.2	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		
20		+1/12 -0	50	0.1			
20		2-5-5-7	50	0.0	Wet, black, medium to coarse SAND, trace fine sub-round Gravel		
22		2-5-5-1	50	0.0			
23		22-10-18-17	75	0.0	Wet, grey, medium to coarse SAND, trace fine sub-round Gravel	1	
23		22 10-10-17		0.0			
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"	1	
26		25 50 17 10		0.0	Wet, black, fine to medium SAND		
20		7-8-8-8	50	0	0-4" Wet, black, fine to medium SAND; 4-12" Moist, brown/olive, fine to medium SAND,	1	
28		, 0-0-0	20	0	some Silt, trace coarse angular Gravel		
29		44-42-17-20	33	0	Moist, brown/olive, fine to medium SAND, some Silt	1	
30			22	0			
31		10-49-17-15	50	0	Moist, brown, fine SAND, little fine sub-round Gravel, little Silt, trace weathered Gneissic		
32		-5 17 17 15		~	Schist		
33		50/2"	0	NA	No Recovery	- 1	
34		50/2	0	1121			
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	- 1	
36	50-5 (55-57)	13-10-22-23	15	0.0	Schist		
30		28-35-50/0"	0	NA	No Recovery		
38		20-33-30/0	U	ina	End of Boring at 38 ft bgs		
		0.D			COMMENTS:		
	SAMPLING METH WH = WEIGHT OF H				0-5 ft bgs was hand cleared		
	HC = HAND CLEAR				5-38 ft bgs advanced utilizing hollow stem augers and split spoons		
	VC = VACUUM CLE	ARED					

### **APPENDIX B**

### **GROUNDWATER SAMPLING LOGS**

	GROUND	WAIER	SAMPLING	RECO	RD			
SITE NAME:	Con Edison (Hunts Poi	nt MTS)						
<b>PROJECT NUMBER:</b>	448994-01000							
Purge Date:	October 30, 2014							
Sampling Date:	October 30, 2014							
Samplers:	Zohar Lavy		of		Parso	ons / Somerset	, NJ	
SAMPLE ID:	MW-1, MW-11 (duplic	ate), MW-1 MS	S, MW-1 MSD					
Sampling Method:	Low Flow Purge Mons	oon Pump						
WELL PURGING								<u> </u>
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 (GAL / F1) = x 0.041 =		Gallons			
2-inch Casing:	Ft. of Water in Well	8.90		1.42	Gallons			
3-inch Casing:	Ft. of Water in Well	0.70	x 0.10 =	1.42	Gallons			
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons			
Method:	Low Flow Purge Mons	oon Pump			Cullons			
		•						
SAMPLE DESCRIPTION								
Odor :	No Odor							
Other :	Clear							
FIELD TESTS	DUDGE	DUDCE	DUDGE	DUDCE	DUDCE	DUDGE	DUDCE	
Time	PURGE 1025	PURGE 1030	PURGE 1035	PURGE 1040	PURGE 1045	PURGE 1050	PURGE 1055	SAMPLE 1100
Depth To Water (TOC) (ft)	10.05	10.06	10.05	1040	1045	10.05	10.05	10.05
Depth To Pump (TOC) (ft)	16.85	16.85	16.85	16.85	16.85	16.85	16.85	16.85
Flow Rate (ml/min)	~350	~350	~300	~250	~250	~250	~250	~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)	3.6	3.41	3.01	2.47	2.45	2.41	2.46	2.48
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
Temperature (Degrees C)	15.87	15.96	16.05	16.17	16.57	16.26	16.18	16.23
ORP (mV)	-52	-81	-105	-122	-130	-134	-137	-139
Salinity (%)	1.9	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 / LABORATO	DRY							
Analyze For:	TCL VOCs, SVOCs, T	AL Metals, CN	, PCBs					
Shipped Via:	Chemtech							
Laboratory								
Other Notes:	Sample collected at 11	00, ~ 3.25 Galle	ons purged					

CITE NAME.								
SITE NAME: PROJECT NUMBER:	Con Edison (Hunts Poi 448994-01000	nt MTS)						
Purge Date:	October 30, 2014							
Sampling Date:	October 30, 2014							
Samplers:	Zohar Lavy		of		Parso	ons / Somerset	, NJ	
SAMPLE ID:	MW-2							
Sampling Method:	Low Flow Purge Mons	oon Pump						
ELL 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			
2-inch Casing:	Ft. of Water in Well	6.75	x 0.16 =	1.08	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 Mons	oon Pump						
AMPLE DESCRIPTION Odor : Other :	No Odor Very Turbid							
TELD TESTS	DUDGE	DUDGE	DUDGE	DUDGE	DUDGE	DUDGE	DUDGE	DUDCI
Time	PURGE 1410	PURGE 1415	PURGE 1420	PURGE 1425	PURGE 1430	PURGE 1435	PURGE 1440	PURGI 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
	~0.25	~0.5	~0.75	~0.75	~1.0	~1.0	~1.25	~1.25
		7.69	7.65	7.64	7.63	7.62	7.62	7.63
Volume of Water Purged	7 74			17.0	17.0	16.9	16.8	16.7
Volume of Water Purged pH (s.u.)	7.74		17.1				Error	Error
Volume of Water Purged	7.74 17.5 Error	17.2 Error	17.1 Error	Error	Error	Error	Error	
Volume of Water Purged pH (s.u.) Conductivity (mS/cm)	17.5	17.2				Error 2.75	2.68	2.64
Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs)	17.5 Error	17.2 Error	Error	Error	Error	-		2.64 18.10
Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L)	17.5 Error 5.21	17.2 Error 3.07	Error 3.0	Error 2.91	Error 2.83	2.75	2.68	
Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C)	17.5 Error 5.21 17.81	17.2 Error 3.07 17.93	Error 3.0 18.03	Error 2.91 17.85	Error 2.83 18.01	2.75 18.15	2.68 18.24	18.10
Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV)	17.5 Error 5.21 17.81 -25	17.2 Error 3.07 17.93 -43	Error 3.0 18.03 -36	Error 2.91 17.85 -32	Error 2.83 18.01 -28	2.75 18.15 -24	2.68 18.24 -23	18.10 -22
Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV) Salinity (%) TDS (g/L)	17.5 Error 5.21 17.81 -25 10.3 10.9	17.2 Error 3.07 17.93 -43 10.0	Error 3.0 18.03 -36 10.0	Error 2.91 17.85 -32 9.9	Error 2.83 18.01 -28 9.9	2.75 18.15 -24 9.9	2.68 18.24 -23 9.8	18.10 -22 9.8
Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV) Salinity (%) TDS (g/L)	17.5 Error 5.21 17.81 -25 10.3 10.9 ORY_	17.2 Error 3.07 17.93 -43 10.0 10.6	Error 3.0 18.03 -36 10.0 10.6	Error 2.91 17.85 -32 9.9 10.5	Error 2.83 18.01 -28 9.9	2.75 18.15 -24 9.9	2.68 18.24 -23 9.8	18.10 -22 9.8
Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV) Salinity (%)	17.5 Error 5.21 17.81 -25 10.3 10.9	17.2 Error 3.07 17.93 -43 10.0 10.6	Error 3.0 18.03 -36 10.0 10.6	Error 2.91 17.85 -32 9.9 10.5	Error 2.83 18.01 -28 9.9	2.75 18.15 -24 9.9	2.68 18.24 -23 9.8	18.10 -22 9.8
Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV) Salinity (%) TDS (g/L) AMPLE ANALYSIS / LABORAT	17.5 Error 5.21 17.81 -25 10.3 10.9 ORY_	17.2 Error 3.07 17.93 -43 10.0 10.6	Error 3.0 18.03 -36 10.0 10.6	Error 2.91 17.85 -32 9.9 10.5	Error 2.83 18.01 -28 9.9	2.75 18.15 -24 9.9	2.68 18.24 -23 9.8	18.10 -22 9.8
Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV) Salinity (%) TDS (g/L) AMPLE ANALYSIS / LABORAT	17.5 Error 5.21 17.81 -25 10.3 10.9 ORY_	17.2 Error 3.07 17.93 -43 10.0 10.6	Error 3.0 18.03 -36 10.0 10.6	Error 2.91 17.85 -32 9.9 10.5	Error 2.83 18.01 -28 9.9	2.75 18.15 -24 9.9	2.68 18.24 -23 9.8	18.10 -22 9.8

	GROUND		<b>ISONS</b> SAMPLING		חפ		
	GROOND						
SITE NAME:	Con Edison (Hunts Poi	int MTS)					
<b>PROJECT NUMBER:</b>	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 Mons	oon Pump					
Samping menou	<u>1000 1 1000 1 dige 101000</u>	oon rump					
VELL 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		
2-inch Casing:	Ft. of Water in Well	6.75	x 0.16 =	1.08	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 Mons	oon Pump			-		
SAMPLE DESCRIPTION Odor : Other :	No Odor Very Turbid						
FIELD TESTS	NIDGE	DUD OF	DUD OF	DUD OF			
T	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 ~2.0		
Volume of Water Purged	~1.5	~1.5		~1.75			
pH (s.u.)	7.63	7.63	7.64	7.63	7.63		
Conductivity (mS/cm) Turbidity (NTUs)	16.7 Error	16.8 Error	16.7 Error	16.7 Error	16.8 Error		
2	2.61	2.57	2.55	2.53	2.51		
Dissolved Oxygen (mg/L)	18.15	18.03	18.12	2.55	2.51		
Temperature (Degrees C) ORP (mV)	-22	-21	-21	-20	-21		
Salinity (%)	9.8	9.8	9.8	9.8	9.8		
TDS (g/L)	10.3	10.3	10.2	10.2	9.8		
1D3 (g/L)	10.5	10.5	10.2	10.2	10.2		
SAMPLE ANALYSIS / LABORATO	ORY						
Analyze For:	TCL VOCs, SVOCs, T	AL Metals, CN	, PCBs, Dissolved M	fetals			
Shipped Via:	Chemtech						
Laboratory							
Other Notes:	Sample collected at 15						

CITUD NI & NATE -	Can Editor (Hant B.	at MTC						
SITE NAME: PROJECT NUMBER:	Con Edison (Hunts Poi 448994-01000	nt MTS)						
Purge Date:	October 31, 2014							
Sampling Date:	October 31, 2014							
Samplers:	Zohar Lavy		of		Parso	ons / Somerset	, NJ	
-								
SAMPLE ID:	MW-3							
Sampling Method:	Low Flow Purge Mons	oon Pump						
ELL 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			
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 Mons	oon Pump			-			
Odor : Other : <b>TELD TESTS</b>	No Odor Clear							
	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	SAMPLI
Time	PURGE 0930	PURGE 0935	PURGE 0940	PURGE 0945	PURGE 0950	PURGE 0955	PURGE 1000	SAMPLI 1005
Time Depth To Water (TOC) (ft)								
	0930	0935	0940	0945	0950	0955	1000	1005
Depth To Water (TOC) (ft)	0930 11.05	0935 11.07	0940 11.11 19.40 ~300	0945 11.20 19.40 ~300	0950 11.25 19.40 ~250	0955 11.31 19.40 ~200	1000 11.35 19.40 ~250	1005 11.37 19.40 ~250
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft)	0930 11.05 19.40 ~400 ~0.5	0935 11.07 19.40 ~400 ~1.25	0940 11.11 19.40 ~300 ~2.0	0945 11.20 19.40 ~300 ~2.5	0950 11.25 19.40 ~250 ~2.75	0955 11.31 19.40 ~200 ~3.25	1000 11.35 19.40 ~250 ~3.5	1005 11.37 19.40 ~250 ~3.75
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft) Flow Rate (ml/min) Volume of Water Purged pH (s.u.)	0930 11.05 19.40 ~400 ~0.5 7.74	0935 11.07 19.40 ~400 ~1.25 7.70	0940 11.11 19.40 ~300 ~2.0 7.69	0945 11.20 19.40 ~300 ~2.5 7.68	0950 11.25 19.40 ~250 ~2.75 7.67	0955 11.31 19.40 ~200 ~3.25 7.67	1000 11.35 19.40 ~250 ~3.5 7.67	1005 11.37 19.40 ~250 ~3.75 7.67
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft) Flow Rate (ml/min) Volume of Water Purged pH (s.u.) Conductivity (mS/cm)	0930 11.05 19.40 ~400 ~0.5 7.74 30.4	0935 11.07 19.40 ~400 ~1.25 7.70 30.2	0940 11.11 19.40 ~300 ~2.0 7.69 30.2	0945 11.20 19.40 ~300 ~2.5 7.68 30.2	0950 11.25 19.40 ~250 ~2.75 7.67 30.2	0955 11.31 19.40 ~200 ~3.25 7.67 30.2	1000 11.35 19.40 ~250 ~3.5 7.67 30.2	1005 11.37 19.40 ~250 ~3.75 7.67 30.2
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft) Flow Rate (ml/min) Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs)	$\begin{array}{r} 0930 \\ \hline 11.05 \\ 19.40 \\ \hline -400 \\ \hline -0.5 \\ \hline 7.74 \\ \hline 30.4 \\ \hline 84.4 \\ \end{array}$	0935 11.07 19.40 ~400 ~1.25 7.70 30.2 36.1	0940 11.11 19.40 ~300 ~2.0 7.69 30.2 21.6	0945 11.20 19.40 ~300 ~2.5 7.68 30.2 10.5	0950 11.25 19.40 ~250 ~2.75 7.67 30.2 4.6	0955 11.31 19.40 ~200 ~3.25 7.67 30.2 0	$ \begin{array}{c} 1000\\ 11.35\\ 19.40\\ \sim 250\\ \sim 3.5\\ 7.67\\ 30.2\\ 0\\ \end{array} $	1005 11.37 19.40 ~250 ~3.75 7.67 30.2 0
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft) Flow Rate (ml/min) Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L)	$\begin{array}{c} 0930\\ \hline 11.05\\ 19.40\\ \hline -400\\ \hline -0.5\\ \hline 7.74\\ \hline 30.4\\ \hline 84.4\\ \hline 19.05\\ \end{array}$	0935 11.07 19.40 ~400 ~1.25 7.70 30.2 36.1 12.53	0940           11.11           19.40           ~300           ~2.0           7.69           30.2           21.6           10.27	0945 11.20 19.40 ~300 ~2.5 7.68 30.2 10.5 9.62	0950 11.25 19.40 ~250 ~2.75 7.67 30.2 4.6 8.53	0955 11.31 19.40 ~200 ~3.25 7.67 30.2 0 8.47	1000 11.35 19.40 ~250 ~3.5 7.67 30.2 0 8.42	11.37 19.40 ~250 ~3.75 7.67 30.2 0 8.36
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft) Flow Rate (ml/min) Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C)	$\begin{array}{r} 0930 \\ 11.05 \\ 19.40 \\ -400 \\ -0.5 \\ 7.74 \\ 30.4 \\ 84.4 \\ 19.05 \\ 15.40 \end{array}$	0935 11.07 19.40 ~400 ~1.25 7.70 30.2 36.1 12.53 15.80	0940           11.11           19.40           ~300           ~2.0           7.69           30.2           21.6           10.27           15.86	0945 11.20 19.40 ~300 ~2.5 7.68 30.2 10.5 9.62 15.86	0950 11.25 19.40 ~250 ~2.75 7.67 30.2 4.6 8.53 15.83	0955 11.31 19.40 ~200 ~3.25 7.67 30.2 0 8.47 15.79	1000 11.35 19.40 ~250 ~3.5 7.67 30.2 0 8.42 15.81	1005 11.37 19.40 ~250 ~3.75 7.67 30.2 0 8.36 15.78
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft) Flow Rate (ml/min) Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV)	$\begin{array}{c} 0930 \\ \hline 11.05 \\ 19.40 \\ \hline -400 \\ -0.5 \\ \hline 7.74 \\ \hline 30.4 \\ \hline 84.4 \\ \hline 19.05 \\ \hline 15.40 \\ \hline 67 \\ \end{array}$	0935 11.07 19.40 ~400 ~1.25 7.70 30.2 36.1 12.53 15.80 0.0	0940 11.11 19.40 ~300 ~2.0 7.69 30.2 21.6 10.27 15.86 -21	0945 11.20 19.40 ~300 ~2.5 7.68 30.2 10.5 9.62 15.86 -13	0950 11.25 19.40 ~250 ~2.75 7.67 30.2 4.6 8.53 15.83 -10	0955 11.31 19.40 ~200 ~3.25 7.67 30.2 0 8.47 15.79 -9	1000 11.35 19.40 ~250 ~3.5 7.67 30.2 0 8.42 15.81 -9	1005 11.37 19.40 ~250 ~3.75 7.67 30.2 0 8.36 15.78 -8
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft) Flow Rate (ml/min) Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV) Salinity (%)	$\begin{array}{c} 0930\\ \hline 11.05\\ 19.40\\ \hline -400\\ \hline -0.5\\ \hline 7.74\\ \hline 30.4\\ \hline 84.4\\ \hline 19.05\\ \hline 15.40\\ \hline 67\\ \hline 18.7\\ \end{array}$	0935 11.07 19.40 ~400 ~1.25 7.70 30.2 36.1 12.53 15.80 0.0 18.6	0940           11.11           19.40           ~300           ~2.0           7.69           30.2           21.6           10.27           15.86           -21           18.6	0945 11.20 19.40 ~300 ~2.5 7.68 30.2 10.5 9.62 15.86 -13 18.6	0950 11.25 19.40 ~250 ~2.75 7.67 30.2 4.6 8.53 15.83 -10 18.6	0955 11.31 19.40 ~200 ~3.25 7.67 30.2 0 8.47 15.79 -9 18.6	$\begin{array}{c} 1000\\ 11.35\\ 19.40\\ \sim 250\\ \sim 3.5\\ 7.67\\ 30.2\\ 0\\ 8.42\\ 15.81\\ -9\\ 18.6 \end{array}$	1005 11.37 19.40 ~250 ~3.75 7.67 30.2 0 8.36 15.78 -8 18.5
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft) Flow Rate (ml/min) Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV)	$\begin{array}{c} 0930 \\ \hline 11.05 \\ 19.40 \\ \hline -400 \\ -0.5 \\ \hline 7.74 \\ \hline 30.4 \\ \hline 84.4 \\ \hline 19.05 \\ \hline 15.40 \\ \hline 67 \\ \end{array}$	0935 11.07 19.40 ~400 ~1.25 7.70 30.2 36.1 12.53 15.80 0.0	0940 11.11 19.40 ~300 ~2.0 7.69 30.2 21.6 10.27 15.86 -21	0945 11.20 19.40 ~300 ~2.5 7.68 30.2 10.5 9.62 15.86 -13	0950 11.25 19.40 ~250 ~2.75 7.67 30.2 4.6 8.53 15.83 -10	0955 11.31 19.40 ~200 ~3.25 7.67 30.2 0 8.47 15.79 -9	1000 11.35 19.40 ~250 ~3.5 7.67 30.2 0 8.42 15.81 -9	1005 11.37 19.40 ~250 ~3.75 7.67 30.2 0 8.36 15.78 -8
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft) Flow Rate (ml/min) Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV) Salinity (%) TDS (g/L)	$\begin{array}{r} 0930\\ \hline 11.05\\ 19.40\\ \hline -400\\ \hline -0.5\\ \hline 7.74\\ \hline 30.4\\ \hline 84.4\\ \hline 19.05\\ \hline 15.40\\ \hline 67\\ \hline 18.7\\ \hline 18.5\\ \end{array}$	0935 11.07 19.40 ~400 ~1.25 7.70 30.2 36.1 12.53 15.80 0.0 18.6	0940           11.11           19.40           ~300           ~2.0           7.69           30.2           21.6           10.27           15.86           -21           18.6	0945 11.20 19.40 ~300 ~2.5 7.68 30.2 10.5 9.62 15.86 -13 18.6	0950 11.25 19.40 ~250 ~2.75 7.67 30.2 4.6 8.53 15.83 -10 18.6	0955 11.31 19.40 ~200 ~3.25 7.67 30.2 0 8.47 15.79 -9 18.6	$\begin{array}{c} 1000\\ 11.35\\ 19.40\\ \sim 250\\ \sim 3.5\\ 7.67\\ 30.2\\ 0\\ 8.42\\ 15.81\\ -9\\ 18.6 \end{array}$	1005 11.37 19.40 ~250 ~3.75 7.67 30.2 0 8.36 15.78 -8 18.5
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft) Flow Rate (ml/min) Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV) Salinity (%) TDS (g/L)	$\begin{array}{r} 0930\\ \hline 11.05\\ 19.40\\ \hline -400\\ \hline -0.5\\ \hline 7.74\\ \hline 30.4\\ \hline 84.4\\ \hline 19.05\\ \hline 15.40\\ \hline 67\\ \hline 18.7\\ \hline 18.5\\ \end{array}$	0935 11.07 19.40 ~400 ~1.25 7.70 30.2 36.1 12.53 15.80 0.0 18.6 18.4	0940           11.11           19.40           ~300           ~2.0           7.69           30.2           21.6           10.27           15.86           -21           18.6           18.4	0945 11.20 19.40 ~300 ~2.5 7.68 30.2 10.5 9.62 15.86 -13 18.6	0950 11.25 19.40 ~250 ~2.75 7.67 30.2 4.6 8.53 15.83 -10 18.6	0955 11.31 19.40 ~200 ~3.25 7.67 30.2 0 8.47 15.79 -9 18.6	$\begin{array}{c} 1000\\ 11.35\\ 19.40\\ \sim 250\\ \sim 3.5\\ 7.67\\ 30.2\\ 0\\ 8.42\\ 15.81\\ -9\\ 18.6 \end{array}$	1005 11.37 19.40 ~250 ~3.75 7.67 30.2 0 8.36 15.78 -8 18.5
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft) Flow Rate (ml/min) Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV) Salinity (%) TDS (g/L) AMPLE ANALYSIS / LABORATO	0930 11.05 19.40 ~400 ~0.5 7.74 30.4 84.4 19.05 15.40 67 18.7 18.5 ORY	0935 11.07 19.40 ~400 ~1.25 7.70 30.2 36.1 12.53 15.80 0.0 18.6 18.4	0940           11.11           19.40           ~300           ~2.0           7.69           30.2           21.6           10.27           15.86           -21           18.6           18.4	0945 11.20 19.40 ~300 ~2.5 7.68 30.2 10.5 9.62 15.86 -13 18.6	0950 11.25 19.40 ~250 ~2.75 7.67 30.2 4.6 8.53 15.83 -10 18.6	0955 11.31 19.40 ~200 ~3.25 7.67 30.2 0 8.47 15.79 -9 18.6	$\begin{array}{c} 1000\\ 11.35\\ 19.40\\ \sim 250\\ \sim 3.5\\ 7.67\\ 30.2\\ 0\\ 8.42\\ 15.81\\ -9\\ 18.6 \end{array}$	1005 11.37 19.40 ~250 ~3.75 7.67 30.2 0 8.36 15.78 -8 18.5
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft) Flow Rate (ml/min) Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV) Salinity (%) TDS (g/L) AMPLE ANALYSIS / LABORATO Analyze For:	0930 11.05 19.40 ~400 ~0.5 7.74 30.4 84.4 19.05 15.40 67 18.7 18.5 ORY TCL VOCs, SVOCs, T	0935 11.07 19.40 ~400 ~1.25 7.70 30.2 36.1 12.53 15.80 0.0 18.6 18.4	0940           11.11           19.40           ~300           ~2.0           7.69           30.2           21.6           10.27           15.86           -21           18.6           18.4	0945 11.20 19.40 ~300 ~2.5 7.68 30.2 10.5 9.62 15.86 -13 18.6	0950 11.25 19.40 ~250 ~2.75 7.67 30.2 4.6 8.53 15.83 -10 18.6	0955 11.31 19.40 ~200 ~3.25 7.67 30.2 0 8.47 15.79 -9 18.6	$\begin{array}{c} 1000\\ 11.35\\ 19.40\\ \sim 250\\ \sim 3.5\\ 7.67\\ 30.2\\ 0\\ 8.42\\ 15.81\\ -9\\ 18.6 \end{array}$	1005 11.37 19.40 ~250 ~3.75 7.67 30.2 0 8.36 15.78 -8 18.5
Depth To Water (TOC) (ft) Depth To Pump (TOC) (ft) Flow Rate (ml/min) Volume of Water Purged pH (s.u.) Conductivity (mS/cm) Turbidity (NTUs) Dissolved Oxygen (mg/L) Temperature (Degrees C) ORP (mV) Salinity (%) TDS (g/L)	0930 11.05 19.40 ~400 ~0.5 7.74 30.4 84.4 19.05 15.40 67 18.7 18.5 ORY	0935 11.07 19.40 ~400 ~1.25 7.70 30.2 36.1 12.53 15.80 0.0 18.6 18.4	0940           11.11           19.40           ~300           ~2.0           7.69           30.2           21.6           10.27           15.86           -21           18.6           18.4	0945 11.20 19.40 ~300 ~2.5 7.68 30.2 10.5 9.62 15.86 -13 18.6	0950 11.25 19.40 ~250 ~2.75 7.67 30.2 4.6 8.53 15.83 -10 18.6	0955 11.31 19.40 ~200 ~3.25 7.67 30.2 0 8.47 15.79 -9 18.6	$\begin{array}{c} 1000\\ 11.35\\ 19.40\\ \sim 250\\ \sim 3.5\\ 7.67\\ 30.2\\ 0\\ 8.42\\ 15.81\\ -9\\ 18.6 \end{array}$	1005 11.37 19.40 ~250 ~3.75 7.67 30.2 0 8.36 15.78 -8 18.5

SITE NAME:	Con Edison (Hunts Poi	nt MTS)						
PROJECT NUMBER: Purge Date:	448994-01000 October 30, 2014							
Sampling Date:	October 30, 2014							
Samping Date: Samplers:	Zohar Lavy		of		Parso	ns / Somerset	NI	
Sampers.	Zonai Lavy		01		1 41 50	iis / Bomerset	, 113	
SAMPLE ID:	MW-4							
Sampling Method:	Low Flow Purge Mons	oon Pump						
		•						
VELL 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		x 0.32 =		Gallons			
4-inch Casing: Method:	Ft. of Water in Well	D	x 0.64 =		Gallons			
Method.	Low Flow Purge Mons	oon Pump						
SAMPLE DESCRIPTION								
Odor :	No Odor							
Other :	Clear							
IELD TESTS	citur							
	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	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 / LABORATO	DV							
AMPLE ANALYSIS / LABORATO Analyze For:	TCL VOCs, SVOCs, T	AI Matala CN	DCPa					
Analyze For:	1CL VOUS, SVOUS, 1	AL Metals, CN	, ruds					
Shipped Via:	Chemtech							

			SONS			
	GROUND	WATER	SAMPLING	<b>RECORD</b>		
SITE NAME:	Con Edison (Hunts Poi	nt 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 Mons	oon 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) =	Gallon	IS	
1-inch Casing:	Ft. of Water in Well		x 0.041 =	Gallon		
2-inch Casing:	Ft. of Water in Well	9.68	x 0.16 =	1.55 Gallon		
3-inch Casing:	Ft. of Water in Well		x 0.32 =	Gallon		
4-inch Casing:	Ft. of Water in Well		x 0.64 =	Gallon		
Method:	Low Flow Purge Mons	oon Pump				
CAMPLE DESCRIPTION						
SAMPLE DESCRIPTION Odor :	No Odor					
Other :	Clear					
FIELD TESTS	Clear					
FIELD IESIS	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 / LABORATO	<b>DDV</b>					
SAMPLE ANALYSIS / LABORATO Analyze For:	TCL VOCs, SVOCs, T	AI Metale CN	DCBc			
Analyze For:	TCL VOCS, SVOCS, T	AL Metals, CN	, PCDS			
Shipped Via:	Chemtech					
Laboratory						
Other Notes:	Sample collected at 13	20 ~ 3.75 Gallo	ons purged. Well is	immediately adjacene	t to NYDOS salt storage	
	<b></b>			* U		

### **APPENDIX C**

## DATA USABILITY SUMMARY REPORT

# DATA USABILITY SUMMARY REPORT

# **HUNTS POINT**

Prepared For:



### CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

31-01 20<sup>th</sup> Avenue Long Island City, NY 11105

Prepared By:

## PARSONS

301 Plainfield Road, Suite 350 Syracuse, New York 13212 Phone: (315) 451-9560 Fax: (315) 451-9570

**APRIL 2015** 

#### TABLE OF CONTENTS

SECTION 1 DATA USABILITY SUMMARY1-1
1.1 LABORATORY DATA PACKAGES1-1
1.2 SAMPLING AND CHAIN-OF-CUSTODY 1-1
1.3 LABORATORY ANALYTICAL METHODS 1-1
1.3.1 Volatile Organic Analysis1-2
1.3.2 Semivolatile Organic Analysis1-2
1.3.3 Polychlorinated Biphenyls (PCBs) Analysis1-2
1.3.4 Inorganic Analysis1-3
SECTION 2 DATA VALIDATION REPORT2-1
2.1 GROUNDWATER
2.1.1 Volatiles
2.1.2 Semivolatiles
2.1.3 Polychlorinated Biphenyls (PCBs)2-3
2.1.4 Inorganics
2.2 SOILS
2.2.1 Volatiles
2.2.2 Semivolatiles
2.2.3 Polychlorinated Biphenyls (PCBs)2-8
2.2.4 Inorganics

#### LIST OF ATTACHMENTS

#### ATTACHMENT A VALIDATED LABORATORY DATA

ATTACHMENT A-1VALIDATED LABORATORY DATA FOR<br/>GROUNDWATER SAMPLESATTACHMENT A-2VALIDATED LABORATORY DATA FOR<br/>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.

#### <u>Usability</u>

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

P:\ConEd\448994 - Hunts Point MTS\WP\SCR\Appendix C\Final\Hunts Point DUSR April 2015 REV1.DOCX

- 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

P:\ConEd\448994 - Hunts Point MTS\WP\SCR\Appendix C\Final\Hunts Point DUSR April 2015 REV1.DOCX

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 2methylnaphthalene 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.

#### <u>Summary</u>

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.

#### <u>Usability</u>

All PCB sample results were considered usable following data validation.

#### <u>Summary</u>

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.

P:\ConEd\448994 - Hunts Point MTS\WP\SCR\Appendix C\Final\Hunts Point DUSR April 2015 REV1.DOCX

#### 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  $\mu$ 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  $\mu$ 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".

#### <u>Usability</u>

All inorganics sample results were considered usable following data validation.

#### <u>Summary</u>

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

P:\ConEd\448994 - Hunts Point MTS\WP\SCR\Appendix C\Final\Hunts Point DUSR April 2015 REV1.DOCX

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

P:\ConEd\448994 - Hunts Point MTS\WP\SCR\Appendix C\Final\Hunts Point DUSR April 2015 REV1.DOCX

- 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  $\pm 20\%$  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.

#### <u>Usability</u>

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.

#### <u>Summary</u>

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.

#### <u>Usability</u>

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						
Con Ed - Hu	unts Point	Location ID:	MW-1	MW-1	MW-2	MW-3	MW-4	FIELDQC	FIELDQC	FIELDQC
Validated G	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 201	14	Lab Sample Id:	F4556-01	F4556-04	F4556-11	F4556-07	F4556-05	F4556-09	F4556-08	F4556-10
SDG: F455	6	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:								
	VOLATILES	_								
	1,1,1-TRICHLOROETHANE	ug/l	0.4 U	0.4 U	0.4 U					
	1,1,2,2-TETRACHLOROETHANE	ug/l	0.31 U	0.31 U	0.31 U					
	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.45 U	0.45 U	0.45 U					
	1,1,2-TRICHLOROETHANE	ug/l	0.38 U	0.38 U	0.38 U					
	1,1-DICHLOROETHANE	ug/l	0.36 U	0.36 U	0.36 U					
	1,1-DICHLOROETHENE 1,2,3-TRICHLOROBENZENE	ug/l	0.47 U 0.2 U	0.47 U 0.2 U	0.47 U 0.2 U					
120-82-1	1,2,3-TRICHLOROBENZENE	ug/l	0.2 U 0.2 U	0.2 U 0.2 U	0.2 U 0.2 U					
96-12-8	1,2,4-TRICHLOROBENZENE 1,2-DIBROMO-3-CHLOROPROPANE	ug/l	0.2 U 0.46 U	0.2 U 0.46 U	0.2 U 0.46 U					
	1,2-DIBROMO-3-CHLOROPROPANE 1,2-DIBROMOETHANE	ug/l ug/l	0.40 U 0.41 U	0.46 U 0.41 U	0.48 U 0.41 U	0.48 U 0.41 U	0.48 U 0.41 U	0.40 U 0.41 U	0.40 U 0.41 U	0.40 U 0.41 U
95-50-1	1,2-DIEROMOETHANE 1,2-DICHLOROBENZENE	ug/l	0.41 U 0.45 U	0.41 U 0.45 U	0.41 U 0.45 U					
	1,2-DICHLOROETHANE	ug/l	0.45 U	0.43 U	0.45 U	0.45 U 0.48 U				
	M,P-XYLENE (SUM OF ISOMERS)	ug/l	0.48 U 0.95 U	0.48 U 0.95 U	0.48 U 0.95 U					
	1,2-DICHLOROPROPANE	ug/l	0.46 U	0.46 U	0.46 U					
	1,3-DICHLOROBENZENE	ug/l	0.43 U	0.43 U	0.43 U					
	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					
	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					
74-97-5	BROMOCHLOROMETHANE	ug/l	0.2 U	0.2 U	0.2 U					
75-27-4	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					
	CARBON DISULFIDE	ug/l	0.2 U	0.2 U	0.2 U					
	CARBON TETRACHLORIDE	ug/l	0.2 U	0.2 U	0.2 U					
	CHLOROBENZENE	ug/l	0.49 U	0.49 U	0.49 U					
	CHLOROETHANE	ug/l	0.2 U	0.2 U	0.2 U					
	CHLOROFORM	ug/l	0.34 U	0.34 U	0.34 U					
74-87-3	CHLOROMETHANE	ug/l	0.2 U	0.2 U	0.2 U					
	CIS-1,2-DICHLOROETHYLENE	ug/l	0.35 U	0.35 U	0.35 U					
	CIS-1,3-DICHLOROPROPENE	ug/l	0.31 U	0.31 U	0.31 U					
	CYCLOHEXANE DIBROMOCHLOROMETHANE	ug/l	0.2 U 0.2 U	0.2 U 0.2 U	0.2 U 0.2 U					
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.2 U 0.2 U	0.2 U 0.2 U	0.2 U 0.2 U					
100-41-4	ETHYLBENZENE	ug/l	0.2 U 0.2 U	0.2 U 0.2 U	0.2 U 0.2 U					
98-82-8	ISOPROPYLBENZENE (CUMENE)	ug/l ug/l	0.2 U 0.45 U	0.2 U 0.45 U	0.2 U 0.45 U					
	METHYL ACETATE	ug/l	0.43 U 0.2 U	0.43 U 0.2 U	0.43 U 0.2 U					
	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					
	METHYLCYCLOHEXANE	ug/l	0.2 U	0.2 U	0.2 U					
	METHYLENE CHLORIDE	ug/l	0.41 U	0.41 U	0.2 U 0.41 U	0.2 U 0.41 U	0.2 U 0.41 U	0.2 U 0.41 U	0.2 U 0.41 U	0.2 U 0.41 U
	O-XYLENE (1,2-DIMETHYLBENZENE)	ug/l	0.43 U	0.43 U	0.43 U					
	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					
	TETRACHLOROETHYLENE(PCE)	ug/l	0.27 U	0.27 U	0.27 U					
	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					
	TRICHLOROETHYLENE (TCE)	ug/l	0.28 U	0.28 U	0.28 U					
	TRICHLOROFLUOROMETHANE	ug/l	0.35 U	0.35 U	0.35 U					
75-01-4	VINYL CHLORIDE	ug/l	0.34 U	0.34 U	0.34 U					

Con Ed - H Validated G October 20 SDG: F455	roundwater Analytical Data 14	Location ID: Sample ID: Lab Sample Id:	MW-1 MW-1-20141031	MW-1 MW-11-20141031	MW-2 MW-2-20141031	MW-3	MW-4	FIELDQC	FIELDQC	FIELDQC
October 20	14		MW-1-20141031	MW-11-20141031	MW-2-20141031	MW 2 20141021				
		Lab Sample Id:				MW-3-20141031	MW-4-20141031	FB100914-20141031	FB103114-20141031	TB103014-20141030
SDG: F45:	56		F4556-01	F4556-04	F4556-11	F4556-07	F4556-05	F4556-09	F4556-08	F4556-10
		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
1		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
CACNO	COMPOUND	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.	SEMIVOLATILES	UNITS:								
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	
95-95-4	2,4,5-TRICHLOROPHENOL	ug/l	0.2 U 0.41 U	0.2 U 0.4 U	0.21 U	0.2 U 0.41 U	0.2 U 0.41 U	0.2 U 0.4 U	0.2 U 0.4 U	
88-06-2	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	
105-67-9	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	
51-28-5	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	
121-14-2	2,4-DINITROTOLUENE	ug/l	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	
606-20-2	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	
91-58-7	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	
95-57-8	2-CHLOROPHENOL	ug/l	0.55 U	0.55 U	0.56 U	0.55 U	0.55 U	0.54 U	0.55 U	
91-57-6	2-METHYLNAPHTHALENE	ug/l	7.2 J	18.7 J	0.33 U	0.33 U	0.33 U	0.32 U	0.32 U	
95-48-7	2-METHYLPHENOL (O-CRESOL)	ug/l	0.24 U	0.24 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U	
88-74-4	2-NITROANILINE	ug/l	0.5 U	0.49 U	0.51 U	0.5 U	0.5 U	0.49 U	0.49 U	
88-75-5 MEDU2ME	2-NITROPHENOL 3- AND 4- METHYLPHENOL (TOTAL)	ug/l	0.53 U	0.53 U	0.54 U 0.39 U	0.53 U	0.53 U	0.52 U	0.53 U	
MEPH3ME 91-94-1		ug/l	0.39 U 1 U	0.38 U 1 U	0.39 U 1 U	0.39 U 1 U	0.39 U 1 U	0.38 U 1 U	0.38 U 1 U	
91-94-1 99-09-2	3,3'-DICHLOROBENZIDINE 3-NITROANILINE	ug/l	1 U	1 U 1 U	1 U 1 U	1 U	1 U 1 U	1 U 1 U	1 U 1 U	
534-52-1	4,6-DINITRO-2-METHYLPHENOL	ug/l 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	0.70 U 0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.23 U	0.73 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	0.25 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	
	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	
100-01-6	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	
100-02-7	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	
98-86-2	ACETOPHENONE	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 UJ	0.14 U	
120-12-7	ANTHRACENE	ug/l	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	
1912-24-9	ATRAZINE	ug/l	0.41 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.4 U	
100-52-7 56-55-3	BENZALDEHYDE BENZO(A)ANTHRACENE	ug/l ug/l	0.79 U 0.16 U	0.78 U 0.16 U	0.79 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	
50-32-8	BENZO(A)PYRENE	ug/l	0.16 U 0.14 U	0.16 U 0.14 U	0.16 U 0.14 U	0.16 U 0.14 U	0.16 U 0.14 U	0.16 U 0.14 U	0.16 U 0.14 U	
205-99-2	BENZO(A)FI KENE BENZO(B)FLUORANTHENE	ug/l	0.14 U 0.3 U	0.14 U 0.29 U	0.14 U 0.3 U	0.14 U 0.3 U	0.14 U 0.3 U	0.14 U 0.29 U	0.14 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	
85-68-7	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	
92-52-4	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	
111-91-1	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	
111-44-4	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	
117-81-7	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	
105-60-2	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 53-70-3	CHRYSENE DIBENZ(A,H)ANTHRACENE	ug/l	0.18 U 0.43 U	0.18 U	0.19 U 0.43 U	0.18 UJ 0.43 U	0.18 U 0.43 U	0.18 UJ 0.42 U	0.18 UJ 0.42 U	
53-70-3 132-64-9	DIBENZ(A,H)AN I HRACENE 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	0.24 U 0.39 U	0.24 U 0.38 U	0.23 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	0.39 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 1 U	0.22 U 1 U	0.25 U 1 U	0.22 U 1 U	0.22 U 1 U	0.22 U 1 U	0.22 U 1 U	
117-84-0	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	
206-44-0	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	
67-72-1	HEXACHLOROETHANE	ug/l	0.26 U	0.25 U	0.26 U	0.26 U	0.26 U	0.25 UJ	0.25 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 - 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							
	SDG:	F4556							
	Matrix:	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:								
PCBS		0.000 11	0.000 11	0.000 11	0.007 11	0.007 11	0.007.11	0.097 U	
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		
11104-28-2 PCB-1221 (AROCLOR 1221)	ug/l	0.102 U 0.102 U	0.103 U	0.102 U	0.101 U	0.101 U	0.101 U	0.101 U	
11141-16-5 PCB-1232 (AROCLOR 1232) 53469-21-9 PCB-1242 (AROCLOR 1242)	ug/l	0.102 U 0.091 U	0.103 U 0.092 U	0.102 U 0.091 U	0.101 U 0.09 U	0.101 U 0.09 U	0.101 U 0.09 U	0.101 U 0.09 U	
12672-29-6 PCB-1242 (AROCLOR 1242)	ug/l	0.091 U 0.102 U	0.092 U 0.103 U	0.091 U 0.102 U	0.101 U	0.09 U 0.101 U	0.101 U	0.101 U	
11097-69-1 PCB-1254 (AROCLOR 1248)	ug/l	0.102 U 0.045 U	0.105 U 0.045 U	0.102 U 0.045 U	0.101 U 0.044 U	0.101 U 0.044 U	0.101 U 0.044 U	0.044 U	
11097-09-11PCB-1254 (AROCLOR 1254) 11096-82-5 PCB-1260 (AROCLOR 1260)	ug/l ug/l	0.043 U 0.083 U	0.043 U 0.084 U	0.043 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	
INORGANICS	ug/1	0.085 0	0.084 0	0.085 0	0.082 0	0.082 0	0.082 0	0.082 0	
7429-90-5 ALUMINUM	ug/l	156	219	13300	59.1	1970	12.8 J	30.2 J	
7440-36-0 ANTIMONY	ug/l	6.25 U							
7440-38-2 ARSENIC	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 BARIUM	ug/l	301 J-	294	266	53.9	555	4 U	4 U	
7440-41-7 BERYLLIUM	ug/l	0.7 U	0.7 U	0.72 J	0.7 U	0.7 U	0.7 U	0.7 U	
7440-43-9 CADMIUM	ug/l	0.5 U							
7440-70-2 CALCIUM	ug/l	121200	119900	95000	153100	604600	31.8 U	127 J	
7440-47-3 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 COBALT	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 COPPER	ug/l	2 U	2.45 J	35.6	8.12 J	9.7 J	2 U	2 U	
7439-89-6 IRON	ug/l	3280 J-	3400	16700	148	6300	13 J	57.3	
7439-92-1 LEAD	ug/l	6.31	5.97 J	151	1.85 J	11.2	1.5 U	1.81 J	
7439-95-4 MAGNESIUM	ug/l	12600	12600	43000	553000	180900	32.5 U	32.5 U	
7439-96-5 MANGANESE	ug/l	1270	1250	1120	13.5	8260	1.7 U	1.7 U	
7439-97-6 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 NICKEL	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	
7782-49-2 SELENIUM	ug/l	4.8 UJ	4.8 U						
7440-22-4 SILVER	ug/l	1.25 UJ	1.25 U						
7440-23-5 SODIUM	ug/l	459800	457300	2895100	13.9 U	23762000	13.9 U	75.6 J	
7440-28-0 THALLIUM	ug/l	2.4 U							
7440-62-2 VANADIUM	ug/l	5 U	5 U	28.5	5 U	5 U	5 U	5 U	
7440-66-6 ZINC	ug/l	6.79 J	8.35 J	130	5 U	7.59 J	5 U	5 U	
57-12-5 CYANIDE DISSOLVED METALS	ug/l	11	12	235	11	132	3 U	3 U	
7429-90-5 ALUMINUM	ug/l			52					
7440-36-0 ANTIMONY	ug/l			6.25 U					
7440-38-2 ARSENIC	ug/l			0.25 U 7.19 J					
7440-39-3 BARIUM	ug/l			161					
7440-41-7 BERYLLIUM	ug/l			0.7 U					
7440-43-9 CADMIUM	ug/l			0.5 U					
7440-70-2 CALCIUM	ug/l			111300					
7440-47-3 CHROMIUM, TOTAL	ug/l			1.1 U					
7440-48-4 COBALT	ug/l			3.75 U					
7440-50-8 COPPER	ug/l			10.75					
7439-89-6 IRON	ug/l			145					
7439-92-1 LEAD	ug/l			4.78 J					
7439-95-4 MAGNESIUM	ug/l			46100					
7439-96-5 MANGANESE	ug/l			1120					
7439-97-6 MERCURY	ug/l			0.1 U					
7440-02-0 NICKEL	ug/l			13.2 J					
7440-09-7 POTASSIUM	ug/l			39300					
7782-49-2 SELENIUM	ug/l			4.8 U					
7440-22-4 SILVER	ug/l			1.25 U					
7440-23-5 SODIUM	ug/l			13.9 U					
7440-28-0 THALLIUM	ug/l			2.4 U					
7440-62-2 VANADIUM	ug/l			5 U					
7440-66-6 ZINC	ug/l		1	13.3 J					

### ATTACHMENT A-2

## VALIDATED LABORATORY DATA FOR SOIL SAMPLES

Con Ed - Hunts	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:						
	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	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
	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	1,1-DICHLOROETHENE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
87-61-6	1,2,3-TRICHLOROBENZENE	ug/kg	0.55 UJ	0.56 U	0.57 UJ	0.59 UJ	0.56 UJ	0.65 UJ
120-82-1	1,2,4-TRICHLOROBENZENE	ug/kg	0.55 UJ	0.56 U	0.57 UJ	0.59 UJ	0.56 UJ	0.65 UJ
96-12-8 106-93-4	1,2-DIBROMO-3-CHLOROPROPANE 1,2-DIBROMOETHANE	ug/kg	0.96 U 0.55 U	0.98 U 0.56 U	0.99 U 0.57 U	1 U 0.59 U	0.97 U 0.56 U	1.1 U 0.65 U
95-50-1	1,2-DIGROMOETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 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 0.55 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
XYLMP	M,P-XYLENE (SUM OF ISOMERS)	ug/kg	0.33 U 0.79 U	0.50 U 0.81 U	0.82 U	0.39 U 0.84 U	0.30 U 0.81 U	0.03 U
78-87-5	1,2-DICHLOROPROPANE	ug/kg	0.29 U	0.31 U	0.3 U	0.3 U	0.31 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	0.25 U 0.41 U	0.48 U
106-46-7	1,4-DICHLOROBENZENE	ug/kg	0.41 U	0.46 U	0.42 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
	2-HEXANONE	ug/kg	2.8 U	2.8 U	2.9 U	2.9 U	2.8 U	3.2 U
	ACETONE	ug/kg	37.1	13 J	18.1 J	27.5 J	18.5 J	100
	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	CHLOROFORM	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
74-87-3	CHLOROMETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
	CIS-1,3-DICHLOROPROPENE	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	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
	DIBROMOCHLOROMETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
	DICHLORODIFLUOROMETHANE ETHYLBENZENE	ug/kg	0.55 U	0.56 U	0.57 U 0.57 U	0.59 U	0.56 U	0.65 U
100-41-4 98-82-8		ug/kg	0.55 U 0.53 U	0.56 U 0.54 U	0.57 U 0.55 U	0.59 U 0.56 U	0.56 U 0.54 U	0.65 U 0.62 U
98-82-8 79-20-9	ISOPROPYLBENZENE (CUMENE) METHYL ACETATE	ug/kg	0.53 U 1.1 U	0.54 U 1.1 U	0.55 U 1.1 U	0.56 U 1.2 U	0.54 U 1.1 U	0.62 U 1.3 U
79-20-9 78-93-3	METHYL ACEIAIE METHYL ETHYL KETONE (2-BUTANONE)	ug/kg ug/kg	3.4 U	3.5 U	3.5 U	1.2 U 3.6 U	3.5 U	1.5 U 18.6 J
108-10-1	METHYL ISOBUTYL KETONE	ug/kg 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	4.2 J 0.57 U	0.59 U	0.56 U	0.65 U
100-42-5	STYRENE	ug/kg	0.5 U	0.50 U	0.57 U	0.53 U	0.50 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	TRICHLOROFLUOROMETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
75-01-4	VINYL CHLORIDE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U

Valuate Sim Analysical Data         Simple ID (1) All Simple ID (1) Al	Con Ed - Hunts Po	oint	Location ID:	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3
SDG: F451         Degh:         7 - 9.8.         23 - 5.8.         5 - 7.8.         23 - 5.7.         27.7.         11 - 13.8.         29.7.           ND::         None:         CTCH			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
Some:         CTICH         E1211         F1211         F12111         F1211         F1211 <t< td=""><td>October 2014</td><td></td><td>Lab Sample Id:</td><td>F4241-01</td><td>F4241-02</td><td>F4241-10</td><td>F4241-11</td><td>F4241-08</td><td>F4241-09</td></t<>	October 2014		Lab Sample Id:	F4241-01	F4241-02	F4241-10	F4241-11	F4241-08	F4241-09
BDC:         FIG11         SOL         SOL <td>SDG: F4241</td> <td></td> <td>Depth:</td> <td>7 - 9 ft</td> <td>23 - 25 ft</td> <td>5 - 7 ft</td> <td>25 - 27 ft</td> <td>11 - 13 ft</td> <td>29 - 31 ft</td>	SDG: F4241		Depth:	7 - 9 ft	23 - 25 ft	5 - 7 ft	25 - 27 ft	11 - 13 ft	29 - 31 ft
Image:         Soft.         Soft. <t< td=""><td></td><td></td><td>Source:</td><td>CTECH</td><td>CTECH</td><td>CTECH</td><td>CTECH</td><td>CTECH</td><td>CTECH</td></t<>			Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
Samples:         101/201 4938         101/2014 11/25         106/201 41-38         107/2014 4-38         107/2014 4-38         107/2014 4-30			SDG:	F4241	F4241		F4241		F4241
L         Value         11/12/2014     <									SOIL
CASA DO         COMPOLIND         LUNTS									10/6/2014 9:45
BANYOLATES         Pbg         7.3.U         147.U         29.8.U         15.1.U         14.6.U           88-02         2.3.4.FTERAGE CONFIRENCE         UP kg         7.3.U         147.U         29.8.U         15.3.U         14.6.U           98-02         2.3.4.FTERAGE CONFIRENCE         UP kg         7.3.U         147.U         29.8.U         15.3.U         14.6.U           109-52         2.3.4.FTERAGE CONFIRENCE         UP kg         7.0.U         143.U         22.0.U         145.U         15.0.U         14.6.U         14.0.U         10.0.U         10.0.				11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014
95-93         12.4-5 TERNACILLOROBENZALE         ugkg         72.3 U         14.7 U         28.8 U         15.3 U         14.6 U           95-94         2.4.5 TERNACILLOROPHENOL         ugkg         13.0 U         22.1 U         23.2 U         15.3 U         14.0 U         20.0 U         33.2 U         12.4 U         30.0 U         12.0 U         33.2 U         12.4 U         30.0 U         12.0			UNITS:						
58-90         23.46-TERRACHLOROPHENOL         up/s         72.3 U         14.7 U         28.8 U         15.3 U         12.4 U         32.0 U         33.0 U         34.0 U         35.0 U         35.0 U         14.1 U         22.1 U         32.0 U         14.0 U         32.0 U         35.0 U         14.1 U         22.0 U         14.9 U         14.0 U         35.0 U         14.0 U         23.0 U         14.0 U         23.0 U         14.0 U         35.0 U         15.0 U         35.0 U         15.0 U									
95.954         2.4.5 TRICHLOROMENOL         ug/s         19.0 U         22.0 U         51.2 U         27.4 U         26.0 U         11.4 U         11.0 U									17 U
88-66.2         24.6-TRICHLOROPHENOL         up/sg         56.3 U         114 U         23.2 U         11.6 U         11.4 U         11           105-32         24.DMETMVDHENOL         up/sg         100 U         23.1 U         43.2 U         23.2 U         13.4 U         21.0 U         23.1 U         39.6 U         37.7 U         23.0 U         23.0 U         23.1 U         43.0 U         23.1 U         39.6 U         37.7 U         23.0 U         13.1 U         11.1 U         21.1 U         23.0 U         13.0 U         30.0 U									17 U
12.83-22         2.4.DICHLOROPHENOL         up to the set of the set									30.4 U
105-679         2-DIMEMPLYHENOL         up age (10)         101         121         143         122         121         1111         111         111         111									13.3 U
51-28-2       24-DNITROPHENCL       up kg       190 U       37.9 UU       77.1 U       39.6 U       37.7 UU       40.6 U         66-30-2       26-DNITROTOLLENE       up kg       55.2 U       11.2 U       22.7 U       10.7 U       11.7 U       11.1 U         66-30-2       26-DNITROTOLLENE       up kg       42.0 U       85.5 U       30.9 U       85.9 U       85.0 U         95-57       26-LID.GONAPHIRALENE       up kg       47.2 U       19.7 U       40.0 U       20.6 U       19.6 U       2         95-76       24-HITHAAPHIRALENE       up kg       49.7 U       80.0 U       41.2 U       12.2 U       20.1 U       2         95-74       23-HITHAAPHIRALENE       up kg       49.7 U       30.0 U       44.2 U       17.0 U       23.0 U       23.0 U       12.3 U       23.0 U       23.0 U       23.8 U       20.2 U       19.3 U       20.2 U       19.3 U       23.0 U       23.8 U       23.0 U <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>16.5 U</td></t<>									16.5 U
121-14-2         2.4-DNTROOULENE         up/g         55.2         11.2         12.2         12.2         11.7         11.1         11.0           06-302         2.6-DNTROOULENE         up/g         75.1         15.2         30.9         15.9         15.0									24.6 U 44.1 U
obs.202         2.6-DNITROPOLUENE         ug/kg         75.1 U         15.2 U         30.9 U         15.9 U         15.1 U         15.1 U           91-58.7         2.CHLORONPHITALENE         ug/kg         47.2 U         19.7 U         40 U         20.6 U         19.6 U         20.6 U									44.1 U 13 U
91-58-7         2-CHLORONAPHITHALENE         ug/kg         42 U         85 U         17.3 U         8.9 U         8.5 U           95-7.8         2-CHLORONPLOL         ug/kg         47.2 U         19.7 U         40 U         20.6 U         19.6 U         22.0 U         20.1 U         22.0 U         23.0 U         43.0 U         33.0 U         30.2 U         30.2 U         30.2 U         30.2 U         30.0 U         22.0 U         23.8 U         23.0 U									13 U 17.7 U
95.57.8         2-CHLOROPHENOL         ug/kg         97.2 U         19.7 U         19.0 U         20.6 U         19.6 U         20.6 U           95.57.6         2-METHYLPHENOL (0-CRESOL)         ug/kg         99.0 U         20.3 U         41.2 U         21.2 U         20.1 U         21           95.47.4         2-METHYLPHENOL (0-CRESOL)         ug/kg         88.7 U         16.6 U         33.7 U         17.3 U         16.5 U         21           88.7.5.5         2-NTROPHENOL         ug/kg         88.0 U         18.0 U         33.9 U         22.0 U         23.8 U         22           91.9-4.1         3.5 -ORTHOROBENDINE         ug/kg         12.0 U         23.9 U         48.7 U         25 U         23.8 U         23           91.9-4.2         3.7 NITROANILINE         ug/kg         10.0 U         21.4 U         43.4 U         22.1 U         23.8 U         23         12.8 U         23.8 U									9.9 U
91-57-0         2-METHYLINAPHTHALENE         ug/kg         46-4         94-U         19.1         98.0         94.0         19           954-7         2-METHYLIPHENOL (-O-CRESOL)         ug/kg         81.7         16.6         0         33.7         17.3         16.5         0         18           88-75-5         2-NTRO-MENOL         ug/kg         85.75         19.4         33.7         17.3         1									9.9 U 22.9 U
95-8-7         2-METHYLPHENOL (O-CRESOL)         ug/kg         99.9 U         20.0 U         412.0 U         21.2 U         20.1 U         21.8 U           88-74-4         2-NITROANILINE         ug/kg         88.9 U         18.0 U         33.6 CH         18.8 U         17.0 U         16.5 U         21.8 U         23.0 CH         19.4 U         39.3 U         20.2 U         19.3 U         22.0 U         23.8 U         23.9 U         48.7 U         25.0 U         23.8 U<									10.9 U
88-74         2-NTROANLINE         up kg         88.7 U         16.6 U         33.7 U         17.3 U         16.5 U         12           MEPHSMEPH         5-NTROENENCL         up kg         95.5 U         18.0 U         30.3 U         20.2 U         19.3 U         20           91-94-1         35.7 DCHLADROBENZIDINE         up kg         120 U         23.9 U         48.7 U         25 U         23.8 U         23           91-92-2         3-NTROANLINE         up kg         120 U         23.9 U         48.7 U         25 U         23.8 U         23         23.1 U         23.1 U <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>23.5 U</td>									23.5 U
88-75       2.NTEOPHENOL       up kg       88.0       18.0       36.6 U       18.8 U       17.9 U       22         91-94-1       3.3-DICHLOROBENZIDNE       up kg       120 U       23.9 U       48.7 U       25 U       23.8 U       22         91-94-1       3.3-DICHLOROBENZIDNE       up kg       120 U       23.9 U       48.7 U       25 U       23.8 U       23         93-92-2       S.NTROANLINE       up kg       110 U       21.4 U       43.4 U       22.3 U       21.3 U       21.3 U         93-95-7       -CHLORO-METHYLPHENOL       up kg       81.7 U       16.6 U       33.7 U       17.3 U       16.5 U       21         90-67-2       -CHLORO-METHYLPHENOL       up kg       81.0 U       26.3 U       33.1 U       17.3 U       16.5 U       20       21         100-64-7.8       -CHLOROANLINE       up kg       240 U       46.4 U       96.7 U       27.5 U       26.2 U       21         100-01-6       +NTRONHENOL       up kg       340 U       96.3 U       14.0 U       12.0 U       20.1 U       20.5 U       20.4 U       20.1 U       20.5 U       20.4 U									19.2 U
MEHRAMENH         1-ND-4 METHYLPHENDL(TOTAL)         ug/sg         10-41         39-3 U         20-2 U         19.3 U         22.3 U           99-90-2         3-NDTCH.ORDENZIDNE         ug/sg         120 U         23.9 U         48.7 U         25 U         23.8 U         22           99-90-2         3-NDTCH.ORDENTI-PHENOL         ug/sg         100 U         21.4 U         44.8 U         7.6 U         7.2 U         23.8 U         22           90-53-3         4-ROMORDENTI-PHENOL         ug/sg         35.9 U         7.3 U         14.8 U         7.6 U         7.2 U         26.0 U         10         10.4 A         10.4 A         10.4 U         21.4 U         14.8 U         7.6 U         7.2 U         26.0 U         10         10.4 A         10.4 U         21.3 U         22.0 U									20.9 U
91-94-1         33-DICHOROBENZIDNE         up/sg         120 U         239 U         487 U         25 U         238 U         23           534-52-1         4-DINTRO-3-METHYLPHENOL         up/sg         110 U         214 U         434 U         223 U         213 U         134 SU         235 U         213 U         148 U         76 U         7.2 U           59-57         4-CHLORO-3-METHYLPHENOL         up/sg         817 U         166 U         337 U         173 U         165 U         165 SI           59-67         4-CHLORO-3-METHYLPHENOL         up/sg         817 U         166 U         337 U         173 U         165 U         165 U           106-47-8         4-CHLORO-METHYLPHENOL         up/sg         130 U         263 U         34.1 U         21.2 U         20.1 U         22           1060-16         4-NITRO-PIENOL         up/sg         340 U         63.3 U         140 U         72.4 U         68.9 U         28           206-02.7         4-NITRO-PIENOL         up/sg         51.9 U         03.5 U         21.4 U         11 U         10.5 U         20           206-27         4-NITRO-NILNE         up/sg         57.5 U         7.6 U         15.5 U         7.9 U         7.6 U           1									20.5 U
99-9-2         3-NTROAMLINE         ug/kg         120 U         23 U         487 U         25 U         28 U         22 U           23-521         4-BROMOHENVL PHENL THER         ug/kg         35 9 U         7.3 U         14.8 U         7.6 U         7.2 U         7.9 U           99-90-7         4-CHLOROAMENTYL PHENL ETHER         ug/kg         81.7 U         16.6 U         33.7 U         7.3 U         16.5 U         17.3 U         16.5 U         17.0 U         16.7 A         4-CHLOROAMENTYL PHENL ETHER         ug/kg         190 U         26.3 U         53.4 U         27.5 U         26.2 U         27.0 U         20.0 U         23.7 U         48.3 U         25.9 U         23.3 U         41.2 U         21.2 U         20.1 U         20.1 U         20.1 U         20.1 U         20.1 U         20.1 U         23.9 U         48.4 U         9.4 U         9.1 U         10.5 U         21.4 U         11.0 U         10.5 U         20.1 U         10.5 U         20.6 U         10.6 U         20.1 U         10.5 U         <									27.8 U
									27.8 U
									24.8 U
									8.5 U
10647*8         4-CHLOROPHENYL PIENYL PIENYL ETHER         ug/kg         130 U         26.3 U         53.4 U         27.5 U         26.2 U         33.4 U           1000-16         4-NITROANLINE         ug/kg         240 U         48.6 U         98.7 U         50.7 U         48.3 U         52.0 U           100-02.7         4-NITROPHENOL         ug/kg         31.0 U         69.3 U         140 U         72.4 U         68.9 U         58.3 U           208-56.8         ACENAPHTHENE         ug/kg         51.9 U         10.5 U         21.4 U         11 U         10.5 U         14.4 U         11.4 U         12.0 1.5.5 U         7.9 U         7.6 U         12.0 1.5.5 U         7.9 U         7.6 U         12.0 1.5.5 U         7.9 U         7.6 U         12.0 1.5.5 U         19.6 U         2.2 U         10.0 5.2 U         19.6 U         2.0 U         10.0 1.5 U         12.0 U         2.6 5.3 S         8 BEXZO(A)PIYRENE         ug/kg         50.0 J         12.1 U         10.1 U         10.1 U         10.1 U         10.0 U									19.2 U
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$				130 U		53.4 U			30.6 U
$\begin{array}{cccccccccccccccccccccccccccccccccccc$							21.2 U		23.5 U
83:32-9       ACENAPHTHENE       ug/kg       51.9 U       10.5 U       21.4 U       11 U       10.5 U       11         208-66-8       ACENAPHTHYLENE       ug/kg       46.4 U       9.4 U       19.1 U       9.8 U       9.4 U       11         208-66-8       ACETOPHENONE       ug/kg       56.3 U       11.4 U       23.2 U       11.9 U       11.4 U       11         120-12-7       ANTHRACENE       ug/kg       37.5 U       7.6 U       15.5 U       7.9 U       7.6 U       10         1912-24-9       ATRAZINE       ug/kg       97.2 U       19.7 U       40 U       20.6 U       19.6 U       22         100-52-7       BENZALDEHYDE       ug/kg       96.1 U       19.5 U       39.6 U       20.3 U       19.4 U       25         56-55-3       BENZO(A)ANTHRACENE       ug/kg       410 J       8.1 U       16.4 U       130 J       8 U       20         205-9-2       BENZO(A)ANTHRACENE       ug/kg       560 J       12.2 U       24.8 U       150 J       12.1 U       11         207-08-9       BENZO(A)GHLORANTHENE       ug/kg       86.7 U       17.6 U       35.7 U       92.4 J       17.5 U       22         92-52-4       BIPHENYL (DIPHEN	100-01-6 4-1	NITROANILINE		240 U	48.6 U	98.7 U	50.7 U	48.3 U	56.4 U
208-96-8         ACENAPHTHYLENE         ug/kg         66.4 U         94.U         191.U         98.W         94.U         19           98-86-2         ACETOPHENONE         ug/kg         56.3 U         11.4 U         23.2 U         11.9 U         11.4 U         11           120-12-7         ANTHRACENE         ug/kg         37.5 U         7.6 U         15.5 U         7.9 U         7.6 U         1912.2 U         17.8 U         20.6 U         19.6 U         22           100-52-7         BENZALDEHYDE         ug/kg         96.1 U         19.5 U         39.6 U         20.3 U         19.6 U         22           56-55-3         BENZO(A)ANTHRACENE         ug/kg         50.0 J         12.2 U         24.8 U         150 J         12.1 U         11           191-24.2         BENZO(G)FLUORANTHENE         ug/kg         560 J         12.2 U         24.8 U         150 J         12.1 U         11           191-24.2         BENZO(K)FLUORANTHENE         ug/kg         86.7 U         17.6 U         35.7 U         92.4 J         17.5 U         12           207.08-9         BENZO(K)FLUORANTHENE         ug/kg         86.8 U         17.9 U         36.4 U         18.7 U         17.8 U         22           92.52.	100-02-7 4-1	NITROPHENOL	ug/kg	340 U	69.3 UJ	140 U	72.4 U	68.9 U	80.5 U
98-86-2         ACETOPHENONE         ug/kg         56.3 U         11.4 U         22.2 U         11.9 U         11.4 U         12.1 U           120-12-7         ANTHRACENE         ug/kg         37.5 U         7.6 U         15.5 U         7.9 U         7.6 U         19.0 U         20.6 U         19.9 U         27.6 U         19.7 U         40 U         20.6 U         19.6 U         22.1 U         19.7 U         40 U         20.6 U         19.6 U         22.1 U         23.5 U         19.4 U         22.5 U         19.5 U         39.6 U         20.3 U         19.4 U         22.5 U         56.55.3 BENZO(A)ATHRACENE         ug/kg         410 J         8.1 U         16.4 U         130 J         8 U         20.5 9.2 BENZO(B)FLUORANTHENE         ug/kg         74.5 U         15.1 U         30.7 U         15.0 J         12.1 U         11           191-24-2         BENZO(K)FLUORANTHENE         ug/kg         74.5 U         17.6 U         35.7 U         92.4 J         17.5 U         22         20.0 S.4 BOREXYL BUTYL PHTHALATE         ug/kg         66.0 U         14.1 U         28.6 U         14.7 U         14 U         14 U         111.9 U         11.4 U         11.4 U         11.4 U         11.4 U         11.1 U         11.4 U         11.4 U         11.1 U <t< td=""><td>83-32-9 AG</td><td>CENAPHTHENE</td><td></td><td>51.9 U</td><td>10.5 U</td><td>21.4 U</td><td>11 U</td><td>10.5 U</td><td>12.2 U</td></t<>	83-32-9 AG	CENAPHTHENE		51.9 U	10.5 U	21.4 U	11 U	10.5 U	12.2 U
	208-96-8 AG	CENAPHTHYLENE	ug/kg	46.4 U	9.4 U	19.1 U	9.8 U	9.4 U	10.9 U
	98-86-2 AG	CETOPHENONE	ug/kg	56.3 U	11.4 U	23.2 U	11.9 U	11.4 U	13.3 U
100-52-7         BENZALDEHYDE         ug/kg         96.1 U         19.5 U         39.6 U         20.3 U         19.4 U         22           56-55-3         BENZO(A)ANTHRACENE         ug/kg         520 J         17.8 U         36.2 U         160 J         17.7 U         22           50-32-8         BENZO(A)PYRENE         ug/kg         410 J         8.1 U         164 U         130 J         8.U         100         17.1 U         101         101         21.1 U         11         11         191-24-2         BENZO(G)FJLUORANTHENE         ug/kg         560 J         12.2 U         24.8 U         150 J         15.1 U         100-52.4         17.5 U         15.0 U         17.5 U         22         24.8 U         18.7 U         17.5 U         22         22.4 U         17.5 U         22         22.4 U         17.5 U         22.4 U         14.4 U         11         11.9 U         28.6 U         14.7 U         14.4 U         14.1 U         11.9 U         23.6 U         14.7 U         14.0 U         14.1 U         11.9 U         12.4 U         14.1 U			ug/kg				7.9 U	7.6 U	8.8 U
56-55-3         BENZO(A)ANTHRACENE         ug/kg         520 J         17.8 U         36.2 U         160 J         17.7 U         22           50-32-8         BENZO(A)PYRENE         ug/kg         410 J         8.1 U         16.4 U         130 J         8 U         12           205-99-2         BENZO(G,H,DPERYLENE         ug/kg         560 J         12.2 U         24.8 U         150 J         12.1 U         11           191-24-2         BENZO(G,H,DPERYLENE         ug/kg         74.5 U         15.1 U         30.7 U         150 J         15.U         12           207-08-9         BENZO(K)FLUORANTHENE         ug/kg         86.7 U         17.6 U         35.7 U         92.4 J         17.5 U         22           92-52-4         BIPHENYL (DIPHENYL)         ug/kg         69.6 U         14.1 U         28.6 U         14.7 U         14 U         11           111-91-1         BIS(2-CHLOROETHOXY) METHANE         ug/kg         83.3 U         17.9 U         36.4 U         18.7 U         17.8 U         21.4 U           111-44.4         BIS(2-CHLOROETHOXY) METHANE         ug/kg         76.2 U         15.4 U         31.4 U         16.1 U         15.4 U         11           108-60-1         BIS(2-ETHYLHEYL) FHER         u			ug/kg						22.9 U
50-32-8         BENZO(A)PYRENE         ug/kg         410 J         8.1 U         16.4 U         130 J         8 U           205-99-2         BENZO(B)FLUORANTHENE         ug/kg         560 J         12.2 U         24.8 U         150 J         12.1 U         11           191-24-2         BENZO(G),H.DPERYLENE         ug/kg         74.5 U         15.1 U         30.7 U         190 J         15 U         11           207-08-9         BENZO(K),FLUORANTHENE         ug/kg         86.7 U         17.6 U         35.7 U         92.4 J         17.5 U         22           85-87         BENZYL BUTYL PHTHALATE         ug/kg         69.6 U         14.1 U         28.6 U         18.7 U         17.8 U         22           92-52-4         BIPHENYL (DIPHENYL)         ug/kg         69.6 U         14.1 U         28.6 U         14.7 U         14 U         14         11           111-91-1         BIS(2-CHLOROETHAYL) ETHER         ug/kg         76.2 U         15.4 U         31.4 U         18.7 U         17.8 U         22           108-60-1         BIS(2-CHLOROETHAYL) ETHER         ug/kg         76.2 U         15.4 U         31.4 U         16.1 U         15.4 U         11           108-62-CHLOROETHAYL) ETHER         ug/kg									22.6 U
205-99-2         BENZO(B)FLUORANTHENE         ug/kg         560 J         12.2 U         24.8 U         150 J         12.1 U         11           191-24-2         BENZO(G,H,DPERYLENE         ug/kg         74.5 U         15.1 U         30.7 U         150 J         15 U         16           207-08-9         BENZO(K)FLUORANTHENE         ug/kg         86.7 U         17.6 U         35.7 U         92.4 J         17.5 U         22           85-68-7         BENZYL BUTYL PHTHALATE         ug/kg         69.6 U         14.1 U         28.6 U         14.7 U         14 U         14         11           92-52-4         BIPHENYL (DIPHENYL)         ug/kg         69.6 U         14.1 U         28.6 U         14.7 U         14 U         14         11         11-9.1         BIS(2-CHLOROETHOXY) METHANE         ug/kg         76.2 U         15.4 U         31.4 U         16.1 U         17.8 U         22.4 U         22.4 U         21.4 U         11         11.7.8 U         22.4 U         22.4 U         21.4 U         11         11.4.4 U         111.4.4 U         18.7 U         17.8 U         22.4 U         21.4 U         11.4.4 U         111.4.4 U         111.4.4 U         18.1 U         16.1 U         15.4 U         111.5.U         12.4 U         11.6.5 U <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>20.7 U</td>									20.7 U
191-24-2       BENZO(G,H,I)PERYLENE       ug/kg       74.5 U       15.1 U       30.7 U       150 J       15 U       1207         207-08-9       BENZO(K)FUORANTHENE       ug/kg       86.7 U       17.6 U       35.7 U       92.4 J       17.5 U       22         85-68-7       BENZYL BUTYL PHTHALATE       ug/kg       88.3 U       17.9 U       36.4 U       18.7 U       17.8 U       22         92-52-4       BIPHENYL (DIPHENYL)       ug/kg       69.6 U       14.1 U       28.6 U       14.7 U       14 U       11         111-91-1       BIS(2-CHLOROETHAYL) ETHER       ug/kg       88.3 U       17.9 U       36.4 U       18.7 U       17.8 U       22         108-60-1       BIS(2-CHLOROETHYL) ETHER       ug/kg       76.2 U       15.4 U       31.4 U       16.1 U       15.4 U       11         117-81-7       BIS(2-CHLOROISOPROPYL) ETHER       ug/kg       2600       190 J       26.8 U       110 J       280 J       92         105-60-2       CAPROLACTAM       ug/kg       40.3 U       82.2 U       16.6 U       8.5 U       81.0 U       16.8 U       11         218-01-9       CHRYSENE       ug/kg       41.0 J       16.9 U       34.3 U       170 J       16.8 U									9.4 U
207-08-9         BENZOK ()FLUORANTHENE         ug/kg         86.7 U         17.6 U         35.7 U         92.4 J         17.5 U         22           85-68-7         BENZYL BUTYL PHTHALATE         ug/kg         88.3 U         17.9 U         36.4 U         18.7 U         17.8 U         22           92-52-4         BIPHENYL (DIPHENYL)         ug/kg         69.6 U         14.1 U         28.6 U         14.7 U         14 U         14         16 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>14.2 U</td>									14.2 U
85-68-7         BENZYL BUTYL PHTHALATE         ug/kg         88.3 U         17.9 U         36.4 U         18.7 U         17.8 U         22           92-52-4         BIPHENYL (DIPHENYL)         ug/kg         69.6 U         14.1 U         28.6 U         14.7 U         14 U         14 U         11           111-91-1         BIS(2-CHLOROETHOXY) METHANE         ug/kg         110 U         21.5 U         43.7 U         22.4 U         21.4 U         11           111-44.4         BIS(2-CHLOROETHXY) ETHER         ug/kg         88.3 U         17.9 U         36.4 U         18.7 U         17.8 U         22           108-60-1         BIS(2-CHLOROISOPROPYL) ETHER         ug/kg         76.2 U         15.4 U         31.4 U         16.1 U         15.4 U         11           117-81-7         BIS(2-ETHYLHEXYL) PHTHALATE         ug/kg         2600         190 J         26.8 U         110 J         280 J         92           105-60-2         CAPROLACTAM         ug/kg         40.3 U         82.2 U         16.6 U         8.5 U         17.3 U         28           218-01-9         CHRYSENE         ug/kg         410 J         16.9 U         34.3 U         170 J         16.8 U         11           53-70-3         DIBENZ(A,H)ANTH									17.6 U
92-52-4         BIPHENYL (DIPHENYL)         ug/kg         69.6 U         14.1 U         28.6 U         14.7 U         14 U         14 U           111-91-1         BIS(2-CHLOROETHOXY) METHANE         ug/kg         110 U         21.5 U         43.7 U         22.4 U         21.4 U         11.4 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         22           108-60-1         BIS(2-CHLOROISOPROPYL) ETHER         ug/kg         76.2 U         15.4 U         31.4 U         16.1 U         15.4 U         11           117-81-7         BIS(2-ETHYLHEXYL) PHTHALATE         ug/kg         2600         190 J         26.8 U         110 J         280 J         92           105-60-2         CAPROLACTAM         ug/kg         40.3 U         82.2 U         16.6 U         8.5 U         17.3 U         28           218-01-9         CHRYSENE         ug/kg         410 J         16.9 U         34.3 U         17.0 J         16.8 U         11           218-01-9         DIBENZ(A,H)ANTHRACENE         ug/kg         53 U         10.7 U         21.8 U         11.2 U         10.7 U         11           22-64-9         DIBENZOFURAN         ug									20.4 U
111-91-1       BIS(2-CHLOROETHOXY) METHANE       ug/kg       110 U       21.5 U       43.7 U       22.4 U       21.4 U         111-44-4       BIS(2-CHLOROETHYL) ETHER       ug/kg       88.3 U       17.9 U       36.4 U       18.7 U       17.8 U       22         108-60-1       BIS(2-CHLOROISOPROPYL) ETHER       ug/kg       76.2 U       15.4 U       31.4 U       16.1 U       15.4 U       11         117-81-7       BIS(2-ETHYLHEXYL) PHTHALATE       ug/kg       2600       190 J       26.8 U       110 J       280 J       280         105-60-2       CAPROLACTAM       ug/kg       85.6 U       17.3 U       35.2 U       18.1 U       17.3 U       28         218-01-9       CHRYSENE       ug/kg       40.3 U       8.2 U       16.6 U       8.5 U       8.1 U         218-01-9       CHRYSENE       ug/kg       410 J       16.9 U       34.3 U       170 J       16.8 U       11         132-64-9       DIBENZOFIRAN       ug/kg       71.8 U       10.7 U       21.4 U       14.5 U       14.									20.8 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       22         108-60-1       BIS(2-CHLOROISOPROPYL) ETHER       ug/kg       76.2 U       15.4 U       31.4 U       16.1 U       15.4 U       11         117-81-7       BIS(2-ETHYLHEXYL) PHTHALATE       ug/kg       2600       190 J       26.8 U       110 J       280 J       92         105-60-2       CAPROLACTAM       ug/kg       85.6 U       17.3 U       35.2 U       18.1 U       17.3 U       28         86-74-8       CARBAZOLE       ug/kg       40.3 U       8.2 U       16.6 U       8.5 U       8.1 U         218-01-9       CHRYSENE       ug/kg       410 J       16.9 U       34.3 U       170 J       16.8 U       11         13-26-49       DIBENZ/GA,HJANTHRACENE       ug/kg       71.8 U       10.7 U       21.8 U       11.2 U       10.7 U       11         13-264-9       DIBENZOFURAN       ug/kg       28.7 U       5.8 U       11.8 U       16.1 U       5.8 U       14.5 U									16.4 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         11           117-81-7         BIS(2-ETHYLHEXYL) PHTHALATE         ug/kg         2600         190 J         26.8 U         110 J         280 J         92           105-60-2         CAPROLACTAM         ug/kg         85.6 U         17.3 U         35.2 U         18.1 U         17.3 U         28           86-74-8         CARBAZOLE         ug/kg         40.3 U         8.2 U         16.6 U         8.5 U         8.1 U           218-01-9         CHRYSENE         ug/kg         410 J         16.9 U         34.3 U         170 J         16.8 U         11           53-70-3         DIBENZ(A,H)ANTHRACENE         ug/kg         53 U         10.7 U         21.8 U         11.2 U         10.7 U         11           13-264-9         DIBENZOFURAN         ug/kg         71.8 U         14.5 U         29.6 U         15.2 U         14.5 U         14.5 U           84-66-2         DIETHYL PHTHALATE         ug/kg         610 J         350 J         500         400         400         400         400         400         400         400         400         400         400									25 U
117-81-7         BIS(2-ETHYLHEXYL) PHTHALATE         ug/kg         2600         190 J         26.8 U         110 J         280 J         99           105-60-2         CAPROLACTAM         ug/kg         85.6 U         17.3 U         35.2 U         18.1 U         17.3 U         22           86-74-8         CARBAZOLE         ug/kg         40.3 U         82.2 U         16.6 U         8.5 U         81.1 U         22           218-01-9         CHRYSENE         ug/kg         410 J         16.9 U         34.3 U         170 J         16.8 U         11           53-70-3         DIBENZ(A,H)ANTHRACENE         ug/kg         53 U         10.7 U         21.8 U         11.2 U         10.7 U         11           132-64-9         DIBENZOFURAN         ug/kg         71.8 U         14.5 U         29.6 U         15.2 U         14.5 U         11           132-64-9         DIBENZOFURAN         ug/kg         28.7 U         5.8 U         11.8 U         6.1 U         5.8 U           131-11-3         DIMETHYL PHTHALATE         ug/kg         610 J         350 J         530 J         500         400         400           84-67-2         DI-N-BUTYL PHTHALATE         ug/kg         610 J         350 J         530 J <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>20.8 U 17.9 U</td>									20.8 U 17.9 U
105-60-2         CAPROLACTAM         ug/kg         85.6 U         17.3 U         35.2 U         18.1 U         17.3 U         22           86-74-8         CARBAZOLE         ug/kg         40.3 U         8.2 U         16.6 U         8.5 U         8.1 U         17.3 U         22           218-01-9         CHRYSENE         ug/kg         410 J         16.9 U         34.3 U         170 J         16.8 U         11           53-70-3         DIBENZ(A,H)ANTHRACENE         ug/kg         53 U         10.7 U         21.8 U         11.2 U         10.7 U         11           132-64-9         DIBENZOFURAN         ug/kg         71.8 U         14.5 U         29.6 U         15.2 U         14.5 U         11           84-66-2         DIETHYL PHTHALATE         ug/kg         28.7 U         5.8 U         11.8 U         6.1 U         5.8 U           131-11-3         DIMETHYL PHTHALATE         ug/kg         610 J         350 J         530 J         500         400         400           84-74-2         DI-N-BUTYL PHTHALATE         ug/kg         140 U         29.3 U         59.6 U         30.6 U         29.2 U         33.3 U									95.4 J
86-74-8         CARBAZOLE         ug/kg         40.3 U         8.2 U         16.6 U         8.5 U         8.1 U           218-01-9         CHRYSENE         ug/kg         410 J         16.9 U         34.3 U         170 J         16.8 U         11           53-70-3         DIBENZ(A,H)ANTHRACENE         ug/kg         53 U         10.7 U         21.8 U         11.2 U         10.7 U         1           132-64-9         DIBENZOFURAN         ug/kg         71.8 U         14.5 U         29.6 U         15.2 U         14.5 U         14.5 U           84-66-2         DETHYL PHTHALATE         ug/kg         28.7 U         5.8 U         11.8 U         6.1 U         5.8 U           131-11-3         DIMETHYL PHTHALATE         ug/kg         610 J         350 J         530 J         500         400         400           84-74-2         DI-N-BUTYL PHTHALATE         ug/kg         140 U         29.3 U         59.6 U         30.6 U         29.2 U         33.4									95.4 J 20.2 U
218-01-9         CHRYSENE         ug/kg         410 J         16.9 U         34.3 U         170 J         16.8 U         11           53-70-3         DIBENZ/CA,HJANTHRACENE         ug/kg         53 U         10.7 U         21.8 U         11.2 U         10.7 U         11           132-64-9         DIBENZOFURAN         ug/kg         71.8 U         14.5 U         29.6 U         15.2 U         14.5 U         14.5 U           84-66-2         DIETHYL PHTHALATE         ug/kg         28.7 U         5.8 U         11.8 U         6.1 U         5.8 U           131-11-3         DIMETHYL PHTHALATE         ug/kg         610 J         350 J         500         400         400           84-74-2         DI-N-BUTYL PHTHALATE         ug/kg         140 U         29.3 U         59.6 U         30.6 U         29.2 U         30.5									20.2 U 9.5 U
53-70-3         DIBENZ(A,H)ANTHRACENE         ug/kg         53 U         10.7 U         21.8 U         11.2 U         10.7 U         11.2 U           132-64-9         DIBENZOFURAN         ug/kg         71.8 U         14.5 U         29.6 U         15.2 U         14.5 U         14.5 U           84-66-2         DIETHYL PHTHALATE         ug/kg         28.7 U         5.8 U         11.8 U         6.1 U         5.8 U           131-11-3         DIMETHYL PHTHALATE         ug/kg         610 J         350 J         530 J         500         400         400           84-74-2         DI-N-BUTYL PHTHALATE         ug/kg         140 U         29.3 U         59.6 U         30.6 U         29.2 U         33.6 U									9.5 U 19.6 U
132-64-9         DIBENZOFURAN         ug/kg         71.8 U         14.5 U         29.6 U         15.2 U         14.5 U         1           84-66-2         DIETHYL PHTHALATE         ug/kg         28.7 U         5.8 U         11.8 U         6.1 U         5.8 U         1           131-11-3         DIMETHYL PHTHALATE         ug/kg         610 J         350 J         530 J         500         400         400           84-74-2         DI-N-BUTYL PHTHALATE         ug/kg         140 U         29.3 U         59.6 U         30.6 U         29.2 U         33									19.6 U 12.5 U
84-66-2         DIETHYL PHTHALATE         ug/kg         28.7 U         5.8 U         11.8 U         6.1 U         5.8 U           131-11-3         DIMETHYL PHTHALATE         ug/kg         610 J         350 J         530 J         500         400									12.5 U 16.9 U
131-11-3         DIMETHYL PHTHALATE         ug/kg         610 J         350 J         530 J         500         400         400           84-74-2         DI-N-BUTYL PHTHALATE         ug/kg         140 U         29.3 U         59.6 U         30.6 U         29.2 U         33									6.8 U
84-74-2 DI-N-BUTYL PHTHALATE ug/kg 140 U 29.3 U 59.6 U 30.6 U 29.2 U 3									410 J
									34.1 U
117/84.0 IDEN-OCTYLEPHTHALATE I $10/kg$ 21 I A 3 II 8 6 II A 4 II 4 2 II		I-N-OCTYLPHTHALATE	ug/kg ug/kg	21 U	4.3 U	8.6 U	4.4 U	4.2 U	4.9 U
									4.9 U 8.7 U

Con Ed - Hunts	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		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
	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
	HEXACHLOROCYCLOPENTADIENE	ug/kg	44.7 U	9.1 U	18.4 U	9.5 U	9 U	10.5 U
	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	ts 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		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:						
	PCBS							
12674-11-2	PCB-1016 (AROCLOR 1016)	ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	3.7 U	4.3 U
11104-28-2	PCB-1221 (AROCLOR 1221)	ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	3.7 U	4.3 U
11141-16-5	PCB-1232 (AROCLOR 1232)	ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	3.7 U	4.3 U
53469-21-9	PCB-1242 (AROCLOR 1242)	ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	3.7 U	4.3 U
12672-29-6	PCB-1248 (AROCLOR 1248)	ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	3.7 U	4.3 U
11097-69-1	PCB-1254 (AROCLOR 1254)	ug/kg	1.6 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U
11096-82-5	PCB-1260 (AROCLOR 1260)	ug/kg	88	3.7 U	3.8 U	3.9 U	3.7 U	4.3 U
	INORGANICS							
7429-90-5	ALUMINUM	mg/kg	6130	7320	6730	9300	1420	6030
7440-36-0	ANTIMONY	mg/kg	0.524 U	0.522 U	0.537 J	0.607 J	0.505 U	0.594 U
7440-38-2	ARSENIC	mg/kg	3.07	1.32	3.29	3.02	3.47	5.49
7440-39-3	BARIUM	mg/kg	178	75.2	73.8	92	18.1	44.3
7440-41-7	BERYLLIUM	mg/kg	0.404	0.381	0.442	0.496	0.142 J	0.426
7440-43-9	CADMIUM	mg/kg	0.056 U	0.056 U	0.056 U	0.058 U	0.054 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	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	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:						
	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	0.42 U	0.56 U	0.57 U	0.58 U	0.40 U	0.57 U
75-27-4	BROMODICHLOROMETHANE	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	0.82 U	0.82 U	0.85 U	0.86 U	0.93 U	0.85 U
74-83-9	BROMOMETHANE	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	0.55 U	0.56 U	0.57 U	0.58 U	6.5	0.57 U
56-23-5	CARBON TETRACHLORIDE	ug/kg	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	CHLOROFORM	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
74-87-3	CHLOROMETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
110-82-7	CIS-1,3-DICHLOROPROPENE CYCLOHEXANE	ug/kg ug/kg	0.55 U 0.55 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
124-48-1	DIBROMOCHLOROMETHANE	ug/kg ug/kg	0.55 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
75-71-8	DICHLORODIFLUOROMETHANE		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
100-41-4	ETHYLBENZENE	ug/kg	0.55 U 0.55 U	0.56 U 0.56 U	0.57 U 0.57 U			0.57 U 0.57 U
100-41-4 98-82-8		ug/kg				0.58 U	0.63 U	
98-82-8 79-20-9	ISOPROPYLBENZENE (CUMENE) METHYL ACETATE	ug/kg	0.53 U 1.1 U	0.53 U 1.1 U	0.55 U 1.1 U	0.56 U 1.2 U	0.61 U 1.3 U	0.55 U 1.1 U
79-20-9 78-93-3		ug/kg	1.1 U 3.4 U	1.1 U 3.5 U	1.1 U 3.6 U	1.2 U 3.6 U	1.3 U 3.9 U	1.1 U 3.6 U
	METHYL ETHYL KETONE (2-BUTANONE)	ug/kg			3.6 U 2.9 U			
108-10-1 108-87-2	METHYL ISOBUTYL KETONE	ug/kg	2.8 U	2.8 U		2.9 U	3.2 U	2.9 U 0.57 U
108-87-2 75-09-2	METHYLCYCLOHEXANE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	
	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		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	37.3 UJ	37.5 UJ	38.9 UJ	39.4 U	42.9 U	190 U
121-14-2	2,4-DINITROTOLUENE	ug/kg	11 U	11.1 U	11.5 U	11.6 U	12.6 U	57.1 U
606-20-2	2,6-DINITROTOLUENE	ug/kg	15 U	15.1 U	15.6 U	15.8 U	17.2 U	77.7 U
91-58-7	2-CHLORONAPHTHALENE	ug/kg	8.4 U	8.4 U	8.7 U	8.8 U	9.6 U	43.4 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	20.2 U 9.6 U	20.5 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	10.5 U	17.8 U	18.5 U	17.2 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	20.4 U 21.9 U	98.8 U
91-94-1	3,3'-DICHLOROBENZIDINE		23.6 U	23.7 U	24.6 U	20.1 U 24.9 U	27.1 U	120 U
		ug/kg						
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	14.9 U	120 J	15.5 U	15.7 U	17.1 U	390 J
207-08-9	BENZO(K)FLUORANTHENE	ug/kg	17.3 U	17.4 U	18 U	18.3 U	19.8 U	460 J
85-68-7	BENZYL BUTYL PHTHALATE	ug/kg	17.6 U	17.7 U	18.4 U	18.6 U	20.2 U	91.4 U
92-52-4	BIPHENYL (DIPHENYL)	ug/kg	13.9 U	14 U	14.5 U	14.7 U	15.9 U	71.9 U
111-91-1	BIS(2-CHLOROETHOXY) METHANE	ug/kg	21.1 U	21.3 U	22 U	22.3 U	24.3 U	110 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	11.5 U 11 U	11.0 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	12.1 U 16.4 U	74.2 U
84-66-2	DIETHYL PHTHALATE	ug/kg	5.7 U	5.8 U	14.9 U 6 U	13.1 U 6 U	6.6 U	29.7 U
84-00-2 131-11-3	DIMETHYL PHTHALATE		5.7 0	3.8 U 390	350 J	410	440	29.7 U 51.4 U
131-11-3 84-74-2	DIMETHYL PHTHALATE DI-N-BUTYL PHTHALATE	ug/kg						
		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 - Hunts	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			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
	COMPOUND	UNITS:						
	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
	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 J	12.7 U	12.9 U	14 U	390 J
	ISOPHORONE	ug/kg	12.1 U	12.2 U	12.6 U	12.8 U	13.9 U	62.8 U
	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
	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				
		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

Con Ed - Hun	ts Point	Location ID:	SB-2	SB-3	SB-3
	l Analytical Data	Sample ID:	SB-2(39-41)-20141009	SB-3(15-17)-20141009	SB-3(35-37)-20141009
October 2014	Thatytea Data	Lab Sample Id:	F4241-15	F4241-16	F4241-17
SDG: F4241		Depth:	39 - 41 ft	15 - 17 ft	35 - 37 ft
300. 14241		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:			
	VOLATILES				
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	R	0.48 U	0.51 U
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/kg	0.76 U	0.52 U	0.56 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/kg	1.4 U	0.94 U	1 U
75-34-3	1,1-DICHLOROETHANE	ug/kg	0.76 U	0.52 U	0.56 U
75-35-4	1,1-DICHLOROETHENE	ug/kg	0.76 U	0.52 U	0.56 U
87-61-6	1,2,3-TRICHLOROBENZENE	ug/kg	R	0.52 UJ	0.56 U
120-82-1	1,2,4-TRICHLOROBENZENE	ug/kg	R	0.52 UJ	0.56 UJ
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/kg	R	0.91 U	0.97 U
106-93-4	1,2-DIBROMOETHANE	ug/kg	0.76 U	0.52 U	0.56 U
95-50-1	1,2-DICHLOROBENZENE	ug/kg	R	0.52 U	0.56 U
107-06-2	1,2-DICHLOROETHANE	ug/kg	0.76 U	0.52 U	0.56 U
XYLMP	M,P-XYLENE (SUM OF ISOMERS)	ug/kg	9.5 J+	0.75 U	0.81 U
78-87-5	1,2-DICHLOROPROPANE	ug/kg	0.39 U	0.27 U	0.29 U
541-73-1	1,3-DICHLOROBENZENE	ug/kg	R	0.39 U	0.41 U
106-46-7	1,4-DICHLOROBENZENE	ug/kg	R	0.43 U	0.46 U
123-91-1	1,4-DIOXANE (P-DIOXANE)	ug/kg	150 U	100 U	110 U
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	BENZENE	ug/kg	0.57 U	0.4 U	0.43 U
74-97-5	BROMOCHLOROMETHANE	ug/kg	0.76 U	0.52 U	0.56 U
75-27-4	BROMODICHLOROMETHANE	ug/kg	0.76 U	0.52 U	0.56 U
75-25-2	BROMOFORM	ug/kg	R	0.77 U	0.83 U
74-83-9	BROMOMETHANE	ug/kg	1.5 U	1 U	1.1 U
75-15-0	CARBON DISULFIDE	ug/kg	11.3	0.52 U	0.56 U
56-23-5	CARBON TETRACHLORIDE	ug/kg	0.76 U	0.52 U	0.56 U
108-90-7	CHLOROBENZENE	ug/kg	R	0.52 U	0.56 U
75-00-3	CHLOROETHANE	ug/kg	0.76 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	0.56 U
156-59-2 10061-01-5	CIS-1,2-DICHLOROETHYLENE CIS-1,3-DICHLOROPROPENE	ug/kg	0.76 U 0.76 U	0.52 U 0.52 U	0.56 U 0.56 U
10061-01-5	CYCLOHEXANE	ug/kg	0.76 U 0.76 U	0.52 U 0.52 U	0.56 U 0.56 U
124-48-1	DIBROMOCHLOROMETHANE	ug/kg	0.76 U 0.76 U	0.52 U 0.52 U	0.56 U 0.56 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/kg	0.76 U	0.52 U 0.52 U	0.56 U 0.56 U
100-41-4	ETHYLBENZENE	ug/kg	0.76 U 47 J+	0.52 U 0.52 U	0.56 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
98-82-8 79-20-9	METHYL ACETATE	ug/kg ug/kg	44.1 J+ 1.5 U	0.5 U 1 U	0.54 U 1.1 U
79-20-9	METHYL ETHYL KETONE (2-BUTANONE)	ug/kg	32.9 J	3.2 U	3.5 U
108-10-1	METHYL ISOBUTYL KETONE	ug/kg	32.9 J 3.8 U	2.6 U	2.8 U
108-10-1 108-87-2	METHYLCYCLOHEXANE	ug/kg	2.2 J	0.52 U	0.56 U
75-09-2	METHYLENE CHLORIDE	ug/kg	14.6	2.7 J	6.2
95-47-6	O-XYLENE (1,2-DIMETHYLBENZENE)	ug/kg	9.9 J+	0.52 U	0.56 U
100-42-5	STYRENE	ug/kg	9.9 J+ R	0.32 U 0.47 U	0.5 U
1634-04-4	TERT-BUTYL METHYL ETHER	ug/kg	0.76 U	0.47 U 0.52 U	0.56 U
1034-04-4	TETRACHLOROETHYLENE(PCE)	ug/kg	0.76 U R	0.52 U 0.52 U	0.56 U
108-88-3	TOLUENE	ug/kg	0.76 U	0.52 U	0.56 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/kg	0.76 U	0.52 U	0.56 U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/kg	0.76 U	0.52 U	0.56 U
79-01-6	TRICHLOROETHYLENE (TCE)	ug/kg	0.76 U	0.52 U	0.56 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/kg	0.76 U	0.52 U	0.56 U

Con Ed Hunts	Point	Location ID:	SB-2	SB-3	SB-3
Con Ed - Hunts Point Validated Soil Analytical Data		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		Lab Sample Id:	F4241-15	F4241-16	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:	11/12/2014	11/12/2014	11/12/2014
0.101.00	SEMIVOLATILES	crimb.			
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
MEPH3MEPH4	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	4-CHLORO-3-METHYLPHENOL	ug/kg	44.5 U	15.3 U	16.5 U
106-47-8	4-CHLOROANILINE	ug/kg	70.6 U	24.4 U	26.3 U
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	ug/kg	54.4 U	18.8 U	20.2 U
100-01-6	4-NITROANILINE	ug/kg	130 U	45 U	48.5 U
100-02-7	4-NITROPHENOL	ug/kg	190 U	64.2 U	69.2 UJ
83-32-9	ACENAPHTHENE	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
	CARBAZOLE	ug/kg	21.9 U	7.6 U	8.2 U
218-01-9	CHRYSENE	ug/kg	1900	15.7 U	16.9 U
53-70-3	DIBENZ(A,H)ANTHRACENE	ug/kg	28.8 U	10 U	10.7 U
132-64-9	DIBENZOFURAN	ug/kg	39.1 U	13.5 U	14.5 U
84-66-2	DIETHYL PHTHALATE	ug/kg	15.6 U	380	320 J
131-11-3	DIMETHYL PHTHALATE	ug/kg	710 J	380	460
84-74-2	DI-N-BUTYL PHTHALATE	ug/kg	78.7 U	27.2 U	29.3 U
117-84-0	DI-N-OCTYLPHTHALATE	ug/kg	11.4 U	3.9 U	4.2 U
206-44-0	FLUORANTHENE	ug/kg	2900	74 J	7.5 U

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 - 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:			
	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