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October 29, 2014

VIA FEDEX OVERNIGHT

Mr. Hank Willems
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7017

Re: Former Unionport Gasworks Site (Site # V00553)
Watson Avenue Remedial Investigation Report
Voluntary Cleanup Agreement
Index No. D2-0003-02-08

Dear Mr. Willems:

Enclosed please find two hard copies of the Watson Avenue Remedial Investigation Report for Operable Unit No. 2 (OU-2) at the former Unionport Gas Works site located in Bronx, New York. The Watson Avenue Remedial Investigation Report presents the results for soil and groundwater investigation activities that were implemented to evaluate the presence and potential extent of manufactured gas plant (MGP) and non-MGP related impacts at OU-2 of the former Unionport Gas Works site.

Please call me at (718) 204-4347 should you have any comments or questions regarding this submittal.

Very truly yours,

Charles P. Leary /jlc

Charles P. Leary
Project Manager
Environmental Health & Safety

cc: Christopher Doroski, NYSDOH - 2 copies
Dena Putnick, Esq., NYSDEC

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Watson Avenue Remedial Investigation Report

Former Unionport Works Site (Site No. V00553)
1066 Zerega Avenue
Bronx, New York

October 2014

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Watson Avenue Remedial Investigation Report

Former Unionport Works Site
1066 Zerega Avenue
Bronx, New York

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Our Ref.:
B0043515.0006 #10

Date:
October 2014

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1. Introduction

This Watson Avenue Remedial Investigation (RI) Report summarizes work performed and results obtained for the RI field activities for Operable Unit Number 2 (OU-2) at the former Consolidated Edison Company of New York, Inc. (Con Edison) Unionport Works site (site) located at 1066 Zerega Avenue in the Unionport section of Bronx, New York. The site location is shown on Figure 1. The Watson Avenue RI field activities were completed in April 2014 to evaluate potential offsite migration of manufactured gas plant (MGP)-related and non-MGP-related residuals from the former Unionport Works site (OU-1) to the area north of Watson Avenue (designated as OU-2).

Historical MGP operations were conducted at OU-1 of the former Unionport Works site in the early 1900s by Con Edison and/or predecessor companies of Con Edison. Gas generated at the Unionport Works site was stored at the Zerega Avenue former gas holder site (located immediately across Zerega Avenue, west of the site). OU-1 was utilized as a bulk petroleum storage and distribution facility from approximately 1950 until 2007, and numerous historical petroleum releases at the site have been documented. The OU-1 property was purchased in 2007 by a private owner and the site will reportedly be redeveloped for commercial and/or industrial use.

The former Unionport Works site consists of following operable units:

- OU-1 consists of the former gas works area which is bordered by Watson Avenue to the north, Zerega Avenue to the west, Blackrock Avenue to the south, and Westchester Creek to the east. The OU-1 RI activities were completed in two phases by ARCADIS of New York, Inc. (ARCADIS), pursuant to the requirements of an existing Voluntary Cleanup Agreement (VCA) between Con Edison and the New York State Department of Environmental Conservation (NYSDEC) (Site # V00553). The initial phase of the OU-1 RI was completed during January 2008 and April 2009, and the second phase was completed during May and June 2013. Investigation activities that have been implemented to evaluate the extent of MGP- and non-MGP related impacts for OU-1 are detailed in the OU-1 Remedial Investigation Report (ARCADIS 2013a).

- OU-2 includes the properties to the north of OU-1, across Watson Avenue. OU-2 site characterization activities were previously proposed in the Watson Avenue Remedial Investigation Work Plan (ARCADIS 2010b).

- OU-3 consists of the portion of Westchester Creek located immediately east of OU-1. Sediment investigation activities that were previously implemented to evaluate potential off-site migration of MGP- and non-MGP-related residuals from OU-1 to Westchester Creek are detailed in the Remedial Investigation Report, Former Unionport Works Site – Westchester Creek Sediment Investigation (ARCADIS 2013a).

The Zerega Avenue former gas holder site is located west of OU-1 on the opposite side of Zerega Avenue. Investigation activities that have been implemented to characterize potential MGP- and non-MGP-related impacts at the former gas holder site are detailed in the Remedial investigation Report, Former Zerega Avenue Gas Holder Site (ARCADIS 2011).

This RI Report focuses on OU-2 and does not present information associated with the Zerega Avenue former gas holder site or with other operable units of the former Unionport Works site (with the exception of accessible monitoring wells located at OU-1 and upgradient wells located immediately west of Zerega Avenue). The Watson Avenue RI activities summarized in this RI Report were implemented in accordance with the following NYSDEC-approved work plans:

- Watson Avenue Remedial Investigation Work Plan (ARCADIS, March 2010)
- Site Characterization Work Plan (ARCADIS, 2007a)
- Field Sampling Plan (ARCADIS, 2007b)
- Quality Assurance Project Plan (ARCADIS, 2007c)
- Community Air Monitoring Plan (ARCADIS, 2007d)
- Health and Safety Plan (ARCADIS, 2013a)

Work activities performed as part of the Watson Avenue RI consisted of the following:

- Implementing soil investigation activities to characterize subsurface stratigraphy and evaluate the presence and extent of residual MGP- and non-MGP-related materials and constituents of concern in soil.

- Implementing groundwater investigation activities to characterize groundwater flow conditions in the vicinity of the site and evaluate the extent of potential MGP- and non-MGP-related groundwater impacts.

1.1 Purpose and Report Organization

The RI Report has been organized into the following sections:

Section		Purpose
Section 1 –	Introduction	Provides background information relevant to the development of the RI Report and the RI objectives.
Section 2 –	Remedial Investigation Activities	Describes the field observations and laboratory results of the RI activities for OU-2.
Section 3 –	Remedial Investigation Findings	Describes the field observations and laboratory results of the RI activities.
Section 4 –	Conclusions and Recommendations	Presents the conclusions based on the RI results and recommendations for further activities.
Section 5 –	References	Presents a list of the references cited in the RI Report.

1.2 Site Background

This section presents relevant background information related to the RI activities. The location and physical setting of the site is described below, followed by a summary of relevant historical information, surface topography and drainage, and geologic/hydrogeologic conditions in the vicinity of the site.

1.2.1 Location and Physical Setting

OU-2 of the former Unionport Works site consists of an approximately 5.0–acre area that is bordered by Commerce Avenue to the north, Zerega Avenue to the west, Watson Avenue to the south, and Westchester Creek to the East. Parcels which comprise OU-2 include Sibling Fuel Oil (located at the northeast corner of the intersection of Zerega Avenue and Watson Avenue), an equipment laydown/storage lot along the north side of Watson Avenue owned by the New York City Economic Development Corporation (NYCEDC), and two undeveloped lots located along Commerce Avenue that are also owned by NYCEDC. OU-1 is located to the south of OU-2 and is currently occupied by

an inactive bulk petroleum storage terminal. The existing layout of the site with soil boring, test pit, and monitoring well locations is shown on Figure 2. Historical MGP structures are presented on Figure 3.

As shown on Figures 1 and 2, the site is located adjacent to the west bank of Westchester Creek, which flows south toward the East River. The portion of the site located along Westchester Creek consists of a stone embankment. The remaining OU-2 area is generally flat with an elevation of approximately 20 feet above mean sea level (AMSL). Surface drainage flows east/southeast toward Westchester Creek.

1.2.2 Site History

Information on historical MGP operations at the former Unionport Works site (OU-1) was obtained from the document entitled Manufactured Gas Plant History: Unionport Works and Zerega Avenue Station prepared by GEI Consultants, Inc. (GEI, 2002). Information presented in the GEI document includes a review of available Sanborn Fire Insurance Maps, current and historical use of the site and adjacent properties, and potential environmental issues associated with these current and historical activities. Information on petroleum releases and previous investigation activities at OU-1 was developed from a review of NYSDEC files obtained through a Freedom of Information Law (FOIL) request. Based on a review of the GEI document and the Sanborn Fire Insurance Maps, no information is available concerning historical industrial use of OU-2.

Historical MGP operations were conducted at the former Unionport Works site between 1905 and 1927 and primarily included the production of manufactured gas using the Lowe carbureted water gas process. Fuel oil used to support the manufacture of gas at OU-1 was stored in aboveground storage tanks located at the Zerega Avenue gas holder site. Manufactured gas produced at OU-1 was stored in aboveground gas holders located at the former gas holder site. In addition to the manufactured gas plant, operations at the site also included an electric generating plant and coal unloading/storage facility. Con Edison owned and operated the former Unionport Works site between 1927 and 1945, but the site use during this period is unknown. Various petroleum companies owned and operated the site between 1945 and 2007, except for the years 1947 through 1950. The OU-1 property was purchased by a private owner in 2007 and the site will reportedly be redeveloped for commercial and/or industrial use.

Annual reports submitted to the Public Service Commission (PSC) indicate that the Bronx Gas and Electric Company (BG&E) (a Con Edison predecessor company) began generating electricity at the former Unionport Works site in 1893. The 1898 Sanborn

map identifies BG&E as the OU-1 occupant, where it operated a small electric generating plant. Coal was shipped to the plant by water and transferred from a small wharf on Westchester Creek.

Prior to 1904, BG&E owned and operated a small MGP on Purdy Street located approximately 12 blocks north of the site (with an average production rate of approximately 96,000 cubic feet [cf] per day). Due to increased demand for gas service, BG&E constructed the MGP at the former Unionport Works site in 1904 (with an average production rate of approximately 750,000 cf per day).

Based on a 1908 Sanborn fire insurance map, the MGP consisted of a generator house, engine room, purifiers, and a meter room. The electric plant was also located onsite. The historical MGP structures at the site are shown on Figure 3. A 1919 and 1908 Sanborn fire insurance map identified approximately the same structures, which indicates that the MGP remained largely unchanged between 1908 and 1919. BG&E's 1922 annual report to the PSC indicates the MGP had two water-gas sets. In addition, the MGP had the following auxiliary structures:

- 3 exhausters
- 1 tar extractor
- 3 purifiers
- 3 governors
- 1 oil heater
- 2 tar pumps
- 2 tar tanks (one having a capacity of 5,000 gallons)
- 1 coal elevator
- 1 tar separator

The 1922 report also indicated that both the MGP and electric plant used tar as a boiler fuel.

Fuel oil was stored in two 80,000-gallon aboveground storage tanks located at the Zerega Avenue former gas holder site to support the manufacture of gas at OU-1. Manufactured gas produced at OU-1 was stored in aboveground gas holders located at the Zerega Avenue former gas holder site.

The 1927 annual report to the Public Service Commission (PSC) indicates that the electric generating plant at the site was removed from service and the building and boiler plant for the generation facility was transferred to the gas department. The annual report to the PSC in 1928 indicated that the gas works installed/constructed purifiers, a shaving scrubber, and an exhauster. In 1928, the MGP was connected to gas mains

owned by Consolidated Gas Company (a Con Edison predecessor company) and, on March 1, 1928, the MGP was shutdown and placed on stand-by status. Portions of the MGP were removed in 1929, including:

- 2 water gas sets
- 150,000-gallon tank
- 2,600-gallon tank
- 4 B&W boilers
- 2 NY Safety steam engines
- 2 Troy Engine Company steam engines

Two small holders (with capacities of 75,000 and 500,000 cubic feet) at the adjacent Zerega Avenue former gas holder site were also removed in 1929 when the MGP at the former Unionport Works site was dismantled. The 5,000,000-cubic foot holder remained in use at the Zerega Ave site until approximately 1966, when it was demolished along with a pumping station, governor house, and storehouse building.

As indicated above, Con Edison (or predecessor companies) owned the OU-1 property between 1929 and 1945. In 1945, Con Edison sold the OU-1 property. Various petroleum companies owned the site from 1945 through 2007, except for the years 1947 through 1950, when Forsee Realty Corporation owned/operated the site. The 1950 Sanborn map indicates the presence of two small buildings (constructed in 1950), loading racks, and "fuel oil tanks buried in ground" with a total capacity of approximately 2,200,000 gallons. Environmental records indicate that the bulk fuel oil tanks were installed at the OU-1 property in 1950. A garage/office building was constructed on the north-central portion of the site in 1962.

Petroleum companies that owned and operated the OU-1 property between 1945 and 2007 include Combined Petroleum Transfer Corporation; Cirillo Brothers Petroleum Company; Cibro Terminal, Inc.; Morningside Fuel Corporation; and Twin Pines Fuels Corporation. Based on records obtained through the NYSDEC FOIL request, multiple documented petroleum releases occurred at the site between 1975 and 2000, including:

- A 20,000-gallon release of No. 6 fuel oil occurred at the western end of the storage tank area in 1975. An estimated 13,000 gallons were recovered through emergency response activities.

- November 18, 1987 – 1,000 gallons of No. 2 fuel oil caused by tank failure.

- June 7, 1988 – 100 gallons of unknown petroleum.

- October 21, 1991 – one pound of unknown petroleum.
- July 23, 1992 – one pound of gasoline caused by tank test failure.
- August 10, 1992 – one pound of No. 6 fuel oil caused by tank test failure.
- December 16, 1992 – one liter of No. 6 fuel oil caused by tank failure.
- February 23, 1995 – one gallon of gasoline due to possible tank failure.
- March 21, 1995 - one gallon of unknown petroleum.
- October 31, 1996 - 10 gallons of No. 2 fuel oil caused by tank test failure.
- January 2, 1998 – 15 gallons of No. 2 fuel oil caused by equipment failure, and all 15 gallons were recovered.
- June 7, 1999 - 2,100 gallons of No. 6 fuel oil caused by equipment failure.

1.2.3 Geologic and Hydrogeologic Setting

Bedrock at OU-2 was encountered during the RI at depths ranging from 24 to 51 feet below ground surface (bgs). Based on information presented in the Manufactured Gas Plant History: Unionport Works and Zerega Avenue Station (GEI, 2002), bedrock in the vicinity of OU-2 is the Pelham Bay Member of the Hartland Formation. The Hartland Formation bedrock varies from Middle Ordovician to Middle Cambrian in age. The Pelham Bay Member generally consists of sillimanite-grade gneiss. The bedrock surface descends sharply toward the east under the Cross Bronx Expressway, located several hundred feet to the south of the site. The axis of a northeast-trending synform (the trough of an upward facing bedrock fold) is mapped in this area, extending through the easternmost portion of the site.

Glacial till comprises the lowermost overburden deposit in the Bronx. The till is derived from the glacial erosion of underlying metamorphic bedrock. The till tends to be sandy in areas and relatively thin; only incompletely blanketing the bedrock (USGS 1992; Caldwell 1989; USGS 1953). The overburden materials at the site are likely the result of a tidal marsh and stream that once existed at the site (USGS, 1992; Topographic Bureau, Bronx, 1905). The edge of the marsh historically ran along the east side of Zerega Avenue (US Coast & Geodectic Survey, 1845; Beers 1868; USGS 1992). The

former stream and marsh deposited fine-grained alluvium over glacial till. Fill, consisting of anthropogenic materials in a matrix of sand and gravel overlies the native deposits.

Groundwater beneath the site has been encountered at depths ranging from approximately 8 to 12 feet bgs. Shallow groundwater flow in the vicinity of the site is generally east/southeast toward Westchester Creek. Groundwater levels measured on site are higher than the level of Westchester Creek, indicating that groundwater discharges to the creek. Water levels in Westchester Creek are subject to tidal fluctuation. According to National Oceanic and Atmospheric Administration (NOAA), the mean range of tide at Kings Point, Queens (NOAA Station 8516945), located approximately 4.5 miles southwest of the site, is 7.1 feet. The magnitude of the tidal influence on groundwater levels at the site has not been evaluated.

1.3 Remedial Investigation Objectives

The overall objective of the Watson Avenue RI activities was to assess the nature and extent of the site-related environmental impacts. The data provided in this report addresses the following objectives:

- Determine if MGP- and/or non-MGP-related compounds are present in soil and/or groundwater at the site.
- Identify the potential presence of MGP- and/or non-MGP-related residuals (such as coal tar, non-aqueous phase liquid [NAPL], purifier wastes, petroleum, solvents, etc.) in soil and/or groundwater at the site.
- Evaluate, to the extent practicable, whether groundwater flow may be a pathway for offsite migration of identified chemical constituents (if present).
- Determine compliance with applicable NYSDEC standards, criteria, and guidance values (SCGs).
- Provide sufficient data to evaluate the necessity for further investigation and/or remedial action.

Watson Avenue RI field activities that were implemented to achieve the above objectives are detailed in Section 2.

2. Remedial Investigation Field Activities

This section summarizes Watson Avenue RI field activities that were implemented by ARCADIS during April 2014. The Watson Avenue RI field activities consisted of the following:

- Mobilizing to the site and conducing utility mark-out efforts to verify existing conditions and identify proposed sample locations.

- Implementing soil investigation activities for OU-2 which consisted of completing soil borings to characterize subsurface conditions and facilitate the collection of subsurface soil samples for laboratory analysis.

- Implementing groundwater investigation activities which included installing new groundwater monitoring wells at OU-2, obtaining fluid level measurements from new OU-2 monitoring wells and existing OU-1 monitoring wells, and collecting groundwater samples for laboratory analysis.

- Completing a site survey to document the property boundaries and locate soil borings, test pits, and groundwater monitoring wells associated with the SC activities.

An analytical sample summary, which identifies soil and groundwater samples collected as part of the RI Investigation activities, is included as Table 1. A summary of field observations at RI sampling locations is included as Table 2. A summary of construction details for groundwater monitoring wells installed as part of the RI is included in Table 3. Fluid level measurements for water and NAPL at groundwater monitoring well locations are presented in Table 4. Comprehensive soil and groundwater analytical results for samples collected as part of the RI field activities are presented in Tables 5 through 10.

Several subcontractors provided various services during implementation of the RI field activities, as presented in the following table:

Subcontractor	Office Location	Services Provided
Cascade Drilling, L.P.	Northborough, MA	Utility clearance/HSA drilling
Naeva Geophysics	Congers, NY	Utility clearance
Accutest Laboratories	Marlborough, MA	Analytical Services
Munoz Engineering, P.C.	New York, NY	Surveying

Subcontractor	Office Location	Services Provided
Clean Venture	Elizabeth, NJ	Waste transport and disposal

A detailed description of the above-listed RI field activities is presented below.

2.1 Mobilization and Utility Mark-out

Utilities were cleared according to the Con Edison Utility Clearance Process for Intrusive Activities (Revision 1, dated October 8, 2003). Prior to mobilization, hard copies of available utility plates, drawings, and maps were reviewed to determine the approximate size and location of aboveground and underground utilities in the vicinity of the site. Field personnel verified existing site conditions and marked/identified the proposed sampling locations. A New York City Rules and Regulations (NYCRR) Code 753 utility mark-out was completed to identify underground utilities in areas where ground-intrusive activities were scheduled to take place. Following the completion of the utility mark-out, a magnetic scope (M-scope) survey was completed by a private utility locating contractor who marked the location of underground utilities in areas of the site where ground intrusive activities were scheduled to occur (including storm sewer lines, water lines, gas lines, oil lines, electric lines, communication lines, subterranean tunnels, etc.). Following utility location markout, equipment and field personnel necessary to implement the remaining RI field investigation activities were mobilized to the site.

2.2 Soil Investigation

The RI soil investigation included the following field activities:

- Completing nine soil borings to the north of Watson Avenue to characterize subsurface conditions and facilitate collection of subsurface soil samples for laboratory analysis.

- Collecting and submitting 27 soil samples for laboratory analysis to characterize the site conditions.

The RI soil investigation activities were conducted in accordance with the FSP and quality assurance/quality control (QA/QC) samples were collected in accordance with the project-specific QAPP. The RI soil investigation activities are described below.

2.2.1 Soil Borings

Soil borings were completed to characterize subsurface conditions at the site and, in some cases, facilitate groundwater monitoring well installation. Soil boring locations were selected to obtain a site-wide characterization of subsurface geologic conditions. A total of 9 soil borings, including 5 soil boring/monitoring well pairs, were completed at the locations shown on Figure 2 using rotosonic drilling techniques.

The borings ranged in depth from approximately 24 to 51 feet bgs. The location of each boring is shown on Figure 2. Each soil boring was first cleared via non-mechanical means (i.e., hand auger, post-hole digger, and/or vacuum truck) to a depth of 5 feet bgs. Subsequently, the soil borings were completed via rotosonic methods.

The rotosonic method uses vibration/resonance to drive the drill tooling into the subsurface. Rotosonic drilling uses two drive motors inside the drill head that rotate weighted cams at high speeds which create a vibration that is translated along the drill string to a diamond- or carbide steel-tipped cutting bit. The speed at which the motors turn can be adjusted which results in a change in the resonance. Along with varying the frequency of the vibration the drill tooling can be rotated to enhance the cutting action of the drill bit. This usually results in fast and efficient borehole completion. During drilling, a core barrel is advanced to obtain a soil sample. An outer casing is then advanced over the core barrel to stabilize the boring. The core barrel is extracted from the ground and the sample is extruded from the core barrel into a plastic sleeve for visual characterization and logging. Core barrel lengths can vary from 5 to 20 feet in length and usually correspond to the size of the rig used and the desired total depth of the borehole.

At each boring location, soil samples were recovered continuously from grade to the total depth of boring completion. Recovered soil samples were visually characterized and logged by an onsite geologist. Soil samples from each 2-foot depth interval were screened for VOCs using a PID and selected samples were submitted for laboratory analyses, as described below in Section 2.2.2. Following completion, borings were tremie-grouted to grade (except for borings completed to facilitate monitoring well installation). Soil borings that were completed in a paved area were repaired with an asphalt patch or non-shrink grout, as appropriate.

Soil boring logs which document subsurface conditions encountered at each boring location are provided in Appendix A. Table 2 summarizes PID screening results and intervals

where staining, sheens, and/or odors were encountered for soil samples recovered from the borings.

2.2.2 Laboratory Analysis of Soil Samples

A total of 27 soil samples (including 1 field duplicate, 1 matrix spike, 1 matrix spike duplicate, and 1 waste characterization sample) were collected from 9 soil borings. Soil samples were submitted to Accutest Laboratories, Inc. (Accutest) of Marlborough, Massachusetts for laboratory analysis for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), and Target Analyte List (TAL) inorganics (including total cyanide) using the analytical methods specified in the project-specific QAPP.

Up to three soil samples were selected for laboratory analysis from each soil boring using the following criteria:

- At the soil/groundwater table interface.
- The sampling interval within the saturated zone where the strongest evidence of suspected impacts was identified based on PID readings, visual observation and/or odors.
- The sampling interval above the top of the first low permeability unit encountered (if any) in the soil boring.
- Sampling intervals where changes in subsurface stratigraphy or differences in visible MGP- or non-MGP-related residual materials were noted.
- At boring locations where suspected impacts were identified, from a sampling interval of apparently clean material below impacted soil (to provide data for vertical delineation).

If no suspected impacts were identified at a boring location based on PID readings, visual observation, and/or odors, then a minimum of two soil samples were selected for laboratory analysis from the following intervals: (1) the soil/groundwater table interface; and (2) the uppermost low permeability unit encountered at the boring. Specific soil sampling methods are described in the FSP (Appendix A of the SC Work Plan).

2.3 Groundwater Investigation

The groundwater investigation was implemented to evaluate hydraulic properties of the overburden, groundwater flow direction and gradient, the potential presence of NAPL, and the potential presence and concentration of MGP- and non-MGP-related constituents in groundwater at new monitoring wells installed on OU-2 and accessible existing monitoring wells at OU-1 of the former Unionport Works site (including the two upgradient wells located immediately west of Zerega Avenue). The RI groundwater investigation consisted of the following:

- Installing 5 groundwater monitoring wells.
- Gauging groundwater monitoring well fluid levels (i.e., water and NAPL [if any]).
- Conducting specific capacity tests.
- Sampling groundwater from 11 monitoring wells (including 6 existing and 5 new wells).

Descriptions of the RI groundwater investigation activities are presented below.

2.3.1 Groundwater Monitoring Well Installation

A total of 5 new groundwater monitoring wells were installed during the RI investigation in April 2014 and are shown on Figure 2. Soil boring logs and monitoring well logs are included as Appendix A, and monitoring well construction details are summarized in Table 3. The groundwater monitoring wells installed during the RI were constructed as described below:

- At each monitoring well location, a soil boring was completed using rotosonic drilling methods.

- Monitoring wells were constructed using 2-inch diameter Schedule 40 polyvinyl chloride (PVC) casing with 20-slot (0.020-inch slot size) PVC well screens.

- One shallow monitoring well (monitoring well WM-114B) was installed in fill to a depth of approximately 5 feet below the groundwater table. The shallow monitoring well was screened over a 10-foot interval, from approximately 5 feet above the water table to the depth of completion.

- Four deep monitoring wells (monitoring wells MW-114A, MW-115, MW-116, and MW-117) were installed in glacial till to a depth of between 33 and 51 feet bgs. Three of the deep monitoring wells were screened over a 10-foot interval (MW-

114A, MW-116, and MW-117) and the remaining monitoring well (MW-115) was screened over a 7.5 -foot interval.

- Appropriately sized silica sand packs were installed in the annular space around the screened interval and generally extended to 2 feet above the screen top.

- The well annulus was filled with 1 to 3 feet of bentonite chips to provide a seal above the sand pack. The bentonite chips were hydrated, and cement/bentonite grout was placed on top of the seal, using a tremie pipe, to a depth of approximately 1 to 2 feet bgs.

- Each well was protected at the surface with an 8-inch flush-mount curb box. A measuring point was marked on top of the PVC riser and fitted with a 2-inch locking J-plug cap.

Following installation, each new monitoring well was evaluated for the presence of NAPL and the well was developed using the procedures outlined in the FSP.

2.3.2 Hydraulic Conductivity Testing

Specific capacity tests were performed for ten of the OU-1 and OU-2 monitoring wells following groundwater sampling (MW-4, MW-5, MW-101A, MW-107, MW-113A, MW-113B, MW-114A, MW-114B, MW-115, and MW-116). The testing was performed to determine the hydraulic conductivity of the formation surrounding the screened interval at each monitoring well. The specific capacity tests were conducted using the procedures identified in the FSP. Monitoring well locations where NAPL was identified were not tested for specific capacity.

2.3.3 Groundwater Flow Characterization

ARCADIS completed a site-wide fluid level gauging event on April 28, 2014 to evaluate groundwater levels and the presence of NAPL at each well location. Groundwater and NAPL levels were measured at each new and existing well to the nearest one-hundredth of a foot from a surveyed reference point at the top of the inner casing using procedures presented in the FSP. Fluid-level measurements obtained at each monitoring well are summarized in Table 4. The measurements were converted to elevations above mean sea level (AMSL). NAPL was identified at four OU-1 wells during the 2014 gauging event (MW-101B, MW-107, MW-108, and MW-109). NAPL was not identified at any of the OU-2 groundwater monitoring wells.

ARCADIS previously completed site-wide fluid level gauging events on March 7, 2008, April 27, 2009, and June 19, 2013. The upgradient wells west of Zerega Avenue (MW-4 and MW-5) were not included in the March 2008 gauging event (these wells were not installed until 2009). NAPL was originally detected at nine wells during the 2008 gauging event and at seven wells during the 2009 gauging event. NAPL was only identified at one monitoring well during the June 2013 gauging event. However, due to extensive asphalt and concrete paving at the site between 2009 and 2013, monitoring wells MW-102, MW-103, MW-110A, MW-110B, MW-111, and MW-112 could not be located for the 2013 or 2014 gauging events.

2.3.4 Groundwater Quality Characterization

ARCADIS collected groundwater samples from 11 monitoring wells (including 6 existing and 5 new wells) during April 2014. Each groundwater sample was submitted to Accutest for laboratory analysis for TCL VOCs, TCL SVOCs, TAL inorganics, and cyanide. Sample analyses were performed in accordance with USEPA SW-846 Methods, as referenced in the NYSDEC 2005 analytical services protocol (ASP). QA/QC samples were collected as required by the project-specific QAPP.

ARCADIS used a peristaltic pump and dedicated disposable tubing (i.e., low-flow techniques) to purge monitoring wells prior to sampling. Field parameters, including pH, oxidation/reduction potential, turbidity, temperature, conductivity, and dissolved oxygen, were measured approximately every five minutes during purging. The results of the field parameter measurements collected prior to sampling are presented on the groundwater sampling logs included in Appendix B.

Groundwater samples were collected from the wells after field parameters stabilized via peristaltic pumping, with the exception of VOCs. Samples submitted for laboratory analysis for VOCs were obtained by collecting water in the dedicated polyethylene tubing prior to entering the pump.

2.4 Site Survey

Following the completion of the soil and groundwater investigations, Munoz Engineering, P.C. (Munoz) surveyed the property limits and the location of major buildings/structures at the site. In addition, Munoz completed a topographic survey and surveyed the location of soil borings and groundwater monitoring wells. The groundwater monitoring well survey included the location, ground-surface elevation, and measuring-point elevation (defined as the top of the inner casing). The survey is

tied to the New York State Plane Coordinate System and the North America Vertical Datum of 1988.

2.5 Equipment Decontamination

All sampling and testing equipment was decontaminated in accordance with the procedures presented in the FSP. In general, non-disposable equipment, including drilling tools and equipment were decontaminated prior to first use onsite, between each investigation point, and prior to mobilization. A total of six equipment rinse blanks were submitted for analysis of TCL VOCs, TCL SVOCs, and TAL inorganics to evaluate the integrity of the decontamination procedures, as required in the QAPP.

2.6 Management of IDW

Investigation-derived waste (IDW) generated during the RI activities included:

- Soil cuttings from subsurface drilling
- Development, decontamination, drilling and purge water
- Personal protective equipment
- Spent disposable sampling equipment

IDW generated during the RI activities was containerized in a new DOT-approved steel 55-gallon, closed-top drums and staged in an onsite area prior to offsite disposal. Each drum was secured and labeled with the date, contents, contact information, and other relevant information. One liquid waste characterization sample (WC-05012014) and one solid waste characterization sample (WC-04222014) were collected and submitted for laboratory analysis for Toxicity Characteristic Leaching Procedure (TCLP) VOCs, TCLP SVOCs, TCLP metals (including cyanide), ignitability, combustibility, and reactivity (I/C/R).Based on the results obtained for the analysis of the waste characterization samples, both solid and liquid IDW materials were transported by a Con Edison approved waste hauler to Clean Venture in Elizabeth, New Jersey for offsite disposal as non-hazardous waste.

3. Remedial Investigation Findings

This section presents the findings of the Watson Avenue RI field investigation activities described in Section 2. A discussion of geologic conditions at the site is presented below, followed by a discussion of groundwater flow and hydrogeology, NAPL distribution, and soil/groundwater sampling results.

3.1 Site Geology

The RI identified four principal stratigraphic units beneath the site. These units, listed below, show a sequence of events, from the land surface down (youngest to oldest) specific to the site's geologic and industrial history:

Stratigraphic Unit	Thickness Range (feet)
Fill	10 – 12
Clay	11 - 25.5
Glacial Till (Sand and Silt)	4 – 18
Bedrock (Gneiss of Heartland Formation)	Not Determined

A geologic cross section location map is presented as Figure 4 and the geologic cross sections on Figures 5 through 9 show the vertical distribution of the stratigraphic units in the site area. The inferred shallow water table surface and visual observations of impacts are also depicted in each of the cross sections.

A description of each stratigraphic unit is provided below.

3.1.1 Fill Unit

The ground surface (top of the fill unit) generally descends from west to east towards the Westchester Creek (Figure 2). The top of the fill unit consists of construction debris (brick, cinders, ash, coal, wood and glass) intermingled with poorly sorted brown to black sand and gravel. As indicated on the cross sections (Figures 5 through 9), the thickness of the fill unit varies from approximately 17 to 19 feet in the western portion of the site, increases to approximately 22 feet near the warehouse west of MW-116/SB-306, and decreases to approximately 16 feet along the Westchester Creek.

3.1.2 Clay Unit

The clay unit consists of post-glacial sediments formed in marshlands that historically extended along Westchester Creek (as discussed in Section 1.2.3). The clay unit consists of grey, medium stiff clay with trace amounts of sand and silt. Peat, roots, and shell fragments were frequently observed in collected samples.

The clay unit appears to be continuous onsite, as depicted in the cross sections (Figures 5 through 9). Silt deposits (consisting of marshland sediments) were encountered in each of the RI soil borings with the exception of SB-300B. The grain size increase from clay to silt at the soil borings and soil boring/monitoring well locations reflects a change in the depositional environment.

3.1.3 Glacial Till (Sand and Silt)

Glacial till was encountered in each of the RI soil borings with the exception of SB-300B (located along Westchester Creek) and SB-303, where the clay unit extends to bedrock. The average thickness (where encountered) of this unit is approximately 12 feet, with a maximum thickness of approximately 22 feet at MW-114A/SB-300A and a minimum thickness of approximately 8 feet at MW-117/SB-307.

3.1.4 Bedrock

A total of 9 RI soil borings encountered the top of bedrock at the site. Depth to bedrock at these borings ranged from approximately 24 to 51 feet bgs (at soil boring SB-300B and SB-300A, respectively). As shown on Figure 10, the top of bedrock generally descends from south to northwest, with the higher elevations (approximately 6 feet bgs) along Zerega Avenue, and the lower elevations along Watson Avenue (approximately 32 feet bgs).

3.2 Groundwater Flow and Hydrogeologic Characterization

The hydrogeology at the site has been characterized based on information obtained from 5 monitoring wells installed as part of the RI and 6 monitoring wells installed during previous site investigations. A total of 3 monitoring wells are screened straddling the water table and 8 monitoring wells are screened within the deeper glacial till unit. Well construction details are summarized in Table 3.

The hydrostratigraphy beneath the site consists of two relatively permeable units (the fill and glacial till units) separated by the low permeability clay confining unit. The saturated portion of the fill unit represents the water table aquifer (uppermost unconfined aquifer). The average saturated thickness of this hydrostratigraphic unit is approximately 5 feet. Hydraulic conductivity (K) values for the fill range between 3.92 ft/day (MW-107) and 18.80 ft/day (MW-113B).

Monitoring wells were not screened in the clay unit, but hydraulic conductivity values for clays are generally between 10^{-9}- and 10^{-6}-ft/day (C.W. Fetter, 1994). Secondary porosity features (i.e., roots, shells, and wood pieces) were identified within the upper 3- to 4-feet of the clay unit.

The glacial till unit is fully saturated. Hydraulic conductivity values for this unit range between 0.09 ft/day (MW-04) and 25.61 ft/day (MW-114B).

3.2.1 Groundwater Flow

Water level and NAPL measurements were collected at the site on April 28, 2014. Groundwater elevation data for the gauging event is presented in Table 4. Table 4 also includes water level and NAPL measurements obtained for previous monitoring of OU-1 monitoring wells on March 7, 2008, April 27, 2009, and June 10, 2013. A groundwater contour map for deep overburden (based on the April 28, 2014 gauging event) is shown on Figure 11. Groundwater elevation data for the shallow overburden wells is not represented on a groundwater contour map since only two shallow overburden wells were monitored (MW-113 and MW-114B).

Groundwater flow in the deep overburden is to the east (Figure 11). Horizontal hydraulic gradients in this unit are of similar magnitude to those observed in shallow groundwater (0.002 feet/feet between MW-101A and MW-113A); however, a steeper horizontal hydraulic gradient exists in the northern portion of the site (0.018 between MW-113A and MW-110A).

One new well cluster (i.e., one well screened in the fill and one well screened in the glacial till) was installed at monitoring wells MW-114A/MW-114B. Further evaluation is needed to determine if the observed vertical gradients may be caused by tidal influences. According to NOAA, the mean range of tide at Kings Point, Queens (NOAA Station 8516945), which is located approximately 4.5 miles to the southeast of the site, is 7.1 feet. Fluctuations of this magnitude, however, would not be expected to propagate far from the creek. The water table elevation in MW-300A (near

Westchester Creek) is at least 4 feet above the creek, indicating that the onsite groundwater discharges to the creek.

3.3 Extent of Visual Impacts and NAPL Characterization

A discussion of visual MGP and non-MGP-related impacts observed at sampling locations and the extent of NAPL identified by fluid level monitoring is presented below.

3.3.1 Field Observations of Impacts

MGP- and non-MGP-related impacts noted during completion of soil borings at OU-02 included odors, visible staining, sheens, and NAPL. Field observations are summarized in Table 3 and shown on the geologic cross sections presented as Figures 5 through 9.

The most widespread observations of NAPL were noted along the top of the clay unit. NAPL impacts were observed along the top of the clay unit at four RI soil borings (SB-300A, SB-300B, SB-301, and SB-303).

Possible petroleum-like odors and staining were reported in glacial till at SB-306 and in fill at SB-307, located in the northeastern portion of OU-2.

NAPL impacts were not observed at MW-115/SB-302 and SB-305.

3.3.2 NAPL Gauging

NAPL gauging was performed concurrently with the collection of water level measurements on April 28, 2014. Previous NAPL gauging events for the OU-1 monitoring wells were conducted on March 7, 2009, April 27, 2009, and June 19, 2013. The NAPL gauging results are summarized in Table 4.

Light, non-aqueous phase liquid (LNAPL) was not observed during the 2014 gauging event. Previously, LNAPL was identified at the groundwater table at three OU-1 monitoring well locations (MW-101B, MW-102, and MW-107) during the 2008 gauging event. One additional location (MW-109) also contained LNAPL during the 2009 gauging event. Only trace quantities of LNAPL were identified during the 2009 gauging event, with the exception of MW-101B and MW-102, which contained approximately 3- and 2.6-inches, respectively. LNAPL was not observed during the 2013 gauging event.

Dense, non-aqueous phase liquid (DNAPL) was observed in four OU-1 monitoring wells for the April 2014 gauging event (at MW-101B, MW-107, MW-108, and MW-109). NAPL and fluid level measurements were not obtained at OU-1 monitoring well locations MW-102, MW-103, MW-110A, MW-110B, and MW-112 for the 2014 gauging event because these wells are no longer accessible (due to extensive paving and grading activities since 2008). DNAPL was not observed in any of the OU-2 monitoring wells.

DNAPL was encountered below the water table at six wells in 2008 (MW-103, MW-108, MW-109, MW-110B, MW-111, and MW-113B). DNAPL thickness ranged from trace to 3.1 feet. DNAPL was detected in four wells for the April 2009 gauging event (including MW-103, MW-109, MW-07-OLD, and MW-08-OLD). DNAPL was only observed in one accessible well for the June 2013 gauging event (at MW-101B).

3.4 Soil Sample Results

A total of 27 soil samples (including 1 field duplicate, 1 matrix spike, 1 matrix spike duplicate, and 1 waste characterization sample) were collected during the Watson Avenue RI activities. Up to three soil samples from each soil boring were submitted for laboratory analysis. Soil samples collected as part of the investigation were analyzed for VOCs, SVOCs, metals, total cyanide, percent solids, and moisture. Analytical results for the laboratory analysis of the RI soil samples were reported using NYSDEC ASP Category B data deliverable packages. Each data package was reviewed by ARCADIS' data validation staff. Data Usability Summary Reports (DUSRs) which present the data validation review for each sample delivery group are presented in Appendix C.

Analytical results for the OU-2 soil samples are presented in Tables 5, 6, and 7. Compounds that are commonly associated with MGP- and petroleum-related residuals were identified in the RI soil samples, including benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), polycyclic aromatic hydrocarbons (PAHs), and/or cyanide. For the purpose of evaluating the soil analytical results, the results have been compared to the restricted commercial- and industrial-use soil cleanup objectives (SCOs) and SCOs for protection of groundwater presented in 6 NYCRR Part 375-6.8(a) and (b). The commercial- and industrial-use SCOs are applicable to the site given the current and anticipated future site use. The SCOs for the protection of groundwater are also potentially applicable to the site given the proximity of the site to Westchester Creek. Detected total BTEX and total PAH concentrations in soil are shown on Figure 12.

The analytical results for the RI subsurface soil samples are summarized below.

- BTEX compounds were detected at concentrations exceeding the SCOs for the protection of groundwater in 4 subsurface soil samples (shown on Figure 12). Benzene was detected at concentrations exceeding the protection of groundwater SCO in one sample (SB-303[13-13.3]). Ethylbenzene was detected at concentrations exceeding the protection of groundwater SCO in two samples (SB-300 [21.5-22] and SB-303[18.5-19], respectively). Ethylbenzene and toluene were detected at concentrations exceeding the protection of groundwater SCO in one sample (SB-301[36-36.5]). No samples exceeded industrial-use SCOs. There were no subsurface soil samples that contained total BTEX concentrations exceeding 10 ppm.

- PAHs were detected at concentrations exceeding SCOs for the protection of groundwater in 7 subsurface soil samples. A total of 5 samples exceeded commercial use SCOs and 5 samples exceeded industrial use SCOs. One sample (SB-301[36-36.5]) collected for OU-2 exceeded the 500 ppm total PAH value, as shown on Figure 12. The 500 ppm total PAH value is consistent with the total PAH soil cleanup criteria for non-residential subsurface soil as outlined in the NYSDEC policy document entitled "CP-51/Soil Cleanup Guidance" (NYSDEC 2010). Detected PAH concentrations at SB-304 (in the northwest portion of OU-2) and at SB-307 (in the northeast portion of OU-2) may indicate the presence of localized petroleum releases that are not associated with MGP or petroleum storage operations at the former Unionport Works site and .

- Potentially elevated concentrations of arsenic and lead were detected at soil boring locations SB-304 and SB-307. Slightly elevated concentrations of arsenic and mercury were detected at soil boring location SB-305. The detected inorganic constituents are not associated with the former MGP or petroleum storage operations at the former Unionport Works site.

- Cyanide did not exceed the protection of groundwater, commercial, and industrial use SCO in any samples collected during the RI.

The RI soil sampling results indicated that MGP- and/or petroleum-related constituents are present in soil along Watson Avenue and have migrated to the southern portion of OU-2 (in the vicinity of SB-301).

3.5 Groundwater Sampling Results

Groundwater samples were collected from 11 monitoring wells, 5 of which were installed during the RI. A total of 5 samples were collected from shallow monitoring wells (MW-4, MW-5, MW-107, MW-113B, and MW-114B) and the remaining 6 samples were collected from deep overburden monitoring wells (MW-101A, MW-113A, MW-114A, MW-115, MW-116, and MW-117). Groundwater samples were submitted for laboratory analysis of VOCs, SVOCs, metals, and cyanide to assess the nature and extent of potential MGP- and non-MGP-related groundwater quality impacts. Analytical results for the laboratory analysis of the RI groundwater samples were reported using NYSDEC ASP Category B data deliverable packages. Each data package was reviewed by ARCADIS' data validation staff. Data Usability Summary Reports (DUSRs) which present the data validation review for each sample delivery group are presented in Appendix C.

Laboratory analytical results for the groundwater samples are presented in Tables 8, 9, and 10. Detected total BTEX and total PAH concentrations in groundwater are presented on Figure 13. For the purpose of evaluating the groundwater analytical results, the results have been compared to the groundwater quality standards/guidance values presented in NYSDEC document entitled Technical and Operational Guidance Series: Ambient Water Quality Standards and Groundwater Effluent Limitations (TOGS 1.1.1) (NYSDEC, 2008),

The groundwater analytical results are summarized below.

- BTEX compounds were detected at concentrations exceeding the groundwater quality standards or guidance values at 5 monitoring wells (MW-4, MW-107, MW-113B, MW-114A, and MW-114B). BTEX exceedances for these monitoring wells are summarized below.

    - BTEX compounds were not detected at upgradient monitoring well MW-5. A slight exceedance for ethylbenzene was identified at upgradient monitoring well MW-4 and an exceedance of benzene was identified at monitoring well MW-107.

    - Benzene slightly exceeded the standards/guidance values in shallow monitoring well MW-113B. Shallow monitoring wells MW-113B and MW-14B, which are both located immediately south of OU-2 along Watson Avenue, contained exceedances of ethylbenzene.

    - Deep monitoring well MW-114A contained exceedances of BTEX compounds.

- PAHs were identified at concentrations exceeding the groundwater quality standards or guidance values in upgradient monitoring well MW-4 and at OU-1 monitoring well MW-107.

- PAHs were detected at concentrations exceeding the groundwater quality standards or guidance values at the monitoring wells located immediately south of the site along Watson Avenue (MW-113A, MW-113B, MW-114A, and MW-114B).

- PAHs were detected at concentrations exceeding the groundwater quality standard or guidance value for naphthalene at the onsite monitoring wells MW-115 and MW-116.

- A slightly elevated concentration of arsenic was detected at OU-1 monitoring well MW-107 and a slightly elevated concentration of chromium was detected at OU-2 monitoring well MW-116. Other concentrations of inorganic constituents are consistent with typical minerals in overburden groundwater. The detected inorganic constituents are not associated with the former MGP or petroleum storage operations at the former Unionport Works site.

- Total cyanide was not detected at any of the monitoring well locations at concentrations exceeding the 200 ppb standard.

The groundwater sampling results indicated that groundwater that exhibits BTEX and PAHs at concentrations exceeding the standards/guidance values are generally located along Watson Avenue to the south of OU-2. Concentrations of BTEX and PAHs identified at these locations were also generally higher at deep monitoring wells than shallow monitoring wells.

4. Conclusions and Recommendations

This section presents conclusions which are supported by the RI results discussed in Section 3 and also discusses recommendations for future activities. As summarized in Section 1.3, the objectives of the RI include:

- Determine if MGP- and/or non-MGP-related compounds are present in soil and/or groundwater at the site.
- Identify the potential presence of MGP- and/or non-MGP-related by-product residuals (such as coal tar, NAPL, purifier wastes, petroleum, solvents, etc.) in soil and/or groundwater at the site.
- Evaluate, to the extent practicable, whether groundwater flow may be a pathway for offsite migration of identified chemical constituents (if present).
- Determine compliance with applicable NYSDEC standards, criteria, and guidance values (SCGs).
- Provide sufficient data to evaluate the necessity for further investigation and/or remedial action.

The results of the OU-2 RI activities described in this report satisfy the RI objectives.

4.1 Summary of Findings

The relevant findings of the RI are summarized below, including historical site use, geologic and hydrogeologic conditions, distribution of visible MGP- and non-MGP-related impacts, soil sampling results, and groundwater sampling results.

4.1.1 Historical Site Use

Historical MGP operations were conducted at OU-1 (immediately south of OU-2) between 1905 and 1927 and primarily included the production of manufactured gas using the Lowe carbureted water gas process. Manufactured gas produced at OU-1 was stored in aboveground gas holders located at the Zerega Avenue former gas holder site. In addition to the manufactured gas plant, operations at the site also included an electric generating plant and coal unloading/storage facility. Con Edison owned and operated the site between 1927 and 1945, but the site use during this

period is unknown. Various petroleum companies owned and operated the site between 1945 and 2007, except for the years 1947 through 1950. The property was purchased by a private owner in 2007 and the site will reportedly be redeveloped to support future commercial and/or industrial use.

Petroleum companies that owned and operated the site between 1945 and 2007 include Combined Petroleum Transfer Corporation; Cirillo Brothers Petroleum Company; Cibro Terminal, Inc.; Morningside Fuel Corporation; and Twin Pines Fuels Corporation. Multiple documented petroleum releases occurred at the site between 1975 and 2000. Several different phases of investigation activities were implemented to evaluate potential environmental concerns associated with petroleum releases at the site.

4.1.2 Geologic and Hydrogeologic Conditions

Surficial deposits in the Bronx consist of till derived from the glacial erosion of underlying metamorphic rocks. Bedrock beneath the site is sillimanite-grade gneiss of the Pelham Bay Member (Hartland Formation, Middle Ordovician to Lower Cambrian age). Depth to bedrock is 40 feet or more. The bedrock surface reportedly descends sharply toward the east under the Cross Bronx Expressway.

Site stratigraphy can be divided into four units. In order of increasing depth, these units are presented in the table below.

Stratigraphic Unit	Thickness Range (feet)
Fill	10 – 12
Clay	11 - 25.5
Glacial Till (Sand and Silt)	4 – 18
Bedrock (Gneiss of Heartland Formation)	Not Determined

Deep groundwater flow in the glacial till unit is generally east as shown on Figure 11.

4.1.3 Distribution of Visual Impacts and NAPL

MGP- and non-MGP-related impacts noted during the RI field activities included odors, visible staining, sheens, and NAPL.

The most widespread observations of NAPL were noted along the top of the clay unit. NAPL impacts were observed along the top of the clay unit at 4 RI soil borings (SB-300A, SB-300B, SB-301, and SB-303).

NAPL impacts were not observed at MW-115/SB-302 and SB-305. Possible petroleum-like odor and staining were reported in glacial till at SB-306 and in fill at SB-307, located in the northeastern portion of OU-2.

LNAPL was not observed during the 2014 gauging event. DNAPL was not observed in any of the OU-2 monitoring wells. DNAPL was observed in four OU-1 monitoring wells for the April 2014 gauging event (at MW-101B, MW-107, MW-108, and MW-109).

4.1.4 Soil Sampling Results

The subsurface soil analytical results are summarized below.

- BTEX compounds were detected at concentrations exceeding the SCOs for the protection of groundwater in 4 subsurface soil samples. Benzene was detected at concentrations exceeding the protection of groundwater SCO in one sample (SB-303[13-13.3]). Ethylbenzene was detected at concentrations exceeding the protection of groundwater SCO in two samples (SB-300 [21.5-22] and SB-303[18.5-19], respectively). Ethylbenzene and toluene were detected at concentrations exceeding the protection of groundwater SCO in one sample (SB-301[36-36.5]). No samples exceeded industrial-use SCOs. There were no subsurface soil samples that contained total BTEX concentrations exceeding 10 ppm.

- PAHs were detected at concentrations exceeding SCOs for the protection of groundwater in 7 subsurface soil samples. A total of 5 samples exceeded commercial use SCOs and 5 samples exceeded industrial use SCOs. One sample (SB-301[36-36.5)] collected for OU-2 exceeded the 500 ppm total PAH value. Detected PAH concentrations at SB-304 (in the northwest portion of OU-2) and at SB-307 (in the northeast portion of OU-2) may indicate the presence of localized petroleum releases

that are not associated with MGP or petroleum storage operations at the former Unionport Works site and.

- Potentially elevated concentrations of arsenic and lead were detected at soil boing locations SB-304 and SB-307. Slightly elevated concentrations of arsenic and mercury were detected at soil boring location SB-305. The detected inorganic constituents are not associated with the former MGP or petroleum storage operations at the former Unionport Works site.

- Cyanide did not exceed the protection of groundwater, commercial, and industrial use SCO in any samples collected during the RI.

The RI soil sampling results indicated that MGP- and/or petroleum-related constituents are present in soil along Watson Avenue and have migrated to the southern portion of OU-2 (in the vicinity of SB-301).

4.1.5 Groundwater Sampling Results

The groundwater analytical results are summarized below.

- BTEX and PAHs were detected at concentrations exceeding the NYSDEC standards/guidance values at monitoring well locations immediately south of the site and on the southern portion of OU-2.

    - Benzene exceeded the standards/guidance values in shallow monitoring well MW-113B at a relatively low concentration. Shallow monitoring wells MW-113B and MW-14B, which are both located immediately south of OU-2 along Watson Avenue, contained exceedances of ethylbenzene. Deep monitoring well MW-114A contained exceedances of BTEX compounds. PAHs were detected at concentrations exceeding the groundwater quality standards or guidance values at the monitoring wells located immediately south of the site along Watson Avenue (MW-113A, MW-113B, MW-114A, and MW-114B.

    - A slight exceedance for ethylbenzene was identified at upgradient OU-1 monitoring well MW-4 and an exceedance of benzene was identified at OU-1 monitoring well MW-107. PAHs were also identified at concentrations exceeding the groundwater quality standards or guidance values at monitoring wells MW-4 and MW-107.

- BTEX compounds were not detected at upgradient monitoring well MW-5 or OU-2 monitoring wells MW-115 and MW-116. PAHs were detected at concentrations exceeding the groundwater quality standards or guidance values for naphthalene at the OU-2 monitoring wells MW-115 and MW-116.

- A slightly elevated concentration of arsenic was detected at OU-1 monitoring well MW-107 and a slightly elevated concentration of chromium was detected at OU-2 monitoring well MW-116. Other concentrations of inorganic constituents are consistent with typical minerals in overburden groundwater. The detected inorganic constituents are not associated with the former MGP or petroleum storage operations at the former Unionport Works site.

- Total cyanide was not detected at any of the monitoring well locations at concentrations exceeding the NYSDEC groundwater quality standard.

The groundwater sampling results indicated that groundwater that exhibits BTEX and PAHs at concentrations exceeding the standards/guidance values are generally located along Watson Avenue to the south of OU-2. Concentrations of BTEX and PAHs identified at these locations were also generally higher at deep monitoring wells than shallow monitoring wells.

4.2 Recommendations

Based on the findings of the Watson Avenue RI activities, the nature and extent of MGP- and non-MGP-related impacts in onsite areas are generally understood. No further remedial investigation is required for OU-2 at this time. Potential remedial activities to address MGP and/or petroleum-related impacts identified in the southern portion of OU-2 will be evaluated concurrently with the evaluation of remedial alternatives for impacts identified at sampling locations along Watson Avenue.

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ARCADIS

Tables

TABLE 1

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SAMPLE SUMMARY TABLE

Sample ID	Depth	Sample Matrix	Sample Type	Date Collected	TCL VOCs	TCL SVOCs	TAL Metals	Total Cyanide	TCLP VOCs	TCLP SVOCs	TCLP Metals	PCBs	Total TPH	RCRA Characteristics
Waste Characterization Samples														
WC-04222014	- -	Soil	Waste	4/22/2014					X	X	X			X
WC-05012014	- -	Water	Waste	5/1/2014					X	X	X	X	X	X
Duplicate Samples														
DUP04152014	- -	Soil	QA/QC-Duplicate	4/15/2014	X	X	X	X						
DUP-04292014	- -	Water	QA/QC-Duplicate	4/29/2014	X	X	X	X						
Matrix Spike/Matrix Spike Duplicate Samples														
SB-300 (21.5-22) MSD	- -	Soil	QA/QC-MSD	4/16/2014	X	X	X	X						
SB-300 (21.5-22) MS	- -	Soil	QA/QC-MS	4/16/2014	X	X	X	X						
MW-05 MSD	- -	Water	QA/QC-MSD	4/28/2014	X	X	X	X						
MW-05 MS	- -	Water	QA/QC-MS	4/28/2014	X	X	X	X						
Soil Samples														
SB-300 (15-16)	(15-16)	Soil		4/16/2014	X	X	X	X						
SB-300 (21.5-22)	(21.5-22)	Soil		4/16/2014	X	X	X	X						
SB-300 (40-41)	(40-41)	Soil		4/16/2014	X	X	X	X						
SB-301 (9-10)	(9-10)	Soil	Sonic	4/15/2014	X	X	X	X						
SB-301 (36-36.5)	(36-36.5)	Soil	Sonic	4/15/2014	X	X	X	X						
SB-302 (15-16)	(15-16)	Soil	Sonic	4/15/2014	X	X	X	X						
SB-302 (31-31.5)	(31-31.5)	Soil	Sonic	4/15/2014	X	X	X	X						
SB-303 (13-13.3)	(13-13.3)	Soil	Sonic	4/17/2014	X	X	X	X						
SB-303 (18.5-19)	(18.5-19)	Soil	Sonic	4/17/2014	X	X	X	X						
SB-303 (22.5-23)	(22.5-23)	Soil	Sonic	4/17/2014	X	X	X	X						
SB-304 (10.5-11)	(10.5-11)	Soil	Sonic	4/18/2014	X	X	X	X						
SB-304 (17-17.5)	(17-17.5)	Soil	Sonic	4/18/2014	X	X	X	X						
SB-304 (28.5-29)	(28.5-29)	Soil	Sonic	4/18/2014	X	X	X	X						
SB-305 (8.5-9)	(8.5-9)	Soil	Sonic	4/22/2014	X	X	X	X						
SB-305 (15-15.5)	(15-15.5)	Soil	Sonic	4/22/2014	X	X	X	X						
SB-305 (34-35)	(34-35)	Soil	Sonic	4/22/2014	X	X	X	X						
SB-305 (37-37.5)	(37-37.5)	Soil	Sonic	4/22/2014	X	X	X	X						
SB-306 (9.5-10)	(9.5-10)	Soil	Sonic	4/17/2014	X	X	X	X						
SB-306 (20-20.5)	(20-20.5)	Soil	Sonic	4/17/2014	X	X	X	X						
SB-306 (42-44)	(42-44)	Soil	Sonic	4/17/2014	X	X	X	X						
SB-307 (10-11)	(10-11)	Soil	Sonic	4/21/2014	X	X	X	X						
SB-307 (12-13)	(12-13)	Soil	Sonic	4/21/2014	X	X	X	X						
SB-307 (33.5-34)	(33.5-34)	Soil	Sonic	4/21/2014	X	X	X	X						
Groundwater Samples														
MW-04	- -	Water	Sonic	4/29/2014	X	X	X	X						
MW-05	- -	Water	Sonic	4/28/2014	X	X	X	X						
MW-101A	- -	Water	Sonic	4/29/2014	X	X	X	X						
MW-107	- -	Water	Sonic	4/29/2014	X	X	X	X						
MW-113A	- -	Water	Sonic	4/29/2014	X	X	X	X						
MW-113B	- -	Water	Sonic	4/29/2014	X	X	X	X						
MW-114A	- -	Water	Sonic	4/30/2014	X	X	X	X						
MW-114B	- -	Water	Sonic	4/30/2014	X	X	X	X						
MW-115	- -	Water	Sonic	4/30/2014	X	X	X	X						
MW-116	- -	Water	Sonic	4/30/2014	X	X	X	X						
MW-117	- -	Water	Sonic	4/30/2014	X	X	X	X						

Notes:

1. PCBs = polychlorinated biphenyls.
2. RCRA = resource conservation and recovery act.
3. SVOCs = semi-volatile organic compounds.
4. TAL = target analyte list.
5. TCL = target compound list.
6. TCLP = Toxicity characteristic leaching procedure .
7. TPH = total petroleum hydrocarbons.
8. VOCs = volatile organic compounds.

TABLE 2

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SUMMARY OF FIELD OBSERVATIONS

Boring ID	Drilling Method	Depth Range (feet bgs)	Depth to Clay	Unit Containing NAPL	PID Reading	Observation
SB-300A / MW-114A	Sonic	10-15	20.0	F	9.1, 12.0, 14.4, 13.5	Moderate petroleum-like odor and staining
	Sonic	15-20		GT	2.0, 3.1, 1.1, 13.7	Petroleum-like odor and staining, sheen from 14 to 15' bgs
	Sonic	21.5-21.8		C	3.2	NAPL blebs
	Sonic	40-41		GT	0.5	Pockets of clay around cobbles exhibit MGP-like odor
SB-300B / MW-114B	Sonic	9-10	15.0	F	NA	Black petroleum-like staining
	Sonic	11.5-13		F	NA	Black staining and petroleum-like odor
	Sonic	13-15		F	NA	Moderate Petroleum-like odor
	Sonic	15-17		C	NA	Slight MGP-like odor
SB-301	Sonic	33.5-35	20.0	GT	3.1	Sheen present at 33.5' bgs, NAPL Blebs and Sheen from 34.5 to 35' bgs
	Sonic	35-37		GT	5.7	Banded sheen at 36 and 36.5' bgs, saturated with TLM at 36.5' bgs
	Sonic	37-42		GT	9.5, 3.0, 6.7, 5.5, 0.0, 0.0	Slight tar-like odor
SB-302 / MW-115	Sonic	NA	10.0	NA	NA	NA
SB-303	Sonic	13.3-15	18.5	F	2.5	Moderate MGP-like odor, sheen, and turning brownish gray
	Sonic	15-18.5		C	2.5	Staining and MGP like odor
SB-304	Sonic	11-15	17.0	F	0.0, 0.0, 0.0	Possible Petroleum-like staining and moderate odor
SB-305	Sonic	NA	15.0	NA	NA	NA
SB-306 / MW-116	Sonic	41.5-45	20.0	GT	7.0, 7.4, 6.5	Possible slight Petroleum-like odor
SB-307 / MW-117	Sonic	10-11	12.5	F	455.3	Possible Petroleum-like odor, High PID reading likely due to excessive heat and moisture caused by drilling
	Sonic	11-12.5		F	0.0	Possible black Petroleum-like staining

Notes:

1. Samples were collected by ARCADIS on April 14 to 18, 2014 and April 21 to 22, 2014 .
2. Sampling descriptions are from the field sampling team at the time of sample collection.
3. bgs = Below ground surface
4. NA = Not applicable
5. TLM = Tar-like material
6. NAPL = Non-aqueous phase liquid
7. PID = Photo ionization detector
8. F = Fill
9. S = Silt
10. C = Clay
11. G = Gravel

TABLE 3

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
WELL CONSTRUCTION SUMMARY

Location ID	Unit Screened	Total Well Depth feet bgs	Depth to Screened Interval (ft. bgs)		Borehole Depth feet bgs	Screen Slot Size inch	Screen Length feet	Sump Length feet	Depth to Water feet bgs	Installed by
			Top	Bottom						
MW-114A	Glacial Till	43.0	31	41	51	0.020	10.0	2	9.42	Sonic
MW-114B	Fill	24.0	12	22	24	0.020	10.0	2	9.26	Sonic
MW-115	Glacial Till	31.5	24	31.5	33	0.020	7.5	NA	8.60	Sonic
MW-116	Glacial Till	45.0	35	45	50	0.020	10.0	NA	9.57	Sonic
MW-117	Glacial Till	36.0	26	36	37	0.020	10.0	NA	8.59	Sonic

Notes:
NA = not available
bgs = below ground surface
All elevations shown are Above Mean Sea Level (AMSL)
Northing and easting coordinates on New York State Plane grid

TABLE 4

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
WATER/NAPL LEVEL DATA

Location	Depth to Groundwater (ft bgs)				Depth to Product (ft bgs)				Depth to Bottom (ft bgs)				Remarks
	3/7/2008	4/27/2009	6/19/2013	4/28/2014	3/7/2008	4/27/2009	6/19/2013	4/28/2014	3/7/2008	4/27/2009	6/19/2013	4/28/2014	
MW-04	- -	8.52	8.15	8.70	- -	ND	- -	ND	- -	- -	21.61	21.55	(4/28/14) MGP-like odor on probe
MW-05	- -	7.88	7.48	8.00	- -	ND	- -	ND	- -	- -	18.02	17.88	- -
MW-101A	11.98	12.10	11.26	11.49	ND	ND	- -	ND	41.40	41.50	41.38	41.35	Bailed out water out of the manhole. Faint MGP odors. (4/28/14) Petroleum-like odor on probe.
MW-101B	12.05	12.20	- -	- -	11.98	11.85	12.58	12.91	17.85	17.79	17.51	17.72	(3/7/08) Trace black oil on tape and probe tip. (4/27/09) Black OLM coating probe - OLM at water table. (6/19/13) Black OLM on probe. (4/28/14) Black OLM on probe, 5 ft of product on tape.
MW-102	8.99	9.30	- -	- -	15.21	9.10	- -	- -	17.40	17.30	- -	- -	NAPL on probe. (6/19/13) Well could not be accessed, under large pile of stone.
MW-103	16.90	21.21	- -	- -	NA	See remarks	- -	- -	22.65	22.62	- -	- -	(3/7/08) Petroleum odor. Residual product on probe. (4/27/09) Trace OLM blebs on probe at the bottom of the well. (6/19/13) Well could not be located.
MW-107	8.40	8.69	8.74	9.10	8.35	See remarks	- -	ND	16.35	16.35	16.48	16.48	(3/7/08) Oil-coated probe. (4/27/09) OLM found sporadically on IP probe/tape. Some observed on nut/string. IP registered no tone when lowered to the bottom of the well. (6/19/13) Petroleum like odor. (4/28/14) NAPL blebs on probe tip.
MW-108	10.43	16.02	14.26	- -	16.61	ND	- -	11.81	18.80	18.75	24.61	18.81	Black NAPL on probe and tape. (4/28/14) Coal tar.
MW-109	11.05	11.19	- -	- -	17.27	See remarks	- -	11.50	20.40	20.30	- -	20.03	(3/7/08) NAPL on probe and tape. (4/27/09) Trace OLM on IP probe and tape when retrieved from well. Trace OLM blebs on nut and string. Lots of sediment on bottom. (6/19/13) Well could not be accessed, under large pile of stone. (4/28/14) Coal tar.
MW-110A	13.06	14.51	- -	- -	ND	ND	- -	- -	39.80	38.50	- -	- -	MGP odors and sediment on probe. (6/19/13) Well could not be located, concrete covered. (4/28/14) Well could not be located, concrete covered.
MW-110B	10.71	14.44	- -	- -	16.94	ND	- -	- -	17.90	17.90	- -	- -	(3/7/08) No NAPL on probe. (4/27/09) Moderate odor. (6/19/13) Well could not be located, concrete covered. (4/28/14) Well could not be located, concrete covered.
MW-111	11.60	15.34	7.02	- -	17.83	ND	- -	- -	20.60	21.00	22.08	- -	(3/7/08) Sediment on probe, no visual impacts. (4/27/09) Sediments on probe. (4/28/14) Well could not be located, concrete covered.
MW-112	8.87	11.21	- -	- -	ND	ND	- -	- -	37.40	37.28	- -	- -	MGP odors. (6/19/13) Well could not be located, asphalt covered. (4/28/14) Well could not be located, asphalt covered.
MW-113A	10.06	14.45	9.41	9.91	17.00	ND	- -	ND	39.50	39.11	39.16	39.30	NVI on probe. (4/28/14) Sediment on probe.
MW-113B	10.40	14.34	10.89	11.00	16.62	ND	- -	ND	18.00	17.95	17.94	17.85	Product on tape. Heavy impacts. (4/28/14) Petroleum-like odor on probe.
MW-114A	- -	- -	- -	9.42	- -	- -	- -	ND	- -	- -	- -	42.50	- -
MW-114B	- -	- -	- -	9.26	- -	- -	- -	ND	- -	- -	- -	23.76	- -
MW-115	- -	- -	- -	8.60	- -	- -	- -	ND	- -	- -	- -	30.70	- -
MW-116	- -	- -	- -	9.57	- -	- -	- -	ND	- -	- -	- -	42.58	- -
MW-117	- -	- -	- -	8.59	- -	- -	- -	ND	- -	- -	- -	35.97	- -

TABLE 4

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
WATER/NAPL LEVEL DATA

Notes:
1. IP = Interphase probe.
2. NAPL = Non-aqueous phase liquid.
3. DNAPL = Dense non-aqueous phase liquid.
4. OLM = Oil-like material.
5. MGP = Manufactured gas plant.
6. ND = Not detected.
7. NVI = No visible impacts
8. MW = Monitoring well.
9. - - = Data is not available.
10. Groundwater elevations are presented in feet above mean sea level (AMSL).
11. ft bgs = Feet below ground surface.

TABLE 5

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - 1066 ZEREGA AVENUE, BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SOIL SAMPLING RESULTS FOR DETECTED VOCs

Location ID: Sample Depth(Feet): Date Collected:	Restricted Commercial Use SCOs	Restricted SCOs Use for Protection of Groundwater	Restricted Industrial Use SCOs	Units	SB-300 15 - 16 04/16/14	SB-300 21.5 - 22 04/16/14	SB-300 40 - 41 04/16/14	SB-301 9 - 10 04/15/14	SB-301 36 - 36.5 04/15/14	SB-302 15 - 16 04/15/14
Volatile Organic Compounds (BTEX)										
Benzene	44	0.06	89	mg/kg	0.26 UJ	0.23 UJ	0.061 UJ	0.0020 J	0.47 UJ	0.0011 UJ [0.00095 UJ]
Ethylbenzene	390	1	780	mg/kg	1.0 U	1.1	0.24 U	0.0018 UJ	3.8	0.0044 U [0.0038 U]
Toluene	500	0.7	1,000	mg/kg	2.6 U	2.3 U	0.61 U	0.00030 J	4.7 U	0.00081 J [0.00065 J]
Xylenes (total)	500	1.6	1,000	mg/kg	0.34 J	0.53 J	0.24 U	0.0018 UJ	2.8	0.0044 U [0.0038 U]
Total BTEX	10	- -	- -	mg/kg	0.34 J	1.6 J	0.61 U	0.0023 J	6.6	0.00081 J [0.00065 J]
Other Volatile Organic Compounds										
Acetone	500	0.05	1,000	mg/kg	5.2 U	4.7 U	1.2 U	0.0092 U	9.5 U	0.050 J [0.038 J]
Carbon Disulfide	- -	- -	- -	mg/kg	2.6 U	2.3 U	0.61 U	0.00036 J	4.7 U	0.011 J [0.011]
Tetrachloroethene	150	1.3	300	mg/kg	1.0 U	0.94 U	0.24 U	0.0018 UJ	1.9 U	0.0044 U [0.0038 U]
Total Other VOCs	- -	- -	- -	mg/kg	5.2 U	4.7 U	1.2 U	0.00036 J	9.5 U	0.061 J [0.049]

TABLE 5

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - 1066 ZEREGA AVENUE, BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SOIL SAMPLING RESULTS FOR DETECTED VOCs

Location ID: Sample Depth(Feet): Date Collected:	Restricted Commercial Use SCOs	Restricted SCOs Use for Protection of Groundwater	Restricted Industrial Use SCOs	Units	SB-302 31 - 31.5 04/15/14	SB-303 13 - 13.3 04/17/14	SB-303 18.5 - 19 04/17/14	SB-303 22.5 - 23 04/17/14	SB-304 10.5 - 11 04/18/14	SB-304 17 - 17.5 04/18/14	SB-304 28.5 - 29 04/18/14	SB-305 8.5 - 9 04/22/14
Volatile Organic Compounds (BTEX)												
Benzene	44	0.06	89	mg/kg	0.00043 UJ	0.39	0.091 U	0.056 J	0.00059 J	0.00078 UJ	0.00037 UJ	0.00039 U
Ethylbenzene	390	1	780	mg/kg	0.0043	0.32 J	2.3	0.91	0.0023 U	0.0031 U	0.0015 U	0.0015 U
Toluene	500	0.7	1,000	mg/kg	0.0016 J	1.1 U	0.91 U	0.61 U	0.0057 U	0.0078 U	0.0037 U	0.0039 U
Xylenes (total)	500	1.6	1,000	mg/kg	0.0052	0.21 J	0.83	0.24 U	0.0023 U	0.0031 U	0.0015 U	0.0015 U
Total BTEX	10	- -	- -	mg/kg	0.011 J	0.92 J	3.2	0.97 J	0.00059	0.0078 U	0.0037 U	0.0039 U
Other Volatile Organic Compounds												
Acetone	500	0.05	1,000	mg/kg	0.0039 J	2.1 U	1.8 U	1.2 U	0.011 UJ	0.057 J	0.0075 UJ	0.0077 U
Carbon Disulfide	- -	- -	- -	mg/kg	0.0097	1.1 U	0.91 U	0.61 U	0.0012 J	0.0035 J	0.00045 J	0.0039 U
Tetrachloroethene	150	1.3	300	mg/kg	0.0017 U	0.58	0.36 U	0.24 U	0.0023 U	0.0031 U	0.0015 U	0.0015 U
Total Other VOCs	- -	- -	- -	mg/kg	0.014 J	0.58	1.8 U	1.2 U	0.0012 J	0.060 J	0.00045 J	0.0077 U

TABLE 5

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - 1066 ZEREGA AVENUE, BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SOIL SAMPLING RESULTS FOR DETECTED VOCs

Location ID: Sample Depth(Feet): Date Collected:	Restricted Commercial Use SCOs	Restricted SCOs Use for Protection of Groundwater	Restricted Industrial Use SCOs	Units	SB-305 15 - 15.5 04/22/14	SB-305 34 - 35 04/22/14	SB-305 37 - 37.5 04/22/14	SB-306 9.5 - 10 04/17/14	SB-306 20 - 20.5 04/17/14	SB-306 42 - 44 04/17/14	SB-307 10 - 11 04/21/14	SB-307 12 - 13 04/21/14	SB-307 33.5 - 34 04/21/14
Volatile Organic Compounds (BTEX)													
Benzene	44	0.06	89	mg/kg	0.0011 U	0.00038 U	0.00044 U	0.0011 J	0.00078 UJ	0.076 U	0.00042 J	0.0013 U	0.00065
Ethylbenzene	390	1	780	mg/kg	0.0042 U	0.0015 U	0.0018 U	0.0019 U	0.0031 U	0.30 U	0.0013 UJ	0.0052 U	0.0017 U
Toluene	500	0.7	1,000	mg/kg	0.011 U	0.0038 U	0.0044 U	0.0048 UJ	0.0078 U	0.76 U	0.0033 UJ	0.013 U	0.0042 U
Xylenes (total)	500	1.6	1,000	mg/kg	0.0042 U	0.0015 U	0.0018 U	0.0019 UJ	0.0031 U	0.30 U	0.0013 UJ	0.0052 U	0.0017 U
Total BTEX	10	- -	- -	mg/kg	0.011 U	0.0038 U	0.0044 U	0.0011	0.0078 U	0.76 U	0.00042	0.013 U	0.00065
Other Volatile Organic Compounds													
Acetone	500	0.05	1,000	mg/kg	0.072 J	0.0075 U	0.0088 U	0.0096 UJ	0.050 J	1.5 U	0.0066 U	0.16 J	0.0083 U
Carbon Disulfide	- -	- -	- -	mg/kg	0.0042 J	0.00064 J	0.0018 J	0.00082 J	0.013	0.76 U	0.0017 J	0.013 U	0.0046
Tetrachloroethene	150	1.3	300	mg/kg	0.0042 U	0.0015 U	0.0018 U	0.0019 U	0.0031 U	0.30 U	0.0013 UJ	0.0052 U	0.0017 U
Total Other VOCs	- -	- -	- -	mg/kg	0.076 J	0.00064 J	0.0018 J	0.00082 J	0.063	1.5 U	0.0017 J	0.16	0.0046

TABLE 5

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - 1066 ZEREGA AVENUE, BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SOIL SAMPLING RESULTS FOR DETECTED VOCs

Notes:

1. This table includes detected compounds only.
2. Shaded data indicates exceedances of Protection of Groundwater Use criteria as per NYCRR Part 375, Table 375-6.8(b).
3. Samples were collected by ARCADIS.
4. Samples were analyzed by Accutest Laboratories of Marlborough, Massachusetts.
5. Data validated by ARCADIS.
6. Results reported are [ ] are for field duplicate sample collected at that location.
7. J = Estimated value.
   UJ = Estimated detection limit.
   U = Compound not detected at indicated detection limit.

TABLE 6

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SOIL SAMPLING RESULTS FOR DETECTED SVOCs

Location ID: Sample Depth(Feet): Date Collected:	Restricted Commercial Use SCOs	Restricted SCOs Use for Protection of Groundwater	Restricted Industrial Use SCOs	Units	SB-300 15 - 16 04/16/14	SB-300 21.5 - 22 04/16/14	SB-300 40 - 41 04/16/14	SB-301 9 - 10 04/15/14	SB-301 36 - 36.5 04/15/14	SB-302 15 - 16 04/15/14	SB-302 31 - 31.5 04/15/14	SB-303 13 - 13.3 04/17/14
Semivolatile Organic Compounds (PAHs)												
Naphthalene	500	12	1,000	mg/kg	1.4	10	2.1	0.13 U	280 D	0.19 U [0.25]	0.052 J	3.1
Acenaphthylene	500	107	1,000	mg/kg	6.4	1.1	0.92	0.075 J	270 D	0.085 J [0.048 J]	0.027 J	1.7
Acenaphthene	500	98	1,000	mg/kg	20 D	8.6	0.64	0.13 U	41	0.029 J [0.19 U]	0.11 U	0.70 U
Fluorene	500	386	1,000	mg/kg	3.7	3.8	0.83	0.018 J	160 D	0.19 U [0.19 U]	0.11 U	0.70 U
Phenanthrene	500	1,000	1,000	mg/kg	38 D	11	2.4	0.49	**590 D**	0.19 U [0.19 U]	0.11 U	1.5
Anthracene	500	1,000	1,000	mg/kg	8.0	3.9	0.68	0.086 J	160 D	0.19 U [0.19 U]	0.11 U	0.87
Fluoranthene	500	1,000	1,000	mg/kg	8.3	3.4	0.63	0.39	150 D	0.19 U [0.19 U]	0.11 U	2.8
Pyrene	500	1,000	1,000	mg/kg	21 D	5.7	1.0	0.55	230 D	0.19 U [0.19 U]	0.11 U	5.5
Benzo(a)anthracene	5.6	1	11	mg/kg	**6.5**	2.1	0.38	0.20	***86 D***	0.19 U [0.19 U]	0.11 U	3.4
Chrysene	56	1	110	mg/kg	5.8	1.9	0.34	0.22	**74 D**	0.19 U [0.19 U]	0.11 U	3.0
Benzo(b)fluoranthene	5.6	1.7	11	mg/kg	3.1	0.92	0.18	0.15	***41***	0.19 U [0.19 U]	0.11 U	4.3
Benzo(k)fluoranthene	56	1.7	110	mg/kg	1.3	0.30	0.073 J	0.060 J	12	0.19 U [0.19 U]	0.11 U	1.2
Benzo(a)pyrene	1	22	1.1	mg/kg	***4.6***	***1.3***	0.28	0.14	***58 D***	0.19 U [0.19 U]	0.11 U	***4.5***
Indeno(1,2,3-cd)pyrene	5.6	8.2	11	mg/kg	1.2	0.34	0.074 J	0.069 J	***16***	0.19 U [0.19 U]	0.11 U	2.9
Dibenzo(a,h)anthracene	0.56	1,000	1.1	mg/kg	0.56	0.14 J	0.029 J	0.023 J	***6.3***	0.19 U [0.19 U]	0.11 U	**0.89**
Benzo(g,h,i)perylene	500	1,000	1,000	mg/kg	1.5	0.42	0.093 J	0.084 J	19	0.19 U [0.19 U]	0.11 U	4.3
Total PAHs	500	- -	- -	mg/kg	130	55 J	11 J	2.6 J	**2,200**	0.11 J [0.30 J]	0.079 J	40
Other Semivolatile Organic Compounds												
2-Methylnaphthalene	- -	- -	- -	mg/kg	0.12 U	1.0	1.4	0.13 U	26	0.19 U [0.19 U]	0.11 U	3.2
2-Methylphenol	500	0.33	1,000	mg/kg	0.58 U	0.82 U	0.59 U	0.64 U	2.8 U	0.94 U [0.93 U]	0.57 U	3.5 U
3&4-Methylphenol	- -	- -	- -	mg/kg	0.58 U	0.82 U	0.59 U	0.64 U	2.8 U	0.94 U [0.93 U]	0.57 U	3.5 U
bis(2-Ethylhexyl)phthalate	- -	- -	- -	mg/kg	0.042 J	0.021 J	0.014 J	0.014 J	0.42 J	0.035 J [0.023 J]	0.015 J	1.8 U
Butylbenzylphthalate	- -	- -	- -	mg/kg	0.29 U	0.41 U	0.29 U	0.32 U	1.4 U	0.47 U [0.47 UB]	0.28 U	1.8 U
Carbazole	- -	- -	- -	mg/kg	0.12 U	0.16 U	0.12 U	0.018 J	1.6	0.19 U [0.19 U]	0.11 U	0.70 U
Dibenzofuran	350	210	1,000	mg/kg	0.75	0.43	0.074 J	0.13 U	15	0.19 U [0.19 U]	0.11 U	0.70 U
Total Other SVOCs	- -	- -	- -	mg/kg	0.80 J	1.6 J	1.6 J	0.086 J	43 J	0.11 J [0.11 J]	0.055 J	3.2

TABLE 6

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SOIL SAMPLING RESULTS FOR DETECTED SVOCs

Location ID: Sample Depth(Feet): Date Collected:	Restricted Commercial Use SCOs	Restricted SCOs Use for Protection of Groundwater	Restricted Industrial Use SCOs	Units	SB-303 18.5 - 19 04/17/14	SB-303 22.5 - 23 04/17/14	SB-304 10.5 - 11 04/18/14	SB-304 17 - 17.5 04/18/14	SB-304 28.5 - 29 04/18/14	SB-305 8.5 - 9 04/22/14	SB-305 15 - 15.5 04/22/14	SB-305 34 - 35 04/22/14
Semivolatile Organic Compounds (PAHs)												
Naphthalene	500	12	1,000	mg/kg	5.7	5.4	0.27 J	0.041 J	0.11 U	0.11 U	0.13 J	0.11 U
Acenaphthylene	500	107	1,000	mg/kg	0.15 U	0.051 J	0.42 J	0.025 J	0.11 U	0.016 J	0.34	0.11 U
Acenaphthene	500	98	1,000	mg/kg	0.15 U	0.65	0.096 J	0.15 U	0.11 U	0.11 U	0.038 J	0.11 U
Fluorene	500	386	1,000	mg/kg	0.15 U	0.14	0.13 J	0.019 J	0.11 U	0.11 U	0.057 J	0.11 U
Phenanthrene	500	1,000	1,000	mg/kg	0.15 U	0.54	1.6	0.066 J	0.11 U	0.037 J	0.36	0.11 U
Anthracene	500	1,000	1,000	mg/kg	0.15 U	0.11 J	0.39 J	0.025 J	0.11 U	0.11 U	0.22	0.11 U
Fluoranthene	500	1,000	1,000	mg/kg	0.15 U	0.12 U	2.9	0.10 J	0.11 U	0.058 J	0.87	0.11 U
Pyrene	500	1,000	1,000	mg/kg	0.15 U	0.12 U	2.3	0.10 J	0.11 U	0.064 J	1.3	0.11 U
Benzo(a)anthracene	5.6	1	11	mg/kg	0.15 U	0.12 U	1.5	0.059 J	0.11 U	0.044 J	0.79	0.11 U
Chrysene	56	1	110	mg/kg	0.15 U	0.12 U	1.4	0.058 J	0.11 U	0.034 J	1.0	0.11 U
Benzo(b)fluoranthene	5.6	1.7	11	mg/kg	0.15 U	0.12 U	1.8	0.077 J	0.11 U	0.049 J	0.82	0.11 U
Benzo(k)fluoranthene	56	1.7	110	mg/kg	0.15 U	0.12 U	0.62 J	0.15 U	0.11 U	0.11 U	0.28	0.11 U
Benzo(a)pyrene	1	22	1.1	mg/kg	0.15 U	0.12 U	***1.3***	0.050 J	0.11 U	0.036 J	0.87	0.11 U
Indeno(1,2,3-cd)pyrene	5.6	8.2	11	mg/kg	0.15 U	0.12 U	0.95	0.035 J	0.11 U	0.022 J	0.45	0.11 U
Dibenzo(a,h)anthracene	0.56	1,000	1.1	mg/kg	0.15 U	0.12 U	0.25 J	0.15 U	0.11 U	0.11 U	0.051 J	0.11 U
Benzo(g,h,i)perylene	500	1,000	1,000	mg/kg	0.15 U	0.12 U	1.1	0.038 J	0.11 U	0.028 J	0.61	0.11 U
Total PAHs	500	- -	- -	mg/kg	5.7	6.9 J	17 J	0.70 J	0.11 U	0.39 J	8.2 J	0.11 U
Other Semivolatile Organic Compounds												
2-Methylnaphthalene	- -	- -	- -	mg/kg	0.15 U	0.54	0.22 J	0.020 J	0.11 U	0.11 U	0.050 J	0.11 U
2-Methylphenol	500	0.33	1,000	mg/kg	0.77 U	0.59 U	3.4 U	0.73 U	0.55 U	0.55 U	0.053 J	0.54 U
3&4-Methylphenol	- -	- -	- -	mg/kg	0.77 U	0.59 U	3.4 U	0.16 J	0.55 U	0.55 U	0.052 J	0.54 U
bis(2-Ethylhexyl)phthalate	- -	- -	- -	mg/kg	0.39 U	0.29 U	1.7 U	0.37 U	0.28 U	0.27 U	0.46 U	0.012 J
Butylbenzylphthalate	- -	- -	- -	mg/kg	0.39 U	0.29 U	1.7 U	0.37 U	0.28 U	0.27 U	0.46 U	0.27 U
Carbazole	- -	- -	- -	mg/kg	0.15 U	0.053 J	0.16 J	0.15 U	0.11 U	0.11 U	0.18 U	0.11 U
Dibenzofuran	350	210	1,000	mg/kg	0.15 U	0.035 J	0.098 J	0.15 U	0.11 U	0.11 U	0.18 U	0.11 U
Total Other SVOCs	- -	- -	- -	mg/kg	1.5 U	0.62 J	0.47 J	0.020 J	1.1 U	1.1 U	0.10 J	0.012 J

TABLE 6

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SOIL SAMPLING RESULTS FOR DETECTED SVOCs

Location ID: Sample Depth(Feet): Date Collected:	Restricted Commercial Use SCOs	Restricted SCOs Use for Protection of Groundwater	Restricted Industrial Use SCOs	Units	SB-305 37 - 37.5 04/22/14	SB-306 9.5 - 10 04/17/14	SB-306 20 - 20.5 04/17/14	SB-306 42 - 44 04/17/14	SB-307 10 - 11 04/21/14	SB-307 12 - 13 04/21/14	SB-307 33.5 - 34 04/21/14
Semivolatile Organic Compounds (PAHs)											
Naphthalene	500	12	1,000	mg/kg	0.11 U	0.11 U	0.17 U	0.33	0.56 U	0.44 J	0.12 U
Acenaphthylene	500	107	1,000	mg/kg	0.11 U	0.048 J	0.17 U	0.039 J	0.56 U	1.5	0.12 U
Acenaphthene	500	98	1,000	mg/kg	0.11 U	0.11 U	0.17 U	0.13 U	0.56 U	0.58 J	0.12 U
Fluorene	500	386	1,000	mg/kg	0.11 U	0.11 U	0.17 U	0.13 U	0.56 U	0.38 J	0.12 U
Phenanthrene	500	1,000	1,000	mg/kg	0.11 U	0.055 J	0.17 U	0.030 J	0.23 J	3.2	0.12 U
Anthracene	500	1,000	1,000	mg/kg	0.11 U	0.023 J	0.17 U	0.13 U	0.56 U	1.0 J	0.12 U
Fluoranthene	500	1,000	1,000	mg/kg	0.11 U	0.15	0.17 U	0.13 U	0.43 J	6.8	0.12 U
Pyrene	500	1,000	1,000	mg/kg	0.11 U	0.16	0.17 U	0.13 U	0.42 J	7.1	0.12 U
Benzo(a)anthracene	5.6	1	11	mg/kg	0.11 U	0.11	0.17 U	0.13 U	0.25 J	3.8	0.12 U
Chrysene	56	1	110	mg/kg	0.11 U	0.11	0.17 U	0.13 U	0.22 J	3.9	0.12 U
Benzo(b)fluoranthene	5.6	1.7	11	mg/kg	0.11 U	0.19	0.17 U	0.13 U	0.26 J	4.8	0.12 U
Benzo(k)fluoranthene	56	1.7	110	mg/kg	0.11 U	0.063 J	0.17 U	0.13 U	0.098 J	1.3	0.12 U
Benzo(a)pyrene	1	22	1.1	mg/kg	0.11 U	0.15	0.17 U	0.13 U	0.19 J	***3.7***	0.12 U
Indeno(1,2,3-cd)pyrene	5.6	8.2	11	mg/kg	0.11 U	0.11	0.17 U	0.13 U	0.11 J	2.0	0.12 U
Dibenzo(a,h)anthracene	0.56	1,000	1.1	mg/kg	0.11 U	0.025 J	0.17 U	0.13 U	0.56 U	**0.71 J**	0.12 U
Benzo(g,h,i)perylene	500	1,000	1,000	mg/kg	0.11 U	0.13	0.17 U	0.13 U	0.16 J	2.6	0.12 U
Total PAHs	500	- -	- -	mg/kg	0.11 U	1.3 J	0.17 U	0.40 J	2.4 J	44 J	0.12 U
Other Semivolatile Organic Compounds											
2-Methylnaphthalene	- -	- -	- -	mg/kg	0.11 U	0.11 U	0.17 U	0.13 U	0.56 U	0.22 J	0.12 U
2-Methylphenol	500	0.33	1,000	mg/kg	0.55 U	0.56 U	0.86 U	0.66 U	2.8 U	5.7 U	0.59 U
3&4-Methylphenol	- -	- -	- -	mg/kg	0.55 U	0.56 U	0.86 U	0.66 U	2.8 U	5.7 U	0.59 U
bis(2-Ethylhexyl)phthalate	- -	- -	- -	mg/kg	0.27 U	0.28 U	0.43 U	0.33 U	1.4 U	2.9 U	0.020 J
Butylbenzylphthalate	- -	- -	- -	mg/kg	0.27 U	0.28 U	0.43 U	0.33 U	1.4 U	2.9 U	0.019 J
Carbazole	- -	- -	- -	mg/kg	0.11 U	0.11 U	0.17 U	0.13 U	0.56 U	0.30 J	0.12 U
Dibenzofuran	350	210	1,000	mg/kg	0.11 U	0.11 U	0.17 U	0.13 U	0.56 U	1.1 U	0.12 U
Total Other SVOCs	- -	- -	- -	mg/kg	1.1 U	1.1 U	1.7 U	1.3 U	5.6 U	0.52 J	0.039 J

TABLE 6

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SOIL SAMPLING RESULTS FOR DETECTED SVOCs

Notes:

1. This table includes detected compounds only.
2. Bolded data indicates exceedances of Restricted Commercial Use criteria as per NYCRR Part 375, Table 375-6.8(b).
3. Shaded data indicates exceedances of Protection of Groundwater Use criteria as per NYCRR Part 375, Table 375-6.8(b).
4. Italicized data indicates exceedances of Industrial Use criteria as per NYCRR Part 375, Table 375-6.8(b).
5. Samples were collected by ARCADIS.
6. Samples were analyzed by Accutest Laboratories of Marlborough, Massachusetts.
7. Data validated by ARCADIS.
8. Results reported are [ ] are for field duplicate sample collected at that location.
9. B = Indicates an estimated value between the instrument detection limit and the Reporting Limit (RL).
   D = Compound quantitated using a secondary dilution.
   J = Estimated value.
   UJ = Estimated detection limit.
   U = Compound not detected at indicated detection limit.

TABLE 7

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SOIL SAMPLING RESULTS FOR INORGANICS

Location ID: Sample Depth(Feet): Date Collected:	Restricted Commercial Use SCOs	Restricted SCOs Use for Protection	Restricted Industrial Use SCOs	Units	SB-300 15 - 16 04/16/14	SB-300 21.5 - 22 04/16/14	SB-300 40 - 41 04/16/14	SB-301 9 - 10 04/15/14	SB-301 36 - 36.5 04/15/14	SB-302 15 - 16 04/15/14	SB-302 31 - 31.5 04/15/14	SB-303 13 - 13.3 04/17/14	SB-303 18.5 - 19 04/17/14
Inorganics (8 RCRA Metals)													
Arsenic	16	16	16	mg/kg	3.00	10.8	0.870 B	1.10	1.30	14.1 [14.0]	1.30	11.5	2.50
Barium	400	820	10,000	mg/kg	**1,200**	49.3	55.3	130	57.2	44.9 [40.9]	189	121	27.6
Cadmium	9.3	7.5	60	mg/kg	0.150 J	0.210 J	0.370 UJ	0.230 J	0.0810 J	.20 J [0.760 J	0.0560 J	0.610	0.0830 B
Chromium	- -	- -	- -	mg/kg	39.5 J	32.6 J	22.7 J	24.7 J	16.7 J	38.7 J [36.7 J]	46.3 J	17.3	29.4
Lead	1,000	450	3,900	mg/kg	28.4	12.8	3.00	17.3	2.30	17.4 [14.8]	3.70	993	8.50
Mercury	2.8	0.73	5.7	mg/kg	0.0300 B	0.0220 B	0.0390 U	0.0410 U	0.0370 U	180 B [0.016(	0.0380 U	0.820	0.0200 B
Selenium	1,500	4	6,800	mg/kg	0.910 U	0.470 B	0.420 B	0.460 B	0.900 U	560 B [0.490	0.930 U	5.10	0.800 B
Silver	1,500	8.3	6,800	mg/kg	0.150 B	0.200 B	0.170 B	0.270 B	0.130 B	210 B [0.170	0.290 B	0.400 B	0.600 U
Total RECRA 8 Metals	- -	- -	- -	mg/kg	1,270 J	106 J	82.5 J	174 J	77.7 J	118 J [108 J]	241 J	1,150	68.9
Other Inorganics													
Aluminum	- -	- -	- -	mg/kg	27,800	16,100	7,990	12,000	5,200	1,500 [20,000	16,400	6,220	16,000
Antimony	- -	- -	- -	mg/kg	0.910 UJ	0.830 UJ	0.920 UJ	0.970 UJ	0.900 UJ	70 UJ [0.900	0.930 UJ	1.10 U	1.20 U
Beryllium	590	47	2,700	mg/kg	0.630	0.760	0.220 B	0.450	0.190 B	0.890 [0.840]	0.0560 B	0.510	0.820
Calcium	- -	- -	- -	mg/kg	7,080 J	3,110 J	1,360 J	2,630 J	1,200 J	620 J [1,490	1,820 J	2,570	2,230
Cobalt	- -	- -	- -	mg/kg	14.0	11.8	5.20	14.8	6.00	16.8 [15.6]	13.1	22.1	9.10
Copper	270	1,720	10,000	mg/kg	43.6	12.6	14.6	34.3	26.5	19.6 [14.4]	34.9	62.9	10.0
Cyanide	27	40	10,000	mg/kg	0.140 U	0.0490 B	0.140 U	0.290	0.0410 B	540 B [0.057(	0.140 U	0.280	0.0510 B
Iron	- -	- -	- -	mg/kg	33,200	36,100	13,500	25,500	8,860	0,400 [36,000	28,600	29,900	14,500
Magnesium	- -	- -	- -	mg/kg	11,400	8,080	2,980	5,230	1,960	8,280 [7,910]	8,500	1,480	4,810
Manganese	10,000	2,000	10,000	mg/kg	464 J	723 J	122 J	622 J	491 J	464 J [392 J]	272 J	348	123
Nickel	310	130	10,000	mg/kg	28.1	25.7	16.9	26.7	24.8	35.2 [31.9]	31.5	65.5	17.9
Potassium	- -	- -	- -	mg/kg	11,500	4,240	2,700	5,490	1,440	4,900 [4,550]	10,600	1,320	2,110
Sodium	- -	- -	- -	mg/kg	1,830	5,100	234 B	155 B	246 B	4,450 [4,350]	540	444 B	380 B
Thallium	- -	- -	- -	mg/kg	0.300 B	0.400 B	0.180 B	0.410 B	0.400 B	190 B [0.400	0.150 B	0.230 B	1.20 U
Vanadium	- -	- -	- -	mg/kg	56.5	40.5	26.6	35.3	16.6	47.2 [45.1]	50.2	19.9	31.0
Zinc	10,000	2,480	10,000	mg/kg	88.9 J	74.9 J	22.9 J	82.8 J	17.9 J	115 J [85.0 J]	60.1 J	290	34.6
Total Other Inorganics	- -	- -	- -	mg/kg	93,500	73,600	29,000	51,800	19,500	1,800 [74,900	66,900	42,700	40,300

TABLE 7

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SOIL SAMPLING RESULTS FOR INORGANICS

Location ID: Sample Depth(Feet): Date Collected:	Restricted Commercial Use SCOs	Restricted SCOs Use for Protection	Restricted Industrial Use SCOs	Units	SB-303 22.5 - 23 04/17/14	SB-304 10.5 - 11 04/18/14	SB-304 17 - 17.5 04/18/14	SB-304 28.5 - 29 04/18/14	SB-305 8.5 - 9 04/22/14	SB-305 15 - 15.5 04/22/14	SB-305 34 - 35 04/22/14	SB-305 37 - 37.5 04/22/14
Inorganics (8 RCRA Metals)												
Arsenic	16	16	16	mg/kg	4.80	***22.0***	7.60	0.850 B	0.770 B	***18.0***	0.770 B	0.570 B
Barium	400	820	10,000	mg/kg	29.1	296	47.8	157	164	65.0	163	220
Cadmium	9.3	7.5	60	mg/kg	0.0500 B	2.30	0.130 B	0.380 U	0.0700 B	0.260 B	0.390 U	0.840 U
Chromium	- -	- -	- -	mg/kg	25.4	50.0	37.5	31.9	19.0	57.2	32.8	52.0
Lead	1,000	450	3,900	mg/kg	6.70	651	87.6	3.30	7.30	118	3.70	13.7
Mercury	2.8	0.73	5.7	mg/kg	0.0280 B	0.410	0.560	0.0360 U	0.0270 B	2.10	0.0360 U	0.0350 U
Selenium	1,500	4	6,800	mg/kg	0.380 B	1.10 U	0.740 B	0.940 U	1.00 U	1.40	0.980 U	1.10 U
Silver	1,500	8.3	6,800	mg/kg	0.500 U	0.620	0.130 B	0.470 U	0.500 U	0.590	0.490 U	0.530 U
Total RECRA 8 Metals	- -	- -	- -	mg/kg	66.5	1,020	182	193	191	263	200	286
Other Inorganics												
Aluminum	- -	- -	- -	mg/kg	13,800	9,920	20,200	11,800	11,000	19,200	11,800	17,600
Antimony	- -	- -	- -	mg/kg	0.990 U	1.50	1.10 U	0.940 U	0.230 B	0.270 B	0.980 U	0.170 B
Beryllium	590	47	2,700	mg/kg	0.450	5.50	0.730	0.280 B	0.300 B	0.700	0.200 B	0.160 B
Calcium	- -	- -	- -	mg/kg	913	18,000	3,630	1,300	1,250	2,320	1,150	1,080
Cobalt	- -	- -	- -	mg/kg	10.1	23.0	13.1	12.0	13.7	9.10	10.5	12.1
Copper	270	1,720	10,000	mg/kg	16.6	**565**	26.7	31.3	19.8	72.0	23.3	34.9
Cyanide	27	40	10,000	mg/kg	0.140 U	0.160 U	0.120 B	0.140 U	0.130 U	0.180 U	0.130 U	0.130 U
Iron	- -	- -	- -	mg/kg	15,100	91,600	29,500	19,900	20,700	28,800	21,700	29,600
Magnesium	- -	- -	- -	mg/kg	3,640	5,230	4,850	4,510	5,750	8,670	5,390	8,530
Manganese	10,000	2,000	10,000	mg/kg	179	637	378	308	218	266	224	265
Nickel	310	130	10,000	mg/kg	18.7	273	22.6	21.5	24.1	31.0	26.8	23.7
Potassium	- -	- -	- -	mg/kg	1,680	2,210	1,640	5,850	7,300	4,800	5,740	10,100
Sodium	- -	- -	- -	mg/kg	144 B	422 B	507 B	176 B	797 UB	7,080	490 UB	530 UB
Thallium	- -	- -	- -	mg/kg	0.220 B	0.190 B	0.210 B	0.940 U	0.430 B	0.240 B	0.160 B	0.190 B
Vanadium	- -	- -	- -	mg/kg	32.8	27.7	43.6	36.5	29.2	52.0	39.5	60.4
Zinc	10,000	2,480	10,000	mg/kg	32.7	2,470	80.5	40.7	73.6	119	41.3	78.4
Total Other Inorganics	- -	- -	- -	mg/kg	35,600	131,000	60,900	44,000	47,200	71,400	46,300	67,700

TABLE 7

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SOIL SAMPLING RESULTS FOR INORGANICS

Location ID: Sample Depth(Feet): Date Collected:	Restricted Commercial Use SCOs	Restricted SCOs Use for Protection	Restricted Industrial Use SCOs	Units	SB-306 9.5 - 10 04/17/14	SB-306 20 - 20.5 04/17/14	SB-306 42 - 44 04/17/14	SB-307 10 - 11 04/21/14	SB-307 12 - 13 04/21/14	SB-307 33.5 - 34 04/21/14
Inorganics (8 RCRA Metals)										
Arsenic	16	16	16	mg/kg	1.40	10.6	1.00	4.40	***31.5***	1.70
Barium	400	820	10,000	mg/kg	218	49.5	74.0	**444**	173	336
Cadmium	9.3	7.5	60	mg/kg	0.0890 B	0.130 B	0.410 U	0.790 B	1.00	0.110 B
Chromium	- -	- -	- -	mg/kg	32.5	38.1	23.5	232	54.7	56.4
Lead	1,000	450	3,900	mg/kg	21.8	14.7	3.00	**2,140**	423	110
Mercury	2.8	0.73	5.7	mg/kg	0.130	0.0250 B	0.0340 U	0.0320 B	0.670	0.0380 U
Selenium	1,500	4	6,800	mg/kg	0.890 U	1.30 U	1.00 U	2.10 U	3.30	1.10 U
Silver	1,500	8.3	6,800	mg/kg	0.450 U	0.640 U	0.510 U	2.50	1.90	0.530 U
Total RECRA 8 Metals	- -	- -	- -	mg/kg	274	113	102	2,820	689	504
Other Inorganics										
Aluminum	- -	- -	- -	mg/kg	17,300	19,300	8,460	23,900	13,500	20,300
Antimony	- -	- -	- -	mg/kg	0.890 U	1.30 U	1.00 U	3.00	0.940 B	0.240 B
Beryllium	590	47	2,700	mg/kg	0.640	0.960	0.260 B	22.6	0.860	0.540
Calcium	- -	- -	- -	mg/kg	4,990	2,110	1,760	9,120	3,080	3,370
Cobalt	- -	- -	- -	mg/kg	16.5	12.9	8.10	131	6.70	14.5
Copper	270	1,720	10,000	mg/kg	49.1	13.3	18.1	**9,070**	207	47.9
Cyanide	27	40	10,000	mg/kg	0.130 U	0.200 U	0.0600 B	0.130 U	0.0700 B	0.140 U
Iron	- -	- -	- -	mg/kg	31,800	40,400	15,200	95,000	26,900	28,900
Magnesium	- -	- -	- -	mg/kg	9,210	8,890	3,730	15,000	5,840	9,990
Manganese	10,000	2,000	10,000	mg/kg	560	654	172	806	270	420
Nickel	310	130	10,000	mg/kg	30.5	27.2	23.5	**330**	26.4	39.0
Potassium	- -	- -	- -	mg/kg	9,100	5,240	3,790	11,500	3,290	9,570
Sodium	- -	- -	- -	mg/kg	207 B	4,870	330 B	1,970	8,150	540 UB
Thallium	- -	- -	- -	mg/kg	0.890 U	0.440 B	1.00 U	0.350 B	0.480 B	1.10 U
Vanadium	- -	- -	- -	mg/kg	43.5	47.0	25.6	70.4	50.2	59.3
Zinc	10,000	2,480	10,000	mg/kg	78.3	77.9	33.5	***15,300***	220	119
Total Other Inorganics	- -	- -	- -	mg/kg	73,400	81,600	33,600	182,000	61,500	73,400

TABLE 7

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
SOIL SAMPLING RESULTS FOR INORGANICS

Notes:

1. This table includes detected compounds only.
2. Bolded data indicates exceedances of the NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.
3. Shaded data indicates exceedances of Protection of Groundwater Use criteria as per NYCRR Part 375, Table 375-6.8(b).
4. Italicized data indicates exceedances of Industrial Use criteria as per NYCRR Part 375, Table 375-6.8(b).
5. Samples were collected by ARCADIS.
6. Samples were analyzed by Accutest Laboratories of Marlborough, Massachusetts.
7. Data validated by ARCADIS.
8. Results reported are [ ] are for field duplicate sample collected at that location.
9. B = Indicates an estimated value between the instrument detection limit and the Reporting Limit (RL).
   J = Estimated value.
   UJ = Estimated detection limit.
   U = Compound not detected at indicated detection limit.

TABLE 8

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED VOCs

Location ID: / Date Collected:	NYSDEC TOGS 1.1.1 Water Guidance Values	Units	MW-4 04/29/14	MW-5 04/28/14	MW-101A 04/29/14	MW-107 04/29/14	MW-113A 04/29/14	MW-113B 04/29/14	MW-114A 04/30/14	MW-114B 04/30/14	MW-115 04/30/14	MW-116 04/30/14	MW-117 04/30/14
Volatile Organic Compounds (BTEX)													
Benzene	1	ug/L	0.36 J	0.50 UJ	0.55 J	**9.6 J**	0.50 UJ [0.50 UJ]	**12 J**	**210 J**	0.62 J	0.50 UJ	0.50 UJ	0.42 J
Ethylbenzene	5	ug/L	**17**	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	**8.2**	**490 D**	**28**	1.4	2.9	1.0 U
Toluene	5	ug/L	1.0 U	1.0 U	1.0 U	0.34 J	1.0 U [1.0 U]	0.46 J	**12**	1.0 U	0.63 J	1.4	1.0 U
Xylenes (total)	5	ug/L	1.5	1.0 U	1.0 U	1.3	1.0 U [1.0 U]	1.9	**230**	3.5	1.4	2.9	1.0 U
Total BTEX	- -	ug/L	19 J	1.0 U	0.55	11 J	1.0 U [1.0 U]	22 J	940	32	3.4 J	7.2	0.42 J
Other Volatile Organic Compounds													
1,1-Dichloroethane	5	ug/L	1.0 UJ	1.0 UJ	1.8 J	1.0 UJ	1.0 UJ [1.0 UJ]	1.0 UJ	1.1 J	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Bromodichloromethane	50	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U
Chloroform	7	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	2.2	1.0 U	**17**	1.0 U
Chloromethane	5	ug/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U [2.0 U]	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**61**
Total Other VOCs	- -	ug/L	10 U	10 U	1.8	10 U	10 U [10 U]	10 U	1.1	2.2	10 U	19	61

Notes:

1. Only those constituents detected in one or more samples are presented.
2. Bold font indicates exceedance of the NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.
3. Samples were analyzed by Accutest Laboratories of Marlborough, Massachusetts.
4. Sample results have been validated by ARCADIS.
5. Field duplicate sample results are presented in brackets "[ ]".
6. D = Compound quantitated using a secondary dilution.
7. J = Indicates an estimated value.
8. UJ = Estimated detection limit.
9. U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
10. ND - None detected.

TABLE 9

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE -BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
GROUNDWATER ANALYTICAL RESULTS FOR DETECTED SVOCs

Location ID: / Date Collected:	NYSDEC TOGS 1.1.1 Water Guidance Values	Units	MW-4 04/29/14	MW-5 04/28/14	MW-101A 04/29/14	MW-107 04/29/14	MW-113A 04/29/14	MW-113B 04/29/14	MW-114A 04/30/14	MW-114B 04/30/14	MW-115 04/30/14	MW-116 04/30/14	MW-117 04/30/14
Semivolatile Organic Compounds (PAHs)													
Acenaphthene	20	ug/L	1.0 J	2.1 U	2.3 U	12	**80 [71]**	5.6	**92**	**30**	0.92 J	0.54 J	2.0 U
Acenaphthylene	- -	ug/L	0.25 J	2.1 U	0.26 J	2.3 U	11 [9.8]	2.3 U	2.0 U	2.1 U	1.0 J	1.4 J	2.0 U
Anthracene	50	ug/L	0.30 J	2.1 U	2.3 U	1.7 J	2.5 [2.3]	1.1 J	3.3	1.6 J	2.0 U	2.1 U	2.0 U
Benzo(a)anthracene	0.002	ug/L	2.2 U	2.1 U	2.3 U	2.3 U	2.2 U [2.2 U]	**0.78 J**	2.0 U	2.1 U	2.0 U	2.1 U	2.0 U
Benzo(a)pyrene	0	ug/L	**0.31 J**	2.1 U	2.3 U	2.3 U	2.2 U [2.2 U]	**0.41 J**	**0.17 J**	2.1 U	2.0 U	2.1 U	2.0 U
Chrysene	0.002	ug/L	2.2 U	2.1 U	2.3 U	**0.42 J**	2.2 U [2.2 U]	**0.60 J**	2.0 U	2.1 U	2.0 U	2.1 U	2.0 U
Fluoranthene	50	ug/L	0.73 J	0.51 J	2.3 U	1.7 J	3.6 [3.4]	2.0 J	0.72 J	1.1 J	2.0 U	2.1 U	2.0 U
Fluorene	50	ug/L	0.41 J	2.1 U	2.3 U	4.5	18 [17]	1.2 J	3.1	0.99 J	2.0 U	2.1 U	2.0 U
Naphthalene	10	ug/L	2.2 U	2.1 U	2.3 U	2.3 U	**10 [8.1]**	**21**	**1,700 D**	**31**	**13**	**16**	2.0 U
Phenanthrene	50	ug/L	0.55 J	2.1 U	2.3 U	2.1 J	39 [36]	3.2	22	6.9	0.52 J	0.32 J	2.0 U
Pyrene	50	ug/L	1.2 J	0.64 J	0.30 J	3.1	4.8 [4.6]	3.1	0.81 J	1.4 J	2.0 U	2.1 U	2.0 U
Total PAHs	- -	ug/L	4.8 J	1.2 J	0.56 J	26 J	170 [150]	39 J	1,900 J	73 J	15 J	18 J	2.0 U
Other Semivolatile Organic Compounds													
2-Methylnaphthalene	- -	ug/L	2.2 U	2.1 U	2.3 U	2.3 U	0.40 J [0.35 J]	0.78 J	11	2.2	2.0 U	2.1 U	2.0 U
bis(2-Ethylhexyl)phthalate	5	ug/L	0.38 J	2.3	0.61 J	0.53 J	0.41 J [0.46 J]	0.57 J	2.0 UB	2.1 UB	3.6 B	2.1 UB	2.0 U
Carbazole	- -	ug/L	2.2 U	2.1 U	2.3 U	2.3 U	5.6 [5.5]	0.48 J	11	0.39 J	2.0 U	2.1 U	2.0 U
Dibenzofuran	- -	ug/L	2.2 U	2.1 U	2.3 U	2.3 U	3.9 [3.6]	2.3 U	3.9	1.0 J	2.0 U	2.1 U	2.0 U
Diethylphthalate	50	ug/L	5.5 U	5.3 U	5.8 U	5.7 U	0.24 J [5.4 U]	0.34 J	5.1 U	5.2 U	5.1 U	5.2 U	5.1 U
Total Other SVOCs	- -	ug/L	0.93 J	2.3	1.2 J	0.53 J	12 J [11 J]	4.0 J	26 J	4.4 J	4.1 J	2.2 J	0.41 J

Notes:

1. Only those constituents detected in one or more samples are presented.
2. Bold font indicates exceedance of the NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.
3. Samples were analyzed by Accutest Laboratories of Marlborough, Massachusetts.
4. Sample results have been validated by ARCADIS.
5. Field duplicate sample results are presented in brackets "[ ]".
6. B = Indicates an estimated value between the instrument detection limit and the Reporting Limit (RL).
7. D = Compound analyzed at secondary dilution.
8. J = Indicates an estimated value.
9. U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
10. ND = None detected.

TABLE 10

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS MGP SITE - BRONX, NY

WATSON AVENUE REMEDIAL INVESTIGATION
GROUNDWATER ANALYTICAL RESULTS FOR INORGANICS

Location ID: / Date Collected:	NYSDEC TOGS 1.1.1 Water Guidance Values	Units	MW-4 04/29/14	MW-5 04/28/14	MW-101A 04/29/14	MW-107 04/29/14	MW-113A 04/29/14	MW-113B 04/29/14	MW-114A 04/30/14	MW-114B 04/30/14	MW-115 04/30/14	MW-116 04/30/14	MW-117 04/30/14
Inorganics (8 RCRA Metals)													
Arsenic	25	ug/L	4.00 U	4.00 U	4.00 U	**35.6**	4.00 U [4.00 U]	4.00 U	4.00 U	5.00	4.00 U	4.00 U	4.00 U
Barium	1,000	ug/L	189	147	79.6	81.5	63.5 [62.1]	120	260	213	71.5	36.0 B	62.9
Chromium	50	ug/L	1.50 B	10.0 U	1.40 B	1.50 B	10.0 U [10.0 U]	10.0 U	10.0 U	10.0 U	26.8	**63.4**	1.40 B
Lead	25	ug/L	5.00 U	5.00 U	5.00 U	3.30 B	5.00 U [5.00 U]	3.10 B	5.00 U	5.00 U	22.6	3.90 B	5.00 U
Silver	50	ug/L	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U [5.00 U]	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Total RCRA 8 Metals	- -	ug/L	196	147	81.0	122	63.5 [62.1]	123	260	228	121	103	64.3
Other Inorganics													
Aluminum	- -	ug/L	200 U	125 B	511	200 U	55.8 B [63.0 B]	200 U	200 U	200 U	1,500	1,090	200 U
Antimony	3	ug/L	6.00 U	6.00 U	6.00 U	6.00 U	6.00 U [6.00 U]	6.00 U	6.00 U	6.00 U	6.00 U	6.00 U	6.00 U
Beryllium	3	ug/L	4.00 U	4.00 U	4.00 U	4.00 U	4.00 U [4.00 U]	4.00 U	4.00 U	4.00 U	4.00 U	4.00 U	4.00 U
Calcium	- -	ug/L	128,000	303,000	91,400	131,000	82,700 [81,700]	145,000	90,500	215,000	81,700	42,300	101,000
Cobalt	- -	ug/L	50.0 U	0.900 B	7.80 B	3.50 B	50.0 U [50.0 U]	1.40 B	50.0 U	50.0 U	0.400 B	0.700 B	50.0 U
Copper	200	ug/L	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U [25.0 U]	25.0 U	25.0 U	25.0 U	50.9	7.90 B	25.0 U
Iron	300	ug/L	142	**3,380**	**1,770**	**26,700**	**20,700 [20,800]**	**3,940**	**10,700**	215	**5,200**	**1,070**	**840**
Magnesium	35,000	ug/L	12,900	30,800	**82,000**	**67,200**	**83,100 [84,000]**	**37,900**	**91,400**	**648,000**	**38,100**	22,200	**85,300**
Manganese	300	ug/L	153	208	**8,120**	**1,160**	**8,070 [7,930]**	**564**	**4,720**	265	**1,120**	**330**	**1,060**
Nickel	100	ug/L	5.50 B	1.80 B	7.60 B	4.00 B	1.60 B [2.00 B]	16.0 B	0.800 B	4.00 B	4.60 B	3.40 B	40.0 U
Potassium	- -	ug/L	5,350	11,900	8,680	26,400	16,400 [16,200]	12,000	17,000	189,000	53,800	19,100	36,900
Sodium	20,000	ug/L	**163,000**	**381,000**	**106,000**	**502,000**	**209,000 [216,000]**	**269,000**	**203,000**	**4,820,000**	**234,000**	**132,000**	**591,000**
Thallium	0.5	ug/L	5.00 U	5.00 U	5.00 U	**2.10 B**	5.00 U [5.00 U]	5.00 U	5.00 U	**3.30 B**	5.00 U	5.00 U	5.00 U
Vanadium	- -	ug/L	3.70 B	10.0 U	10.0 U	3.20 B	10.0 U [10.0 U]	10.0 U	10.0 U	3.90 B	5.60 B	15.6	10.0 U
Zinc	2,000	ug/L	72.7	1.30 B	4.80 B	1.20 B	20.0 U [20.0 U]	3.00 B	20.0 U	14.3 B	45.5	10.4 B	20.0 U
Cyanide	200	ug/L	0.0110	0.0960	0.0200	0.140	0.00580 B [0.00640 B]	0.110	0.00140 B	0.0100	0.00420 B	0.00310 B	0.00330 B
Total Other Inorganics	- -	ug/L	310,000	730,000	299,000	754,000	420,000 [427,000]	468,000	417,000	5,870,000	416,000	218,000	816,000

Notes:

1. Only those constituents detected in one or more samples are presented.
2. Bold font indicates exceedance of the NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.
3. Samples were analyzed by Accutest Laboratories of Marlborough, Massachusetts.
4. Sample results have been validated by ARCADIS.
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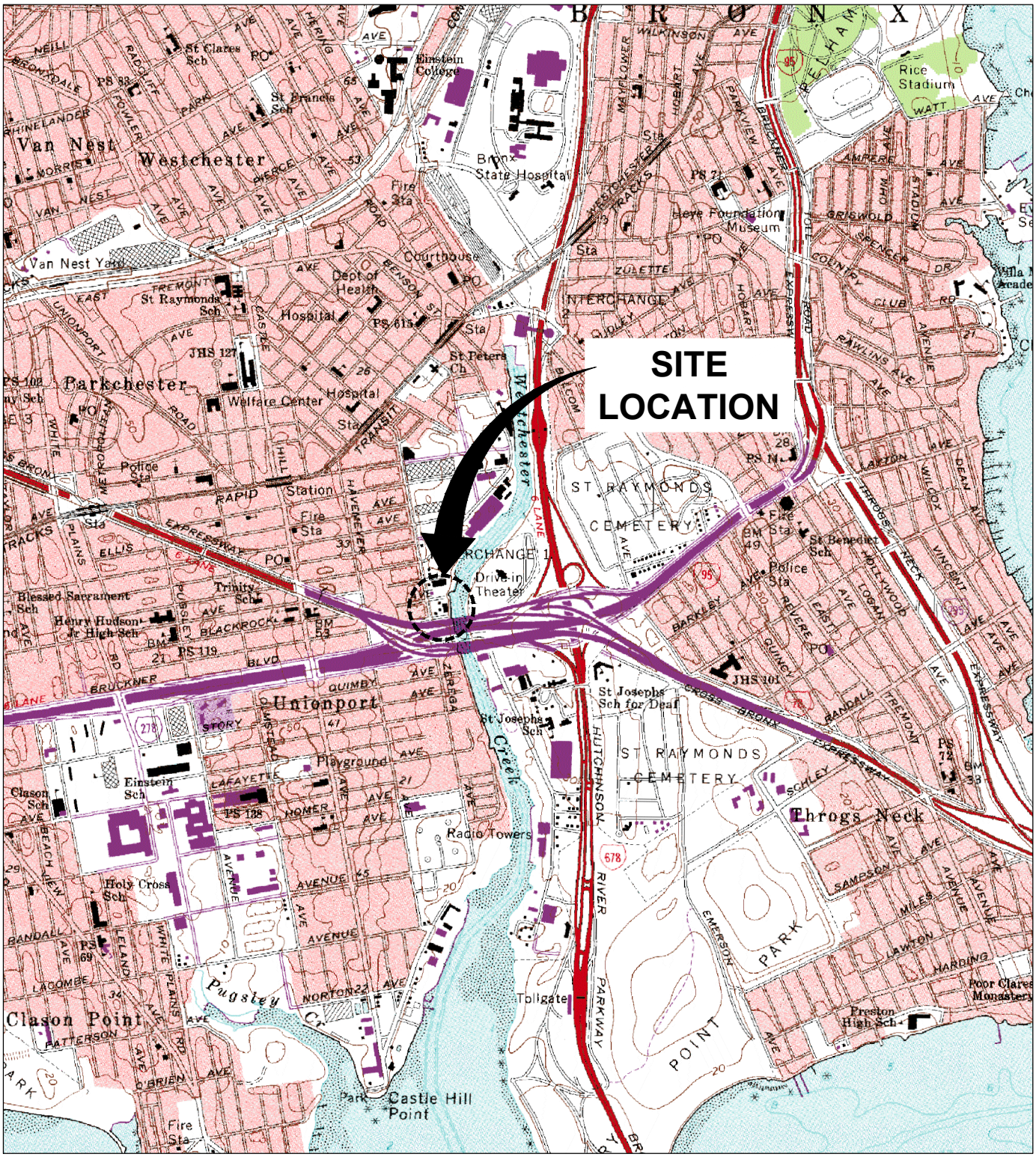
6. J = Indicates an estimated value.
7. UJ = Estimated detection limit.
8. U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

ARCADIS

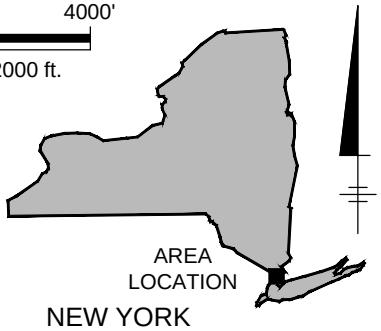
Figures



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., FLUSHING, N.Y., 1966, PHOTOREVISED 1979.

0 2000' 4000'

Approximate Scale: 1 in. = 2000 ft.



CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS SITE
1066 ZEREGA AVENUE BRONX, NEW YORK
WATSON AVENUE REMEDIAL INVESTIGATION REPORT

SITE LOCATION MAP

ARCADIS

FIGURE
1

CITY: SYRACUSE NY GROUP: EnvCAD DB: K. SARTORI, P. LISTER, E. KRAHMER PIC: M. MILLER PM/TM: M. JONES TR: M. KISER LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\SYRACUSE\ACT\B0043515\0006\0002\DWG\43515N01.dwg LAYOUT: 1 SAVED: 6/27/2014 11:42 AM ACADVER: 18.1S (LMSTECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 7/23/2014 2:13 PM BY: KRAHMER, ERIC
XREFS: IMAGES: PROJECTNAME: ----
43515XBL 43515X01.tif

LEGEND:

- CHAINLINK FENCE
- X FENCE
- OPERABLE UNIT BOUNDARY
- OVERHEAD STRUCTURE
- CATCH BASIN
- OIL RECOVERY SHED
- OIL/WATER SEPARATOR
- MW-103 NEW MONITORING WELL
- MW-08 PREVIOUS MONITORING WELL
- SB-111 SOIL BORING
- TP-106 TEST PIT
- INDICATES BORING DRILLED AT AN ANGLE BELOW PETROLEUM STORAGE TANK

AERIAL VICINITY MAP
NO SCALE

HAVILAND AVENUE

COMMERCE AVENUE

SIDEWALK

PAVED PARKING AREA

DIRT

TREES

GRASS

SIDEWALK

SB-304

GRASS

OFFICE BUILDING

PAVEMENT

TREES

TREES

WARE HOUSE

MW-116
SB-306

MW-117
SB-307

SB-305

MW-115
SB-302

STONE RIVERBANK

WESTCHESTER CREEK
FLOW DIRECTION

ZEREGA AVENUE

SIDEWALK

GRASS

CONC.

PAVED PARKING AREA

GRASS

GARAGE BUILDING

JUNK YARD

SB-301

TREES

OPERABLE UNIT NO. 2

SB-207

SB-208

SB-209

SB-210

SB-211

MW-114A
SB-300A

MW-112

MW-114B
SB-300B

SB-128

SB-303

GATE

SB-123

MW-113B
SB-124B

MW-113A
SB-124A

1 STY BRICK BLDG.

WATSON AVENUE

2 STY BRICK BLDG.

SB-125

MW-110A
SB-126A

MW-110B
SB-126B

SB-115

SB-112

TP-103

TP-102

MW-101A
SB-102A

MASONRY WAREHOUSE BLDG.

TP-114

CONC.

SB-113

UNPAVED AREA

BULKHEAD

1 STY BRICK BLDG.

SB-101

MW-101B
SB-102B

SB-109

SB-111

SB-122

TP-105

TP-104

MW-103
SB-110

MW-111
SB-127

TP-106

TP-108

MW-02

TP-113

MW-03

SIDEWALK

TP-107

SB-103

TP-112

SB-114

1 STY BRICK BLDG.

SB-116

SB-120

TP-110

SB-107

SB-108

MW-07

MW-08

MW-109

SB-104

PETROLEUM STORAGE TANKS

TIMBER STEPS

SB-206

OPERABLE UNIT NO. 1

SB-205

SB-118

SB-201

MW-102

SLOPE

SB-204

MW-108

TP-111

SB-106

MW-06

SB-121

SB-105

MW-107

SB-202

SB-119

SB-203

MW-01

BLACKROCK AVENUE

ZEREGA AVENUE FORMER GAS HOLDER SITE

FORMER GAS HOLDER (5,000,000 CU. FT.)

FORMER HEATING PLANT AND STOREHOUSE BUILDING

GATE

GATE

FORMER GAS HOLDER (500,000 CU. FT.)

FORMER PUMP HOUSE

MW-04

APPROXIMATE LOCATION OF EXISTING DIESEL AST

FORMER OIL TANKS (80,000 GAL.) (TYP.)

FORMER BLOW DOWN TANK PIT

BLOCK 3827 LOT 1

FORMER COKE FILTER PIT

SCHOOL BUS PARKING LOT (BITUMINOUS PAVEMENT)

FORMER SUPPLY HOUSE

BLOCK 3827 LOT 30

GRASS

TRANSFORMERS

GRAVEL

PAVED

APPROX. LOCATION OF FORMER USTs

FORMER DRIP TANKS

SERVICE GARAGE BUILDING

FORMER RELIEF GAS HOLDER/OIL STORAGE TANK (75,000 CU. FT.)

MW-05

FORMER PUMPING STATION AND GOVERNER HOUSE

FORMER 500 GALLON DRIP OIL UST

GATE

CON EDISON SUBSTATION

NOTES:

1. BASEMAP PREPARED FROM SURVEYS BY MUÑOZ ENGINEERING P.C., 2008 & 2014. AERIAL PHOTO FROM GOOGLE EARTH PR0, DATED JUNE 16, 2010.
2. FLOW IN WESTCHESTER CREEK IS TIDALLY INFLUENCED.

0 80' 160'

GRAPHIC SCALE

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS SITE
1066 ZEREGA AVENUE BRONX, NEW YORK

WATSON AVENUE REMEDIAL INVESTIGATION REPORT

CURRENT SITE LAYOUT

ARCADIS

FIGURE 2

CITY: SYRACUSE NY GROUP: ENVCAD DB: R.ALLEN, E. KRAHMER LD: (Opt.) PIC: M. MILLER PM/TM: M. JONES TR: M. KISER LYR:ON=*;OFF=REF, (FRZ)
G:\ENVCAD\SYRACUSE\ACT\B0043515\0006\0002\DWG\43515B01.dwg LAYOUT: 2 SAVED: 8/5/2014 10:28 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/5/2014 10:30 AM BY: KRAHMER, ERIC
XREFS: 43515XBL 43515X06 43515X03
IMAGES: PROJECTNAME: ----
Aerial-Full View-2.png

LEGEND:

- CHAINLINK FENCE
- X FENCE
- OPERABLE UNIT BOUNDARY
- OVERHEAD STRUCTURE
- CATCH BASIN
- OIL RECOVERY SHED
- OIL/WATER SEPARATOR
- HISTORIC SITE FEATURES

HAVILAND AVENUE

PAVED PARKING AREA

SIDEWALK

COMMERCE AVENUE

SIDEWALK

PAVED PARKING AREA

DIRT

TREES

GRASS

TREES

SIDEWALK

GRASS

PAVEMENT

TREES

TREES

OFFICE BUILDING

WARE HOUSE

GRASS

CONC.

GRASS

GARAGE BUILDING

PAVED PARKING AREA

JUNK YARD

ZEREGA AVENUE

STONE RIVERBANK

WESTCHESTER CREEK

FLOW DIRECTION

TREES

OPERABLE UNIT NO. 2

ZEREGA AVENUE FORMER GAS HOLDER SITE

FORMER GAS HOLDER (5,000,000 CU. FT.)

FORMER HEATING PLANT AND STOREHOUSE BUILDING

GATE

GATE

FORMER GAS HOLDER (500,000 CU. FT.)

FORMER PUMP HOUSE

APPROXIMATE LOCATION OF EXISTING DIESEL AST

FORMER OIL TANKS (80,000 GAL.) (TYP.)

FORMER BLOW DOWN TANK PIT

BLOCK 3827 LOT 1

FORMER COKE FILTER PIT

SCHOOL BUS PARKING LOT (BITUMINOUS PAVEMENT)

FORMER SUPPLY HOUSE

BLOCK 3827 LOT 30

GRASS

TRANSFORMERS

GRAVEL

PAVED

APPROX. LOCATION OF FORMER USTs

FORMER DRIP TANKS

SERVICE GARAGE BUILDING

FORMER RELIEF GAS HOLDER/OIL STORAGE TANK (75,000 CU. FT.)

FORMER PUMPING STATION AND GOVERNER HOUSE

FORMER 500 GALLON DRIP OIL UST

GATE

CON EDISON SUBSTATION

2 STY BRICK BLDG.

1 STY BRICK BLDG.

GATE

WATSON AVENUE

BOOSTER HOUSE

METER HOUSE

PURIFIER HOUSE

FORMER 2,500 GALLON UST

EXHAUSTER HOUSE

GENERATOR HOUSE

SCALE

SCRUBBER

1 STY BRICK BLDG.

CONDENSER

BLOWER HOUSE

MASONRY WAREHOUSE BLDG.

CONC.

COAL PILE

UNPAVED AREA

BULKHEAD

DISPENSER ISLAND

FORMER 550 GALLON UST

PURIFIER BOX

TAR TANK

SCALE HOUSE

TAR SEPARATOR

SIDEWALK

SUMP PUMP

OIL PIT

HOT WELL

LOCKERS MASS'NS.

MACHINE SHOP

1 STY BRICK BLDG.

COAL TOWER

BURIED OIL TANK

5,000 GALLON STORAGE TANK (PERMANENTLY CLOSED)

ELECTRIC STATION

ELEVATED CONC. TRESTLE

OPERABLE UNIT NO. 1

ROOF OVER LOADING STALLS

PETROLEUM STORAGE TANKS

OFFICE

BOILER HOUSE

EXHAUST STACK

WATER TANK

SLOPE

TIMBER STEPS

BOOSTER ENG.

OIL HOUSE

BALCONY

FIRE PUMPS

BLACKROCK AVENUE

NOTES:

1. BASEMAP PREPARED FROM SURVEYS BY MUÑOZ ENGINEERING P.C., 2008 & 2014.
2. FLOW IN WESTCHESTER CREEK IS TIDALLY INFLUENCED.

0 80' 160'

GRAPHIC SCALE

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS SITE
1066 ZEREGA AVENUE BRONX, NEW YORK
WATSON AVENUE REMEDIAL INVESTIGATION REPORT

SITE MAP WITH FORMER MGP STRUCTURES

ARCADIS

FIGURE 3

CITY: SYRACUSE NY GROUP: ENVCAD DB: R.ALLEN, E. KRAHMER LD: (Opt.) PIC: M. MILLER PM/TM: M. JONES TR: M. KISER LYR:ON=*;OFF=REF, (FRZ)
G:\ENVCAD\SYRACUSE\ACT\B0043515\0006\00002\DWG\43515B02.dwg LAYOUT: 3 SAVED: 8/5/2014 11:23 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/5/2014 11:25 AM BY: KRAHMER, ERIC
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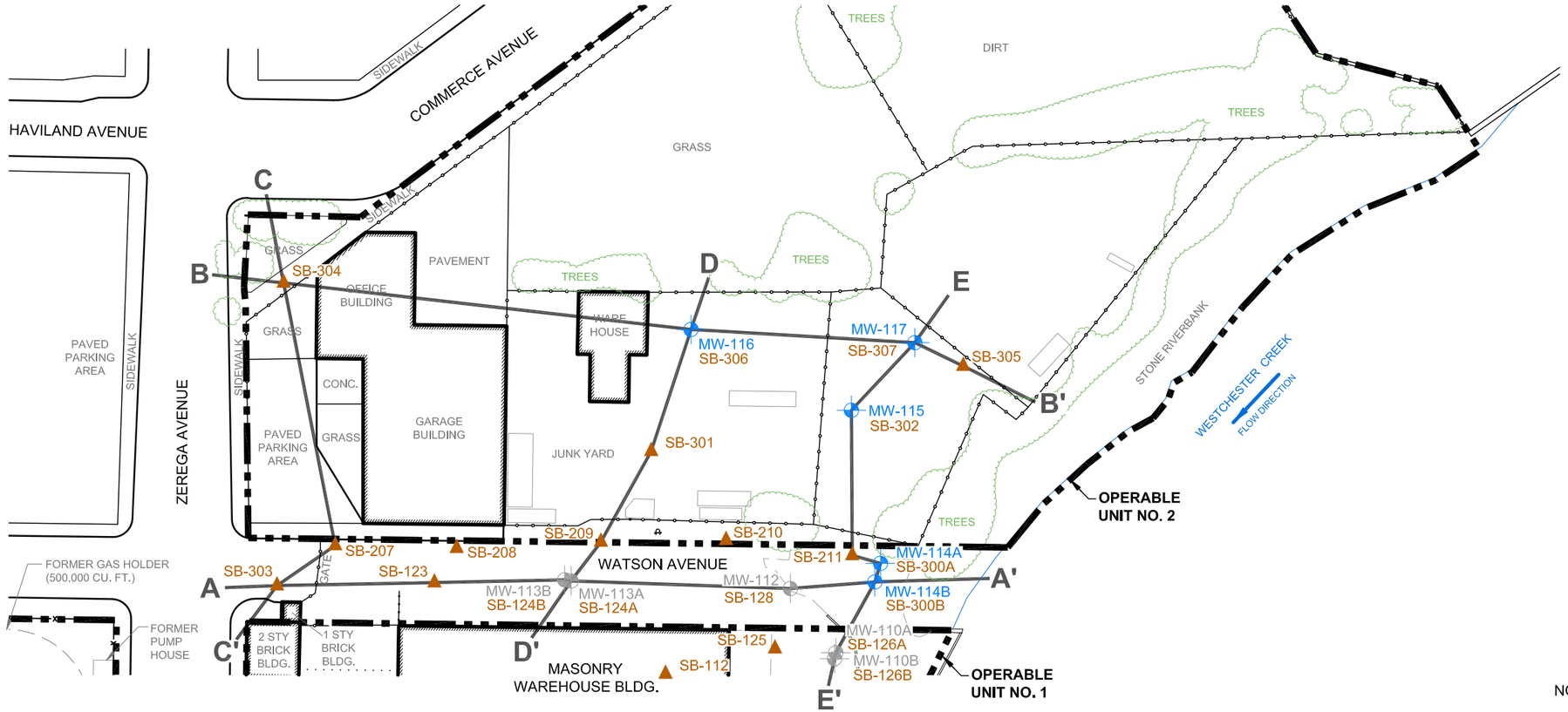

LEGEND:

- CHAINLINK FENCE
- FENCE
- OPERABLE UNIT BOUNDARY
- OVERHEAD STRUCTURE
- CATCH BASIN
- OIL RECOVERY SHED
- OIL/WATER SEPARATOR
- MW-103 NEW MONITORING WELL
- MW-112 PREVIOUS MONITORING WELL
- SB-111 SOIL BORING
- G——G' CROSS SECTION LOCATION

NOTES:

1. BASEMAP PREPARED FROM SURVEYS BY MUÑOZ ENGINEERING P.C., 2008 & 2014.
2. FLOW IN WESTCHESTER CREEK IS TIDALLY INFLUENCED.

0 80' 160'

GRAPHIC SCALE

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS SITE
1066 ZEREGA AVENUE BRONX, NEW YORK
WATSON AVENUE REMEDIAL INVESTIGATION REPORT

GEOLOGIC CROSS SECTION LOCATION MAP

ARCADIS

FIGURE 4

CITY: SYRACUSE NY GROUP: EnvCAD DB: E. KRAHMER LD: (Opt.) PIC: M. MILLER PM/TM: M. JONES TR: M. KISER LYRON='OFF=REF, (FRZ)
G:\ENVCAD\SYRACUSE\ACTIB\00435150006000021DWG\435150V01.dwg LAYOUT: 4 SAVED: 8/5/2014 10:38 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/5/2014 10:38 AM BY: KRAHMER, ERIC
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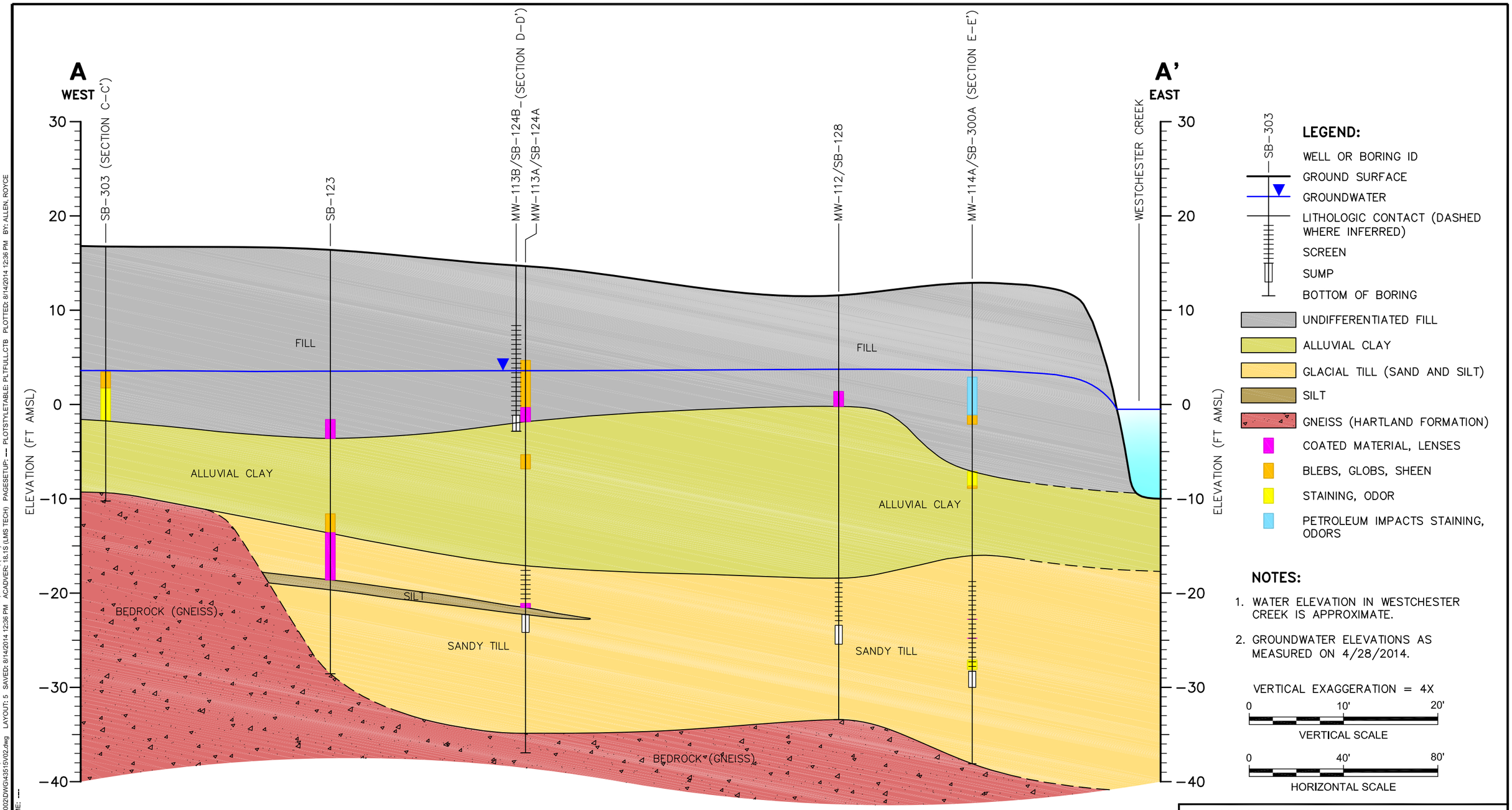


NOTES:

1. WATER ELEVATION IN WESTCHESTER CREEK IS APPROXIMATE.
2. GROUNDWATER ELEVATIONS AS MEASURED ON 4/28/2014.

VERTICAL EXAGGERATION = 4X

0 10' 20'

VERTICAL SCALE

0 40' 80'

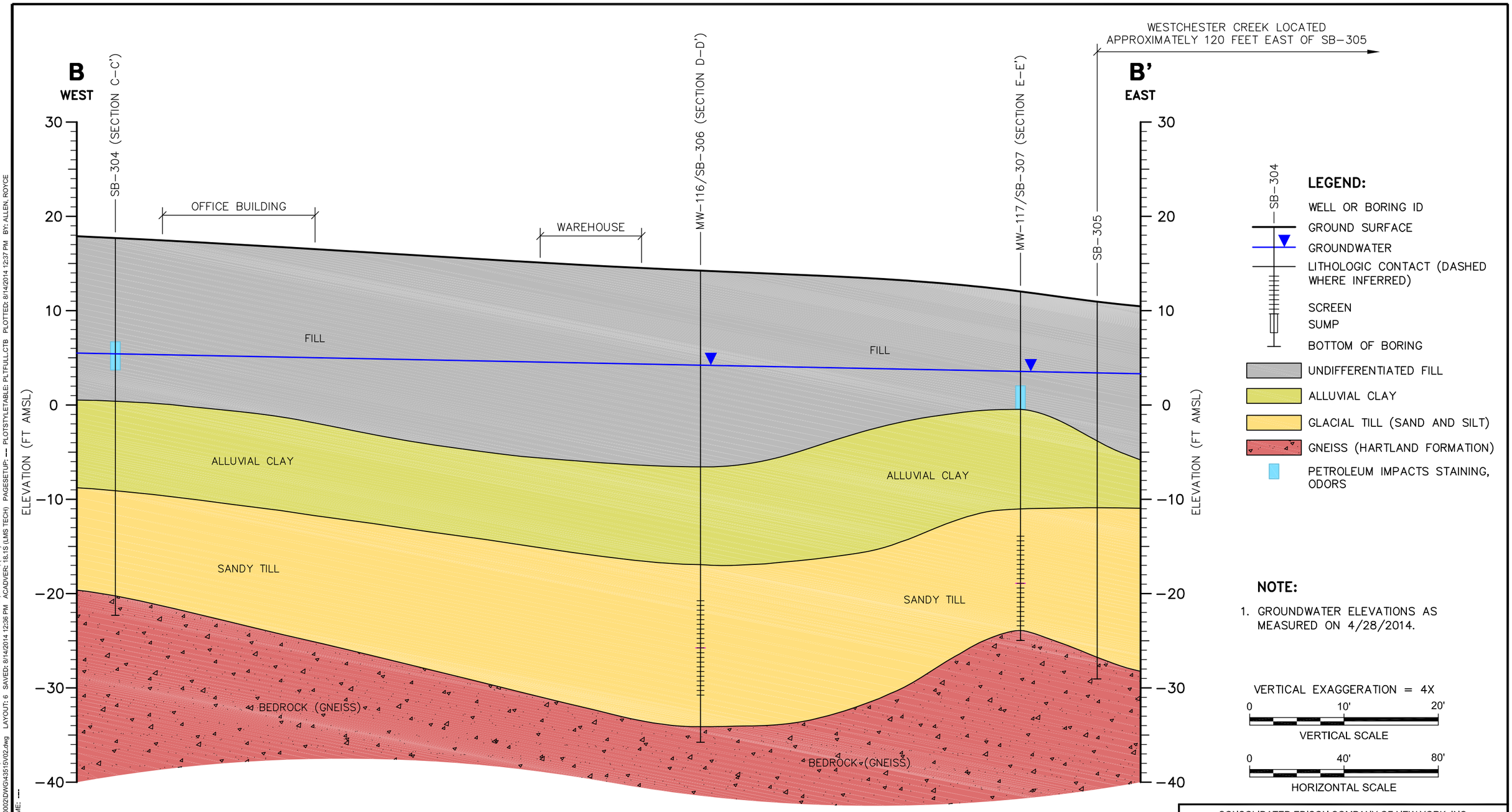
HORIZONTAL SCALE

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS SITE
1066 ZEREGA AVENUE BRONX, NEW YORK
WATSON AVENUE REMEDIAL INVESTIGATION REPORT

GEOLOGIC CROSS SECTION A-A'

ARCADIS

FIGURE
5



NOTE:

1. GROUNDWATER ELEVATIONS AS MEASURED ON 4/28/2014.

VERTICAL EXAGGERATION = 4X

0 10' 20'

VERTICAL SCALE

0 40' 80'

HORIZONTAL SCALE

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS SITE
1066 ZEREGA AVENUE BRONX, NEW YORK
WATSON AVENUE REMEDIAL INVESTIGATION REPORT

GEOLOGIC CROSS SECTION B-B'

ARCADIS

FIGURE
6

CITY:SYRACUSE NY GROUP:ENV/IM-DV DB: E. KRAHMER, R. ALLEN PIC: PM/TM: TR: A. ALLEN LYR:ON=*;OFF=REF. (FRZ)
G:\ENV\CAD\SYRACUSE\ACTIB\0043515\0006\0002\DWG\43515V02.dwg LAYOUT: 6 SAVED: 8/14/2014 12:36 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---
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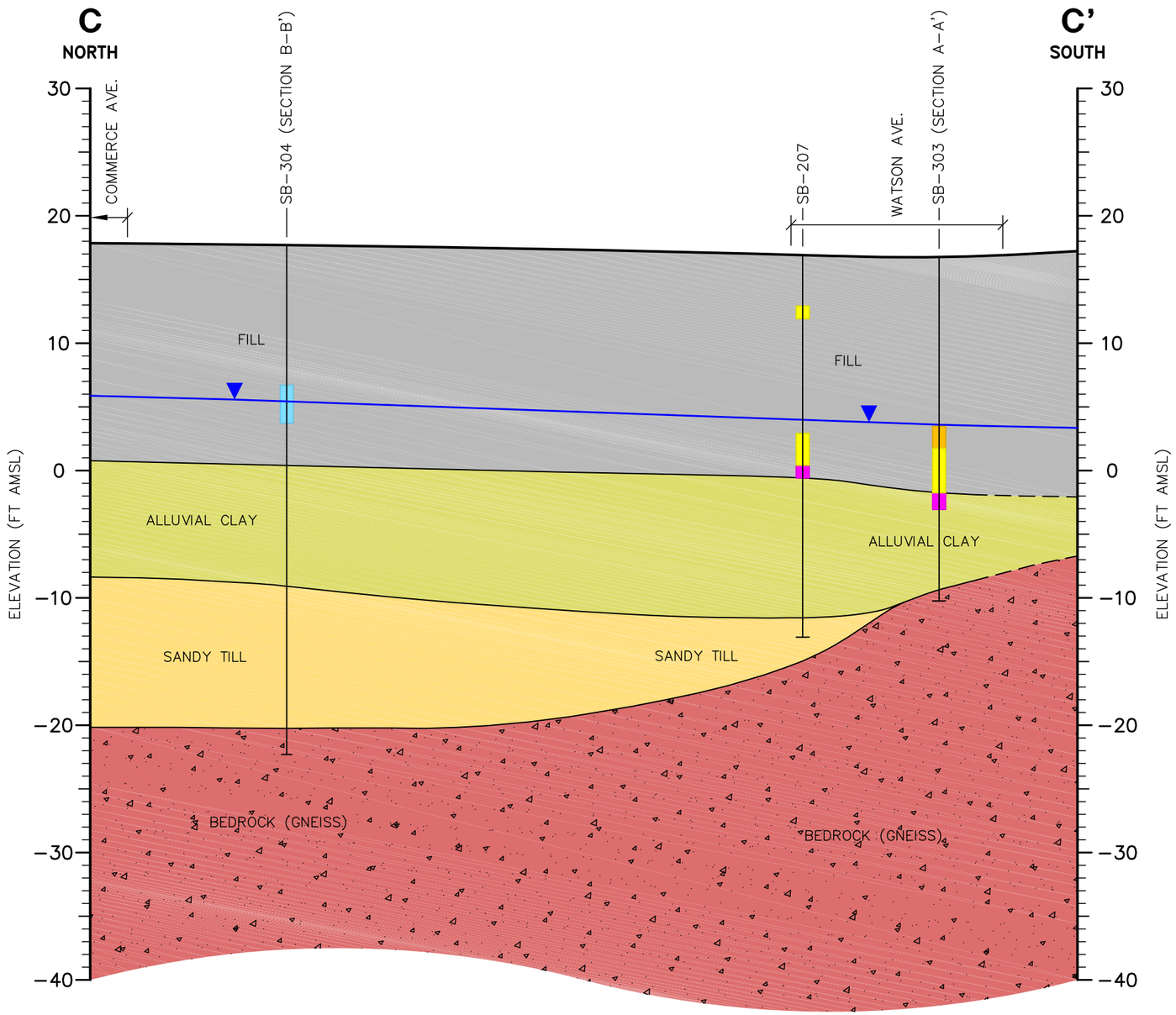

LEGEND:

- WELL OR BORING ID
- GROUND SURFACE
- GROUNDWATER
- LITHOLOGIC CONTACT (DASHED WHERE INFERRED)
- SCREEN
- SUMP
- BOTTOM OF BORING
- UNDIFFERENTIATED FILL
- ALLUVIAL CLAY
- GLACIAL TILL (SAND AND SILT)
- GNEISS (HARTLAND FORMATION)
- COATED MATERIAL, LENSES
- BLEBS, GLOBS, SHEEN
- STAINING, ODOR
- PETROLEUM IMPACTS STAINING, ODORS

NOTES:

1. GROUNDWATER ELEVATIONS AS MEASURED ON 4/28/2014..

VERTICAL EXAGGERATION = 4X

0 10' 20'

VERTICAL SCALE

0 40' 80'

HORIZONTAL SCALE

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS SITE
1066 ZEREGA AVENUE BRONX, NEW YORK
WATSON AVENUE REMEDIAL INVESTIGATION REPORT

GEOLOGIC CROSS SECTION C-C'

ARCADIS

FIGURE
7

CITY:SYRACUSE NY GROUP:ENV/IM-DV DB: E. KRAHMER, R. ALLEN PIC: PM/TM: TR: A. ALLEN LYR:ON=*;OFF=REF; (FR2)
G:\ENV\CAD\SYRACUSE\ACTIB\00435150006\00002\DWG\43515V02.dwg LAYOUT: 7 SAVED: 8/14/2014 12:44 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---
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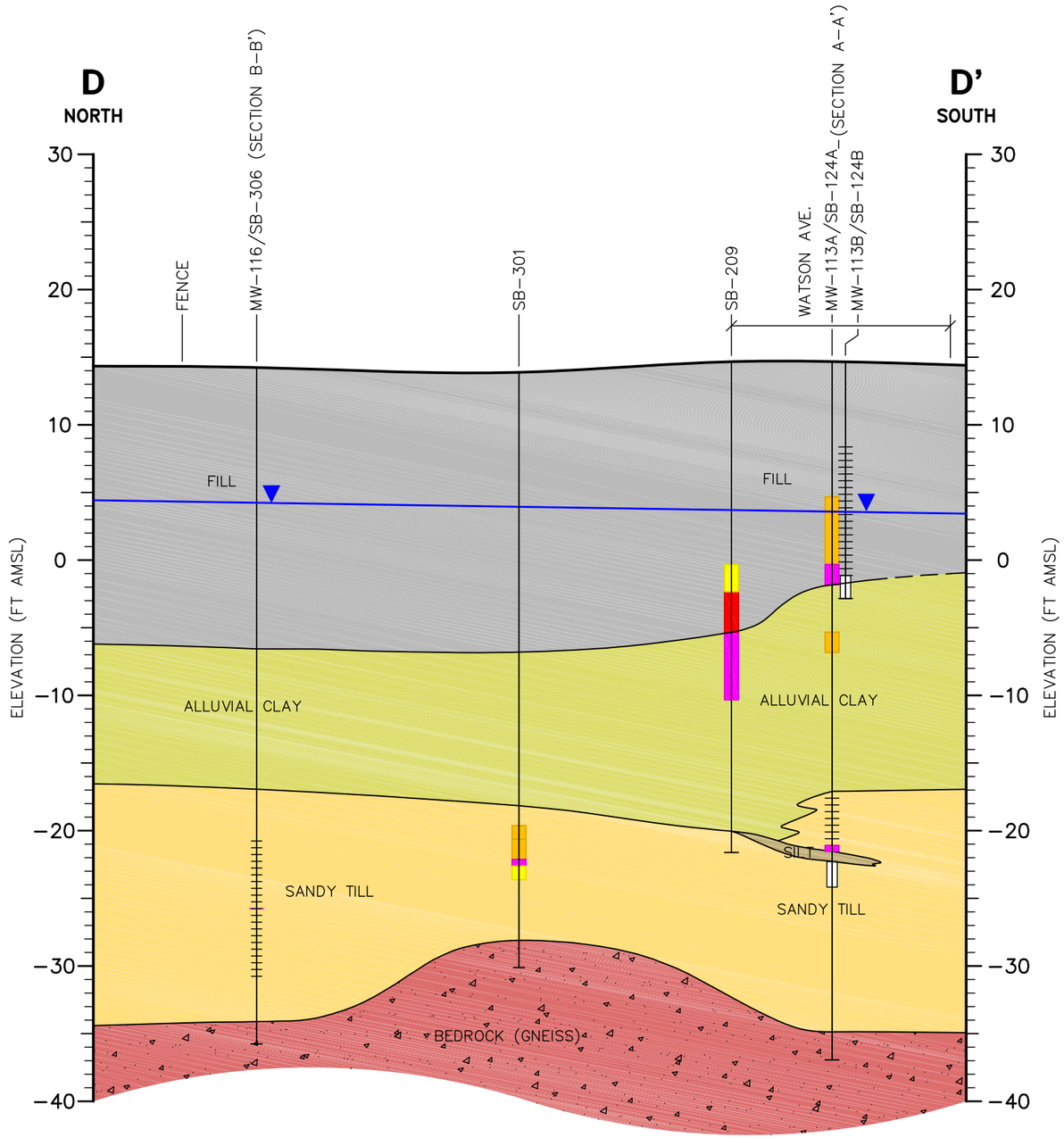
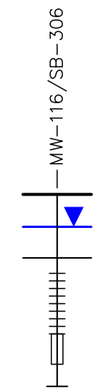




LEGEND:

- WELL OR BORING ID
- GROUND SURFACE
- GROUNDWATER
- LITHOLOGIC CONTACT (DASHED WHERE INFERRED)
- SCREEN
- SUMP
- BOTTOM OF BORING
- UNDIFFERENTIATED FILL
- GRAVEL
- ALLUVIAL CLAY
- GLACIAL TILL (SAND AND SILT)
- SILT
- GNEISS (HARTLAND FORMATION)
- TAR SATURATED
- COATED MATERIAL, LENSES
- BLEBS, GLOBS, SHEEN
- STAINING, ODOR

NOTES:

1. GROUNDWATER ELEVATIONS AS MEASURED ON 4/28/2014.

VERTICAL EXAGGERATION = 4X

0 10' 20'

VERTICAL SCALE

0 40' 80'

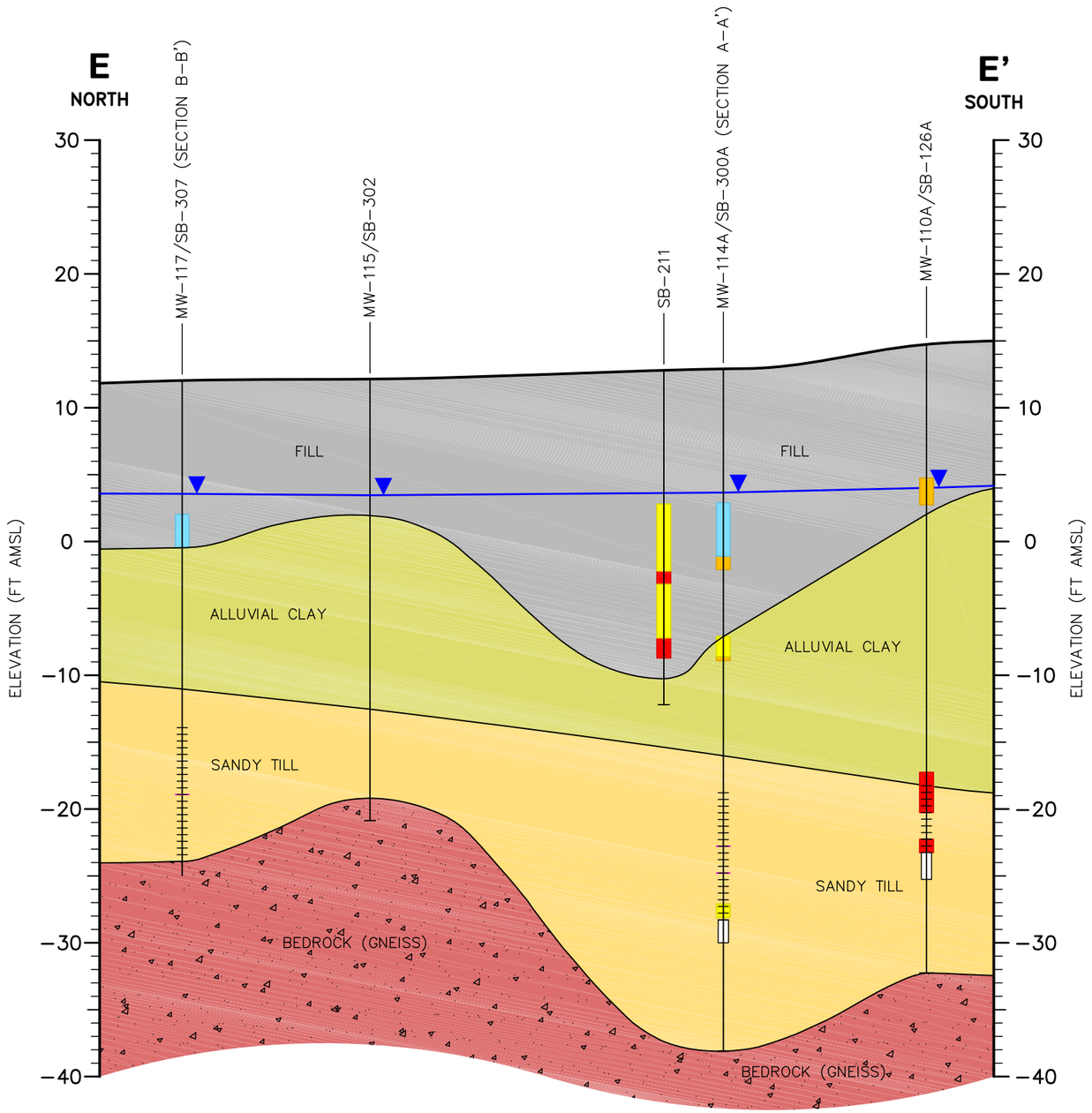
HORIZONTAL SCALE

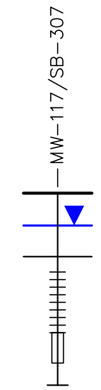
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS SITE
1066 ZEREGA AVENUE BRONX, NEW YORK
WATSON AVENUE REMEDIAL INVESTIGATION REPORT

GEOLOGIC CROSS SECTION D-D'

ARCADIS

FIGURE
8





LEGEND:

- WELL OR BORING ID
- GROUND SURFACE
- GROUNDWATER
- LITHOLOGIC CONTACT (DASHED WHERE INFERRED)
- SCREEN
- SUMP
- BOTTOM OF BORING
- FILL
- ALLUVIAL CLAY
- GLACIAL TILL (SAND AND SILT)
- GNEISS (HARTLAND FORMATION)
- TAR SATURATED
- COATED MATERIAL, LENSES
- BLEBS, GLOBS, SHEEN
- STAINING, ODOR
- PETROLEUM IMPACTS STAINING, ODORS

NOTES:

1. GROUNDWATER ELEVATIONS AS MEASURED ON 4/28/2014.

VERTICAL EXAGGERATION = 4X

0 10' 20'

VERTICAL SCALE

0 40' 80'

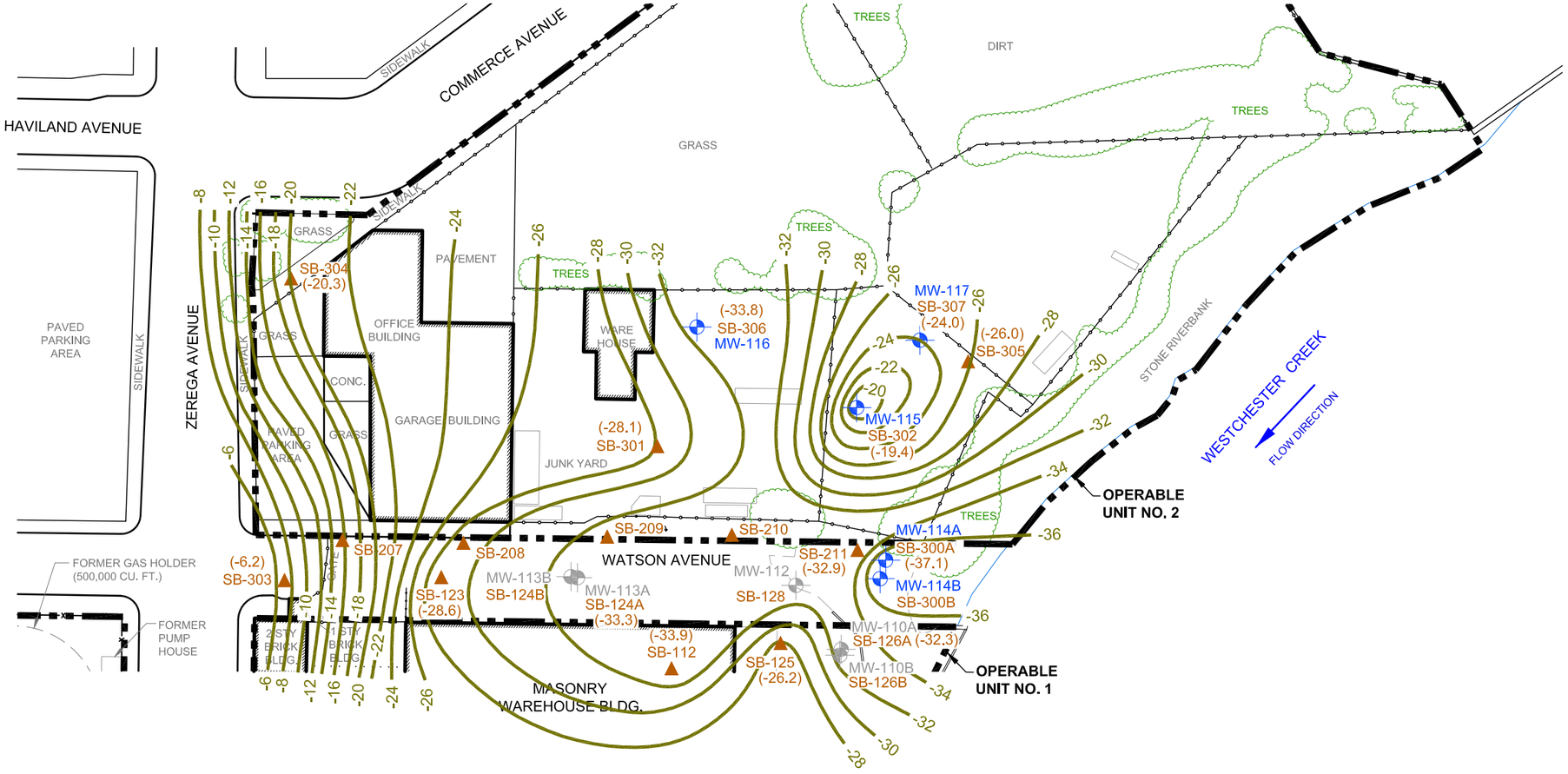
HORIZONTAL SCALE

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS SITE
1066 ZEREGA AVENUE BRONX, NEW YORK
WATSON AVENUE REMEDIAL INVESTIGATION REPORT

GEOLOGIC CROSS SECTION E-E'

ARCADIS

FIGURE
9



LEGEND:

- CHAINLINK FENCE
- OPERABLE UNIT BOUNDARY
- OVERHEAD STRUCTURE
- CATCH BASIN
- MW-103 — NEW MONITORING WELL
- MW-112 — PREVIOUS MONITORING WELL
- SB-111 — SOIL BORING
- -32 — TOP OF BEDROCK ELEVATION CONTOUR (FT. AMSL)
- -33.3 — TOP OF BEDROCK ELEVATION (FT. AMSL)

NOTES:

1. BASEMAP PREPARED FROM SURVEYS BY MUÑOZ ENGINEERING P.C., 2008 & 2014.
2. TOP OF BEDROCK ELEVATIONS BASED ON EXISTING SUBSURFACE BORING LOG.
3. ALL ELEVATIONS REFER TO NAVD 1988 VERTICAL DATUM.

0 80' 160'

GRAPHIC SCALE

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS SITE
1066 ZEREGA AVENUE BRONX, NEW YORK
WATSON AVENUE REMEDIAL INVESTIGATION REPORT

TOP OF BEDROCK ELEVATION MAP

ARCADIS

FIGURE 10

CITY: SYRACUSE NY GROUP: ENV/IM-DV DB: E. KRAHMER, R. ALLEN LD:(Opt.) PIC: M. MILLER PM/TM: M. JONES TR: M. KISER LYRON=*OFFREF, (FRZ)
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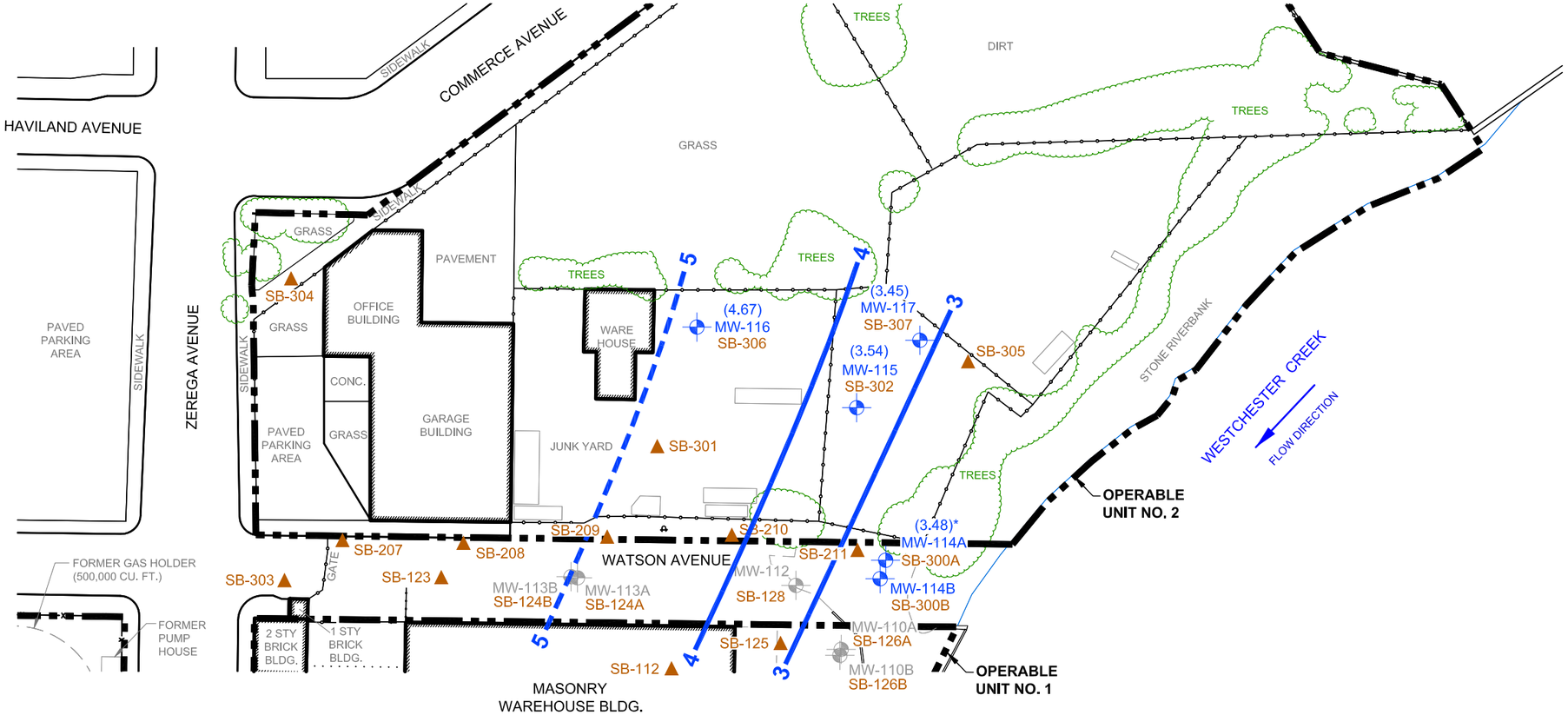
43515X06
43515X03



LEGEND:

- CHAINLINK FENCE
- OPERABLE UNIT BOUNDARY
- OVERHEAD STRUCTURE
- CATCH BASIN
- MW-103 — NEW MONITORING WELL
- MW-112 — PREVIOUS MONITORING WELL
- SB-111 — SOIL BORING
- 5 — WATER TABLE ELEVATION CONTOUR (DASHED WHERE INFERRED)
- (4.67) — WATER TABLE ELEVATION (FEET ABOVE MEAN SEA LEVEL)

NOTES:

1. BASEMAP PREPARED FROM SURVEYS BY MUÑOZ ENGINEERING P.C., 2008 & 2014.
2. FLOW IN WESTCHESTER CREEK IS TIDALLY INFLUENCED.
3. WATER TABLE ELEVATIONS MEASURED ON 04/28/14.
4. *THE ELEVATION AT MW–114A WAS TIDALLY INFLUENCED DURING THE GAUGING EVENT AND WAS NOT CONTOURED ON THIS FIGURE.

0 80' 160'

GRAPHIC SCALE

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS SITE
1066 ZEREGA AVENUE BRONX, NEW YORK
WATSON AVENUE REMEDIAL INVESTIGATION REPORT

DEEP OVERBURDEN GROUNDWATER CONTOUR MAP

ARCADIS

FIGURE 11

CITY: SYRACUSE NY GROUP: ENV/IM-DIV DB: E. KRAHMER, R. ALLEN LD:(Opt.) PIC: M. MILLER PM/TM: M. JONES TR: M. KISER LYR:ON=*;OFF=REF, (FRZ)
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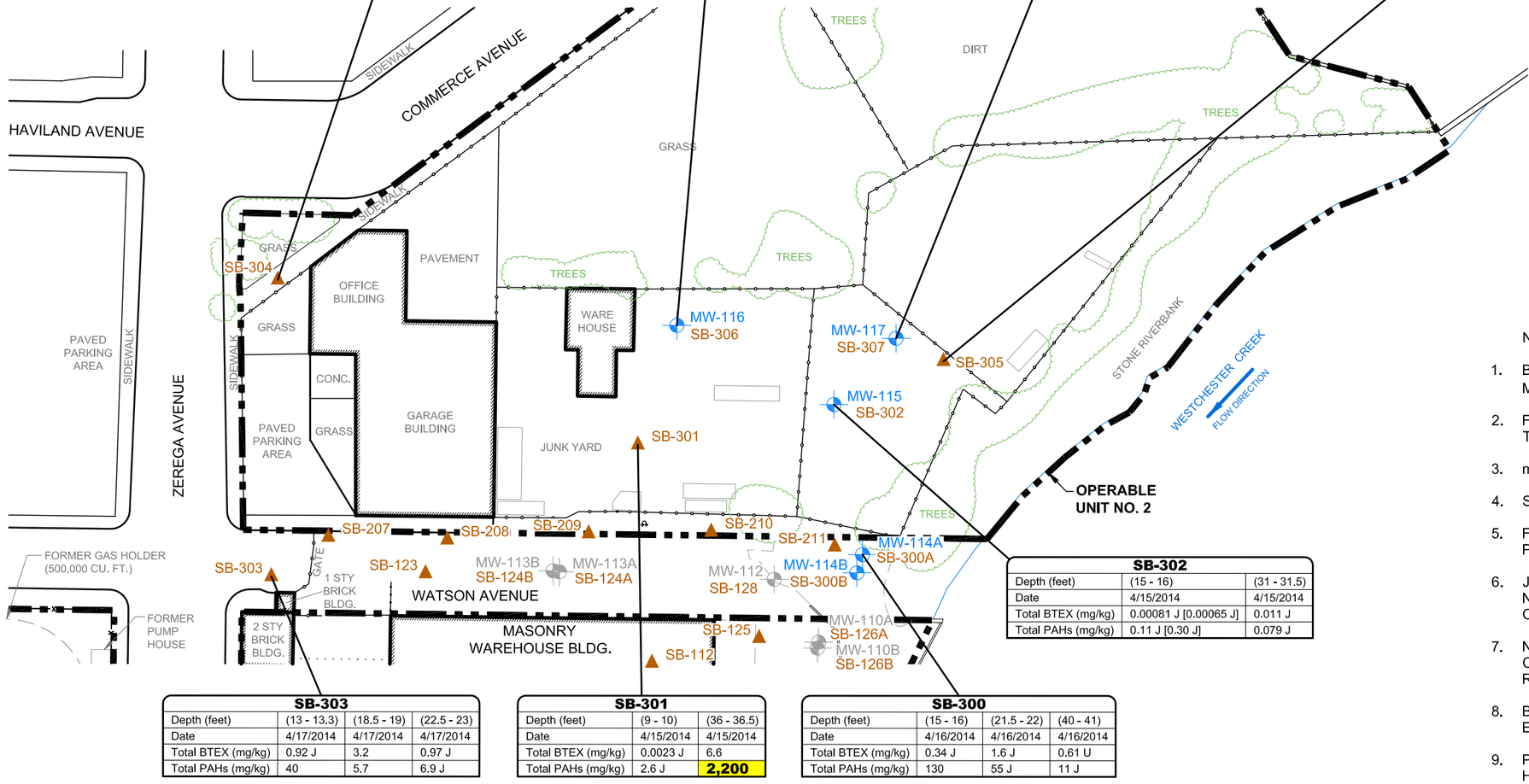
IMAGES: PROJECTNAME: ----
XREFS:
43515XBL
43515X06
43515X03

SB-304			
Depth (feet)	(10.5 - 11)	(17 - 17.5)	(28.5 - 29)
Date	4/18/2014	4/18/2014	4/18/2014
Total BTEX (mg/kg)	0.00059	0.0078 U	0.0037 U
Total PAHs (mg/kg)	17 J	0.70 J	0.11 U

SB-306			
Depth (feet)	(9.5 - 10)	(20 - 20.5)	(42 - 44)
Date	4/17/2014	4/17/2014	4/17/2014
Total BTEX (mg/kg)	0.0011	0.0078 U	0.76 U
Total PAHs (mg/kg)	1.3 J	0.17 U	0.40 J

SB-307			
Depth (feet)	10 - 11	12 - 13	33.5 - 34
Date	4/21/2014	4/21/2014	4/21/2014
Total BTEX (mg/kg)	0.00042	0.013 U	0.00065
Total PAHs (mg/kg)	2.4 J	44 J	0.12 U

SB-305				
Depth (feet)	(8.5 - 9)	(15 - 15.5)	(34 - 35)	(37 - 37.5)
Date	4/22/14	4/22/14	4/22/14	4/22/14
Total BTEX (mg/kg)	0.0039 U	0.011 U	0.0038 U	0.0044 U
Total PAHs (mg/kg)	0.39 J	8.2 J	0.11 U	0.11 U



SB-303			
Depth (feet)	(13 - 13.3)	(18.5 - 19)	(22.5 - 23)
Date	4/17/2014	4/17/2014	4/17/2014
Total BTEX (mg/kg)	0.92 J	3.2	0.97 J
Total PAHs (mg/kg)	40	5.7	6.9 J

SB-301		
Depth (feet)	(9 - 10)	(36 - 36.5)
Date	4/15/2014	4/15/2014
Total BTEX (mg/kg)	0.0023 J	6.6
Total PAHs (mg/kg)	2.6 J	**2,200**

SB-300			
Depth (feet)	(15 - 16)	(21.5 - 22)	(40 - 41)
Date	4/16/2014	4/16/2014	4/16/2014
Total BTEX (mg/kg)	0.34 J	1.6 J	0.61 U
Total PAHs (mg/kg)	130	55 J	11 J

SB-302		
Depth (feet)	(15 - 16)	(31 - 31.5)
Date	4/15/2014	4/15/2014
Total BTEX (mg/kg)	0.00081 J [0.00065 J]	0.011 J
Total PAHs (mg/kg)	0.11 J [0.30 J]	0.079 J

LEGEND:

- CHAINLINK FENCE
- FENCE
- OPERABLE UNIT BOUNDARY
- OVERHEAD STRUCTURE
- CATCH BASIN
- OIL RECOVERY SHED
- OIL/WATER SEPARATOR
- MW-103 NEW MONITORING WELL
- MW-112 PREVIOUS MONITORING WELL
- SB-111 SOIL BORING

NOTES:

1. BASEMAP PREPARED FROM SURVEYS BY MUÑOZ ENGINEERING P.C., 2008 & 2014.
2. FLOW IN WESTCHESTER CREEK IS TIDALLY INFLUENCED.
3. mg/kg = MILLIGRAMS PER KILOGRAMS.
4. SHADED VALUES >500 mg/kg TOTAL PAHs.
5. FIELD DUPLICATE SAMPLE RESULTS ARE PRESENTED IN BRACKETS [ ].
6. J = INDICATES THAT THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATIONS.
7. ND = CONSTITUENTS NOT DETECTED AT CONCENTRATIONS ABOVE THE REPORTED DETECTION LIMITS.
8. BTEX = BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES.
9. PAHs = POLYCYCLIC AROMATIC HYDROCARBONS.

0 80' 160'

GRAPHIC SCALE

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS SITE
1066 ZEREGA AVENUE BRONX, NEW YORK
WATSON AVENUE REMEDIAL INVESTIGATION REPORT

TOTAL BTEX AND PAH CONCENTRATIONS FOR SOIL (mg/kg)

ARCADIS

FIGURE 12

CITY: SYRACUSE NY GROUP: EnvCAD DB: E. KRAHMER LD: (Opt.) PIC: M. MILLER PM/TM: M. JONES TR: M. KISER LYR:ON=*;OFF=REF, (FRZ)
G:\ENV\CAD\SYRACUSE\ACTIB\00435150\0060\0002\DWG\43515C01.dwg LAYOUT: 12 SAVED: 8/5/2014 10:58 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/5/2014 10:58 AM BY: KRAHMER, ERIC
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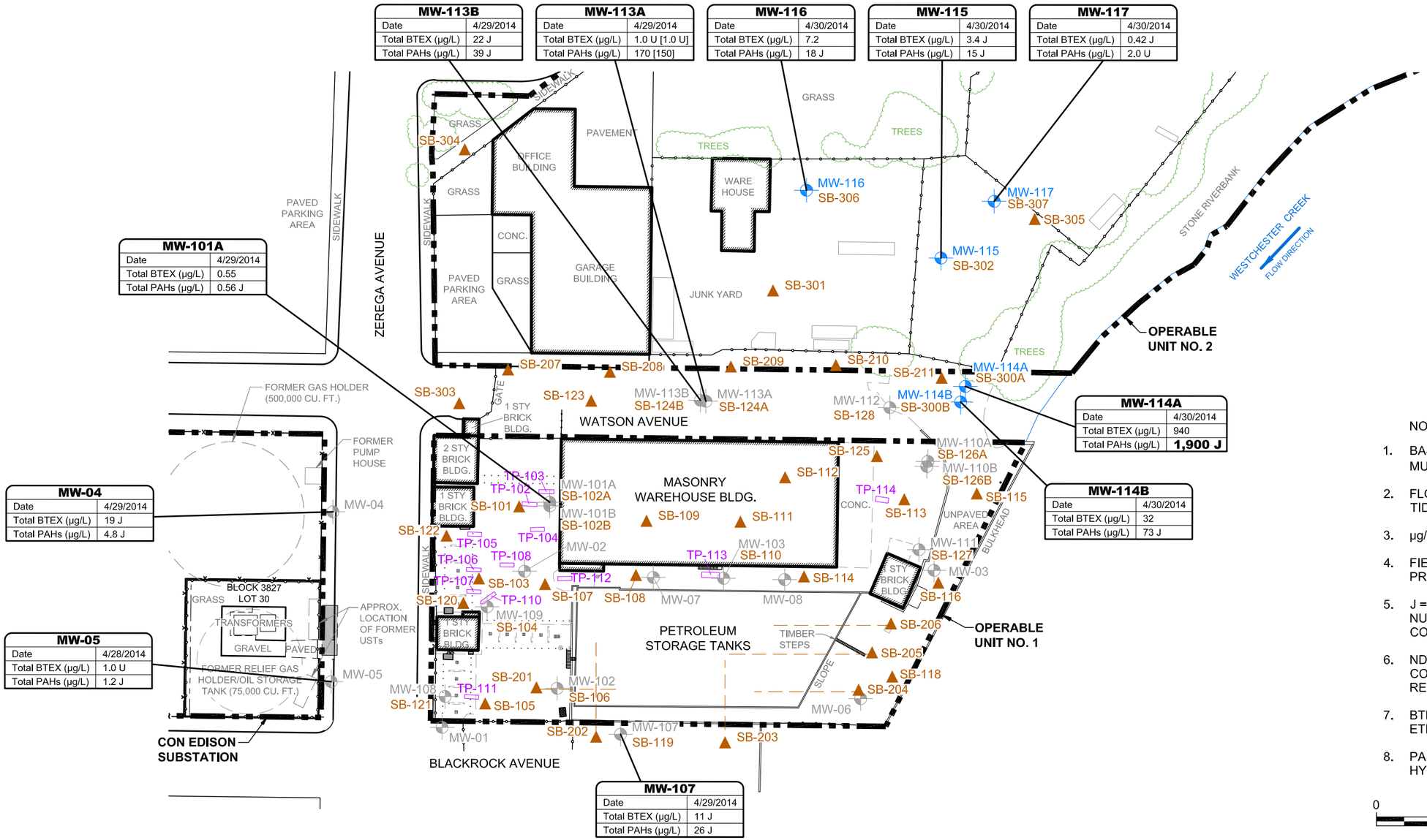

LEGEND:

- CHAINLINK FENCE
- FENCE
- OPERABLE UNIT BOUNDARY
- OVERHEAD STRUCTURE
- CATCH BASIN
- OIL RECOVERY SHED
- OIL/WATER SEPARATOR
- NEW MONITORING WELL
- PREVIOUS MONITORING WELL
- SOIL BORING
- INDICATES BORING DRILLED AT AN ANGLE BELOW PETROLEUM STORAGE TANK
- TEST PIT

NOTES:

1. BASEMAP PREPARED FROM SURVEYS BY MUÑOZ ENGINEERING P.C., 2008 & 2014.
2. FLOW IN WESTCHESTER CREEK IS TIDALLY INFLUENCED.
3. µg/L = MICROGRAMS PER LITER.
4. FIELD DUPLICATE SAMPLE RESULTS ARE PRESENTED IN BRACKETS [ ].
5. J = INDICATES THAT THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATIONS.
6. ND = CONSTITUENTS NOT DETECTED AT CONCENTRATIONS ABOVE THE REPORTED DETECTION LIMITS.
7. BTEX = BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES.
8. PAHs = POLYCYCLIC AROMATIC HYDROCARBONS.

0 80' 160'

GRAPHIC SCALE

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
FORMER UNIONPORT GAS WORKS SITE
1066 ZEREGA AVENUE BRONX, NEW YORK
WATSON AVENUE REMEDIAL INVESTIGATION REPORT

TOTAL BTEX AND PAH CONCENTRATIONS FOR GROUNDWATER (µg/L)

ARCADIS

FIGURE 13

CITY: SYRACUSE NY GROUP: EnvCAD DB: E. KRAHMER LD: (Opt.) PIC: M. MILLER PM/TM: M. JONES LAYOUT: 13 SAVED: 8/5/2014 10:34 AM BY: KRAHMER, ERIC
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IMAGES: PROJECTNAME: ---
XREFS: 43515XBL 43515X06 43515X03
LYR:On=*;OFF=REF; (FRZ) TR: M. KISER ACADVER: 18.1S (LMS TECH) PAGESETUP: ---
(FRZ)

Appendix A

Soil Boring Logs

Date Start/Finish: 4/16/14
Drilling Company: Cascade Drilling
Driller's Name: Dale Duscher/Frank Gardella
Drilling Method: Rotary Sonic
Auger Size:
Rig Type: Track-Mounted Mini Rotary Sonic
Sampling Method: 4" ID by 5' Core Barrel

Northing: 728245.9249
Easting: 673947.8727
Casing Elevation: NA

Borehole Depth: 51' bgs
Surface Elevation: 12.9024' AMSL

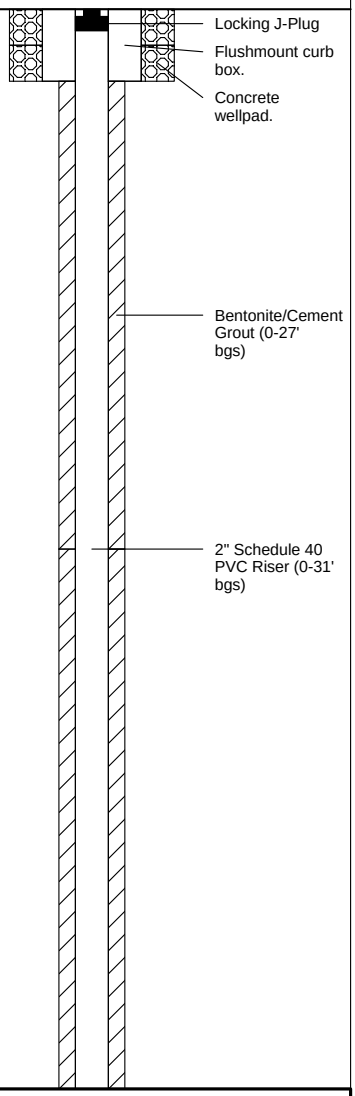
Descriptions By: J. LeMessurier/ A. Allen

Well/Boring ID: **MW-114A/SB-300A**

Client: Consolidated Edison Company of New York, Inc

Location: Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue
Bronx, NY

DEPTH ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description
0									
0	1	0-5	NA			0.1			FILL: Dark brown SILT and fine to coarse SAND, little Concrete, trace Cobbles and fine to coarse subrounded Gravel, moist.
						0.4			
						0.4			1-5' bgs trace Red Brick.
10									
						0.9			3-5' bgs increasing Cobbles with depth, trace Asphalt and rebar.
						1.4			
5									Wet at 5' bgs.
	2	5-10	5.0			0.0			FILL: Dark grayish brown SILT and SAND, some fine to coarse Gravel, little Cobbles, trace Brick, Glass, Plastic, and Mica, loose. (Munsell color 10YR 4/2).
						0.0			
5						0.0			
						0.0			
10						9.1			10-15' bgs increasing Clay with depth, moderate petroleum-like odor and staining.
						12.0			
	3	10-15	4.5						
0						14.4			
						13.5			
15									



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Remarks:
NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (15-16), (21.5-22), and (40-41).

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: **MW-114A/SB-300A**

Borehole Depth: 51' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
							2.0			Dark gray-brown fine SAND, some medium to coarse Sand, little Cobbles and Mica, trace Silt and Clay, Petroleum-like odor and staining throughout sample, Sheen from 14 to 15' bgs, wet. (Munsell color 10YR 3/1).	
							3.1				
		4	15-20	4.0			1.1				
	-5						13.7				
20							4.2			Dark gray Silty CLAY, little Organics (vegetation) and Shells, trace very fine Sand, slight MGP-like and Organic odors, plastic, soft, moist. (Munsell color 10YR 5/1).	Bentonite/Cement Grout (0-27' bgs)
							3.2			21.5-21.8' bgs NAPL blebs.	
		5	20-25	4.0			6.8				2" Schedule 40 PVC Riser (0-31' bgs)
	-10						14.7				
25							10.1			Increasing Sand content below 25' bgs.	
							5.6				
		6	25-30	5.0			2.1				Bentonite (27-29' bgs)
	-15						1.2			Gray medium to coarse SAND, little Silt, trace fine Gravel and Clay, slight Organic odor, medium density, increasing Mica with depth, moist (Munsell color 10YR 6/1).	
30							1.7			Gray coarse SAND, some fine to medium Sand, trace medium to coarse rounded Gravel and Cobbles, very loose, moist. (Munsell color 10YR 6/2).	
		7	30-35	5.0			1.0				
							0.0				

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Remarks:
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Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (15-16), (21.5-22), and (40-41).

0-5' bgs descriptions from hand clearing cuttings.

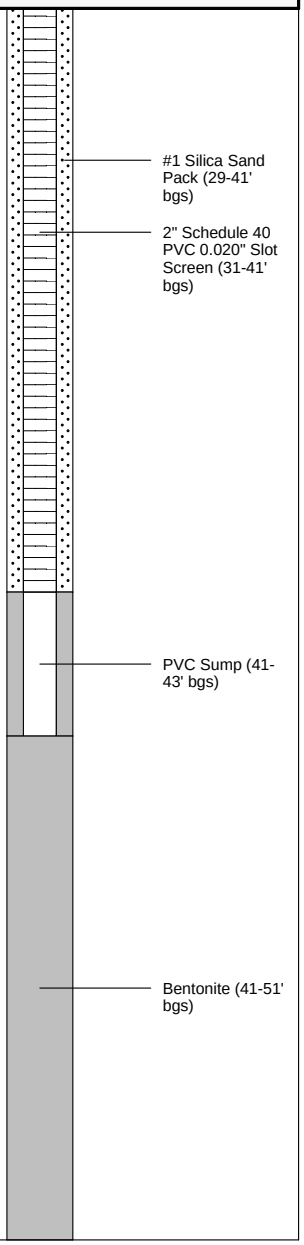
Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: MW-114A/SB-300A

Borehole Depth: 51' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description
35 / -25	7	30-35	5.0			0.0			Gray coarse SAND, some fine to medium Sand, trace medium to coarse rounded Gravel and Cobbles, very loose, moist (Munsell color 10YR 6/2).
						0.0			
	8	35-40	5.0			0.6			
						0.9			38' bgs MGP-like odor.
40 / -30						2.0			Yellowish brown Silty SAND, some fine to medium Sand, little medium to coarse rounded Gravel, trace rounded Cobbles and Clay, dense, moist. (Munsell color 2.5YR 5/3). (Possible Till).
						0.5			40-41' bgs pockets of clay around cobbles exhibit MGP-like odor.
	9	40-45	5.0			0.0			
						0.0			Possible weathered bedrock.
						0.0			
45 / -35						0.2			
	10	45-51	4.5			0.2			
						0.0			
50						0.0			



Well/Boring Construction

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Remarks:
NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (15-16), (21.5-22), and (40-41).

0-5' bgs descriptions from hand clearing cuttings.

Date Start/Finish: 4/16/14
Drilling Company: Cascade Drilling
Driller's Name: Dale Duscher/Frank Gardella
Drilling Method: Rotary Sonic
Sampling Method: 4" ID by 5' Core Barrel
Rig Type: Track-Mounted Mini Rotary Sonic

Northing: 728234.2302
Easting: 673946.7229
Casing Elevation: NA
Surface Elevation: 12.9712' AMSL
Borehole Depth: 24' bgs

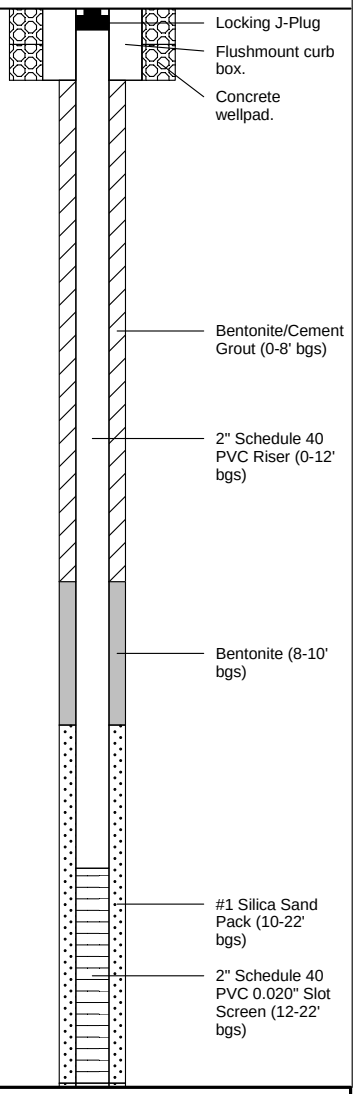
Descriptions By: J. LeMessurier/ A. Allen

Well/Boring ID: **MW-114B/SB-300B**

Client: Consolidated Edison Company of New York, Inc

Location: Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue
Bronx, NY

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description
0							
				0.1			FILL: Dark brown SILT and fine to coarse SAND, little Concrete, trace Cobbles and fine to coarse subrounded Gravel, moist.
				0.4			
10	1	0-5	5.0	0.4			
				0.9			
				1.4			
5							FILL: Dark brownish gray fine to medium SAND, some coarse Sand and fine to coarse angular Gravel, little Silt and Clay (increasing with depth), trace Brick and Concrete, loose.
	2	5-10	5.0	NA			Wet at 7' bgs.
5							9-10' bgs black Petroleum-like staining.
10							
	3	10-15	4.5	NA			FILL: Dark gray to black Silty SAND, some Cobbles and fine to coarse Gravel, trace very fine to fine Sand, black staining and petroleum-like odor, wet.
0							FILL: Light grayish brown SAND, some fine to caorse Gravel, little Cobbles, trace Silt, Mica throughout, moderate Petroleum-like odor, very loose.
15							



Well/Boring Construction

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Remarks: NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: **MW-114B/SB-300B**

Borehole Depth: 24' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5	4	15-20	5.0	NA			Dark gray CLAY, some Organics (Roots and Grass) decreasing with depth, trace Silt and very fine Sand, stiff, high plasticity, moist. 15-17' bgs Slight MGP-like odor. Organic-like odor below 17' bgs. 19-20' bgs trace Shells.	#1 Silica Sand Pack (10-22' bgs) 2" Schedule 40 PVC 0.020" Slot Screen (12-22' bgs)
-10	5	20-24	4.0	NA			Gray CLAY, little Silt, trace Shells, slight Organic odor, dense, high plasticity, moist.	Bentonite (22-24' bgs) PVC Sump (22-24' bgs)
-15							End of boring at 24' bgs.	
-20								
-25								
-30								

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Remarks: NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

0-5' bgs descriptions from hand clearing cuttings.

Date Start/Finish: 4/14/14 - 4/15/14
Drilling Company: Cascade Drilling
Driller's Name: Dale Duscher/Frank Gardella
Drilling Method: Rotary Sonic
Auger Size:
Rig Type: Track-Mounted Mini Rotary Sonic
Sampling Method: 4" ID by 5' Core Barrel

Northing: 728285.5021
Easting: 673798.4851
Casing Elevation: NA

Borehole Depth: 44' bgs
Surface Elevation: 13.8818' AMSL

Descriptions By: J. LeMessurier/ A. Allen

Well/Boring ID: **SB-301**

Client: Consolidated Edison Company of New York, Inc

Location: Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue
Bronx, NY

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
15										
0										
	1	0-5	5.0			8.9			FILL: Grayish brown COBBLES, little Brick and Silt, trace fine to coarse Gravel and fine to coarse Sand, moist. (Munsell color 10YR 4/3)	
						3.0				
						0.6				
10						0.9				
						1.6				
5						0.0			FILL: Grayish brown COBBLE (1'), some fine to coarse Sand, little fine to coarse Gravel and Mica flakes, trace Silt and Clay, loose, moist. (Munsell color 10YR 4/3)	
						0.0			Yellowish brown fine to medium SAND, some subangular Cobbles, little medium to coarse Gravel, trace Silt and Clay, loose, moist.	
	2	5-10	2.0			0.0				Bentonite/Cement Grout (0-44')
5						0.0				
						0.0				
10						0.0				
						0.4				
	3	10-15	3.0			0.1				
0						0.0				
						0.0			Dark grayish brown COBBLES, some fine to coarse Sand, little fine to coarse Gravel, trace Silt and Clay, clay portion plastic, wet. (Munsell color 10YR 3/3)	
15										

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Remarks:
NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (9-10) and (36-36.5).

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: SB-301

Borehole Depth: 44' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
							6.5				
							10.8			Light gray very fine to fine SAND, some fine to coarse rounded Gravel, little Cobbles, trace coarse Sand, very loose. (Munsell color 10YR 7/1)	
		4	15-20	4.5			30.5				
							50.2				
	-5						120.7			WOOD, little Silt and Clay, trace fine to medium Gravel, Creosote-like odor. Possible creosote-treated wood piling.	
20							1.0			Dark gray CLAY, little Silt and very fine Sand, high plasticity, density increasing with depth, moderate Organic odor, moist. (Munsell color 10YR 4/1)	
							2.0			Little Peat and Wood chips from 20 to 21.5' bgs.	
		5	20-25	5.0			4.5			Little Shells and Organics (vegetation) from 21.5 to 30' bgs.	
	-10						5.5				Bentonite/Cement Grout (0-44')
25							1.0				
							5.0				
							12.0				
		6	25-30	5.0			21.0				
	-15						20.0				
							15.2				
30							3.0				
		7	30-35	5.0			5.2			Gray fine to medium SAND, some coarse Sand, little Silt and Clay, trace Organics (vegetation), medium to coarse Gravel, and Peat, low odor, loose, moist.	
							4.7				

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Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (9-10) and (36-36.5).

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: SB-301

Borehole Depth: 44' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
	-20	7	30-35	5.0			3.1			Sheen present at 33.5' bgs. NAPL Blebs and Sheen from 34.5 to 35' bgs.	
35							5.7			Grayish brown fine to coarse SAND, trace fine Gravel and Clay, moderate odor. (Munsell color 10YR 5/6) Banded sheen at 36 and 36.5' bgs. Saturated with tar-like substance at 36.5' bgs.	
							9.5			Brownish yellow very fine to fine SAND and SILT, trace Cobbles, slight Tar-like odor, medium density, moist. (Munsell color 10YR 5/6)	
		8	35-40	5.0			3.0				
	-25						6.7				Bentonite/Cement Grout (0-44')
							5.5				
40							0.0				
							0.0				
		9	40-44	4.0			0.0			Gray weathered ROCK (Gneiss), little fine to medium Sand.	
	-30						0.0				
										End of Boring 44' bgs.	
45											
	-35										
50											

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Remarks:
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Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (9-10) and (36-36.5).

0-5' bgs descriptions from hand clearing cuttings.

Date Start/Finish: 4/15/14
Drilling Company: Cascade Drilling
Driller's Name: Dale Duscher/Frank Gardella
Drilling Method: Rotary Sonic
Auger Size:
Rig Type: Track-Mounted Mini Rotary Sonic
Sampling Method: 4" ID by 5' Core Barrel

Northing: 728333.4206
Easting: 673912.5363
Casing Elevation: NA

Borehole Depth: 33' bgs
Surface Elevation: 12.1377' AMSL

Descriptions By: J. LeMessurier/ A. Allen

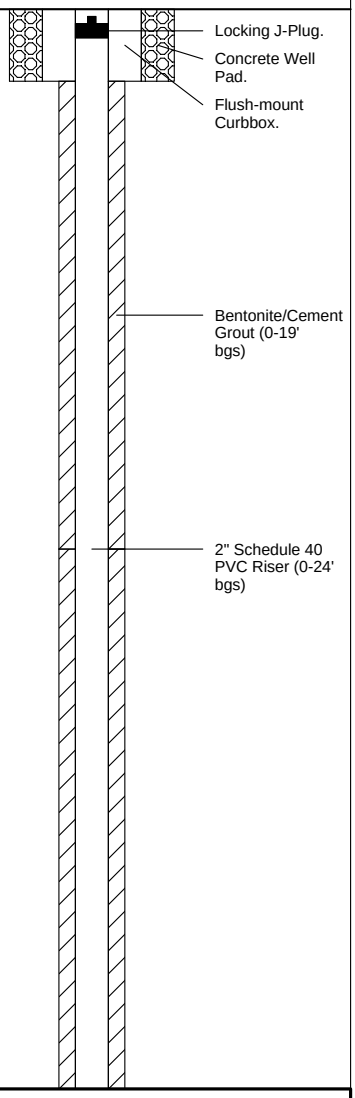
Well/Boring ID: **MW-115/SB-302**

Client: Consolidated Edison Company of New York, Inc

Location: Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue
Bronx, NY

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description
0 / 10	1	0-5	5.0			4.6 0.5 3.1 1.0 0.6			FILL: Brown and gray COBBLES, little Silt, trace fine to coarse Sand and Gravel, Red Brick, Mica, and Concrete.
5 / 5	2	5-10	4.5			0.0 0.0 0.2 1.5			FILL: Grayish brown fine to coarse SAND, some Cobbles, little fine to coarse subangular Gravel, little Silt, trace Clay, very loose, dry. (Munsell color 10YR 5/2) Trace black Peat at bottom of 5-10' run.
10 / 0	3	10-15	5.0			0.1 0.1 0.5 0.7			Dark gray Silty CLAY, some very fine Sand, little Peat and Shells, trace Organics (vegetation) above 11' bgs, density increasing with depth, moderate Organic odor, plastic, moist.

Well/Boring Construction



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Remarks:
NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (15-16) and (31-31.5).

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: MW-115/SB-302

Borehole Depth: 33' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
							0.1			Dark gray Silty CLAY, some very fine Sand, little Peat and Shells, trace Organics (vegetation) above 11' bgs, density increasing with depth, moderate Organic odor, plastic, moist.	
							0.3				
-5		4	15-20	5.0			1.0				
							0.5				
20							3.5				
							10.2				
-10		5	20-25	5.0			11.7				
							8.1			Dark gray fine to medium SAND, some coarse Sand, little Silt, trace Gravel, Clay, and Mica, soft, moist. (Munsell color 10YR 4/2)	
25							0.0				
							0.0				
-15		6	25-30	3.0			0.0				
							0.0				
30										30-30.5' bgs turning reddish brown. Increasing Mica with depth.	
		7	30-31.5	4.5			0.0				
-20										ROCK (Gneiss).	

Bentonite/Cement Grout (0-19' bgs)
2" Schedule 40 PVC Riser (0-24' bgs)
Bentonite (19-21' bgs)
#1 Silica Sand Pack (21-33' bgs)
2" Schedule 40 PVC 0.020" Slot Screen (24-31.5' bgs)

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Remarks:
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Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (15-16) and (31-31.5).

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: **MW-115/SB-302**

Borehole Depth: 33' bgs

Site Location:

Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction

Remarks:

NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (15-16) and (31-31.5).

0-5' bgs descriptions from hand clearing cuttings.

Date Start/Finish: 4/17/14
Drilling Company: Cascade Drilling
Driller's Name: Dale Duscher/Frank Gardella
Drilling Method: Rotary Sonic
Auger Size:
Rig Type: Track-Mounted Mini Rotary Sonic
Sampling Method: 4" ID by 5' Core Barrel

Northing: 728161.5170
Easting: 673592.1520
Casing Elevation: NA

Borehole Depth: 27' bgs
Surface Elevation: 16.7600' AMSL

Descriptions By: J. LeMessurier/ A. Allen

Well/Boring ID: **SB-303**

Client: Consolidated Edison Company of New York, Inc

Location: Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue
Bronx, NY

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 15										
0 / 15						0.0			CONCRETE	
									FILL: Dark brown micaceous fine Sandy SILT, trace medium to coarse Sand and fine to coarse rounded Gravel, moist.	
						NA			FILL: Dark brown to black fine Sandy SILT, some to little Slag, little Cobbles and fine to coarse Gravel, trace Cinders.	
	1	0-5	NA			0.0			FILL: Black coarse SLAG, some Silt, little fine Sand, trace medium to coarse Sand and fine to coarse Gravel, moist.	
						0.0				
						0.0				
5 / 10										
	2	5-10	5.0			NA			FILL: Dark brown to dark gray fine to caorse GRAVEL, some fine to coarse Sand, little angular Cobbles, trace Brick and Ash, very loose, moist. (Munsell color10YR 3/1).	Bentonite/Cement Grout (0-27')
									9-15' bgs trace Mica.	
10 / 5						2.0				
	3	10-15	5.0			3.5				
						1.7			Wet at 13.3' bgs. 13.3-15' bgs moderate MGP-like odor, sheen, and turning brownish gray.	
						2.5			14.5-15' bgs increased Clay content.	
15										

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Remarks:
NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (13-13.3), (18.5-19) and (22.5-23).

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: SB-303

Borehole Depth: 27' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
		4	15-20	5.0						Dark brownish gray Silty SAND, little fine to medium Sand, staining and MGP-like odor, stiff, moist. (Munsell color 10YR 4/2). Some Peat below 15.3' bgs.	
20	0									Dark gray CLAY, some Silt, little fine to medium Sand, little Peat and Mica, MGP-like odor, stiff, low plasticity, moist. (Munsell color10YR 5/2).	
										Dark yellowish brown Sandy CLAY, little medium Sand, trace fine angular Gravel, Mica, and Organics (Vegetation), low Organic odor, soft, moderate plasticity, moist. (Munsell color10YR 4/6).	Bentonite/Cement Grout (0-27')
25	-5	5	20-27	7.0						Light gray weathered BEDROCK (Gneiss). Competent rock at 26' bgs.	
	-10									End of Boring 27' bgs.	
30	-15										

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Remarks:
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Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (13-13.3), (18.5-19) and (22.5-23).

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: SB-303

Borehole Depth: 27' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction

Remarks:
NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (13-13.3), (18.5-19) and (22.5-23).

0-5' bgs descriptions from hand clearing cuttings.

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Date Start/Finish: 4/18/14
Drilling Company: Cascade Drilling
Driller's Name: Dale Duscher/Frank Gardella
Drilling Method: Rotary Sonic
Auger Size:
Rig Type: Track-Mounted Mini Rotary Sonic
Sampling Method: 4" ID by 5' Core Barrel

Northing: 728342.1349
Easting: 673560.3655
Casing Elevation: NA

Borehole Depth: 40' bgs
Surface Elevation: 17.7033' AMSL

Descriptions By: J. LeMessurier/ A. Allen

Well/Boring ID: **SB-304**

Client: Consolidated Edison Company of New York, Inc

Location: Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue
Bronx, NY

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0									CONCRETE	
						0.0			FILL: Brown fine to medium SAND, some coarse Sand, Silt, and fine Gravel, trace medium Gravel, moist.	
						0.0			FILL: Tan SILT, some black Cinders, trace fine to coarse Gravel, Cobbles, and Brick, moist.	
15	1	0-5	5.0			0.1			2-3' bgs increasing Cobbles.	
						NA			FILL: Tan SILT, some black Cinders, little Cobbles, trace fine to coarse Gravel, Brick, Glass, and Wood, moist.	
5						0.0				
						0.0			FILL: Dark brownish gray coarse SAND and coarse angular GRAVEL, some fine to medium Sand, little fine to medium Gravel, trace Cobbles, Brick, Metal, Glass, and Ash. (Munsell color 10YR 3/3).	
10	2	5-10	4.0			0.0				Bentonite/Cement Grout (0-40')
						0.0				
10						0.5			Wet at 11' bgs.	
						0.0			FILL: Brownish gray Silty CLAY, some very fine SAND, little medium to coarse angular Gravel, trace Shells, possible Petroleum-like staining and moderate odor, soft, high plasticity. (Munsell color 10YR 5/2).	
5	3	10-15	4.0			0.0				
						0.0				
15										

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Remarks:
NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (10.5-11), (17-17.5), and (28.5-29).

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: SB-304

Borehole Depth: 40' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
							0.4			FILL: Dark gray fine to medium angular GRAVEL, some Slag, trace fine to coarse Sand, very loose, moist. (Munsell color 10YR 2/1).	
							0.0				
	0	4	15-20	5.0			0.0			Dark gray Silty CLAY, some Peat and Vegetation decreasing with depth, trace very fine Sand, moderate Organic odor, stiff, moderate plasticity, moist. (Munsell color 10YR 4/1).	
							0.0				
20							0.3				
							0.0				
	-5	5	20-25	4.5			0.0				
							0.2				Bentonite/Cement Grout (0-40')
25							0.0			Grayish brown Sandy CLAY, some fine to medium Sand, little Wood chips, trace Mica, Brown Discoloration possibily due to oxidation, very stiff, low plasticity, moist. (Munsell color 10YR 4/2). Boulder at 26' bgs.	
							0.0			Dark brown fine SAND, some medium to coarse Sand, little fine to medium rounded Gravel, trace Silt and Clay, loose, moist. (Munsell color 10YR 3/3).	
	-10	6	25-30	5.0			0.0				
							0.0			TILL: Grayish brown Sandy SILT, some large rounded Cobbles, trace very fine to fine Sand, moderately stiff, moist. (Munsell color10YR 5/2).	
30							0.0				
		7	30-35	5.0			0.0				
	-15						0.0				

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Remarks:
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Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (10.5-11), (17-17.5), and (28.5-29).

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: SB-304

Borehole Depth: 40' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
									TILL: Grayish brown Sandy SILT, some large rounded Cobbles, trace very fine to fine Sand, moderately stiff, moist. (Munsell color 10YR 5/2).	
	7	30-35	5.0			0.0			Gneiss BOULDER.	
35						0.0			TILL: Grayish brown Sandy SILT, some large rounded Cobbles, trace very fine to fine Sand, very stiff, moist. (Munsell color 10YR 5/2).	Bentonite/Cement Grout (0-40')
-20	8	35-40	5.0			0.0			Weathered BEDROCK (Gneiss).	
						0.0			Competent BEDROCK (Gneiss).	
40									End of Boring 40' bgs.	
-25										
45										
-30										
50										

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Remarks:
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Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (10.5-11), (17-17.5), and (28.5-29).

0-5' bgs descriptions from hand clearing cuttings.

Date Start/Finish: 4/22/14
Drilling Company: Cascade Drilling
Driller's Name: Frank Gardelle/Oliden Gonzalez
Drilling Method: Rotary Sonic
Auger Size:
Rig Type: Track-Mounted Mini Rotary Sonic
Sampling Method: 4" ID by 5' Core Barrel

Northing: 728372.8783
Easting: 673973.7027
Casing Elevation: NA

Borehole Depth: 40' bgs
Surface Elevation: 10.9536' AMSL

Descriptions By: J. LeMessurier/ A. Allen

Well/Boring ID: **SB-305**

Client: Consolidated Edison Company of New York, Inc

Location: Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue
Bronx, NY

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 10	1	0-5	NA			0.0 0.0 NA			FILL: Brown to black CINDERS, some Silt and fine to coarse Sand, little to trace fine to coarse subrounded Gravel, Cobbels, Concrete, and Brick. 2-3' bgs increasing Cobbles.	Bentonite/Cement Grout (0-40')
5 / 5						0.0 0.0 0.0			FILL: Brown, black, and gray COBBLES and BOULDERS, some to little Cinders, fine to medium Sand, and Silt, trace fine to coarse Gravel, Brick, and Concrete, moist.	
10 / 0	2	5-10	4.0			0.0 0.0 0.0 0.0			FILL: Grayish brown COBBLES, some fine to coarse angular Gravel, little fine to coarse Sand, trace Silt, Clay, Brick, and Cinders, very loose, wet, 10YR 4/2. Wet at 9' bgs.	
15 / -5	3	10-15	3.5			0.0 0.0 0.0 0.0				

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Remarks:
NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (8.5-9), (15-15.5), (34-35), and (37-37.5).

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: SB-305

Borehole Depth: 40' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
							176			Gray CLAY, some Peat and Grass, trace very fine to fine Sand, Silt, and Shells, strong Organic odor, high plasticity, stiff, moist. (Munsell color10YR 4/1).	
	-5						145				
		4	15-20	5.0			94				
							125				
20							85				
	-10						50			Gray Clayey SAND, some fine to coarse Sand, trace Shells and Organics (Vegetation), moderate Organic odor, soft, moist. (Munsell color 10YR 5/1).	
		5	20-25	5.0			20				
							17				Bentonite/Cement Grout (0-40')
25							14.7			Grayish brown fine to coarse SAND, trace fine to medium Gravel, slight Organic odor, very loose, moist. (Munsell color 10YR 5/2).	
	-15						1.5			Gray fine SAND, little very fine Sand, slight Organic odor, loose, moist. (Munsell color 10YR 5/2).	
		6	25-30	5.0			0.0				
							0.1				
30							0.0			30-34' bgs Mica present.	
	-20										
		7	30-35	5.0			0.0				
							0.0				

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Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (8.5-9), (15-15.5), (34-35), and (37-37.5).

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: SB-305

Borehole Depth: 40' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
										Gray fine SAND, little very fine Sand, slight Organic odor, loose, moist. (Munsell color 10YR 5/2).	
		7	30-35	5.0			0.0			TILL: Light yellowish brown Silty SAND, some rounded Gravel, little medium to coarse Sand, trace Mica and Cobbles, moderately stiff, moist. (Munsell color 10YR 6/4).	
35	-25						0.0				
							0.0				Bentonite/Cement Grout (0-40')
		8	35-40	5.0						Weathered BEDROCK (Gneiss).	
							0.0				
40							0.0			Competent BEDROCK (Gneiss).	
										End of Boring 40' bgs.	
	-30										
45											
	-35										
50											

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Remarks:
NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (8.5-9), (15-15.5), (34-35), and (37-37.5).

0-5' bgs descriptions from hand clearing cuttings.

Date Start/Finish: 4/17/14
Drilling Company: Cascade Drilling
Driller's Name: Dale Duscher/Frank Gardella
Drilling Method: Rotary Sonic
Auger Size:
Rig Type: Track-Mounted Mini Rotary Sonic
Sampling Method: 4" ID by 5' Core Barrel

Northing: 728362.5402
Easting: 673807.7577
Casing Elevation: NA

Borehole Depth: 50' bgs
Surface Elevation: 14.2374' AMSL

Descriptions By: J. LeMessurier/ A. Allen

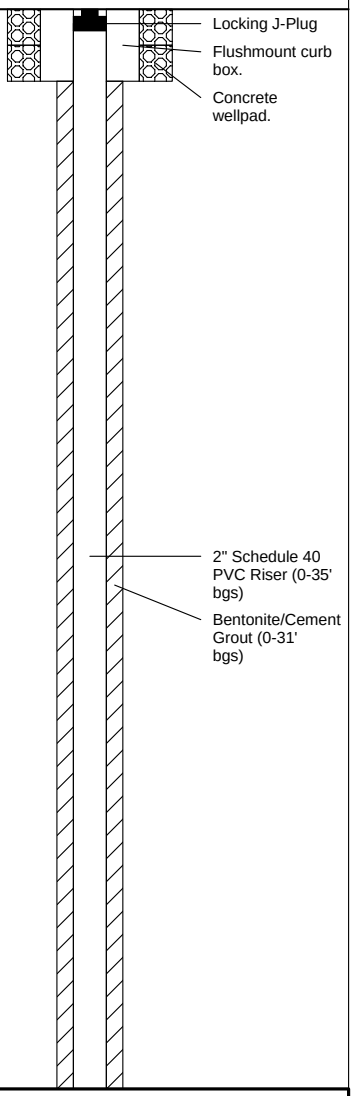
Well/Boring ID: **SB-306/MW-116**

Client: Consolidated Edison Company of New York, Inc

Location: Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue
Bronx, NY

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description
0	15									
		1	0-5	NA			0.1			FILL: Black SILT and fine to coarse SAND, trace fine Gravel and Organics (roots), moist.
							0.4			FILL: Tan SILT and fine to coarse SAND, little rounded Gravel, trace red Brick, Steel, and Cobbles, moist.
							0.3			FILL: Brown and gray COBBLES, some Silt and fine to coarse Sand, trace subrounded Gravel, Concrete, red Brick, and yellow Brick.
5	10						0.0			4-5' bgs Micaceous.
		2	5-10	4.0			0.0			
							1.8			FILL: Grayish brown fine to coarse GRAVEL, some medium to coarse Sand, little Cobbles, trace Clay, fine Sand, Silt, and Mica, loose, moist. (Munsell color 10YR 5/2).
10	5						2.0			
							1.9			
							2.2			
		3	10-15	2.0			2.4			Gneiss BOULDER, trace very fine to fine Sand and Silt. Saturated at 10.5' bgs.
15	0						2.2			

Well/Boring Construction



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Remarks:
NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (9.5-10), (20-20.5), and (42-44).

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: SB-306/MW-116

Borehole Depth: 50' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description
							2.3			Gneiss BOULDER, trace very fine to fine Sand and Silt.
		4	15-20	4.0			2.2			
							2.2			
	-5						2.1			Dark gray rounded GRAVEL, some rounded Cobbles, little fine to coarse Sand and Mica, trace Silt and Clay, very loose, wet. (Munsell color 10YR 3/2).
20							1.4			Gray CLAY, little Silt, trace very fine Sand, Shells, and Organics (Vegetation), stiff, high plasticity, moist. (Munsell color 10YR 5/1).
		5	20-25	5.0			1.7			
							2.2			
	-10						2.9			
25							2.1			
							3.3			No Shells below 27' bgs.
		6	25-30	5.0			1.7			
	-15						2.0			
30							1.8			Grayish brown coarse SAND, some fine to medium Sand, little Silt, trace Gravel and Mica, very loose, moist. (Munsell color 10YR 5/2).
		7	30-35	5.0			2.0			
							2.1			

Well/Boring Construction

- Bentonite/Cement Grout (0-31' bgs)
- 2" Schedule 40 PVC Riser (0-35' bgs)
- Bentonite (31-33' bgs)

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Remarks:

NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (9.5-10), (20-20.5), and (42-44).

0-5' bgs descriptions from hand clearing cuttings.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: SB-306/MW-116

Borehole Depth: 50' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
35	-20	7	30-35	5.0			2.2			Grayish brown coarse SAND, some fine to medium Sand, little Silt, trace Gravel and Mica, very loose, moist. (Munsell color 10YR 5/2).	2" Schedule 40 PVC Riser (0-35' bgs)
							2.2				
		8	35-40	5.0			1.8				
							2.5				#1 Silica Sand Pack (33-50' bgs)
40	-25						2.2				
							3.7				2" Schedule 40 PVC 0.020" Slot Screen (35-45' bgs)
							7.0			Brown fine SAND, little very fine Sand, trace Silt and Clay, possible slight Petroleum-like odor, loose, moist. (Munsell color 10YR 5/3).	
		9	40-45	5.0			7.4				
	-30						6.5				
45							3.5			Dark gray to black GRAVEL, some fine to medium Sand, trace Silt, Clay, and Mica, loose, moist. (Munsell color 10YR 3/1).	
							1.7				
		10	45-50	5.0			2.0				#1 Silica Sand Pack (33-50' bgs)
										Gray to black weathered BEDROCK.	
	-35									BEDROCK (Gneiss).	
50											

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Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (9.5-10), (20-20.5), and (42-44).

0-5' bgs descriptions from hand clearing cuttings.

Date Start/Finish: 4/21/14
Drilling Company: Cascade Drilling
Driller's Name: Frank Gardelle/Oliden Gonzalez
Drilling Method: Rotary Sonic
Auger Size:
Rig Type: Track-Mounted Mini Rotary Sonic
Sampling Method: 4" ID by 5' Core Barrel

Northing: 728381.0771
Easting: 673942.2240
Casing Elevation: NA

Borehole Depth: 37' bgs
Surface Elevation: 12.0359' AMSL

Descriptions By: J. LeMessurier/ A. Allen

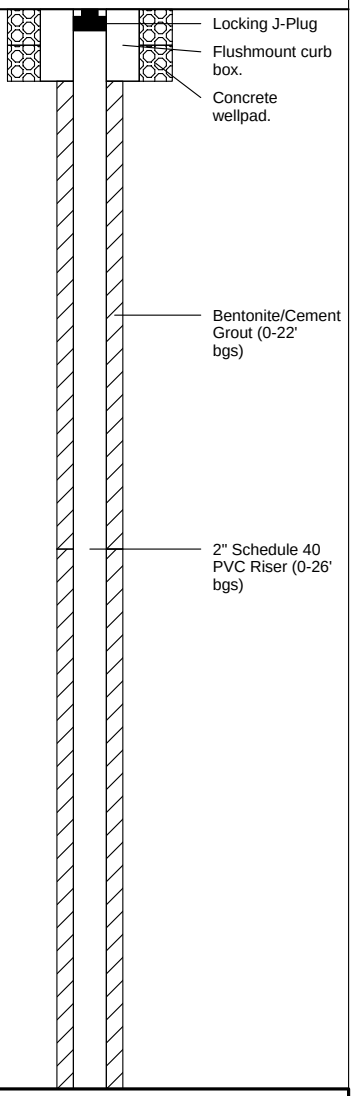
Well/Boring ID: **MW-117/SB-307**

Client: Consolidated Edison Company of New York, Inc

Location: Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue
Bronx, NY

DEPTH ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description
0									
0						0.0			CONCRETE
									FILL: Black Silty CINDERS, little coarse Sand, trace fine to coarse Gravel and Concrete, moist.
						NA			
10									
	1	0-5	NA			0.0			
									FILL: Brown and gray concrete CHUNKS and BOULDERS, little Cinders and Silt, trace Red Brick, fine to coarse Gravel, and Slag.
						NA			
						NA			
5									FILL: Dark gray coarse GRAVEL, some fine to coarse Sand, trace Brick, Plastic, Wood, loose, moist. (Munsell color 10YR 3/1).
						0.0			FILL: Dark gray BOULDER and ROCK POWDER, trace Silt and Clay.
5						0.0			
	2	5-10	4.5			0.0			
						0.0			Wet at 9' bgs.
10									
						455.3*			FILL: Grayish brown SAND, some Cobbles and fine to coarse Gravel, trace Silt and Clay, possible Petroleum-like odor, medium density, moist. (Munsell color 10YR 4/2.
						0.0			FILL: Dark gray to black Sandy SILT, little very fine to fine Sand and fine to coarse Gravel, trace Mica and Clay, possible black Petroleum-like staining, dense, moist. (Munsell color 10YR 2/1).
0									
	3	10-15	5.0			0.0			Grayish brown CLAY, some Peat and Organics (Grass), little Silt, trace very fine Sand, Organic odor, stiff, plastic. (Munsell color 10YR 5/2.
						0.5			
15									

Well/Boring Construction



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Remarks:
NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (10-11), (12-13), and (33.5-34).

*High PID readings likely due to excessive heat and moisture caused by drilling.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: **MW-117/SB-307**

Borehole Depth: 37' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
							9.4			Grayish brown CLAY, some Peat and Grass, little Silt, trace very fine Sand, Organic odor, stiff, plastic. (Munsell color 10YR 5/2).	
							10.4			15-15.5 increased fine to coarse Sand. Clay density increasing with depth.	
-5		4	15-20	5.0			16.5				
							12.5				
							27.1				
20							95.8				
							44.0				
-10		5	20-25	5.0			24.5				
							5.0			Dark grayish brown fine SAND, some medium to coarse Sand, trace Silt, Clay, and medium Gravel, moderate Organic odor, medium density, moist. (Munsell color 10YR 4/2).	
							1.4				
25							0.0				
							0.0				
-15		6	25-30	5.0			0.0				
							1.2				
							1.8				
30							0.0				
		7	30-35	5.0			0.0				
-20							1.4				

Bentonite/Cement Grout (0-22' bgs)
2" Schedule 40 PVC Riser (0-26' bgs)
Bentonite (22-24' bgs)
#1 Silica Sand Pack (24-37' bgs)
2" Schedule 40 PVC 0.020" Slot Screen (26-36' bgs)

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Remarks:
NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (10-11), (12-13), and (33.5-34).

*High PID readings likely due to excessive heat and moisture caused by drilling.

Client: Consolidated Edison Company of New York, Inc

Well/Boring ID: **MW-117/SB-307**

Borehole Depth: 37' bgs

Site Location:
Watson Avenue
Former Unionport Gas Works Site
1066 Zerega Avenue

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	Blow Counts	N - Value	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
35	-25	7	30-35	5.0			1.5 0.0			TILL: Grayish brown Clayey SAND, some very fine to fine Sand, little Cobbles, trace medium to coarse angular Gravel, Silt, and weathered Bedrock, stiff, moist. (Munsell color 10YR 5/2).	2" Schedule 40 PVC 0.020" Slot Screen (26-36' bgs)
		8	35-37	2.5			355.0* 0.0			TILL: Grayish brown Silty CLAY, little fine to medium Sand, little rounded Gravel, very stiff, moist. (Munsell color 10YR 5/2). BEDROCK (Gneiss).	#1 Silica Sand Pack (24-37' bgs)
40	-30									End of borehole at 37' bgs.	
45	-35										
50											

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Remarks:
NA = Not Applicable/Available; AMSL = Above Mean Sea Level, NR = No Recovery.

Samples collected for analysis of TCL VOCs, TCL SVOCs, TAL metals (including cyanide), and % Solids: (10-11), (12-13), and (33.5-34).

*High PID readings likely due to excessive heat and moisture caused by drilling.

Appendix B

Groundwater Sampling Logs

11:08:59

GROUNDWATER SAMPLING LOG

Sampling Personnel: ASA	Well ID: MW-04
Client / Job Number: CONED WATSON AVE	Date: 4/29/14
Weather: 45 overcast, windy	Time in: 1020 Time out: 1210

Well Information

Depth to water:	8.72	(feet)	Well Type:	(Flushmount)	Stick-up
Total depth:	21.55	(feet)	Well Material:	Stainless Steel	(PVC)
Length of water column:	12.83	(feet)	Well locked:	(Yes)	No
Volume of water in well:	2.09	(gal)	Measuring point marke	Yes	(No)
Three well volumes:	6.27	(gal)	Well Diameter:	1" (2")	Other

Purging Information

Purging Method:	Bailer	(Peristaltic)	Grundfos	Other:	
Tubing/Bailer Material:	St. Steel	(Polyethylene)	Teflon	Other:	
Sampling Method:	(Bailer/VOC)	(Peristaltic)	Grundfos	Other:	
Pump Start: 1040	Pumpe End: 1125	Total Pump Duration: 45 min			
Total Volume Removed:	(gal)	Did well go dry?	Y/(N)		
Water-Quality Meter: HORIBA					

Unit Stability	
pH	± 0.1 ✓
DO	± 10% ✓
Cond.	± 3.0% ✓
ORP	± 10 mV ✓

~~Parameter~~ Time	1040 [1]	1045 [2]	1050 [3]	1055 [4]	1100 [5]	1105 [6]	1110 [7]	1115 [8]	1120	1125
Total Volume Purged (mL)	PUMP	1000	2000	2750	3500	4250	5000	5750	6500	SAMPLE
Rate (mL/min)	START	200	200	150	150		150	150	150	
Depth to Water (ft)		9.27	9.50	9.57	9.70		9.77	9.81	9.84	
pH		6.83	6.65	6.60	6.57		6.58	6.58	6.58	
Temp (°C)		10.86	11.03	11.07	11.05		11.27	11.34	11.35	
Conductivity (mS/cm)		1.08	1.10	1.12	1.14		1.14	1.14	1.13	
Dissolved Oxygen		1.09	0.00	0.00	0.00		0.00	0.00	0.00	
ORP (mV)		14	23	25	26		23	21	17	
Turbidity (NTU)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Notes:										

Sampling Information

Analyses	#	Laboratory

Sample ID:	MW-04	Sample Time:	1125
MS/MSD:	Yes	No	✓
Duplicate:	Yes	No	✓
Duplicate ID:	—	Duplicate Time:	—
Chain of Custody Signed By:	JON CENKOSKI		

Conversion Factors

gal/ft of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L = 3875 mL = 0.1337 cubic ft

Problems/Observations

1045: some solids, colorless water, odorless
↳ only initially

Site

Event

GROUND-WATER SAMPLING LOG

Sampling Personnel: ASA
Client / Job Number: ConEd - Watson Ave. Bronx, NY
Weather: 60° Sunny
Well ID: MW-05
Date: 4/28/14
Time In: 1315 **Time Out:** 1520

Well Information

Depth to Water:	8.00 (feet)		(from MP)
Total Depth:	17.97 (feet)		(from MP)
Length of Water Column:	(feet) 9.97		
Volume of Water in Well:	(gal) 1.625 = 6.15L		
Three Well Volumes:	(gal) 4.873 = 18.45L		

Well Type:		(Flushmount)	Stick-Up
Well Material:	Stainless Steel		(PVC)
Well Locked:		(Yes)	No
Measuring Point Marked:		(Yes)	No
Well Diameter:	1"	(2")	Other:

Purging Information

Purging Method:	Bailer	(Peristaltic)	Waterra	Other:
Tubing/Bailer Material:	Steel	(Polyethylene)	Teflon	Other:
Sampling Method:	(Bailer)	Peristaltic	Waterra	Other:
Duration of Pumping:	(min)			
Average Pumping Rate:	(ml/min)	Water-Quality Meter Type:	Horiba	
Total Volume Removed:	(gal)	Did well go dry:	Yes	(No)

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH ✓	DO ✓	Cond.	ORP ✓
± 0.1	±10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
	1350	1355	1400	1405	1410	1415	1420	1425	1430
Volume Purged ~~(gal)~~ mL	PUMP	1250	2500	3700	4700	5575	6325		
Rate (mL/min)		250	250	240	200	175	150	150	150
Depth to Water (ft.)	START	8.53	8.64	8.79	8.86	8.93	WATER LEVEL STOPPED WORKING		
pH		7.19	6.95	6.82	6.78	6.77	6.77	6.79	6.76
Temp. (C)		17.18	16.81	17.13	17.13	17.69	17.91	18.13	18.18
Conductivity (mS/cm)		3.74	3.70	3.67	3.66	3.49	3.39	3.35	3.36
Dissolved Oxygen (mg/L)		2.22	1.22	0.31	0.00	0.00	0.00	unstable	0.00
ORP (mV)		-6	-10	-13	-13	-14	-13	-17	-20
Turbidity (NTU)		320	242	196	174	62.4	33.6	24.4	19.9
Notes:									

Sampling Information

Analyses	#	Laboratory

Sample ID: MW-05		Sample Time: 1500	
MS/MSD:	(Yes)	No	
Duplicate:	Yes	(No)	
Duplicate ID	—	Dup. Time:	
Chain of Custody Signed By:	JON CEMESSUELLE		

Problems / Observations

1350: pump start
1355: turbid water, tan, odorless

1455: less turbid, almost clear

Site | Event

GROUND-WATER SAMPLING LOG

Sampling Personnel: ASA
Client / Job Number: CONED WATSON AVE BRONX, NY
Weather: 60° SUNNY
Well ID: MW-05
Date: 4/28/14
Time In: **Time Out:**

Well Information

Depth to Water:	(feet)	(from MP)
Total Depth:	(feet)	(from MP)
Length of Water Column:	(feet)	
Volume of Water in Well:	(gal)	
Three Well Volumes:	(gal)	

PG1

Well Type:	Flushmount		Stick-Up
Well Material:	Stainless Steel		PVC
Well Locked:	Yes		No
Measuring Point Marked:	Yes		No
Well Diameter:	1"	2"	Other:

Purging Information

Purging Method:	Bailer	Peristaltic	Waterra	Other:
Tubing/Bailer Material:	Steel	Polyethylene	Teflon	Other:
Sampling Method:	Bailer	Peristaltic	Waterra	Other:
Duration of Pumping:	(min)			
Average Pumping Rate:	(ml/min)	Water-Quality Meter Type:	Horiba	
Total Volume Removed:	(gal)	Did well go dry:	Yes	No

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO	Cond.	ORP
± 0.1	±10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
	1435	1445	1450	1455					
Volume Purged (gal)				PUMP					
Rate (mL/min)	200	120	120						
Depth to Water (ft.)				STOP					
pH	6.76		6.75						
Temp. (C)	18.56		18.62						
Conductivity (mS/cm)	3.29		3.39						
Dissolved Oxygen (mg/L)	0.00		0.00						
ORP (mV)	-27		-34						
Turbidity (NTU)	14.5		24.5						
Notes:		NO READINGS RECORDED							

Sampling Information

Analyses	#	Laboratory

Sample ID:	Sample Time:	
MS/MSD:	Yes	No
Duplicate:	Yes	No
Duplicate ID	Dup. Time:	
Chain of Custody Signed By:		

Problems / Observations

Site | Event

GROUND-WATER SAMPLING LOG

Sampling Personnel: JDL
Client / Job Number: B0043515
Weather: 50°F, OVERCAST
Well ID: MW-101A
Date: 4/24/14
Time In: 1320 **Time Out:** 1445

Well Information

Depth to Water:	11.61 (feet)	(from MP)
Total Depth:	(feet)	(from MP)
Length of Water Column:	(feet)	
Volume of Water in Well:	(gal)	
Three Well Volumes:	(gal)	

Well Type:	(Flushmount)		Stick-Up
Well Material:	Stainless Steel		(PVC)
Well Locked:	(Yes)		No
Measuring Point Marked:	(Yes)		No
Well Diameter:	1"	(2")	Other:

Purging Information

Purging Method:	Bailer	(Peristaltic)	Waterra	Other:
Tubing/Bailer Material:	Steel	(Polyethylene)	Teflon	Other:
Sampling Method:	(Bailer)	(Peristaltic)	Waterra	Other:

Duration of Pumping: 50 (min)
Average Pumping Rate: 200 (ml/min) Water-Quality Meter Type: HORIBA U52
Total Volume Removed: 1.8 (gal) Did well go dry: Yes (No)

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO	Cond.	ORP
± 0.1	±10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
	1350	1400	1405	1410	1415	1420	1425	1430	
Volume Purged (gal)									
Rate (mL/min)	~200	~200	~200	~200	~200	~200	~200		
Depth to Water (ft.)	11.55	11.86	11.88	11.91	11.91	11.90	11.91		
pH		6.65	6.59	6.56	6.54	6.54	6.53		
Temp. (C)		14.16	14.39	14.51	14.63	14.69	14.70		
Conductivity (mS/cm)		1.22	1.19	1.17	1.18	1.16	1.16		
Dissolved Oxygen (mg/L)		1.11	0.00	0.00	0.00	0.00	0.00		
ORP (mV)		63	52	46	46	42	42		
Turbidity (NTU)		31.7	29.0	22.9	16.9	15.5	15.5		
Notes:	INITIAL PURGE							SAMPLE STABILIZED SAMPLE TIME	

Sampling Information

Analyses	#	Laboratory

Sample ID: MW-101A Sample Time: 1430
MS/MSD: Yes No ✓
Duplicate: Yes No ✓
Duplicate ID — Dup. Time: —
Chain of Custody Signed By: JON LEMESSURIER

Problems / Observations

PID: 0.0 ppm

INITIAL PURGE: CLEAR, COLORLESS, SLIGHT MGP-LIKE ODOR

FINAL PURGE:

Site

Event

GROUND-WATER SAMPLING LOG

Sampling Personnel: JDL
Client / Job Number: 30043515
Weather: 50°F, OVERCAST

Well ID: MW-107
Date: 4/29/14
Time In: 1040 **Time Out:** 1200

Well Information

Depth to Water:	9.12 (feet)	(from MP)
Total Depth:	16.48 (feet)	(from MP)
Length of Water Column:	7.36 (feet)	
Volume of Water in Well:	1.8 (gal)	
Three Well Volumes:	14.4 (gal)	

Well Type:	Flushmount		(Stick-Up)
Well Material:	Stainless Steel		(PVC)
Well Locked:		(Yes)	No
Measuring Point Marked:		(Yes)	No
Well Diameter:	1"	2"	Other: 4"

Purging Information

Purging Method:	Bailer	(Peristaltic)	Waterra	Other:
Tubing/Bailer Material:	Steel	(Polyethylene)	Teflon	Other:
Sampling Method:	(Bailer)	(Peristaltic)	Waterra	Other:

Duration of Pumping: 60 (min)
Average Pumping Rate: ~200 (ml/min) Water-Quality Meter Type: HORIBA U52
Total Volume Removed: ~2.5 (gal) Did well go dry: Yes No

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO	Cond.	ORP
± 0.1	±10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
	1045	1055	1100	1105	1110	1115	1120	1125	1130
Volume Purged (gal)									
Rate (mL/min)	~300	~200	~200	~200	~200	~200	~200	~200	~200
Depth to Water (ft.)	9.11	9.37	9.37	9.37	9.37	9.38	9.38	9.38	9.38
pH		6.93	6.81	6.64	6.63	6.79	6.69	6.66	6.67
Temp. (C)		11.00	11.05	11.07	11.07	11.04	11.14	11.12	11.14
Conductivity (mS/cm)		4.20	4.19	4.18	4.18	4.17	4.17	4.17	4.17
Dissolved Oxygen (mg/L)		4.48	11.99	11.16	10.80	11.91	10.08	9.27	9.54
ORP (mV)		-95	-93	-92	-95	-97	-100	-102	-104
Turbidity (NTU)		13.0	18.3	10.7	10.9	11.4	10.8	10.8	11.0
Notes:	INITIAL PURGE								

Sampling Information

Analyses	#	Laboratory
Sample ID: MW-107	Sample Time: 1135	
MS/MSD: Yes	No ✓	
Duplicate: Yes	No ✓	
Duplicate ID —	Dup. Time: —	
Chain of Custody Signed By: JON LEMESSURIER		

Problems / Observations

PID: 0.0 ppm

INITIAL PURGE: CLEAR, COLORLESS, SLIGHT OLM-LIKE ODOR, SHEEN

FINAL PURGE: SAA.

Site

Event

GROUND-WATER SAMPLING LOG

Sampling Personnel: JDL & ASA | **Well ID:** MW-113A
Client / Job Number: B0043515 | **Date:** 4/29/13
Weather: 45°F, OVERCAST | **Time In:** 0650 | **Time Out:** 0830

Well Information

Depth to Water: 10.25 (feet) (from MP)
Total Depth: 39.30 (feet) (from MP)
Length of Water Column: 29.05 (feet)
Volume of Water in Well: 4.7 (gal)
Three Well Volumes: 14.2 (gal)

Well Type: (Flushmount) Stick-Up
Well Material: Stainless Steel (PVC)
Well Locked: (Yes) No
Measuring Point Marked: (Yes) No
Well Diameter: 1" (2") Other:

Purging Information

Purging Method: Bailer (Peristaltic) Waterra Other:
Tubing/Bailer Material: Steel (Polyethylene) Teflon Other:
Sampling Method: (Bailer) (Peristaltic) Waterra Other:
Duration of Pumping: 80 (min)
Average Pumping Rate: 200 (ml/min) Water-Quality Meter Type: HORIBA U52
Total Volume Removed: ~2.0 (gal) Did well go dry: Yes (No)

Conversion Factors	1" ID	2" ID	4" ID	6" ID
gal / ft. of water	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO	Cond.	ORP
± 0.1	±10%	± 3.0%	± 10 mV

Parameter:	1 0717	2 0725	3 0730	4 0735	5 0740	6 0745	7 0750	8 0755	9 0800
Volume Purged ~~(gal)~~ mL	PUMP	1125	2125	3125	4125	5125	6125	7125	S
Rate (mL/min)	START	225	200	200	200	200	200	200	A
Depth to Water (ft.)	10.31	10.45	10.45	10.45	10.45	10.45	10.46	10.50	A
pH		7.05	6.53	6.29	6.11	5.99	5.92	5.86	M
Temp. (C)		12.46	13.14	13.24	13.33	13.41	13.42	13.48	M
Conductivity (mS/cm)		2.27	2.35	2.32	2.26	2.24	2.23	2.21	P
Dissolved Oxygen (mg/L)		0.46	0.00	0.00	0.00	0.00	0.00	0.00	L
ORP (mV)		-71	-134	-142	-145	-146	-145	-146	L
Turbidity (NTU)		14.4	15.0	15.5	14.0	13.7	14.6	14.3	E
Notes:	0720 thru flow cell leaking. stopped pump. Restart pump 0722								\

Sampling Information

Analyses	#	Laboratory

Sample ID: MW-113A Sample Time: 0800
MS/MSD: Yes No ✓
Duplicate: Yes ✓ No
Duplicate ID DUP-042913 Dup. Time: 0800
Chain of Custody Signed By: Jon Lemessurier

Problems / Observations

PID = 0.0 ppm
0725: clear, colorless, odorless
* potential tidal influence?

FINAL PURGE: CLEAR, COLORLESS, SLIGHT PETROLEUM-LIKE ODOR

Site

Event

GROUND-WATER SAMPLING LOG

Sampling Personnel: ASA
Client / Job Number: CONED WATSON AVE
Weather: 45° overcast, windy

Well ID: MW-113B
Date: 4/29/14
Time In: 0900 **Time Out:** 1000

Well Information

Depth to Water:	10.96 (feet) (from MP)
Total Depth:	17.85 (feet) (from MP)
Length of Water Column:	6.89 (feet)
Volume of Water in Well:	1.12 (gal)
Three Well Volumes:	3.36 (gal)

Well Type:		(Flushmount)	Stick-Up
Well Material:	Stainless Steel		(PVC)
Well Locked:		(Yes)	No
Measuring Point Marked:		(Yes)	No
Well Diameter:	1"	(2")	Other:

Purging Information

Purging Method:	Bailer	(Peristaltic)	Waterra	Other:
Tubing/Bailer Material:	Steel	(Polyethylene)	Teflon	Other:
Sampling Method:	(Bailer VOC)	(Peristaltic)	Waterra	Other:

Duration of Pumping: ~55 (min)
Average Pumping Rate: 175 (ml/min) Water-Quality Meter Type: Horiba U52
Total Volume Removed: ~2.0 (gal) Did well go dry: Yes (No)

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO	Cond.	ORP
± 0.1	±10%	± 3.0%	± 10 mV

Parameter:	1 0900	2 0905	3 0910	4 0915	5 0920	6 0925	7 0930	8 0935	9 0940	0945
Volume Purged ~~(gal)~~ mL	PUMP	875	1750	2625	3500	4375	5250	6125	7000	SAMPLE
Rate (mL/min)	START	175	175	175	175	175	175	175	175	
Depth to Water (ft.)		11.00	11.01	11.01	11.01	11.01	11.01	11.01	11.01	
pH		9.31	9.28	9.26	9.23	9.22	9.20	9.17	9.16	
Temp. (C)		11.25	11.42	11.44	11.50	11.50	11.46	11.43	11.42	
Conductivity (mS/cm)		2.24	2.25	2.24	2.24	2.24	2.23	2.23	2.23	
Dissolved Oxygen (mg/L)		0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ORP (mV)		-56	-67	-74	-78	-83	-90	-93	-98	
Turbidity (NTU)		16.4	12.5	10.5	0.0	0.0	0 0	0.0	0.0	
Notes:										

Sampling Information

Analyses	#	Laboratory

Sample ID: MW-113B Sample Time: 0945
MS/MSD: Yes No ✓
Duplicate: Yes No ✓
Duplicate ID — Dup. Time: —
Chain of Custody Signed By: JON LEMESSURIER

Problems / Observations

0905: slight tint, some solids

PID: 0.0 ppm

Site

Event

GROUND-WATER SAMPLING LOG

Sampling Personnel: JDL
Client / Job Number: B0043515
Weather: 40°F, HEAVY RAIN

Well ID: MW-114A
Date: 4/30/14
Time In: 0915 **Time Out:** 1050

Well Information JDL

Depth to Water: ~~12.05~~ (feet)	11.55	(from MP)	
Total Depth:	42.50 (feet)	(from MP)	
Length of Water Column:	(feet) 30.95		
Volume of Water in Well:	(gal) 5.04		
Three Well Volumes:	(gal) 15.13		

Well Type:		(Flushmount)	Stick-Up
Well Material:	Stainless Steel		(PVC)
Well Locked:		Yes	(No)
Measuring Point Marked:		Yes	(No)
Well Diameter:	1"	(2")	Other:

Purging Information

Purging Method:	Bailer	(Peristaltic)	Waterra	Other:
Tubing/Bailer Material:	Steel	(Polyethylene)	Teflon	Other:
Sampling Method:	(Bailer)	(Peristaltic)	Waterra	Other:

Duration of Pumping: 70 (min)
Average Pumping Rate: 450 (ml/min) Water-Quality Meter Type: HORIBA U52
Total Volume Removed: 4.0 (gal) Did well go dry: Yes (No)

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO	Cond.	ORP
± 0.1	±10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
	0935	0945	0950	0955	1000	1005	1010	1015	
Volume Purged (gal)								STABILIZED PARAMETERS SAMPLE TIME	
Rate (mL/min)	~300	~400	~450	~450	~450	~450	~450		
Depth to Water (ft.)	11.85	12.40	11.35	11.20	11.03	10.90	10.75		
pH		7.05	6.92	6.87	6.79	6.83	6.83		
Temp. (C)		12.26	12.55	12.66	12.67	12.64	12.67		
Conductivity (mS/cm)		1.94	1.94	1.91	1.89	1.88	1.86		
Dissolved Oxygen (mg/L)		0.16	0.00	0.00	0.00	0.00	0.00		
ORP (mV)		-106	-108	-107	-102	-104	-104		
Turbidity (NTU)		2.16	0.0	0.0	0.0	0.0	0.0		
Notes:	INITIAL PURGE		PERI-PUMP FULL CRANK						

Sampling Information

Analyses	#	Laboratory

Sample ID: MW-114A Sample Time: 1015
MS/MSD: Yes No ✓
Duplicate: Yes No ✓
Duplicate ID — Dup. Time: —
Chain of Custody Signed By: JON LEMESSURIER

Problems / Observations

PID: 0.0 ppm

INITIAL PURGE: CLEAR, COLORLESS, MILD-LIKE ODOR

FINAL PURGE: S.A.A.

* TIDAL INFLUENCE CAUSING RISE IN DTW *

** PERI-PUMP FULL CRANK **

Site | Event

GROUND-WATER SAMPLING LOG

Sampling Personnel: JDL | **Well ID:** MW-114B
Client / Job Number: B0043515 | **Date:** 4/30/14
Weather: 40°F, WIND, HEAVY RAIN | **Time In:** 0715 | **Time Out:** 0900

Well Information

Depth to Water:	9.59 (feet)	(from MP)
Total Depth:	23.76 (feet)	(from MP)
Length of Water Column:	(feet) 14.17	
Volume of Water in Well:	(gal) 2.31	
Three Well Volumes:	(gal) 6.93	

Well Type:		(Flushmount)	Stick-Up
Well Material:	Stainless Steel		(PVC)
Well Locked:		Yes	(No)
Measuring Point Marked:		Yes	(No)
Well Diameter:	1"	(2")	Other:

Purging Information

Purging Method:	Bailer	(Peristaltic)	Waterra	Other:
Tubing/Bailer Material:	Steel	(Polyethylene)	Teflon	Other:
Sampling Method:	(Bailer)	(Peristaltic)	Waterra	Other:

Duration of Pumping: 70 (min)
Average Pumping Rate: ~300 (ml/min) | Water-Quality Meter Type: Horiba U52
Total Volume Removed: 20 (gal) | Did well go dry: Yes (No)

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L = 3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO	Cond.	ORP
± 0.1	±10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
	0750	0800	0805	0810	0815	0820	0825		
Volume Purged (gal)							PARAMETERS STABLE SAMPLE		
Rate (mL/min)	~300	~300	~300	~300	~300	~300			
Depth to Water (ft.)	9.59	9.63	9.63	9.63	9.64	9.64			
pH		6.81	6.85	6.82	6.79	6.77			
Temp. (C)		9.90	9.64	9.53	9.44	9.46			
Conductivity (mS/cm)		36.5	28.4	27.4	27.2	27.1			
Dissolved Oxygen (mg/L)		4.53	0.73	0.00	0.00	0.00			
ORP (mV)		-118	-115	-111	-114	-116			
Turbidity (NTU)		0.0	0.0	0.0	0.0	0.0			
Notes:									

Sampling Information

Analyses	#	Laboratory

Sample ID: MW-114B | Sample Time: 0825
MS/MSD: Yes / No ✓
Duplicate: Yes / No ✓
Duplicate ID: — | Dup. Time: —
Chain of Custody Signed By: JON LEMESSURIER

Problems / Observations

PID = 0.0 ppm

INITIAL PURGE: CLEAR, COLORLESS, SLIGHT ORGANIC ODOR

FINAL PURGE: S.A.A.

Site

Event

GROUND-WATER SAMPLING LOG

Sampling Personnel: Jeff Johnston
Well ID: MW-115
Client / Job Number: B0043515
Date: 4/30/14
Weather: Cloudy, Rainy, Breezy, mid 50's
Time In: 0920 **Time Out:** 1045

Well Information

Depth to Water:	10.31	(feet) (from MP)
Total Depth:	30.70	(feet) (from MP)
Length of Water Column:	20.39	(feet)
Volume of Water in Well:	3.32	(gal)
Three Well Volumes:		(gal)

Well Type:		(Flushmount)	Stick-Up
Well Material:	Stainless Steel		(PVC)
Well Locked:		Yes	(No)
Measuring Point Marked:		Yes	(No)
Well Diameter:	1"	(2")	Other:

Purging Information

Purging Method:	Bailer	(Peristaltic)	Waterra	Other:
Tubing/Bailer Material:	Steel	(Polyethylene)	Teflon	Other:
Sampling Method:	(Bailer)	(Peristaltic)	Waterra	Other:

Duration of Pumping:	(min)	35			
Average Pumping Rate:	(ml/min)	200	Water-Quality Meter Type:	Horiba U52	
Total Volume Removed:	(gal)	1.75	Did well go dry:	Yes	(No)

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO	Cond.	ORP
± 0.1	±10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
	0945	0950	0955	1000	1005	1010	1025	1020	1025
Volume Purged (gal)									
Rate (mL/min)	200	200	200	200	200	200	200	200	S
Depth to Water (ft.)	10.38	10.22	10.09	9.94	9.85	9.81	9.80	9.79	A
pH	7.17	6.98	6.88	6.84	6.83	6.84	6.85	6.85	M
Temp. (C)	12.35	12.07	11.95	11.82	11.80	11.78	11.70	11.71	P
Conductivity (mS/cm)	1.82	1.75	1.80	1.82	1.86	1.88	1.90	1.91	L
Dissolved Oxygen (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	E
ORP (mV)	-114	-113	-116	-117	-118	-119	-122	-119	
Turbidity (NTU)	47.4	30.4	14.4	1.6	0.7	0.5	0.4	0.4	
Notes:									

Sampling Information

Analyses	#	Laboratory
8260	3	Accutest
8270	2	
Cyanide	1	
metals	1	

Sample ID:	MW-115	Sample Time:	1025
MS/MSD:	Yes	No	—
Duplicate:	Yes	No	—
Duplicate ID	—	Dup. Time:	—
Chain of Custody Signed By:	JON LEMESSURIER		

Problems / Observations

* initial purge: colorless, black flock

Final purge: colorless, odorless

* D.O. at 0.00 consistently through purge

Site

Event

GROUND-WATER SAMPLING LOG

Sampling Personnel: Jeff Johnston
Client / Job Number: B0043515
Weather: Breezy, Rain, low 50's

Well ID: MW-116
Date: 4/30/14
Time In: 0731 **Time Out:** 0855

Well Information

Depth to Water:	9.64	(feet)	TIC (from MP)
Total Depth:	42.58	(feet)	(from MP)
Length of Water Column:	32.94	(feet)	
Volume of Water in Well:	5.36	(gal)	
Three Well Volumes:		(gal)	

Well Type:		(Flushmount)	Stick-Up
Well Material:	Stainless Steel		(PVC)
Well Locked:		Yes	(No)
Measuring Point Marked:		Yes	(No)
Well Diameter:	1"	(2")	Other:

Purging Information

Purging Method:	Bailer	(Peristaltic)	Waterra	Other:
Tubing/Bailer Material:	Steel	(Polyethylene)	Teflon	Other:
Sampling Method:	(Bailer)	(Peristaltic)	Waterra	Other:

Duration of Pumping:	(min)	35			
Average Pumping Rate:	(ml/min)	200	Water-Quality Meter Type:	Horiba U52	
Total Volume Removed:	(gal)	2.00	Did well go dry:	Yes	(No)

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO	Cond.	ORP
± 0.1	±10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9
	0795	0800	0805	0810	0815	0820	0825	0830	0835
Volume Purged (gal)									S
Rate (mL/min)	200	200	200	200	200	200	200	200	A
Depth to Water (ft.)	9.65	9.72	9.75	9.76	9.76	9.76	9.76	9.76	M
pH	7.05	6.81	6.76	6.74	6.74	6.73	6.73	6.74	P
Temp. (C)	8.81	10.69	11.05	11.03	11.06	11.04	11.03	11.03	L
Conductivity (mS/cm)	1.15	1.11	1.11	1.11	1.11	1.10	1.10	1.11	E
Dissolved Oxygen (mg/L)	2.61	2.10	0.50	0.32	0.21	0.18	0.16	0.14	
ORP (mV)	31	23	7	5	12	10	8	6	
Turbidity (NTU)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Notes:									

Sampling Information

Analyses	#	Laboratory
8270	2	Accutest
8260	3	
Cyanide	1	
Metals	1	

Sample ID:	MW-116	Sample Time:	0835
MS/MSD:	Yes	No	✓
Duplicate:	Yes	No	✓
Duplicate ID	—	Dup. Time:	—
Chain of Custody Signed By:	JON LEMESSURIER		

Problems / Observations

- Initial purge, colorless,
- Final purge, colorless
- Turbidity consistently @ 0.0

Site

Event

GROUND-WATER SAMPLING LOG

Sampling Personnel: Jeff Johnston
Client / Job Number: BQ043515
Weather: cloudy, hazy, breezy

Well ID: MW-117
Date: 4/30/14
Time In: 1100 **Time Out:**

Well Information

Depth to Water:	8.20 (feet)	(from MP)
Total Depth:	35.97 (feet)	(from MP)
Length of Water Column:	(feet) 27.77	
Volume of Water in Well:	(gal) 4.52	
Three Well Volumes:	(gal)	

Well Type:		(Flushmount)	Stick-Up
Well Material:	Stainless Steel		(PVC)
Well Locked:		Yes	(No)
Measuring Point Marked:		Yes	(No)
Well Diameter:	1"	(2")	Other:

Purging Information

Purging Method:	Bailer	(Peristaltic)	Waterra	Other:
Tubing/Bailer Material:	Steel	(Polyethylene)	Teflon	Other:
Sampling Method:	(Bailer)	(Peristaltic)	Waterra	Other:
Duration of Pumping:	(min) 25			
Average Pumping Rate:	(ml/min) 200	Water-Quality Meter Type:	HORIBA U52	
Total Volume Removed:	(gal) 1	Did well go dry:	Yes	(No)

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO	Cond.	ORP
± 0.1	±10%	± 3.0%	± 10 mV

Parameter:	1 MIS	2 1120	3 1125	4 1130	5 1135	6 1140	7 1145	8	9
Volume Purged (gal)									
Rate (mL/min)	200	200	200	200	200	200	S		
Depth to Water (ft.)	8.04	7.93	7.89	7.82	7.81	7.82	A		
pH	6.90	6.81	6.80	6.81	6.81	6.79	M		
Temp. (C)	10.76	11.29	11.39	11.30	11.11	11.09	P		
Conductivity (mS/cm)	4.31	4.20	4.23	4.25	4.26	4.21	L		
Dissolved Oxygen (mg/L)	1.35	1.15	0.91	0.76	0.52	0.51	E		
ORP (mV)	-237	-256	-270	-278	-284	-287			
Turbidity (NTU)	6.1	4.2	1.3	.08	0.0	0.0			
Notes:									

Sampling Information

Analyses	#	Laboratory
8260	3	Accutest
8270	2	↓
Cyanide	1	↓
Metals	1	↓

Sample ID:	MW-117	Sample Time:	1145
MS/MSD:	Yes	No	✓
Duplicate:	Yes	No	✓
Duplicate ID	—	Dup. Time:	—
Chain of Custody Signed By:	JON LEMESSURIER		

Problems / Observations

initial purge: colorless, black flock

final purge:

Appendix C

Data Usability Summary Reports

ARCADIS
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Imagine the result

Consolidated Edison Company of New York, Inc. - Watson Avenue

Data Usability Summary Report

BRONX, NEW YORK

Volatile, Semivolatile, Metals and Miscellaneous Analyses

SDG #MC29825

Analyses Performed By:
Accutest Laboratories
Marlborough, Massachussetts

Report: #21694R
Review Level: Tier III
Project: B0043515.0006.00002

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #MC29825 for samples collected in association with the Con Edison Former Unionport Works site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	PCB	MET	MISC
MC29825	SB-301(9-10)	MC29825-1	Soil	4/15/2014		X	X		X	X
	SB-301(36-36.5)	MC29825-2	Soil	4/15/2014		X	X		X	X
	SB-302(15-16)	MC29825-3	Soil	4/15/2014		X	X		X	X
	SB-302(31-31.5)	MC29825-4	Soil	4/15/2014		X	X		X	X
	DUP04152014	MC29825-5	Soil	4/15/2014	SB-302(15-16)	X	X		X	X
	SB-300(15-16)	MC29825-6	Soil	4/16/2014		X	X		X	X
	SB-300(21.5-22)	MC29825-7	Soil	4/16/2014		X	X		X	X
	TRIP BLANK	MC29825-8	Soil	4/16/2014		X	X		X	X
	TRIP BLANK2	MC29825-8A	Soil	4/16/2014		X	X		X	X
	SB-300(40-41)	MC29825-9	Soil	4/16/2014		X				

Note:
1. Miscellaneous analysis includes cyanide.
2. The matrx spike/matrix spike duplicate (MS/MSD) analysis was performed on samples SB-301(9-10) and SB-300(21.5-22) for VOCs; SB-300(21.5-22) for metals and cyanide analysis.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260 and 8270 as referenced in the NYSDEC ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	14 days from collection to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were detected in the associated QA blanks; however, the associated sample results were greater than the BAL and/or were non-detect. Therefore, no qualification of the sample results was required.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
SB-301(9-10) SB-301(36-36.5) SB-302(15-16) SB-302(31-31.5) DUP04152014 SB-300(15-16) SB-300(21.5-22) TRIP BLANK TRIP BLANK2 SB-300(40-41)	ICV %RSD	1,1-dichloroethene	19.7%
		2-butanone	16.9%
		benzene	17.2%
SB-301(9-10) SB-302(15-16) SB-302(31-31.5) DUP04152014 TRIP BLANK2	CCV %D	2-butanone	-24.6%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J

Initial/Continuing	Criteria	Sample Result	Qualification
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
SB-300(21.5-22)	Vinyl chloride	>UL	>UL
SB-301(9-10)	Benzene	<LL but >10%	<LL but >10%
	Bromodichloromethane	<LL but >10%	
	Bromoform	AC	
	Bromomethane	<LL but >10%	
	Carbon disulfide	<LL but >10%	

Sample Locations	Compound	MS Recovery	MSD Recovery
	Carbon tetrachloride	<LL but >10%	<LL but >10%
	Chlorobenzene		
	Chloroethane		
	Chloroform		
	Chloromethane		
	Dibromochloromethane		
	1,1-Dichloroethane		
	1,2-Dichloroethane	AC	
	1,1-Dichloroethene	<LL but >10%	
	cis-1,2-Dichloroethene		
	trans-1,2-Dichloroethene		
	1,2-Dichloropropane		
	cis-1,3-Dichloropropene		
	trans-1,3-Dichloropropene		
	Ethylbenzene		
	Methylene chloride	AC	
	Styrene	<LL but >10%	
	Tetrachloroethene		
	Toluene		
	1,1,1-Trichloroethane		
	1,1,2-Trichloroethane	AC	
	Trichloroethene	<LL but >10%	
	Vinyl chloride		
	Xylene (total)		

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J

Control Limit	Sample Result	Qualification
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than of the control limit presented in the following table.

Sample Locations	Compound
SB-301(9-10)	1,1-Dichloroethene
	Ethylbenzene
	Tetrachloroethene
	Trichloroethene

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
SB-301(9-10) SB-302(15-16) SB-302(31-31.5) DUP04152014 TRIP BLANK2	Acetone	>UL

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J

Control Limit	Sample Result	Qualification
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SB-302(15-16)/ DUP04152014	Acetone	0.05	0.0379	AC
	Carbon disulfide	0.0107 J	0.0109	AC
	Toluene	0.00081 J	0.00065 J	AC

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Field blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X	X		
Laboratory Control Sample Duplicate(LCSD)		X			X
LCS/LCSD Precision (RPD)		X			X
Matrix Spike (MS)		X	X		
Matrix Spike Duplicate(MSD)		X	X		
MS/MSD Precision (RPD)		X	X		
Field Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X	X		
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C.
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
DUP04152014	Butyl benzyl phthalate	Detected sample results <RL and <BAL	"UB" at the RL
SB-301(9-10) SB-301(36-36.5) SB-301(36-36.5) SB-302(15-16) SB-302(31-31.5) DUP04152014 SB-300(21.5-22) SB-300(40-41)	Di-n-butyl phthalate		

RL Reporting limit

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
SB-301(9-10) SB-301(36-36.5) SB-302(15-16) SB-302(31-31.5) DUP04152014 SB-300(15-16) SB-300(21.5-22) SB-300(40-41)	CCAL %D	2,4-Dinitrophenol	-37.3%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J

Initial/Continuing	Criteria	Sample Result	Qualification
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
	%RSD >90%	Non-detect	R
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D >90% (increase/decrease in sensitivity)	Non-detect	R
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis was not performed on a sample location within this SDG.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
SB-301(9-10) SB-301(36-36.5) SB-301(36-36.5) SB-302(15-16) SB-302(31-31.5) DUP04152014 SB-300(21.5-22) SB-300(40-41)	2,4-Dinitrophenol	<LL but >10%

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SB-302(15-16)/ DUP04152014	Acenaphthene	0.029 J	0.19 U	AC
	Acenaphthylene	0.0854 J	0.0478 J	
	bis(2-Ethylhexyl)phthalate	0.0346 J	0.0233 J	
	Naphthalene	0.19 U	0.247	

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
SB-301(36-36.5) 2	Acenaphthylene	--	268000 D	268000 D
	Acenaphthene	--	160000 D	160000 D
	Benzo(a)anthracene	--	85500 D	85500 D
	Benzo(a)pyrene	--	58100 D	58100 D
	Chrysene	--	74300 D	74300 D
	Fluoranthene	--	153000 D	153000 D
	Fluorene	--	161000 D	161000 D
	Naphthalene	--	279000 D	279000 D
	Phenanthrene	--	591000 D	591000 D
	Pyrene	--	234000 D	234000 D
SB-300(15-16)	Acenaphthene	--	19700 D	19700 D
	Phenanthrene	--	3700 D	3700 D
	Pyrene	--	20700 D	20700 D

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ
Original sample result greater than the calibration range	EJ

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Field blanks					X
Laboratory Control Sample (LCS) %R		X	X		
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R					X
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Field Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6000/7000 and 9012. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

  B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

  E The reported value is estimated due to the presence of interference.

  N Spiked sample recovery is not within control limits.

  * Duplicate analysis is not within control limits.

- Validation Qualifiers

  J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010B	Water	180 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	180 days from collection to analysis	Cool to <6 °C.
SW-846 7470	Water	28 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
SW-846 7471	Soil	28 days from collection to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration and Continuing Calibration

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All continuing calibration verification standard recoveries were within the control limit.

3.2 CRDL Check Standard

The CRDL check standard serves to verify the linearity of calibration of the analysis at the CRDL. The CRDL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe), magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the CRDL standard analysis are presented below in the CRDL standards evaluation table.

All analytes associated with CRDL standard recoveries were within control limits.

3.3 ICP Interference Control Sample (ICS)

The ICS verifies the laboratories interelement and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier "N" will be removed.

All analytes associated with MS/MSD recoveries were within control limits with the exception of the following analyte present in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
SB-300(21.5-22)	Antimony	<30%	<30%
	Calcium	AC (77.5%)	>125%

AC Acceptable

The criteria used to evaluate MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified. The qualifications are applied to all sample results associated with this SDG. The qualification of analytical results for Calcium will be applied as described in the table below due to the low MS/MSD recoveries. The qualification of Antimony is applied as described below the post spike evaluation.

Control limit	Sample Result	Qualification
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery <30%	Non-detect	R
	Detect	J

Control limit	Sample Result	Qualification
MS/MSD percent recovery >125%	Non-detect	No Action
	Detect	J

A post spike (PS) was performed as required when matrix spike recoveries are outside control limits. The post spike results were evaluated as presented in the table below.

Sample Location	Analyte	MS Recovery	PS Recovery
SB-300(21.5-22)	Antimony	<30%	98.5%

The sample results will be qualified as presented in the following table. The qualifications are applied to all sample results associated with this SDG.

Control limit	Post Spike	Sample Result	Qualification
MS/MSD percent recovery <30%	PS percent recovery >75%	Non-detect	UJ
		Detect	J
	PS percent recovery <75%	Non-detect	R
		Detect	J

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices and two times the CRDL for soil matrices.

The MS/MSD was performed in replace of the laboratory duplicate analysis. Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than of the control limit are presented in the following table.

Sample Location	Analytes	MS/MSD RPD
SB-300(21.5-22)	Calcium	61.3%

The criteria used to evaluate MS/MSD RPD are presented in the following table. In the case of a MS/MSD RPD deviation, the sample results are qualified. The qualifications are applied to the all sample results associated with this SDG.

Control Limit	Sample Result	Qualification
> 20% (water) or >35% (soil	Non-detect	UJ
	Detect	J

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SB-302(15-16)/ DUP04152014	Aluminum	21500	20000	7.2%
	Arsenic	14.1	14	0.7%
	Barium	44.9	40.9	9.3%
	Beryllium	0.89	0.84	AC
	Cadmium	2.2	0.76	NC
	Calcium	1620	1490	8.3%
	Chromium	38.7	36.7	5.3%
	Cobalt	16.8	15.6	AC
	Copper	19.6	14.4	30.5%
	Iron	40400	36000	11.5%
	Lead	17.4	14.8	16.1%
	Magnesium	8280	7910	4.5%
	Manganese	464	392	16.8%
	Mercury	0.018 B	0.016 B	AC
	Nickel	35.2	31.9	9.8%
	Potassium	4900	4550	7.4%
	Selenium	0.56 B	0.49 B	AC
	Silver	0.21 B	0.17 B	AC
	Sodium	4450	4350	2.2%
	Thallium	0.19 B	0.4 B	AC
	Vanadium	47.2	45.1	4.5%
	Zinc	115	85	30.0%

AC Acceptable
NC = Non-compliant

The analyte cadmium associated with sample locations SB-302(15-16) and DUP04152014 exhibited a field duplicate RPD greater than the control limit. The associated sample results from sample locations for the listed analyte were qualified as estimated.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit recoveries between the control limits of 80% and 120%. The relative percent difference (RPD) between the LCS and LCSD results must be no greater than the established acceptance limit of 20%.

All analytes associated with the LCS/LCSD analysis exhibited recoveries and RPD within the control limits.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

All serial dilutions were within control limits, with the exception of the analytes presented in the following table. The sample locations associated with the deviant %D are also presented in the following table.

Sample Locations	Analytes	Serial Dilution (%D)
SB-300(21.5-22)	Chromium	10.8%
	Manganese	15.3%
	Zinc	12.7%

The criteria used to evaluate the serial dilution are presented in the following table. In the case of a serial dilution deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6000/7000	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X		X	
B. Method Blanks		X		X	
C. Field Blanks					X
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision (RPD)		X	X		
Laboratory Duplicate (RPD)		X		X	
Field Duplicate (RPD)		X	X		
ICP Serial Dilution		X	X		
Reporting Limit Verification		X		X	
Raw Data		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
CRDL Standard		X		X	
ICP Interference Check		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Cyanide by SW-846 9012	Water	14 days from collection to analysis	Cool to <6 °C.; preserved to a pH of greater than 12.
	Soil		Cool to <6 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the MDL. The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 and all initial calibration verification standard recoveries were within control limits.

All continuing calibration standard recoveries were within the control limit.

4. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS/MSD performed on sample locations where the

analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS analysis exhibited recoveries within the control limits.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices and two times the CRDL for soil matrices.

The laboratory duplicate sample results exhibited RPD within the control limit.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SB-302(15-16)/ DUP04152014	Cyanide	0.054 B	0.057 B	AC

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA 9012	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Field blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Lab/Field Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD – relative standard deviation, %R - percent recovery, RPD - relative percent difference,

SAMPLE COMPLIANCE REPORT

SAMPLE COMPLIANCE REPORT

SDG	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PEST/ HERB /PCB	MET	MISC	
MC29825	4/15/2014	SW846	SB-301(9-10)	Soil	No	No	--	No	Yes	VOC-ICAL %RSD, CCAL %D, MS/MSD %R, MS/MSD RPD SVOC-CCAL %D, Blank contamination, LCS %R Metals-MS/MSD %R, MS/MSD RPD, Field duplicate RPD, Serial dilution %D
	4/15/2014	SW846	SB-301(36-36.5)	Soil	No	No	--	No	Yes	VOC-ICAL %RSD SVOC-CCAL %D, Dilution, Blank contamination, LCS %R Metals-MS/MSD %R, MS/MSD RPD, Field duplicate RPD, Serial dilution %D
	4/15/2014	SW846	SB-302(15-16)	Soil	No	No	--	No	Yes	VOC-ICAL %RSD, CCAL %D SVOC-CCAL %D, Blank contamination, LCS %R Metals-MS/MSD %R, MS/MSD RPD, Field duplicate RPD, Serial dilution %D
	4/15/2014	SW846	SB-302(31-31.5)	Soil	No	No	--	No	Yes	VOC-ICAL %RSD, CCAL %D SVOC-CCAL %D, Blank contamination, LCS %R Metals-MS/MSD %R, MS/MSD RPD, Field duplicate RPD, Serial dilution %D
	4/15/2014	SW846	DUP04152014	Soil	No	No	--	No	Yes	VOC-ICAL %RSD, CCAL %D SVOC-CCAL %D, Blank contamination, LCS %R Metals-MS/MSD %R, MS/MSD RPD, Field duplicate RPD, Serial dilution %D
	4/16/2014	SW846	SB-300(15-16)	Soil	No	No	--	No	Yes	VOC-ICAL %RSD SVOC-CCAL %D, Dilution, Blank contamination, LCS %R Metals-MS/MSD %R, MS/MSD RPD, Field duplicate RPD, Serial dilution %D
	4/16/2014	SW846	SB-300(21.5-22)	Soil	No	No	--	No	Yes	VOC- ICAL %RSD, MS/MSD %R SVOC-CCAL %D, Blank contamination, LCS %R Metals-MS/MSD %R, MS/MSD RPD, Field duplicate RPD, Serial dilution %D
	4/16/2014	SW846	TRIP BLANK	Soil	No	--	--	--	--	VOC-ICAL %RSD, CCAL %D

SDG	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PEST/ HERB /PCB	MET	MISC	
	4/16/2014	SW846	TRIP BLANK2	Soil	No	--	--	--	--	VOC-ICAL %RSD
	4/16/2014	SW846	SB-300(40-41)	Water	No	No	--	No	Yes	VOC-ICAL %RSD SVOC-CCAL %D, Blank contamination, LCS %R Metals-MS/MSD %R, MS/MSD RPD, Field duplicate RPD, Serial dilution %D

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

VALIDATION PERFORMED BY: Todd Church

SIGNATURE: 

DATE: May 19, 2014

PEER REVIEW: Dennis Capria

DATE: May 27, 2014

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-301(9-10)		
Lab Sample ID:	MC29825-1	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	78.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64624.D	1	04/21/14	AMY	n/a	n/a	MSM2270
Run #2							

	Initial Weight	Final Volume
Run #1	6.96 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.2	2.6	ug/kg	
71-43-2	Benzene	2.0 J	0.46	0.31	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.19	ug/kg	
75-25-2	Bromoform	ND	1.8	0.33	ug/kg	
74-83-9	Bromomethane	ND UJ	1.8	0.55	ug/kg	
78-93-3	2-Butanone (MEK)	ND UJ	9.2	2.8	ug/kg	
75-15-0	Carbon disulfide	0.36 J	4.6	0.12	ug/kg	J
56-23-5	Carbon tetrachloride	ND UJ	1.8	0.20	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	0.14	ug/kg	
75-00-3	Chloroethane	ND	4.6	0.70	ug/kg	
67-66-3	Chloroform	ND	1.8	0.16	ug/kg	
74-87-3	Chloromethane	ND	4.6	0.52	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.30	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.8	0.25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.8	0.30	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.8	0.38	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.8	0.42	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.8	0.38	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.39	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.21	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.24	ug/kg	
100-41-4	Ethylbenzene	ND	1.8	0.63	ug/kg	
591-78-6	2-Hexanone	ND	9.2	0.70	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.6	0.50	ug/kg	
75-09-2	Methylene chloride	ND	1.8	0.49	ug/kg	
100-42-5	Styrene	ND	4.6	0.16	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.36	ug/kg	
127-18-4	Tetrachloroethene	ND UJ	1.8	0.29	ug/kg	
108-88-3	Toluene	0.30 J	4.6	0.19	ug/kg	J
71-55-6	1,1,1-Trichloroethane	ND UJ	1.8	0.20	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.53	ug/kg	
79-01-6	Trichloroethene	ND	1.8	0.23	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-301(9-10)		
Lab Sample ID:	MC29825-1	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	78.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND UJ	1.8	0.84	ug/kg	
1330-20-7	Xylene (total)	ND UJ	1.8	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	79%		70-130%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-301(9-10)
Lab Sample ID: MC29825-1 **Date Sampled:** 04/15/14
Matrix: SO - Soil **Date Received:** 04/16/14
Method: SW846 8270D SW846 3546 **Percent Solids:** 78.1
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72455.D	1	04/21/14	WK	04/17/14	OP37651	MSF3222
Run #2							

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	320	14	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	640	16	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	640	18	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	640	100	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1300	160	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	640	80	ug/kg	
95-48-7	2-Methylphenol	ND	640	25	ug/kg	
	3&4-Methylphenol	ND	640	31	ug/kg	
88-75-5	2-Nitrophenol	ND	640	17	ug/kg	
100-02-7	4-Nitrophenol	ND	1300	120	ug/kg	
87-86-5	Pentachlorophenol	ND	640	45	ug/kg	
108-95-2	Phenol	ND	320	18	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	640	16	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	640	16	ug/kg	
83-32-9	Acenaphthene	ND	130	17	ug/kg	
208-96-8	Acenaphthylene	74.5	130	13	ug/kg	J
120-12-7	Anthracene	86.4	130	15	ug/kg	J
56-55-3	Benzo(a)anthracene	204	130	16	ug/kg	
50-32-8	Benzo(a)pyrene	142	130	14	ug/kg	
205-99-2	Benzo(b)fluoranthene	154	130	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	84.1	130	13	ug/kg	J
207-08-9	Benzo(k)fluoranthene	60.1	130	19	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	320	16	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	320	13	ug/kg	
91-58-7	2-Chloronaphthalene	ND	320	17	ug/kg	
106-47-8	4-Chloroaniline	ND	640	16	ug/kg	
86-74-8	Carbazole	18.0	130	15	ug/kg	J
218-01-9	Chrysene	219	130	16	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	320	15	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	320	19	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	320	23	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	320	20	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-301(9-10)
Lab Sample ID: MC29825-1 **Date Sampled:** 04/15/14
Matrix: SO - Soil **Date Received:** 04/16/14
Method: SW846 8270D SW846 3546 **Percent Solids:** 78.1
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	320	16	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	320	18	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	320	17	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	640	43	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	640	16	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	320	32	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	22.6	130	15	ug/kg	J
132-64-9	Dibenzofuran	ND	130	18	ug/kg	
84-74-2	Di-n-butyl phthalate 320	~~53.7~~	320	34	ug/kg	~~JB~~ UB
117-84-0	Di-n-octyl phthalate	ND	320	10	ug/kg	
84-66-2	Diethyl phthalate	ND	320	16	ug/kg	
131-11-3	Dimethyl phthalate	ND	320	18	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	13.9	320	12	ug/kg	J
206-44-0	Fluoranthene	389	130	17	ug/kg	
86-73-7	Fluorene	17.8	130	17	ug/kg	J
118-74-1	Hexachlorobenzene	ND	320	20	ug/kg	
87-68-3	Hexachlorobutadiene	ND	320	18	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	640	160	ug/kg	
67-72-1	Hexachloroethane	ND	320	15	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	68.9	130	14	ug/kg	J
78-59-1	Isophorone	ND	320	15	ug/kg	
91-57-6	2-Methylnaphthalene	ND	130	16	ug/kg	
88-74-4	2-Nitroaniline	ND	640	16	ug/kg	
99-09-2	3-Nitroaniline	ND	640	35	ug/kg	
100-01-6	4-Nitroaniline	ND	640	16	ug/kg	
91-20-3	Naphthalene	ND	130	20	ug/kg	
98-95-3	Nitrobenzene	ND	320	17	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	320	18	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	320	19	ug/kg	
85-01-8	Phenanthrene	490	130	17	ug/kg	
129-00-0	Pyrene	546	130	15	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	320	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	68%		30-130%
4165-62-2	Phenol-d5	66%		30-130%
118-79-6	2,4,6-Tribromophenol	69%		30-130%
4165-60-0	Nitrobenzene-d5	64%		30-130%
321-60-8	2-Fluorobiphenyl	72%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-301(9-10)		
Lab Sample ID:	MC29825-1	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	78.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	77%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-301(9-10)
Lab Sample ID: MC29825-1
Matrix: SO - Soil
Date Sampled: 04/15/14
Date Received: 04/16/14
Percent Solids: 78.1
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	12000	19	3.5	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Antimony	ND UJ	0.97	0.15	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Arsenic	1.1	0.97	0.20	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Barium	130	4.9	0.070	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Beryllium	0.45	0.39	0.023	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cadmium	0.23 B J	0.39	0.041	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Calcium	2630 J	490	6.1	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Chromium	24.7 J	0.97	0.092	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cobalt	14.8	4.9	0.046	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Copper	34.3	2.4	0.54	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Iron	25500	97	8.4	mg/kg	10	04/21/14	04/22/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Lead	17.3	0.97	0.16	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Magnesium	5230	490	5.0	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Manganese	622 J	1.5	0.039	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Mercury	ND	0.041	0.0089	mg/kg	1	04/21/14	04/21/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	26.7	3.9	0.043	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Potassium	5490	490	8.3	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Selenium	0.46 B	0.97	0.34	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Silver	0.27 B	0.49	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Sodium	155 B	490	3.2	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Thallium	0.41 B	0.97	0.13	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Vanadium	35.3	0.97	0.13	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Zinc	82.8 J	1.9	0.16	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]

(1) Instrument QC Batch: MA17039
(2) Instrument QC Batch: MA17047
(3) Instrument QC Batch: MA17050
(4) Prep QC Batch: MP22897
(5) Prep QC Batch: MP22898

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SB-301(9-10)
Lab Sample ID: MC29825-1
Matrix: SO - Soil
Date Sampled: 04/15/14
Date Received: 04/16/14
Percent Solids: 78.1
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.29	0.14	0.027	mg/kg	1	04/20/14 12:14	MA	SW846 9012 M
Solids, Percent	78.1			%	1	04/18/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-301(36-36.5)		
Lab Sample ID:	MC29825-2	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	86.6
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G136748.D	1	04/21/14	JM	n/a	n/a	MSG5241
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.62 g	10.0 ml	10.0 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9500	2700	ug/kg	
71-43-2	Benzene	ND	470	320	ug/kg	UJ
75-27-4	Bromodichloromethane	ND	1900	200	ug/kg	
75-25-2	Bromoform	ND	1900	340	ug/kg	
74-83-9	Bromomethane	ND	1900	570	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9500	2900	ug/kg	UJ
75-15-0	Carbon disulfide	ND	4700	120	ug/kg	
56-23-5	Carbon tetrachloride	ND	1900	210	ug/kg	
108-90-7	Chlorobenzene	ND	1900	150	ug/kg	
75-00-3	Chloroethane	ND	4700	720	ug/kg	
67-66-3	Chloroform	ND	1900	160	ug/kg	
74-87-3	Chloromethane	ND	4700	540	ug/kg	
124-48-1	Dibromochloromethane	ND	1900	310	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1900	250	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1900	310	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1900	390	ug/kg	UJ
156-59-2	cis-1,2-Dichloroethene	ND	1900	430	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1900	400	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1900	400	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1900	220	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1900	250	ug/kg	
100-41-4	Ethylbenzene	3760	1900	650	ug/kg	
591-78-6	2-Hexanone	ND	9500	720	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4700	510	ug/kg	
75-09-2	Methylene chloride	ND	1900	500	ug/kg	
100-42-5	Styrene	ND	4700	160	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1900	370	ug/kg	
127-18-4	Tetrachloroethene	ND	1900	300	ug/kg	
108-88-3	Toluene	ND	4700	200	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1900	210	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1900	540	ug/kg	
79-01-6	Trichloroethene	ND	1900	230	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-301(36-36.5)		
Lab Sample ID:	MC29825-2	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	86.6
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1900	860	ug/kg	
1330-20-7	Xylene (total)	2830	1900	210	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-301(36-36.5)
Lab Sample ID: MC29825-2 **Date Sampled:** 04/15/14
Matrix: SO - Soil **Date Received:** 04/16/14
Method: SW846 8270D SW846 3546 **Percent Solids:** 86.6
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72456.D	5	04/22/14	WK	04/17/14	OP37651	MSF3222
Run #2	R38361.D	50	04/22/14	WK	04/17/14	OP37651	MSR1413
Run #3	F72545.D	250	04/23/14	WK	04/17/14	OP37651	MSF3225

	Initial Weight	Final Volume
Run #1	20.8 g	1.0 ml
Run #2	20.8 g	1.0 ml
Run #3	20.8 g	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	1400	63	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	2800	71	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	2800	80	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	2800	450	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	5600	700	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	2800	350	ug/kg	
95-48-7	2-Methylphenol	ND	2800	110	ug/kg	
	3&4-Methylphenol	ND	2800	140	ug/kg	
88-75-5	2-Nitrophenol	ND	2800	74	ug/kg	
100-02-7	4-Nitrophenol	ND	5600	520	ug/kg	
87-86-5	Pentachlorophenol	ND	2800	200	ug/kg	
108-95-2	Phenol	ND	1400	79	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	2800	70	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	2800	69	ug/kg	
83-32-9	Acenaphthene	41200	560	74	ug/kg	
208-96-8	Acenaphthylene	268000 [a]	5600	550	ug/kg	D
120-12-7	Anthracene	160000 [a]	5600	670	ug/kg	D
56-55-3	Benzo(a)anthracene	85500 [a]	5600	720	ug/kg	D
50-32-8	Benzo(a)pyrene	58100 [a]	5600	600	ug/kg	D
205-99-2	Benzo(b)fluoranthene	41100	560	70	ug/kg	
191-24-2	Benzo(g,h,i)perylene	18600	560	56	ug/kg	
207-08-9	Benzo(k)fluoranthene	11700	560	84	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	1400	70	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	1400	57	ug/kg	
91-58-7	2-Chloronaphthalene	ND	1400	75	ug/kg	
106-47-8	4-Chloroaniline	ND	2800	70	ug/kg	
86-74-8	Carbazole	1600	560	66	ug/kg	
218-01-9	Chrysene	74300 [a]	5600	690	ug/kg	D
111-91-1	bis(2-Chloroethoxy)methane	ND	1400	65	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	1400	85	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-301(36-36.5)		
Lab Sample ID:	MC29825-2	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	86.6
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	1400	100	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1400	85	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1400	72	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1400	80	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1400	74	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	2800	190	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	2800	70	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1400	140	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	6270	560	66	ug/kg	
132-64-9	Dibenzofuran	15200	560	77	ug/kg	
84-74-2	Di-n-butyl phthalate 1400	~~318~~	1400	150	ug/kg	~~JB~~ UB
117-84-0	Di-n-octyl phthalate	ND	1400	43	ug/kg	
84-66-2	Diethyl phthalate	ND	1400	69	ug/kg	
131-11-3	Dimethyl phthalate	ND	1400	80	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	416	1400	51	ug/kg	J
206-44-0	Fluoranthene	153000 [a]	5600	760	ug/kg	D
86-73-7	Fluorene	161000 [a]	5600	740	ug/kg	D
118-74-1	Hexachlorobenzene	ND	1400	87	ug/kg	
87-68-3	Hexachlorobutadiene	ND	1400	80	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	2800	700	ug/kg	
67-72-1	Hexachloroethane	ND	1400	67	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	15600	560	61	ug/kg	
78-59-1	Isophorone	ND	1400	64	ug/kg	
91-57-6	2-Methylnaphthalene	25900	560	71	ug/kg	
88-74-4	2-Nitroaniline	ND	2800	70	ug/kg	
99-09-2	3-Nitroaniline	ND	2800	150	ug/kg	
100-01-6	4-Nitroaniline	ND	2800	70	ug/kg	
91-20-3	Naphthalene	279000 [a]	5600	890	ug/kg	D
98-95-3	Nitrobenzene	ND	1400	75	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	1400	80	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	1400	84	ug/kg	
85-01-8	Phenanthrene	591000 [b]	28000	3800	ug/kg	D
129-00-0	Pyrene	234000 [a]	5600	650	ug/kg	D
120-82-1	1,2,4-Trichlorobenzene	ND	1400	77	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
367-12-4	2-Fluorophenol	58%	28% [c]	37%	30-130%
4165-62-2	Phenol-d5	62%	28% [c]	27% [c]	30-130%
118-79-6	2,4,6-Tribromophenol	75%	38%	46%	30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-301(36-36.5)		
Lab Sample ID:	MC29825-2	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	86.6
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
4165-60-0	Nitrobenzene-d5	65%	52%	47%	30-130%
321-60-8	2-Fluorobiphenyl	71%	78%	96%	30-130%
1718-51-0	Terphenyl-d14	93%	87%	105%	30-130%

(a) Result is from Run# 2
(b) Result is from Run# 3
(c) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-301(36-36.5)
Lab Sample ID: MC29825-2
Matrix: SO - Soil
Date Sampled: 04/15/14
Date Received: 04/16/14
Percent Solids: 86.6
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	5200	18	3.2	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Antimony	ND UJ	0.90	0.14	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Arsenic	1.3	0.90	0.19	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Barium	57.2	4.5	0.065	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Beryllium	0.19 B	0.36	0.021	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Cadmium	0.081 ~~B~~ J	0.36	0.038	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Calcium	1200 J	450	5.6	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Chromium	16.7 J	0.90	0.085	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Cobalt	6.0	4.5	0.042	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Copper	26.5	2.2	0.50	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Iron	8860	9.0	0.78	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Lead	2.3	0.90	0.15	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Magnesium	1960	450	4.6	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Manganese	491 J	1.3	0.036	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Mercury	ND	0.037	0.0082	mg/kg	1	04/21/14	04/21/14	SA	SW846 7471B [1]	SW846 7471B [3]
Nickel	24.8	3.6	0.039	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Potassium	1440	450	7.7	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Selenium	ND	0.90	0.31	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Silver	0.13 B	0.45	0.11	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Sodium	246 B	450	3.0	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Thallium	0.40 B	0.90	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Vanadium	16.6	0.90	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Zinc	17.9 J	1.8	0.14	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [4]

(1) Instrument QC Batch: MA17039
(2) Instrument QC Batch: MA17047
(3) Prep QC Batch: MP22897
(4) Prep QC Batch: MP22898

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SB-301(36-36.5)
Lab Sample ID: MC29825-2
Matrix: SO - Soil
Date Sampled: 04/15/14
Date Received: 04/16/14
Percent Solids: 86.6
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.041 B	0.13	0.024	mg/kg	1	04/20/14 12:15	MA	SW846 9012 M
Solids, Percent	86.6			%	1	04/18/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-302(15-16)		
Lab Sample ID:	MC29825-3	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	51.3
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64625.D	1	04/21/14	AMY	n/a	n/a	MSM2270
Run #2							

	Initial Weight	Final Volume
Run #1	4.40 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	50.0	22	6.2	ug/kg	J
71-43-2	Benzene	ND	1.1	0.75	ug/kg	UJ
75-27-4	Bromodichloromethane	ND	4.4	0.46	ug/kg	
75-25-2	Bromoform	ND	4.4	0.79	ug/kg	
74-83-9	Bromomethane	ND	4.4	1.3	ug/kg	
78-93-3	2-Butanone (MEK)	ND	22	6.8	ug/kg	UJ
75-15-0	Carbon disulfide	10.7	11	0.29	ug/kg	J
56-23-5	Carbon tetrachloride	ND	4.4	0.49	ug/kg	
108-90-7	Chlorobenzene	ND	4.4	0.35	ug/kg	
75-00-3	Chloroethane	ND	11	1.7	ug/kg	
67-66-3	Chloroform	ND	4.4	0.37	ug/kg	
74-87-3	Chloromethane	ND	11	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	4.4	0.71	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.4	0.59	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.4	0.71	ug/kg	
75-35-4	1,1-Dichloroethene	ND	4.4	0.92	ug/kg	UJ
156-59-2	cis-1,2-Dichloroethene	ND	4.4	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	4.4	0.93	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.4	0.93	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.4	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.4	0.58	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	1.5	ug/kg	
591-78-6	2-Hexanone	ND	22	1.7	ug/kg	UJ
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	11	1.2	ug/kg	
75-09-2	Methylene chloride	ND	4.4	1.2	ug/kg	
100-42-5	Styrene	ND	11	0.38	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.4	0.87	ug/kg	
127-18-4	Tetrachloroethene	ND	4.4	0.69	ug/kg	
108-88-3	Toluene	0.81	11	0.46	ug/kg	J
71-55-6	1,1,1-Trichloroethane	ND	4.4	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.4	1.3	ug/kg	
79-01-6	Trichloroethene	ND	4.4	0.54	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-302(15-16)		
Lab Sample ID:	MC29825-3	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	51.3
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	4.4	2.0	ug/kg	
1330-20-7	Xylene (total)	ND	4.4	0.49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	90%		70-130%
460-00-4	4-Bromofluorobenzene	80%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-302(15-16)
Lab Sample ID: MC29825-3
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Date Sampled: 04/15/14
Date Received: 04/16/14
Percent Solids: 51.3

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72457.D	1	04/22/14	WK	04/17/14	OP37651	MSF3222
Run #2							

	Initial Weight	Final Volume
Run #1	20.8 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	470	21	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	940	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	940	27	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	940	150	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1900	230	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	940	120	ug/kg	
95-48-7	2-Methylphenol	ND	940	37	ug/kg	
	3&4-Methylphenol	ND	940	46	ug/kg	
88-75-5	2-Nitrophenol	ND	940	25	ug/kg	
100-02-7	4-Nitrophenol	ND	1900	180	ug/kg	
87-86-5	Pentachlorophenol	ND	940	66	ug/kg	
108-95-2	Phenol	ND	470	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	940	23	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	940	23	ug/kg	
83-32-9	Acenaphthene	29.0	190	25	ug/kg	J
208-96-8	Acenaphthylene	85.4	190	19	ug/kg	J
120-12-7	Anthracene	ND	190	23	ug/kg	
56-55-3	Benzo(a)anthracene	ND	190	24	ug/kg	
50-32-8	Benzo(a)pyrene	ND	190	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	190	23	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	190	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	190	28	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	470	24	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	470	19	ug/kg	
91-58-7	2-Chloronaphthalene	ND	470	25	ug/kg	
106-47-8	4-Chloroaniline	ND	940	23	ug/kg	
86-74-8	Carbazole	ND	190	22	ug/kg	
218-01-9	Chrysene	ND	190	23	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	470	22	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	470	29	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	470	34	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	470	29	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-302(15-16)		
Lab Sample ID:	MC29825-3	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	51.3
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	470	24	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	470	27	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	470	25	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	940	63	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	940	23	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	470	47	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	190	22	ug/kg	
132-64-9	Dibenzofuran	ND	190	26	ug/kg	
84-74-2	Di-n-butyl phthalate 470	~~71.2~~	470	50	ug/kg	~~JB~~ UB
117-84-0	Di-n-octyl phthalate	ND	470	15	ug/kg	
84-66-2	Diethyl phthalate	ND	470	23	ug/kg	
131-11-3	Dimethyl phthalate	ND	470	27	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	34.6	470	17	ug/kg	J
206-44-0	Fluoranthene	ND	190	26	ug/kg	
86-73-7	Fluorene	ND	190	25	ug/kg	
118-74-1	Hexachlorobenzene	ND	470	29	ug/kg	
87-68-3	Hexachlorobutadiene	ND	470	27	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	940	230	ug/kg	
67-72-1	Hexachloroethane	ND	470	23	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	190	21	ug/kg	
78-59-1	Isophorone	ND	470	22	ug/kg	
91-57-6	2-Methylnaphthalene	ND	190	24	ug/kg	
88-74-4	2-Nitroaniline	ND	940	23	ug/kg	
99-09-2	3-Nitroaniline	ND	940	51	ug/kg	
100-01-6	4-Nitroaniline	ND	940	23	ug/kg	
91-20-3	Naphthalene	ND	190	30	ug/kg	
98-95-3	Nitrobenzene	ND	470	25	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	470	27	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	470	28	ug/kg	
85-01-8	Phenanthrene	ND	190	25	ug/kg	
129-00-0	Pyrene	ND	190	22	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	470	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	72%		30-130%
4165-62-2	Phenol-d5	69%		30-130%
118-79-6	2,4,6-Tribromophenol	74%		30-130%
4165-60-0	Nitrobenzene-d5	60%		30-130%
321-60-8	2-Fluorobiphenyl	72%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-302(15-16)		
Lab Sample ID:	MC29825-3	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	51.3
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	72%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-302(15-16)
Lab Sample ID: MC29825-3
Matrix: SO - Soil
Date Sampled: 04/15/14
Date Received: 04/16/14
Percent Solids: 51.3
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	21500	19	3.5	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Antimony	ND UJ	0.97	0.15	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Arsenic	14.1	0.97	0.20	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Barium	44.9	4.8	0.070	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Beryllium	0.89	0.39	0.023	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cadmium	2.2 J	0.39	0.041	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Calcium	1620 J	480	6.1	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Chromium	38.7 J	0.97	0.092	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cobalt	16.8	4.8	0.045	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Copper	19.6	2.4	0.54	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Iron	40400	97	8.4	mg/kg	10	04/21/14	04/22/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Lead	17.4	0.97	0.16	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Magnesium	8280	480	4.9	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Manganese	464 J	1.4	0.039	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Mercury	0.018 B	0.062	0.014	mg/kg	1	04/21/14	04/21/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	35.2	3.9	0.042	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Potassium	4900	480	8.3	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Selenium	0.56 B	0.97	0.33	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Silver	0.21 B	0.48	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Sodium	4450	480	3.2	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Thallium	0.19 B	0.97	0.13	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Vanadium	47.2	0.97	0.13	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Zinc	115 J	1.9	0.16	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]

(1) Instrument QC Batch: MA17039
(2) Instrument QC Batch: MA17047
(3) Instrument QC Batch: MA17050
(4) Prep QC Batch: MP22897
(5) Prep QC Batch: MP22898

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-302(15-16)		
Lab Sample ID:	MC29825-3	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
		Percent Solids:	51.3
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.054 B	0.19	0.036	mg/kg	1	04/20/14 12:18	MA	SW846 9012 M
Solids, Percent	51.3			%	1	04/18/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-302(31-31.5)		
Lab Sample ID:	MC29825-4	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	85.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64626.D	1	04/21/14	AMY	n/a	n/a	MSM2270
Run #2							

	Initial Weight	Final Volume
Run #1	6.85 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	3.9	8.5	2.4	ug/kg	J
71-43-2	Benzene	ND	0.43	0.29	ug/kg	UJ
75-27-4	Bromodichloromethane	ND	1.7	0.18	ug/kg	
75-25-2	Bromoform	ND	1.7	0.30	ug/kg	
74-83-9	Bromomethane	ND	1.7	0.51	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.5	2.6	ug/kg	UJ
75-15-0	Carbon disulfide	9.7	4.3	0.11	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.7	0.19	ug/kg	
108-90-7	Chlorobenzene	ND	1.7	0.13	ug/kg	
75-00-3	Chloroethane	ND	4.3	0.64	ug/kg	
67-66-3	Chloroform	ND	1.7	0.14	ug/kg	
74-87-3	Chloromethane	ND	4.3	0.48	ug/kg	
124-48-1	Dibromochloromethane	ND	1.7	0.27	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.7	0.23	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.7	0.27	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.7	0.35	ug/kg	UJ
156-59-2	cis-1,2-Dichloroethene	ND	1.7	0.38	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.7	0.36	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.7	0.36	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.7	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.7	0.22	ug/kg	
100-41-4	Ethylbenzene	4.3	1.7	0.59	ug/kg	
591-78-6	2-Hexanone	ND	8.5	0.64	ug/kg	UJ
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.3	0.46	ug/kg	
75-09-2	Methylene chloride	ND	1.7	0.45	ug/kg	
100-42-5	Styrene	ND	4.3	0.14	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.7	0.33	ug/kg	
127-18-4	Tetrachloroethene	ND	1.7	0.27	ug/kg	
108-88-3	Toluene	1.6	4.3	0.17	ug/kg	J
71-55-6	1,1,1-Trichloroethane	ND	1.7	0.18	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.7	0.49	ug/kg	
79-01-6	Trichloroethene	ND	1.7	0.21	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-302(31-31.5)		
Lab Sample ID:	MC29825-4	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	85.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.7	0.77	ug/kg	
1330-20-7	Xylene (total)	5.2	1.7	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	90%		70-130%
460-00-4	4-Bromofluorobenzene	82%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-302(31-31.5)
Lab Sample ID: MC29825-4 **Date Sampled:** 04/15/14
Matrix: SO - Soil **Date Received:** 04/16/14
Method: SW846 8270D SW846 3546 **Percent Solids:** 85.8
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72458.D	1	04/22/14	WK	04/17/14	OP37651	MSF3222
Run #2							

	Initial Weight	Final Volume
Run #1	20.6 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	280	13	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	570	14	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	570	16	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	570	92	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	140	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	570	71	ug/kg	
95-48-7	2-Methylphenol	ND	570	23	ug/kg	
	3&4-Methylphenol	ND	570	28	ug/kg	
88-75-5	2-Nitrophenol	ND	570	15	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	110	ug/kg	
87-86-5	Pentachlorophenol	ND	570	40	ug/kg	
108-95-2	Phenol	ND	280	16	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	570	14	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	570	14	ug/kg	
83-32-9	Acenaphthene	ND	110	15	ug/kg	
208-96-8	Acenaphthylene	27.2	110	11	ug/kg	J
120-12-7	Anthracene	ND	110	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	110	15	ug/kg	
50-32-8	Benzo(a)pyrene	ND	110	12	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	110	14	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	110	11	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	110	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	12	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	15	ug/kg	
106-47-8	4-Chloroaniline	ND	570	14	ug/kg	
86-74-8	Carbazole	ND	110	13	ug/kg	
218-01-9	Chrysene	ND	110	14	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	13	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	17	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	20	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	280	17	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-302(31-31.5)
Lab Sample ID: MC29825-4 **Date Sampled:** 04/15/14
Matrix: SO - Soil **Date Received:** 04/16/14
Method: SW846 8270D SW846 3546 **Percent Solids:** 85.8
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	15	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	16	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	15	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	570	38	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	570	14	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	14	ug/kg	
132-64-9	Dibenzofuran	ND	110	16	ug/kg	
84-74-2	Di-n-butyl phthalate 280	~~39.6~~	280	30	ug/kg	~~JB~~ UB
117-84-0	Di-n-octyl phthalate	ND	280	8.9	ug/kg	
84-66-2	Diethyl phthalate	ND	280	14	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	16	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	15.3	280	10	ug/kg	J
206-44-0	Fluoranthene	ND	110	16	ug/kg	
86-73-7	Fluorene	ND	110	15	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	18	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	570	140	ug/kg	
67-72-1	Hexachloroethane	ND	280	14	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	110	13	ug/kg	
78-59-1	Isophorone	ND	280	13	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	14	ug/kg	
88-74-4	2-Nitroaniline	ND	570	14	ug/kg	
99-09-2	3-Nitroaniline	ND	570	31	ug/kg	
100-01-6	4-Nitroaniline	ND	570	14	ug/kg	
91-20-3	Naphthalene	52.2	110	18	ug/kg	J
98-95-3	Nitrobenzene	ND	280	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	16	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	17	ug/kg	
85-01-8	Phenanthrene	ND	110	15	ug/kg	
129-00-0	Pyrene	ND	110	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	71%		30-130%
4165-62-2	Phenol-d5	66%		30-130%
118-79-6	2,4,6-Tribromophenol	76%		30-130%
4165-60-0	Nitrobenzene-d5	68%		30-130%
321-60-8	2-Fluorobiphenyl	79%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-302(31-31.5)		
Lab Sample ID:	MC29825-4	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	85.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	85%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-302(31-31.5)
Lab Sample ID: MC29825-4
Matrix: SO - Soil
Date Sampled: 04/15/14
Date Received: 04/16/14
Percent Solids: 85.8
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	16400	19	3.3	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Antimony	ND UJ	0.93	0.14	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Arsenic	1.3	0.93	0.19	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Barium	189	4.6	0.067	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Beryllium	0.056 B	0.37	0.022	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cadmium	0.056 ~~B~~ J	0.37	0.039	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Calcium	1820 J	460	5.8	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Chromium	46.3 J	0.93	0.088	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cobalt	13.1	4.6	0.043	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Copper	34.9	2.3	0.51	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Iron	28600	93	8.0	mg/kg	10	04/21/14	04/22/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Lead	3.7	0.93	0.16	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Magnesium	8500	460	4.7	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Manganese	272 J	1.4	0.037	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Mercury	ND	0.038	0.0084	mg/kg	1	04/21/14	04/21/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	31.5	3.7	0.041	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Potassium	10600	460	7.9	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Selenium	ND	0.93	0.32	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Silver	0.29 B	0.46	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Sodium	540	460	3.1	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Thallium	0.15 B	0.93	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Vanadium	50.2	0.93	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Zinc	60.1 J	1.9	0.15	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]

(1) Instrument QC Batch: MA17039
(2) Instrument QC Batch: MA17047
(3) Instrument QC Batch: MA17050
(4) Prep QC Batch: MP22897
(5) Prep QC Batch: MP22898

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-302(31-31.5)		
Lab Sample ID:	MC29825-4	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
		Percent Solids:	85.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.14	0.027	mg/kg	1	04/20/14 12:19	MA	SW846 9012 M
Solids, Percent	85.8			%	1	04/18/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP04152014		
Lab Sample ID:	MC29825-5	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	53.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64627.D	1	04/21/14	AMY	n/a	n/a	MSM2270
Run #2							

	Initial Weight	Final Volume
Run #1	4.99 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	37.9	19	5.3	ug/kg	J
71-43-2	Benzene	ND	0.95	0.64	ug/kg	UJ
75-27-4	Bromodichloromethane	ND	3.8	0.39	ug/kg	
75-25-2	Bromoform	ND	3.8	0.67	ug/kg	
74-83-9	Bromomethane	ND	3.8	1.1	ug/kg	
78-93-3	2-Butanone (MEK)	ND	19	5.8	ug/kg	UJ
75-15-0	Carbon disulfide	10.9	9.5	0.25	ug/kg	
56-23-5	Carbon tetrachloride	ND	3.8	0.42	ug/kg	
108-90-7	Chlorobenzene	ND	3.8	0.30	ug/kg	
75-00-3	Chloroethane	ND	9.5	1.4	ug/kg	
67-66-3	Chloroform	ND	3.8	0.32	ug/kg	
74-87-3	Chloromethane	ND	9.5	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	3.8	0.61	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.8	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.8	0.61	ug/kg	
75-35-4	1,1-Dichloroethene	ND	3.8	0.78	ug/kg	UJ
156-59-2	cis-1,2-Dichloroethene	ND	3.8	0.85	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	3.8	0.79	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.8	0.79	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.8	0.43	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.8	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	3.8	1.3	ug/kg	
591-78-6	2-Hexanone	ND	19	1.4	ug/kg	UJ
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	9.5	1.0	ug/kg	
75-09-2	Methylene chloride	ND	3.8	1.0	ug/kg	
100-42-5	Styrene	ND	9.5	0.32	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.8	0.74	ug/kg	
127-18-4	Tetrachloroethene	ND	3.8	0.59	ug/kg	
108-88-3	Toluene	0.65	9.5	0.39	ug/kg	J
71-55-6	1,1,1-Trichloroethane	ND	3.8	0.41	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.8	1.1	ug/kg	
79-01-6	Trichloroethene	ND	3.8	0.46	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP04152014		
Lab Sample ID:	MC29825-5	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	53.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	3.8	1.7	ug/kg	
1330-20-7	Xylene (total)	ND	3.8	0.41	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	81%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP04152014		
Lab Sample ID:	MC29825-5	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	53.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72459.D	1	04/22/14	WK	04/17/14	OP37651	MSF3222
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	470	21	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	930	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	930	27	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	930	150	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1900	230	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	930	120	ug/kg	
95-48-7	2-Methylphenol	ND	930	37	ug/kg	
	3&4-Methylphenol	ND	930	45	ug/kg	
88-75-5	2-Nitrophenol	ND	930	25	ug/kg	
100-02-7	4-Nitrophenol	ND	1900	170	ug/kg	
87-86-5	Pentachlorophenol	ND	930	66	ug/kg	
108-95-2	Phenol	ND	470	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	930	23	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	930	23	ug/kg	
83-32-9	Acenaphthene	ND	190	25	ug/kg	
208-96-8	Acenaphthylene	47.8	190	19	ug/kg	J
120-12-7	Anthracene	ND	190	22	ug/kg	
56-55-3	Benzo(a)anthracene	ND	190	24	ug/kg	
50-32-8	Benzo(a)pyrene	ND	190	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	190	23	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	190	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	190	28	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	470	24	ug/kg	
85-68-7	Butyl benzyl phthalate	470 ~~20.6~~	470	19	ug/kg	~~JB~~ UB
91-58-7	2-Chloronaphthalene	ND	470	25	ug/kg	
106-47-8	4-Chloroaniline	ND	930	23	ug/kg	
86-74-8	Carbazole	ND	190	22	ug/kg	
218-01-9	Chrysene	ND	190	23	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	470	22	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	470	28	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	470	33	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	470	29	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP04152014		
Lab Sample ID:	MC29825-5	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	53.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	470	24	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	470	27	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	470	25	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	930	62	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	930	23	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	470	47	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	190	22	ug/kg	
132-64-9	Dibenzofuran	ND	190	26	ug/kg	
84-74-2	Di-n-butyl phthalate 470	66.0	470	49	ug/kg	JB UB
117-84-0	Di-n-octyl phthalate	ND	470	15	ug/kg	
84-66-2	Diethyl phthalate	ND	470	23	ug/kg	
131-11-3	Dimethyl phthalate	ND	470	27	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	23.3	470	17	ug/kg	J
206-44-0	Fluoranthene	ND	190	26	ug/kg	
86-73-7	Fluorene	ND	190	25	ug/kg	
118-74-1	Hexachlorobenzene	ND	470	29	ug/kg	
87-68-3	Hexachlorobutadiene	ND	470	27	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	930	230	ug/kg	
67-72-1	Hexachloroethane	ND	470	22	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	190	21	ug/kg	
78-59-1	Isophorone	ND	470	21	ug/kg	
91-57-6	2-Methylnaphthalene	ND	190	24	ug/kg	
88-74-4	2-Nitroaniline	ND	930	23	ug/kg	
99-09-2	3-Nitroaniline	ND	930	51	ug/kg	
100-01-6	4-Nitroaniline	ND	930	23	ug/kg	
91-20-3	Naphthalene	247	190	30	ug/kg	
98-95-3	Nitrobenzene	ND	470	25	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	470	27	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	470	28	ug/kg	
85-01-8	Phenanthrene	ND	190	25	ug/kg	
129-00-0	Pyrene	ND	190	22	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	470	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%		30-130%
4165-62-2	Phenol-d5	64%		30-130%
118-79-6	2,4,6-Tribromophenol	65%		30-130%
4165-60-0	Nitrobenzene-d5	55%		30-130%
321-60-8	2-Fluorobiphenyl	66%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP04152014		
Lab Sample ID:	MC29825-5	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	53.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	65%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DUP04152014
Lab Sample ID: MC29825-5
Matrix: SO - Soil
Date Sampled: 04/15/14
Date Received: 04/16/14
Percent Solids: 53.0
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	20000	18	3.2	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Antimony	ND UJ	0.90	0.14	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Arsenic	14.0	0.90	0.19	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Barium	40.9	4.5	0.065	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Beryllium	0.84	0.36	0.021	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cadmium	0.76 J	0.36	0.038	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Calcium	1490 J	450	5.6	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Chromium	36.7 J	0.90	0.085	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cobalt	15.6	4.5	0.042	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Copper	14.4	2.2	0.50	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Iron	36000	90	7.8	mg/kg	10	04/21/14	04/22/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Lead	14.8	0.90	0.15	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Magnesium	7910	450	4.6	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Manganese	392 J	1.3	0.036	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Mercury	0.016 B	0.060	0.013	mg/kg	1	04/21/14	04/21/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	31.9	3.6	0.039	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Potassium	4550	450	7.7	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Selenium	0.49 B	0.90	0.31	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Silver	0.17 B	0.45	0.11	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Sodium	4350	450	3.0	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Thallium	0.40 B	0.90	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Vanadium	45.1	0.90	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Zinc	85.0 J	1.8	0.14	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]

(1) Instrument QC Batch: MA17039
(2) Instrument QC Batch: MA17047
(3) Instrument QC Batch: MA17050
(4) Prep QC Batch: MP22897
(5) Prep QC Batch: MP22898

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	DUP04152014		
Lab Sample ID:	MC29825-5	**Date Sampled:**	04/15/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
		Percent Solids:	53.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.057 B	0.18	0.034	mg/kg	1	04/20/14 12:20	MA	SW846 9012 M
Solids, Percent	53			%	1	04/18/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-300(15-16)		
Lab Sample ID:	MC29825-6	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	83.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	G136747.D	1	04/21/14	JM	n/a	n/a	MSG5241
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.28 g	10.0 ml	20.0 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5200	1500	ug/kg	
71-43-2	Benzene	ND	260	180	ug/kg	UJ
75-27-4	Bromodichloromethane	ND	1000	110	ug/kg	
75-25-2	Bromoform	ND	1000	190	ug/kg	
74-83-9	Bromomethane	ND	1000	310	ug/kg	
78-93-3	2-Butanone (MEK)	ND	5200	1600	ug/kg	UJ
75-15-0	Carbon disulfide	ND	2600	69	ug/kg	
56-23-5	Carbon tetrachloride	ND	1000	120	ug/kg	
108-90-7	Chlorobenzene	ND	1000	82	ug/kg	
75-00-3	Chloroethane	ND	2600	400	ug/kg	
67-66-3	Chloroform	ND	1000	89	ug/kg	
74-87-3	Chloromethane	ND	2600	300	ug/kg	
124-48-1	Dibromochloromethane	ND	1000	170	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1000	140	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1000	170	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1000	220	ug/kg	UJ
156-59-2	cis-1,2-Dichloroethene	ND	1000	240	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1000	220	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1000	220	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1000	120	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1000	140	ug/kg	
100-41-4	Ethylbenzene	ND	1000	360	ug/kg	
591-78-6	2-Hexanone	ND	5200	400	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	2600	280	ug/kg	
75-09-2	Methylene chloride	ND	1000	280	ug/kg	
100-42-5	Styrene	ND	2600	89	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1000	210	ug/kg	
127-18-4	Tetrachloroethene	ND	1000	160	ug/kg	
108-88-3	Toluene	ND	2600	110	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1000	110	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1000	300	ug/kg	
79-01-6	Trichloroethene	ND	1000	130	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-300(15-16)		
Lab Sample ID:	MC29825-6	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	83.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1000	480	ug/kg	
1330-20-7	Xylene (total)	335	1000	110	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

(a) Dilution required due to high concentration of non-target compound.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-300(15-16)
Lab Sample ID: MC29825-6 **Date Sampled:** 04/16/14
Matrix: SO - Soil **Date Received:** 04/16/14
Method: SW846 8270D SW846 3546 **Percent Solids:** 83.8
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72460.D	1	04/22/14	WK	04/17/14	OP37651	MSF3222
Run #2	F72544.D	10	04/23/14	WK	04/17/14	OP37651	MSF3225

	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2	20.5 g	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	290	13	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	580	15	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	580	17	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	580	95	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	150	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	580	73	ug/kg	
95-48-7	2-Methylphenol	ND	580	23	ug/kg	
	3&4-Methylphenol	ND	580	28	ug/kg	
88-75-5	2-Nitrophenol	ND	580	16	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	110	ug/kg	
87-86-5	Pentachlorophenol	ND	580	41	ug/kg	
108-95-2	Phenol	ND	290	17	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	580	15	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	580	14	ug/kg	
83-32-9	Acenaphthene	19700 [a]	1200	160	ug/kg	D
208-96-8	Acenaphthylene	6410	120	12	ug/kg	
120-12-7	Anthracene	7990	120	14	ug/kg	
56-55-3	Benzo(a)anthracene	6510	120	15	ug/kg	
50-32-8	Benzo(a)pyrene	4630	120	13	ug/kg	
205-99-2	Benzo(b)fluoranthene	3060	120	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1500	120	12	ug/kg	
207-08-9	Benzo(k)fluoranthene	1270	120	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	290	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	290	12	ug/kg	
91-58-7	2-Chloronaphthalene	ND	290	16	ug/kg	
106-47-8	4-Chloroaniline	ND	580	15	ug/kg	
86-74-8	Carbazole	ND	120	14	ug/kg	
218-01-9	Chrysene	5790	120	14	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	290	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	290	18	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	290	21	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	290	18	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-300(15-16)
Lab Sample ID: MC29825-6 **Date Sampled:** 04/16/14
Matrix: SO - Soil **Date Received:** 04/16/14
Method: SW846 8270D SW846 3546 **Percent Solids:** 83.8
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	290	15	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	290	17	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	290	15	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	580	39	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	580	15	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	290	29	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	557	120	14	ug/kg	
132-64-9	Dibenzofuran	754	120	16	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	290	31	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	290	9.1	ug/kg	
84-66-2	Diethyl phthalate	ND	290	15	ug/kg	
131-11-3	Dimethyl phthalate	ND	290	17	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	42.3	290	11	ug/kg	J
206-44-0	Fluoranthene	8250	120	16	ug/kg	
86-73-7	Fluorene	3720	120	15	ug/kg	
118-74-1	Hexachlorobenzene	ND	290	18	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	17	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	580	150	ug/kg	
67-72-1	Hexachloroethane	ND	290	14	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1230	120	13	ug/kg	
78-59-1	Isophorone	ND	290	13	ug/kg	
91-57-6	2-Methylnaphthalene	ND	120	15	ug/kg	
88-74-4	2-Nitroaniline	ND	580	15	ug/kg	
99-09-2	3-Nitroaniline	ND	580	32	ug/kg	
100-01-6	4-Nitroaniline	ND	580	15	ug/kg	
91-20-3	Naphthalene	1390	120	19	ug/kg	
98-95-3	Nitrobenzene	ND	290	16	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	290	17	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	290	18	ug/kg	
85-01-8	Phenanthrene	37700 [a]	1200	160	ug/kg	D
129-00-0	Pyrene	20700 [a]	1200	140	ug/kg	D
120-82-1	1,2,4-Trichlorobenzene	ND	290	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	76%	64%	30-130%
4165-62-2	Phenol-d5	75%	68%	30-130%
118-79-6	2,4,6-Tribromophenol	82%	60%	30-130%
4165-60-0	Nitrobenzene-d5	72%	63%	30-130%
321-60-8	2-Fluorobiphenyl	81%	83%	30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-300(15-16)		
Lab Sample ID:	MC29825-6	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	83.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	84%	89%	30-130%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-300(15-16)
Lab Sample ID: MC29825-6
Matrix: SO - Soil
Date Sampled: 04/16/14
Date Received: 04/16/14
Percent Solids: 83.8
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	27800	18	3.3	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Antimony	ND UJ	0.91	0.14	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Arsenic	3.0	0.91	0.19	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Barium	1200	4.6	0.066	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Beryllium	0.63	0.36	0.022	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cadmium	0.15 ~~B~~ J	0.36	0.039	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Calcium	7080 J	460	5.7	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Chromium	39.5 J	0.91	0.087	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cobalt	14.0	4.6	0.043	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Copper	43.6	2.3	0.51	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Iron	33200	91	7.9	mg/kg	10	04/21/14	04/22/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Lead	28.4	0.91	0.15	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Magnesium	11400	460	4.7	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Manganese	464 J	1.4	0.036	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Mercury	0.030 B	0.038	0.0083	mg/kg	1	04/21/14	04/21/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	28.1	3.6	0.040	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Potassium	11500	460	7.8	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Selenium	ND	0.91	0.32	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Silver	0.15 B	0.46	0.11	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Sodium	1830	460	3.0	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Thallium	0.30 B	0.91	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Vanadium	56.5	0.91	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Zinc	88.9 J	1.8	0.15	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [5]

(1) Instrument QC Batch: MA17039
(2) Instrument QC Batch: MA17047
(3) Instrument QC Batch: MA17050
(4) Prep QC Batch: MP22897
(5) Prep QC Batch: MP22898

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-300(15-16)		
Lab Sample ID:	MC29825-6	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
		Percent Solids:	83.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.14	0.027	mg/kg	1	04/20/14 12:21	MA	SW846 9012 M
Solids, Percent	83.8			%	1	04/18/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-300(21.5-22)		
Lab Sample ID:	MC29825-7	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	58.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	G136739.D	1	04/21/14	JM	n/a	n/a	MSG5241
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.28 g	10.0 ml	50.0 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	4700	1300	ug/kg	
71-43-2	Benzene	ND	230	160	ug/kg	UJ
75-27-4	Bromodichloromethane	ND	940	98	ug/kg	
75-25-2	Bromoform	ND	940	170	ug/kg	
74-83-9	Bromomethane	ND	940	280	ug/kg	
78-93-3	2-Butanone (MEK)	ND	4700	1400	ug/kg	UJ
75-15-0	Carbon disulfide	ND	2300	61	ug/kg	
56-23-5	Carbon tetrachloride	ND	940	100	ug/kg	
108-90-7	Chlorobenzene	ND	940	74	ug/kg	
75-00-3	Chloroethane	ND	2300	350	ug/kg	
67-66-3	Chloroform	ND	940	79	ug/kg	
74-87-3	Chloromethane	ND	2300	260	ug/kg	
124-48-1	Dibromochloromethane	ND	940	150	ug/kg	
75-34-3	1,1-Dichloroethane	ND	940	130	ug/kg	
107-06-2	1,2-Dichloroethane	ND	940	150	ug/kg	
75-35-4	1,1-Dichloroethene	ND	940	190	ug/kg	UJ
156-59-2	cis-1,2-Dichloroethene	ND	940	210	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	940	200	ug/kg	
78-87-5	1,2-Dichloropropane	ND	940	200	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	940	110	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	940	120	ug/kg	
100-41-4	Ethylbenzene	1100	940	320	ug/kg	
591-78-6	2-Hexanone	ND	4700	350	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	2300	250	ug/kg	
75-09-2	Methylene chloride	ND	940	250	ug/kg	
100-42-5	Styrene	ND	2300	80	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	940	180	ug/kg	
127-18-4	Tetrachloroethene	ND	940	150	ug/kg	
108-88-3	Toluene	ND	2300	96	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	940	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	940	270	ug/kg	
79-01-6	Trichloroethene	ND	940	110	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-300(21.5-22)		
Lab Sample ID:	MC29825-7	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	58.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	940	430	ug/kg	
1330-20-7	Xylene (total)	525	940	100	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

(a) Dilution required due to high concentration of non-target compound.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-300(21.5-22)
Lab Sample ID: MC29825-7
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Date Sampled: 04/16/14
Date Received: 04/16/14
Percent Solids: 58.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72454.D	1	04/21/14	WK	04/17/14	OP37651	MSF3222
Run #2							

	Initial Weight	Final Volume
Run #1	20.7 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	410	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	820	21	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	820	24	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	820	130	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1600	210	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	820	100	ug/kg	
95-48-7	2-Methylphenol	ND	820	33	ug/kg	
	3&4-Methylphenol	ND	820	40	ug/kg	
88-75-5	2-Nitrophenol	ND	820	22	ug/kg	
100-02-7	4-Nitrophenol	ND	1600	150	ug/kg	
87-86-5	Pentachlorophenol	ND	820	58	ug/kg	
108-95-2	Phenol	ND	410	23	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	820	21	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	820	20	ug/kg	
83-32-9	Acenaphthene	8600	160	22	ug/kg	
208-96-8	Acenaphthylene	1090	160	16	ug/kg	
120-12-7	Anthracene	3940	160	20	ug/kg	
56-55-3	Benzo(a)anthracene	2050	160	21	ug/kg	
50-32-8	Benzo(a)pyrene	1330	160	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	921	160	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	420	160	16	ug/kg	
207-08-9	Benzo(k)fluoranthene	295	160	25	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	410	21	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	410	17	ug/kg	
91-58-7	2-Chloronaphthalene	ND	410	22	ug/kg	
106-47-8	4-Chloroaniline	ND	820	21	ug/kg	
86-74-8	Carbazole	ND	160	19	ug/kg	
218-01-9	Chrysene	1860	160	20	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	410	19	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	410	25	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	410	30	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	410	25	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-300(21.5-22)		
Lab Sample ID:	MC29825-7	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	58.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	410	21	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	410	24	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	410	22	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	820	55	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	820	21	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	410	41	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	137	160	20	ug/kg	J
132-64-9	Dibenzofuran	427	160	23	ug/kg	
84-74-2	Di-n-butyl phthalate 410	~~75.6~~	410	44	ug/kg	~~JB~~ UB
117-84-0	Di-n-octyl phthalate	ND	410	13	ug/kg	
84-66-2	Diethyl phthalate	ND	410	21	ug/kg	
131-11-3	Dimethyl phthalate	ND	410	24	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	21.1	410	15	ug/kg	J
206-44-0	Fluoranthene	3430	160	23	ug/kg	
86-73-7	Fluorene	3820	160	22	ug/kg	
118-74-1	Hexachlorobenzene	ND	410	26	ug/kg	
87-68-3	Hexachlorobutadiene	ND	410	24	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	820	210	ug/kg	
67-72-1	Hexachloroethane	ND	410	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	336	160	18	ug/kg	
78-59-1	Isophorone	ND	410	19	ug/kg	
91-57-6	2-Methylnaphthalene	1040	160	21	ug/kg	
88-74-4	2-Nitroaniline	ND	820	21	ug/kg	
99-09-2	3-Nitroaniline	ND	820	45	ug/kg	
100-01-6	4-Nitroaniline	ND	820	21	ug/kg	
91-20-3	Naphthalene	10300	160	26	ug/kg	
98-95-3	Nitrobenzene	ND	410	22	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	410	24	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	410	25	ug/kg	
85-01-8	Phenanthrene	10600	160	22	ug/kg	
129-00-0	Pyrene	5660	160	19	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	410	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	76%		30-130%
4165-62-2	Phenol-d5	72%		30-130%
118-79-6	2,4,6-Tribromophenol	71%		30-130%
4165-60-0	Nitrobenzene-d5	62%		30-130%
321-60-8	2-Fluorobiphenyl	69%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-300(21.5-22)		
Lab Sample ID:	MC29825-7	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	58.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	69%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-300(21.5-22)
Lab Sample ID: MC29825-7
Matrix: SO - Soil
Date Sampled: 04/16/14
Date Received: 04/16/14
Percent Solids: 58.7
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	16100	17	3.0	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Antimony	ND UJ	0.83	0.13	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Arsenic	10.8	0.83	0.17	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Barium	49.3	4.2	0.060	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Beryllium	0.76	0.33	0.020	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Cadmium	0.21 B J	0.33	0.035	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Calcium	3110 J	420	5.2	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Chromium	32.6 J	0.83	0.079	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Cobalt	11.8	4.2	0.039	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Copper	12.6	2.1	0.46	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Iron	36100	83	7.2	mg/kg	10	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Lead	12.8	0.83	0.14	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Magnesium	8080	420	4.3	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Manganese	723 J	1.2	0.033	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Mercury	0.022 B	0.045	0.0099	mg/kg	1	04/22/14	04/23/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	25.7	3.3	0.036	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Potassium	4240	420	7.1	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Selenium	0.47 B	0.83	0.29	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Silver	0.20 B	0.42	0.10	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Sodium	5100	420	2.8	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Thallium	0.40 B	0.83	0.11	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Vanadium	40.5	0.83	0.11	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Zinc	74.9 J	1.7	0.13	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA17046
(2) Instrument QC Batch: MA17047
(3) Prep QC Batch: MP22898
(4) Prep QC Batch: MP22907

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-300(21.5-22)		
Lab Sample ID:	MC29825-7	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
		Percent Solids:	58.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.049 B	0.16	0.030	mg/kg	1	04/20/14 12:13	MA	SW846 9012 M
Solids, Percent	58.7			%	1	04/18/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC29825-8	**Date Sampled:**	04/16/14
Matrix:	SO - Trip Blank Methanol	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G136730.D	1	04/21/14	JM	n/a	n/a	MSG5241
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.0 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	140	ug/kg	
71-43-2	Benzene	ND	25	17	ug/kg	UJ
75-27-4	Bromodichloromethane	ND	100	10	ug/kg	
75-25-2	Bromoform	ND	100	18	ug/kg	
74-83-9	Bromomethane	ND	100	30	ug/kg	
78-93-3	2-Butanone (MEK)	ND	500	150	ug/kg	UJ
75-15-0	Carbon disulfide	ND	250	6.5	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	11	ug/kg	
108-90-7	Chlorobenzene	ND	100	7.9	ug/kg	
75-00-3	Chloroethane	ND	250	38	ug/kg	
67-66-3	Chloroform	ND	100	8.5	ug/kg	
74-87-3	Chloromethane	ND	250	28	ug/kg	
124-48-1	Dibromochloromethane	ND	100	16	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	13	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	21	ug/kg	UJ
156-59-2	cis-1,2-Dichloroethene	ND	100	23	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	21	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	21	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	11	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	13	ug/kg	
100-41-4	Ethylbenzene	ND	100	34	ug/kg	
591-78-6	2-Hexanone	ND	500	38	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	27	ug/kg	
75-09-2	Methylene chloride	ND	100	27	ug/kg	
100-42-5	Styrene	ND	250	8.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	20	ug/kg	
127-18-4	Tetrachloroethene	ND	100	16	ug/kg	
108-88-3	Toluene	ND	250	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	11	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	29	ug/kg	
79-01-6	Trichloroethene	ND	100	12	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC29825-8	**Date Sampled:**	04/16/14
Matrix:	SO - Trip Blank Methanol	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	100	45	ug/kg	
1330-20-7	Xylene (total)	ND	100	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC29825-8A	**Date Sampled:**	04/16/14
Matrix:	SO - Trip Blank Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64618.D	1	04/21/14	AMY	n/a	n/a	MSM2270
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/kg	UJ
71-43-2	Benzene	ND	0.50	0.34	ug/kg	UJ
75-27-4	Bromodichloromethane	ND	2.0	0.21	ug/kg	
75-25-2	Bromoform	ND	2.0	0.35	ug/kg	
74-83-9	Bromomethane	ND	2.0	0.60	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	3.1	ug/kg	UJ
75-15-0	Carbon disulfide	ND	5.0	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.22	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.16	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.76	ug/kg	
67-66-3	Chloroform	ND	2.0	0.17	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.56	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.32	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.32	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	0.41	ug/kg	UJ
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.45	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.42	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.26	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.69	ug/kg	
591-78-6	2-Hexanone	ND	10	0.76	ug/kg	UJ
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.54	ug/kg	
75-09-2	Methylene chloride	ND	2.0	0.53	ug/kg	
100-42-5	Styrene	ND	5.0	0.17	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.39	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.31	ug/kg	
108-88-3	Toluene	ND	5.0	0.21	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.22	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.57	ug/kg	
79-01-6	Trichloroethene	ND	2.0	0.24	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC29825-8A	**Date Sampled:**	04/16/14
Matrix:	SO - Trip Blank Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	2.0	0.91	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	92%		70-130%
460-00-4	4-Bromofluorobenzene	79%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-300(40-41)		
Lab Sample ID:	MC29825-9	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	82.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	G136736.D	1	04/21/14	JM	n/a	n/a	MSG5241
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.39 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1200	340	ug/kg	
71-43-2	Benzene	ND	61	41	ug/kg	UJ
75-27-4	Bromodichloromethane	ND	240	26	ug/kg	
75-25-2	Bromoform	ND	240	43	ug/kg	
74-83-9	Bromomethane	ND	240	74	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1200	380	ug/kg	UJ
75-15-0	Carbon disulfide	ND	610	16	ug/kg	
56-23-5	Carbon tetrachloride	ND	240	27	ug/kg	
108-90-7	Chlorobenzene	ND	240	19	ug/kg	
75-00-3	Chloroethane	ND	610	93	ug/kg	
67-66-3	Chloroform	ND	240	21	ug/kg	
74-87-3	Chloromethane	ND	610	69	ug/kg	
124-48-1	Dibromochloromethane	ND	240	40	ug/kg	
75-34-3	1,1-Dichloroethane	ND	240	33	ug/kg	
107-06-2	1,2-Dichloroethane	ND	240	39	ug/kg	
75-35-4	1,1-Dichloroethene	ND	240	51	ug/kg	UJ
156-59-2	cis-1,2-Dichloroethene	ND	240	55	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	240	51	ug/kg	
78-87-5	1,2-Dichloropropane	ND	240	51	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	240	28	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	240	32	ug/kg	
100-41-4	Ethylbenzene	ND	240	84	ug/kg	
591-78-6	2-Hexanone	ND	1200	93	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	610	66	ug/kg	
75-09-2	Methylene chloride	ND	240	65	ug/kg	
100-42-5	Styrene	ND	610	21	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	240	48	ug/kg	
127-18-4	Tetrachloroethene	ND	240	38	ug/kg	
108-88-3	Toluene	ND	610	25	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	240	27	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	240	70	ug/kg	
79-01-6	Trichloroethene	ND	240	30	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-300(40-41)		
Lab Sample ID:	MC29825-9	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8260C	**Percent Solids:**	82.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	240	110	ug/kg	
1330-20-7	Xylene (total)	ND	240	27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%

(a) Dilution required due to high concentration of non-target compound.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-300(40-41)		
Lab Sample ID:	MC29825-9	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72461.D	1	04/22/14	WK	04/17/14	OP37651	MSF3222
Run #2							

	Initial Weight	Final Volume
Run #1	20.6 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	290	13	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	590	15	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	590	17	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	590	96	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	150	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	590	73	ug/kg	
95-48-7	2-Methylphenol	ND	590	23	ug/kg	
	3&4-Methylphenol	ND	590	29	ug/kg	
88-75-5	2-Nitrophenol	ND	590	16	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	110	ug/kg	
87-86-5	Pentachlorophenol	ND	590	41	ug/kg	
108-95-2	Phenol	ND	290	17	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	590	15	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	590	14	ug/kg	
83-32-9	Acenaphthene	640	120	16	ug/kg	
208-96-8	Acenaphthylene	916	120	12	ug/kg	
120-12-7	Anthracene	678	120	14	ug/kg	
56-55-3	Benzo(a)anthracene	384	120	15	ug/kg	
50-32-8	Benzo(a)pyrene	276	120	13	ug/kg	
205-99-2	Benzo(b)fluoranthene	181	120	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	93.1	120	12	ug/kg	J
207-08-9	Benzo(k)fluoranthene	73.2	120	18	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	290	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	290	12	ug/kg	
91-58-7	2-Chloronaphthalene	ND	290	16	ug/kg	
106-47-8	4-Chloroaniline	ND	590	15	ug/kg	
86-74-8	Carbazole	ND	120	14	ug/kg	
218-01-9	Chrysene	339	120	15	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	290	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	290	18	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	290	21	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	290	18	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-300(40-41)		
Lab Sample ID:	MC29825-9	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	290	15	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	290	17	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	290	16	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	590	39	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	590	15	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	290	29	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	28.5	120	14	ug/kg	J
132-64-9	Dibenzofuran	74.3	120	16	ug/kg	J
84-74-2	Di-n-butyl phthalate 290	41.1	290	31	ug/kg	JB UB
117-84-0	Di-n-octyl phthalate	ND	290	9.2	ug/kg	
84-66-2	Diethyl phthalate	ND	290	15	ug/kg	
131-11-3	Dimethyl phthalate	ND	290	17	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	14.3	290	11	ug/kg	J
206-44-0	Fluoranthene	634	120	16	ug/kg	
86-73-7	Fluorene	831	120	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	290	18	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	17	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	590	150	ug/kg	
67-72-1	Hexachloroethane	ND	290	14	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	74.1	120	13	ug/kg	J
78-59-1	Isophorone	ND	290	14	ug/kg	
91-57-6	2-Methylnaphthalene	1430	120	15	ug/kg	
88-74-4	2-Nitroaniline	ND	590	15	ug/kg	
99-09-2	3-Nitroaniline	ND	590	32	ug/kg	
100-01-6	4-Nitroaniline	ND	590	15	ug/kg	
91-20-3	Naphthalene	2130	120	19	ug/kg	
98-95-3	Nitrobenzene	ND	290	16	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	290	17	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	290	18	ug/kg	
85-01-8	Phenanthrene	2380	120	16	ug/kg	
129-00-0	Pyrene	1040	120	14	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	68%		30-130%
4165-62-2	Phenol-d5	66%		30-130%
118-79-6	2,4,6-Tribromophenol	68%		30-130%
4165-60-0	Nitrobenzene-d5	63%		30-130%
321-60-8	2-Fluorobiphenyl	70%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-300(40-41)		
Lab Sample ID:	MC29825-9	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	74%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-300(40-41)
Lab Sample ID: MC29825-9
Matrix: SO - Soil
Date Sampled: 04/16/14
Date Received: 04/16/14
Percent Solids: 82.8
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7990	18	3.3	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Antimony	ND UJ	0.92	0.14	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Arsenic	0.87 B	0.92	0.19	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Barium	55.3	4.6	0.067	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Beryllium	0.22 B	0.37	0.022	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Cadmium	ND UJ	0.37	0.039	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Calcium	1360 J	460	5.8	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Chromium	22.7 J	0.92	0.088	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Cobalt	5.2	4.6	0.043	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Copper	14.6	2.3	0.51	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Iron	13500	9.2	0.80	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Lead	3.0	0.92	0.15	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Magnesium	2980	460	4.7	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Manganese	122 J	1.4	0.037	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Mercury	ND	0.039	0.0086	mg/kg	1	04/22/14	04/23/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	16.9	3.7	0.040	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Potassium	2700	460	7.9	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Selenium	0.42 B	0.92	0.32	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Silver	0.17 B	0.46	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Sodium	234 B	460	3.1	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Thallium	0.18 B	0.92	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Vanadium	26.6	0.92	0.12	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]
Zinc	22.9 J	1.8	0.15	mg/kg	1	04/21/14	04/21/14	EAL	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA17046
(2) Instrument QC Batch: MA17047
(3) Prep QC Batch: MP22898
(4) Prep QC Batch: MP22907

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-300(40-41)		
Lab Sample ID:	MC29825-9	**Date Sampled:**	04/16/14
Matrix:	SO - Soil	**Date Received:**	04/16/14
		Percent Solids:	82.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.14	0.027	mg/kg	1	04/20/14 12:22	MA	SW846 9012 M
Solids, Percent	82.8			%	1	04/18/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

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Consolidated Edison Company of New York, Inc. - Watson Avenue

Data Usability Summary Report

BRONX, NEW YORK

Volatile, Semivolatile, Metals and Miscellaneous Analyses

SDG #MC29908

Analyses Performed By:
Accutest Laboratories
Marlborough, Massachussetts

Report: #21695R
Review Level: Tier III
Project: B0043515.0006.00002

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #MC29908 for samples collected in association with the Con Edison Former Unionport Works site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	PCB	MET	MISC
MC29908	SB-303(13-13.3)	MC29908-1	Soil	4/17/2014		X	X		X	X
	SB-303(18.5-19)	MC29908-2	Soil	4/17/2014		X	X		X	X
	SB-303(22.5-23)	MC29908-3	Soil	4/17/2014		X	X		X	X
	SB-306(9.5-10)	MC29908-4	Soil	4/17/2014		X	X		X	X
	SB-306(20-20.5)	MC29908-5	Soil	4/17/2014		X	X		X	X
	SB-306(42-44)	MC29908-6	Soil	4/17/2014		X	X		X	X
	SB-304(10.5-11)	MC29908-7	Soil	4/18/2014		X	X		X	X
	SB-304(17-17.5)	MC29908-8	Soil	4/18/2014		X	X		X	X
	SB-304(28.5-29)	MC29908-9	Soil	4/18/2014		X	X		X	X
	TRIP BLANK-02	MC29908-10	Soil	4/18/2014		X				
	TRIP BLANK-02a	MC29908-10A	Soil	4/18/2014		X				

Note:
1. Miscellaneous analysis includes cyanide.
2. The matrx spike/matrix spike duplicate (MS/MSD) analysis was performed on samples SB-303(18.5-19) and SB-306(9.5-10) for VOCs.
3. The MS/MSD analysis was performed on sample SB-303(22.5-23) for SVOCs.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260 and 8270 as referenced in the NYSDEC ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Soil	14 days from collection to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were detected in the associated QA blanks; however, the associated sample results were non-detect. Therefore, no qualification of the sample results was required.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
SB-306(9.5-10) SB-306(20-20.5) SB-304(10.5-11) SB-304(17-17.5) SB-304(38.5-29) TRIP BLANK-02a	ICV %RSD	1,1-Dichloroethene	19.7%
		2-Butanone	16.9%
		Benzene	17.2%
		Trichloroethene	16.3%
	CCV %D	Acetone	-25.3%
		2-Butanone	-27.9%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
	%RSD >90%	Non-detect	R
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D >90% (increase/decrease in sensitivity)	Non-detect	R
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
SB-306(9.5-10)	Acetone	AC	< LL but > 10%
	Trichloroethene		
	Vinyl chloride		
	Bromomethane	< LL but > 10%	
	Chloromethane		
	Bromodichloromethane	> UL	AC
	Bromoform		
	2-Butanone		
	Dibromochloromethane		
	1,2-Dichloroethane		
	trans-1,3-Dichloropropene		

Sample Locations	Compound	MS Recovery	MSD Recovery
	2-Hexanone		
	4-Methyl-2-pentanone		
	1,1,2,2-Tetrachloroethane		
	1,1,2-Trichloroethane		

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than of the control limit presented in the following table.

Sample Locations	Compound
SB-306(9.5-10)	Acetone
	Bromodichloromethane
	2-Butanone
	Chlorobenzene
	Chloroform
	Dibromochloromethane
	1,2-Dichloroethane
	1,2-Dichloropropane
	cis-1,3-Dichloropropene
	trans-1,3-Dichloropropene
	4-Methyl-2-pentanone
	Styrene
	Toluene
	1,1,2-Trichloroethane
	Xylene (total)

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Field duplicate samples were not collected in association with this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Field blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD)		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS)		X	X		
Matrix Spike Duplicate(MSD)		X	X		
MS/MSD Precision (RPD)		X	X		
Field Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X	X		
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
SB-303(13-13.3) SB-303(18.5-19) SB-303(22.5-23) SB-306(9.5-10) SB-306(20-20.5) SB-306(42-44) SB-304(10.5-11) SB-304(17-17.5) SB-304(28.5-29)	CCAL %D	2-Methylphenol	24.2%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
	%RSD >90%	Non-detect	R
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D >90% (increase/decrease in sensitivity)	Non-detect	R
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC

analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
SB-303(22.5-23)	2,4-Dinitrophenol	< LL but > 10%	AC

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Field duplicate samples were not collected in association with this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Field blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate(MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6000/7000 and 9012. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

  B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

  E The reported value is estimated due to the presence of interference.

  N Spiked sample recovery is not within control limits.

  * Duplicate analysis is not within control limits.

- Validation Qualifiers

  J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010B	Soil	180 days from collection to analysis	Cool to <6 °C.
SW-846 7471	Soil	28 days from collection to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration and Continuing Calibration

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All continuing calibration verification standard recoveries were within the control limit.

3.2 CRDL Check Standard

The CRDL check standard serves to verify the linearity of calibration of the analysis at the CRDL. The CRDL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe), magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the CRDL standard analysis are presented below in the CRDL standards evaluation table.

All analytes associated with CRDL standard recoveries were within control limits.

3.3 ICP Interference Control Sample (ICS)

The ICS verifies the laboratories interelement and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier "N" will be removed.

The MS/MSD analysis was not performed on a sample location within this SDG.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices and two times the CRDL for soil matrices.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. However, the MS/MSD analysis was not performed on a sample location within this SDG.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Field duplicate samples were not collected in association with this SDG.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit recoveries between the control limits of 80% and 120%. The relative percent difference (RPD) between the LCS and LCSD results must be no greater than the established acceptance limit of 20%.

All analytes associated with the LCS/LCSD analysis exhibited recoveries and RPD within the control limits.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

The serial dilution analysis was not performed on a sample location within this SDG.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6000/7000	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X		X	
B. Method Blanks		X		X	
C. Field Blanks					X
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R					X
Matrix Spike Duplicate (MSD) %R					X
MS/MSD Precision (RPD)					X
Laboratory Duplicate (RPD)					X
Field Duplicate (RPD)					X
ICP Serial Dilution					X
Reporting Limit Verification		X		X	
Raw Data		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
CRDL Standard		X		X	
ICP Interference Check		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Cyanide by SW-846 9012	Soil	14 days from collection to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the MDL. The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 and all initial calibration verification standard recoveries were within control limits.

All continuing calibration standard recoveries were within the control limit.

4. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier “N” will be removed.

The MS analysis was not performed on a sample location within this SDG.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices and two times the CRDL for soil matrices.

The laboratory duplicate analysis was not performed on a sample location within this SDG.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Field duplicate samples were not collected in association with this SDG.

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA 9012	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Field blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Lab/Field Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R Percent recovery
%RSD Relative standard deviation
RPD Relative percent difference

SAMPLE COMPLIANCE REPORT

SAMPLE COMPLIANCE REPORT

SDG	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PEST/ HERB /PCB	MET	MISC	
MC29908	4/17/2014	SW846	SB-303(13-13.3)	Soil	Yes	No	--	Yes	Yes	SVOC – CCAL %D
	4/17/2014	SW846	SB-303(18.5-19)	Soil	Yes	No	--	Yes	Yes	SVOC – CCAL %D
	4/17/2014	SW846	SB-303(22.5-23)	Soil	Yes	No	--	Yes	Yes	SVOC – CCAL %D, MS %R
	4/17/2014	SW846	SB-306(9.5-10)	Soil	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCAL %D, MS %R, MSD %R, MS/MSD RPD SVOC – CCAL %D
	4/17/2014	SW846	SB-306(20-20.5)	Soil	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCAL %D SVOC – CCAL %D
	4/17/2014	SW846	SB-306(42-44)	Soil	Yes	No	--	Yes	Yes	SVOC – CCAL %D
	4/18/2014	SW846	SB-304(10.5-11)	Soil	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCAL %D SVOC – CCAL %D
	4/18/2014	SW846	SB-304(17-17.5)	Soil	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCAL %D SVOC – CCAL %D
	4/18/2014	SW846	SB-304(28.5-29)	Soil	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCAL %D SVOC – CCAL %D
	4/18/2014	SW846	TRIP BLANK-02	Soil	Yes	--	--	--	--	
	4/18/2014	SW846	TRIP BLANK-02a	Soil	No	--	--	--	--	VOC – ICAL %RSD, CCAL %D

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: 

DATE: May 21, 2014

PEER REVIEW: Dennis Capria

DATE: May 27, 2014

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: MC29908

Client / Reporting Information

Company Name: ARCADIS
Street Address: 6723 TOWPATH RD
City: SYRACUSE State: NY Zip: 13214
Project Contact: DAVID CORNELL E-mail:
Phone #: 315 671 9319 Fax #:
Sampler(s) Name(s): JON LEMESSURIER Phone #: 315 558 1904

Project Information

Project Name: CONED - UNIONPORT
Street: WATSON AVE
City: BRONX
Project#: BUD43515
Client PO#:
Project Manager: CHARLES LEARY

Billing Information (If different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB - Equipment Blank; RB - Rinse Blank; TB - Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfite	TCL VOC	TCL SVOC, TAL METALS (N, % SOL)	LAB USE ONLY
-1	SB-303 (13-13.3)		4/17/14	0900	JDL	SO	4					1		1		2	X	X	
-2	SB-303 (18.5-19)			0940			4					1		1		2	X	X	
-3	SB-303 (22.5-23)			1000			4					1		1		2	X	X	
-4	SB-306 (9.5-10)			1350			4					1		1		2	X	X	
-5	SB-306 (20-20.5)			1400			4					1		1		2	X	X	
-6	SB-306 (42-44)			1410			4					1		1		2	X	X	
-7	SB-304 (10.5-11)		4/18/14	1025			4					1		1		2	X	X	
-8	SB-304 (17-17.5)			1030			4					1		1		2	X	X	
-9	SB-304 (28.5-29)			1035			4					1		1		2	X	X	
-10	TRIP BLANK-02			—			3							1		2	X	X	1E, 10H2

Turnaround Time (Business days)

- [x] Std. 10 Business Days → CALL DAVID CORNELL 315 671 9319
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Date Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

DISPOSE SAMPLES BY LAB

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		4/18/14 1200			4-18-14 1733	
2						
3						
4						
5						

Custody Seal # | Intact | Not intact | Preserved where applicable | On Ice | Cooler Temp: 0.7 °C

ACCUTEST SYRACUSE-SC

MC29908: Chain of Custody
Page 1 of 2

Report of Analysis

Client Sample ID:	SB-303(13-13.3)		
Lab Sample ID:	MC29908-1	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	70.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K78580.D	1	04/24/14	JM	n/a	n/a	MSK2504
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	3.75 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2100	590	ug/kg	
71-43-2	Benzene	389	110	71	ug/kg	
75-27-4	Bromodichloromethane	ND	420	44	ug/kg	
75-25-2	Bromoform	ND	420	75	ug/kg	
74-83-9	Bromomethane	ND	420	130	ug/kg	
78-93-3	2-Butanone (MEK)	ND	2100	650	ug/kg	
75-15-0	Carbon disulfide	ND	1100	27	ug/kg	
56-23-5	Carbon tetrachloride	ND	420	46	ug/kg	
108-90-7	Chlorobenzene	ND	420	33	ug/kg	
75-00-3	Chloroethane	ND	1100	160	ug/kg	
67-66-3	Chloroform	ND	420	36	ug/kg	
74-87-3	Chloromethane	ND	1100	120	ug/kg	
124-48-1	Dibromochloromethane	ND	420	68	ug/kg	
75-34-3	1,1-Dichloroethane	ND	420	56	ug/kg	
107-06-2	1,2-Dichloroethane	ND	420	68	ug/kg	
75-35-4	1,1-Dichloroethene	ND	420	87	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	420	95	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	420	88	ug/kg	
78-87-5	1,2-Dichloropropane	ND	420	88	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	420	48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	420	55	ug/kg	
100-41-4	Ethylbenzene	319	420	140	ug/kg	J
591-78-6	2-Hexanone	ND	2100	160	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1100	110	ug/kg	
75-09-2	Methylene chloride	ND	420	110	ug/kg	
100-42-5	Styrene	ND	1100	36	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	420	83	ug/kg	
127-18-4	Tetrachloroethene	582	420	66	ug/kg	
108-88-3	Toluene	ND	1100	43	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	420	46	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	420	120	ug/kg	
79-01-6	Trichloroethene	ND	420	51	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(13-13.3)		
Lab Sample ID:	MC29908-1	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	70.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	420	190	ug/kg	
1330-20-7	Xylene (total)	208	420	46	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(13-13.3)		
Lab Sample ID:	MC29908-1	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	70.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	R38371.D	5	04/23/14	WK	04/21/14	OP37687	MSR1414
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	1800	79	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	3500	89	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	3500	100	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	3500	570	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	7000	880	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	3500	440	ug/kg	
95-48-7	2-Methylphenol	ND	3500	140	ug/kg	
	3&4-Methylphenol	ND	3500	170	ug/kg	
88-75-5	2-Nitrophenol	ND	3500	94	ug/kg	
100-02-7	4-Nitrophenol	ND	7000	660	ug/kg	
87-86-5	Pentachlorophenol	ND	3500	250	ug/kg	
108-95-2	Phenol	ND	1800	100	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	3500	88	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	3500	87	ug/kg	
83-32-9	Acenaphthene	ND	700	94	ug/kg	
208-96-8	Acenaphthylene	1680	700	70	ug/kg	
120-12-7	Anthracene	874	700	85	ug/kg	
56-55-3	Benzo(a)anthracene	3370	700	90	ug/kg	
50-32-8	Benzo(a)pyrene	4450	700	75	ug/kg	
205-99-2	Benzo(b)fluoranthene	4340	700	88	ug/kg	
191-24-2	Benzo(g,h,i)perylene	4250	700	70	ug/kg	
207-08-9	Benzo(k)fluoranthene	1220	700	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	1800	89	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	1800	72	ug/kg	
91-58-7	2-Chloronaphthalene	ND	1800	95	ug/kg	
106-47-8	4-Chloroaniline	ND	3500	88	ug/kg	
86-74-8	Carbazole	ND	700	83	ug/kg	
218-01-9	Chrysene	2950	700	87	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	1800	82	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	1800	110	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	1800	130	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1800	110	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(13-13.3)		
Lab Sample ID:	MC29908-1	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	70.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1800	91	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1800	100	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1800	93	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	3500	230	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	3500	88	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1800	180	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	888	700	84	ug/kg	
132-64-9	Dibenzofuran	ND	700	97	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	1800	190	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	1800	55	ug/kg	
84-66-2	Diethyl phthalate	ND	1800	88	ug/kg	
131-11-3	Dimethyl phthalate	ND	1800	100	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1800	65	ug/kg	
206-44-0	Fluoranthene	2800	700	96	ug/kg	
86-73-7	Fluorene	ND	700	93	ug/kg	
118-74-1	Hexachlorobenzene	ND	1800	110	ug/kg	
87-68-3	Hexachlorobutadiene	ND	1800	100	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	3500	880	ug/kg	
67-72-1	Hexachloroethane	ND	1800	85	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	2920	700	78	ug/kg	
78-59-1	Isophorone	ND	1800	81	ug/kg	
91-57-6	2-Methylnaphthalene	3230	700	89	ug/kg	
88-74-4	2-Nitroaniline	ND	3500	88	ug/kg	
99-09-2	3-Nitroaniline	ND	3500	190	ug/kg	
100-01-6	4-Nitroaniline	ND	3500	88	ug/kg	
91-20-3	Naphthalene	3080	700	110	ug/kg	
98-95-3	Nitrobenzene	ND	1800	95	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	1800	100	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	1800	110	ug/kg	
85-01-8	Phenanthrene	1520	700	95	ug/kg	
129-00-0	Pyrene	5490	700	82	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	1800	97	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		30-130%
4165-62-2	Phenol-d5	49%		30-130%
118-79-6	2,4,6-Tribromophenol	71%		30-130%
4165-60-0	Nitrobenzene-d5	52%		30-130%
321-60-8	2-Fluorobiphenyl	64%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(13-13.3)		
Lab Sample ID:	MC29908-1	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	70.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	72%		30-130%

(a) Elevated RL due to dilution required for matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(13-13.3)		
Lab Sample ID:	MC29908-1	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	70.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	6220	23	4.1	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Antimony	ND	1.1	0.17	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Arsenic	11.5	1.1	0.24	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Barium	121	5.7	0.083	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Beryllium	0.51	0.46	0.027	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cadmium	0.61	0.46	0.048	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Calcium	2570	570	7.2	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Chromium	17.3	1.1	0.11	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cobalt	22.1	5.7	0.054	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Copper	62.9	2.9	0.63	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Iron	29900	110	10	mg/kg	10	04/22/14	04/23/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Lead	993	1.1	0.19	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Magnesium	1480	570	5.9	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Manganese	348	1.7	0.046	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Mercury	0.82	0.045	0.0099	mg/kg	1	04/22/14	04/23/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	65.5	4.6	0.050	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Potassium	1320	570	9.8	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Selenium	5.1	1.1	0.40	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Silver	0.40 B	0.57	0.14	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Sodium	444 B	570	3.8	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Thallium	0.23 B	1.1	0.15	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Vanadium	19.9	1.1	0.15	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Zinc	290	2.3	0.18	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]

(1) Instrument QC Batch: MA17046
(2) Instrument QC Batch: MA17050
(3) Instrument QC Batch: MA17059
(4) Prep QC Batch: MP22907
(5) Prep QC Batch: MP22908

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-303(13-13.3)		
Lab Sample ID:	MC29908-1	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	70.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.28	0.17	0.032	mg/kg	1	04/20/14 12:38	MA	SW846 9012 M
Solids, Percent	70.5			%	1	04/21/14	HS	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-303(18.5-19)		
Lab Sample ID:	MC29908-2	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	63.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K78582.D	1	04/24/14	JM	n/a	n/a	MSK2504
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.21 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1800	510	ug/kg	
71-43-2	Benzene	ND	91	61	ug/kg	
75-27-4	Bromodichloromethane	ND	360	38	ug/kg	
75-25-2	Bromoform	ND	360	64	ug/kg	
74-83-9	Bromomethane	ND	360	110	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1800	560	ug/kg	
75-15-0	Carbon disulfide	ND	910	24	ug/kg	
56-23-5	Carbon tetrachloride	ND	360	40	ug/kg	
108-90-7	Chlorobenzene	ND	360	29	ug/kg	
75-00-3	Chloroethane	ND	910	140	ug/kg	
67-66-3	Chloroform	ND	360	31	ug/kg	
74-87-3	Chloromethane	ND	910	100	ug/kg	
124-48-1	Dibromochloromethane	ND	360	59	ug/kg	
75-34-3	1,1-Dichloroethane	ND	360	48	ug/kg	
107-06-2	1,2-Dichloroethane	ND	360	58	ug/kg	
75-35-4	1,1-Dichloroethene	ND	360	75	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	360	82	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	360	76	ug/kg	
78-87-5	1,2-Dichloropropane	ND	360	76	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	360	41	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	360	48	ug/kg	
100-41-4	Ethylbenzene	2340	360	120	ug/kg	
591-78-6	2-Hexanone	ND	1800	140	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	910	98	ug/kg	
75-09-2	Methylene chloride	ND	360	96	ug/kg	
100-42-5	Styrene	ND	910	31	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	360	71	ug/kg	
127-18-4	Tetrachloroethene	ND	360	57	ug/kg	
108-88-3	Toluene	ND	910	37	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	360	39	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	360	100	ug/kg	
79-01-6	Trichloroethene	ND	360	44	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(18.5-19)		
Lab Sample ID:	MC29908-2	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	63.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	360	160	ug/kg	
1330-20-7	Xylene (total)	826	360	40	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
2037-26-5	Toluene-D8	109%		70-130%
460-00-4	4-Bromofluorobenzene	107%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(18.5-19)		
Lab Sample ID:	MC29908-2	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	63.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38372.D	1	04/23/14	WK	04/21/14	OP37687	MSR1414
Run #2							

	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	390	17	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	770	20	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	770	22	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	770	130	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1500	190	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	770	97	ug/kg	
95-48-7	2-Methylphenol	ND	770	31	ug/kg	
	3&4-Methylphenol	ND	770	38	ug/kg	
88-75-5	2-Nitrophenol	ND	770	21	ug/kg	
100-02-7	4-Nitrophenol	ND	1500	140	ug/kg	
87-86-5	Pentachlorophenol	ND	770	54	ug/kg	
108-95-2	Phenol	ND	390	22	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	770	19	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	770	19	ug/kg	
83-32-9	Acenaphthene	ND	150	21	ug/kg	
208-96-8	Acenaphthylene	ND	150	15	ug/kg	
120-12-7	Anthracene	ND	150	19	ug/kg	
56-55-3	Benzo(a)anthracene	ND	150	20	ug/kg	
50-32-8	Benzo(a)pyrene	ND	150	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	150	19	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	150	15	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	150	23	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	390	20	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	390	16	ug/kg	
91-58-7	2-Chloronaphthalene	ND	390	21	ug/kg	
106-47-8	4-Chloroaniline	ND	770	19	ug/kg	
86-74-8	Carbazole	ND	150	18	ug/kg	
218-01-9	Chrysene	ND	150	19	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	390	18	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	390	24	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	390	28	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	390	24	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(18.5-19)		
Lab Sample ID:	MC29908-2	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	63.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	390	20	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	390	22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	390	21	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	770	52	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	770	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	390	39	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	150	18	ug/kg	
132-64-9	Dibenzofuran	ND	150	21	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	390	41	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	390	12	ug/kg	
84-66-2	Diethyl phthalate	ND	390	19	ug/kg	
131-11-3	Dimethyl phthalate	ND	390	22	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	390	14	ug/kg	
206-44-0	Fluoranthene	ND	150	21	ug/kg	
86-73-7	Fluorene	ND	150	21	ug/kg	
118-74-1	Hexachlorobenzene	ND	390	24	ug/kg	
87-68-3	Hexachlorobutadiene	ND	390	22	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	770	190	ug/kg	
67-72-1	Hexachloroethane	ND	390	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	150	17	ug/kg	
78-59-1	Isophorone	ND	390	18	ug/kg	
91-57-6	2-Methylnaphthalene	ND	150	20	ug/kg	
88-74-4	2-Nitroaniline	ND	770	19	ug/kg	
99-09-2	3-Nitroaniline	ND	770	42	ug/kg	
100-01-6	4-Nitroaniline	ND	770	19	ug/kg	
91-20-3	Naphthalene	5720	150	25	ug/kg	
98-95-3	Nitrobenzene	ND	390	21	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	390	22	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	390	23	ug/kg	
85-01-8	Phenanthrene	ND	150	21	ug/kg	
129-00-0	Pyrene	ND	150	18	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	390	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	80%		30-130%
4165-62-2	Phenol-d5	75%		30-130%
118-79-6	2,4,6-Tribromophenol	86%		30-130%
4165-60-0	Nitrobenzene-d5	74%		30-130%
321-60-8	2-Fluorobiphenyl	84%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(18.5-19)		
Lab Sample ID:	MC29908-2	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	63.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	87%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(18.5-19)		
Lab Sample ID:	MC29908-2	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	63.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	16000	24	4.3	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Antimony	ND	1.2	0.18	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Arsenic	2.5	1.2	0.25	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Barium	27.6	6.0	0.087	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Beryllium	0.82	0.48	0.028	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Cadmium	0.083 B	0.48	0.050	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Calcium	2230	600	7.5	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Chromium	29.4	1.2	0.11	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Cobalt	9.1	6.0	0.056	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Copper	10	3.0	0.66	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Iron	14500	12	1.0	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Lead	8.5	1.2	0.20	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Magnesium	4810	600	6.1	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Manganese	123	1.8	0.048	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Mercury	0.020 B	0.042	0.0093	mg/kg	1	04/22/14	04/23/14	SA	SW846 7471B [1]	SW846 7471B [3]
Nickel	17.9	4.8	0.052	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Potassium	2110	600	10	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Selenium	0.80 B	1.2	0.41	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Silver	ND	0.60	0.15	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Sodium	380 B	600	3.9	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Thallium	ND	1.2	0.16	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Vanadium	31.0	1.2	0.16	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Zinc	34.6	2.4	0.19	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]

(1) Instrument QC Batch: MA17046
(2) Instrument QC Batch: MA17050
(3) Prep QC Batch: MP22907
(4) Prep QC Batch: MP22908

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-303(18.5-19)		
Lab Sample ID:	MC29908-2	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	63.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.051 B	0.18	0.035	mg/kg	1	04/20/14 12:28	MA	SW846 9012 M
Solids, Percent	63.1			%	1	04/21/14	HS	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-303(22.5-23)		
Lab Sample ID:	MC29908-3	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	82.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K78585.D	1	04/24/14	JM	n/a	n/a	MSK2504
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.48 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1200	340	ug/kg	
71-43-2	Benzene	55.9	61	41	ug/kg	J
75-27-4	Bromodichloromethane	ND	240	25	ug/kg	
75-25-2	Bromoform	ND	240	43	ug/kg	
74-83-9	Bromomethane	ND	240	73	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1200	370	ug/kg	
75-15-0	Carbon disulfide	ND	610	16	ug/kg	
56-23-5	Carbon tetrachloride	ND	240	27	ug/kg	
108-90-7	Chlorobenzene	ND	240	19	ug/kg	
75-00-3	Chloroethane	ND	610	92	ug/kg	
67-66-3	Chloroform	ND	240	20	ug/kg	
74-87-3	Chloromethane	ND	610	68	ug/kg	
124-48-1	Dibromochloromethane	ND	240	39	ug/kg	
75-34-3	1,1-Dichloroethane	ND	240	32	ug/kg	
107-06-2	1,2-Dichloroethane	ND	240	39	ug/kg	
75-35-4	1,1-Dichloroethene	ND	240	50	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	240	55	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	240	51	ug/kg	
78-87-5	1,2-Dichloropropane	ND	240	51	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	240	27	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	240	32	ug/kg	
100-41-4	Ethylbenzene	912	240	84	ug/kg	
591-78-6	2-Hexanone	ND	1200	92	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	610	65	ug/kg	
75-09-2	Methylene chloride	ND	240	64	ug/kg	
100-42-5	Styrene	ND	610	21	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	240	48	ug/kg	
127-18-4	Tetrachloroethene	ND	240	38	ug/kg	
108-88-3	Toluene	ND	610	25	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	240	26	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	240	70	ug/kg	
79-01-6	Trichloroethene	ND	240	30	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(22.5-23)		
Lab Sample ID:	MC29908-3	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	82.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	240	110	ug/kg	
1330-20-7	Xylene (total)	ND	240	27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		70-130%
2037-26-5	Toluene-D8	108%		70-130%
460-00-4	4-Bromofluorobenzene	109%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(22.5-23)		
Lab Sample ID:	MC29908-3	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38370.D	1	04/23/14	WK	04/21/14	OP37687	MSR1414
Run #2							

	Initial Weight	Final Volume
Run #1	20.6 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	290	13	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	590	15	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	590	17	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	590	96	ug/kg	
51-28-5	2,4-Dinitrophenol	ND UJ	1200	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	590	74	ug/kg	
95-48-7	2-Methylphenol	ND	590	23	ug/kg	
	3&4-Methylphenol	ND	590	29	ug/kg	
88-75-5	2-Nitrophenol	ND	590	16	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	110	ug/kg	
87-86-5	Pentachlorophenol	ND	590	41	ug/kg	
108-95-2	Phenol	ND	290	17	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	590	15	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	590	15	ug/kg	
83-32-9	Acenaphthene	652	120	16	ug/kg	
208-96-8	Acenaphthylene	51.3	120	12	ug/kg	J
120-12-7	Anthracene	106	120	14	ug/kg	J
56-55-3	Benzo(a)anthracene	ND	120	15	ug/kg	
50-32-8	Benzo(a)pyrene	ND	120	13	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	120	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	120	12	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	120	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	290	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	290	12	ug/kg	
91-58-7	2-Chloronaphthalene	ND	290	16	ug/kg	
106-47-8	4-Chloroaniline	ND	590	15	ug/kg	
86-74-8	Carbazole	53.4	120	14	ug/kg	J
218-01-9	Chrysene	ND	120	15	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	290	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	290	18	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	290	21	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	290	18	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(22.5-23)		
Lab Sample ID:	MC29908-3	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	290	15	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	290	17	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	290	16	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	590	39	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	590	15	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	290	29	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	120	14	ug/kg	
132-64-9	Dibenzofuran	34.8	120	16	ug/kg	J
84-74-2	Di-n-butyl phthalate	ND	290	31	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	290	9.2	ug/kg	
84-66-2	Diethyl phthalate	ND	290	15	ug/kg	
131-11-3	Dimethyl phthalate	ND	290	17	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	290	11	ug/kg	
206-44-0	Fluoranthene	ND	120	16	ug/kg	
86-73-7	Fluorene	135	120	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	290	18	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	17	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	590	150	ug/kg	
67-72-1	Hexachloroethane	ND	290	14	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	120	13	ug/kg	
78-59-1	Isophorone	ND	290	14	ug/kg	
91-57-6	2-Methylnaphthalene	536	120	15	ug/kg	
88-74-4	2-Nitroaniline	ND	590	15	ug/kg	
99-09-2	3-Nitroaniline	ND	590	32	ug/kg	
100-01-6	4-Nitroaniline	ND	590	15	ug/kg	
91-20-3	Naphthalene	5390	120	19	ug/kg	
98-95-3	Nitrobenzene	ND	290	16	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	290	17	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	290	18	ug/kg	
85-01-8	Phenanthrene	543	120	16	ug/kg	
129-00-0	Pyrene	ND	120	14	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	72%		30-130%
4165-62-2	Phenol-d5	73%		30-130%
118-79-6	2,4,6-Tribromophenol	85%		30-130%
4165-60-0	Nitrobenzene-d5	73%		30-130%
321-60-8	2-Fluorobiphenyl	78%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(22.5-23)		
Lab Sample ID:	MC29908-3	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	88%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-303(22.5-23)		
Lab Sample ID:	MC29908-3	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	82.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	13800	20	3.6	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Antimony	ND	0.99	0.15	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Arsenic	4.8	0.99	0.21	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Barium	29.1	5.0	0.072	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Beryllium	0.45	0.40	0.024	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Cadmium	0.050 B	0.40	0.042	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Calcium	913	500	6.2	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Chromium	25.4	0.99	0.094	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Cobalt	10.1	5.0	0.047	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Copper	16.6	2.5	0.55	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Iron	15100	9.9	0.86	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Lead	6.7	0.99	0.17	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Magnesium	3640	500	5.1	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Manganese	179	1.5	0.040	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Mercury	0.028 B	0.037	0.0082	mg/kg	1	04/22/14	04/23/14	SA	SW846 7471B [1]	SW846 7471B [3]
Nickel	18.7	4.0	0.044	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Potassium	1680	500	8.5	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Selenium	0.38 B	0.99	0.34	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Silver	ND	0.50	0.12	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Sodium	144 B	500	3.3	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Thallium	0.22 B	0.99	0.13	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Vanadium	32.8	0.99	0.13	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Zinc	32.7	2.0	0.16	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [4]

(1) Instrument QC Batch: MA17046
(2) Instrument QC Batch: MA17050
(3) Prep QC Batch: MP22907
(4) Prep QC Batch: MP22908

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-303(22.5-23)		
Lab Sample ID:	MC29908-3	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	82.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.14	0.026	mg/kg	1	04/20/14 12:31	MA	SW846 9012 M
Solids, Percent	82.5			%	1	04/21/14	HS	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-306(9.5-10)		
Lab Sample ID:	MC29908-4	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	88.9
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64840.D	1	04/29/14	KD	n/a	n/a	MSM2279
Run #2							

	Initial Weight	Final Volume
Run #1	5.87 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	9.6	2.7	ug/kg	
71-43-2	Benzene	1.1 J	0.48	0.32	ug/kg	
75-27-4	Bromodichloromethane	ND UJ	1.9	0.20	ug/kg	
75-25-2	Bromoform	ND	1.9	0.34	ug/kg	
74-83-9	Bromomethane	ND UJ	1.9	0.58	ug/kg	
78-93-3	2-Butanone (MEK)	ND UJ	9.6	2.9	ug/kg	
75-15-0	Carbon disulfide	0.82	4.8	0.13	ug/kg	J
56-23-5	Carbon tetrachloride	ND	1.9	0.21	ug/kg	
108-90-7	Chlorobenzene	ND UJ	1.9	0.15	ug/kg	
75-00-3	Chloroethane	ND	4.8	0.72	ug/kg	
67-66-3	Chloroform	ND UJ	1.9	0.16	ug/kg	
74-87-3	Chloromethane	ND UJ	4.8	0.54	ug/kg	
124-48-1	Dibromochloromethane	ND UJ	1.9	0.31	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.9	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND UJ	1.9	0.31	ug/kg	
75-35-4	1,1-Dichloroethene	ND UJ	1.9	0.40	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.9	0.43	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.9	0.40	ug/kg	
78-87-5	1,2-Dichloropropane	ND UJ	1.9	0.40	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND UJ	1.9	0.22	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND UJ	1.9	0.25	ug/kg	
100-41-4	Ethylbenzene	ND	1.9	0.66	ug/kg	
591-78-6	2-Hexanone	ND	9.6	0.73	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	4.8	0.52	ug/kg	
75-09-2	Methylene chloride	ND	1.9	0.51	ug/kg	
100-42-5	Styrene	ND UJ	4.8	0.16	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	0.38	ug/kg	
127-18-4	Tetrachloroethene	ND	1.9	0.30	ug/kg	
108-88-3	Toluene	ND UJ	4.8	0.20	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.9	0.21	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND UJ	1.9	0.55	ug/kg	
79-01-6	Trichloroethene	ND UJ	1.9	0.23	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-306(9.5-10)		
Lab Sample ID:	MC29908-4	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	88.9
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND UJ	1.9	0.87	ug/kg	
1330-20-7	Xylene (total)	ND UJ	1.9	0.21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
2037-26-5	Toluene-D8	90%		70-130%
460-00-4	4-Bromofluorobenzene	79%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-306(9.5-10)		
Lab Sample ID:	MC29908-4	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.9
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38373.D	1	04/23/14	WK	04/21/14	OP37687	MSR1414
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	280	13	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	560	14	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	560	16	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	560	91	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	560	70	ug/kg	
95-48-7	2-Methylphenol	ND	560	22	ug/kg	
	3&4-Methylphenol	ND	560	27	ug/kg	
88-75-5	2-Nitrophenol	ND	560	15	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	100	ug/kg	
87-86-5	Pentachlorophenol	ND	560	39	ug/kg	
108-95-2	Phenol	ND	280	16	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	560	14	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	560	14	ug/kg	
83-32-9	Acenaphthene	ND	110	15	ug/kg	
208-96-8	Acenaphthylene	48.3	110	11	ug/kg	J
120-12-7	Anthracene	23.0	110	13	ug/kg	J
56-55-3	Benzo(a)anthracene	114	110	14	ug/kg	
50-32-8	Benzo(a)pyrene	146	110	12	ug/kg	
205-99-2	Benzo(b)fluoranthene	186	110	14	ug/kg	
191-24-2	Benzo(g,h,i)perylene	132	110	11	ug/kg	
207-08-9	Benzo(k)fluoranthene	62.8	110	17	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	280	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	11	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	15	ug/kg	
106-47-8	4-Chloroaniline	ND	560	14	ug/kg	
86-74-8	Carbazole	ND	110	13	ug/kg	
218-01-9	Chrysene	114	110	14	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	13	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	17	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	20	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	280	17	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-306(9.5-10)		
Lab Sample ID:	MC29908-4	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.9
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	14	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	16	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	15	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	560	37	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	560	14	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	24.8	110	13	ug/kg	J
132-64-9	Dibenzofuran	ND	110	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	30	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	8.7	ug/kg	
84-66-2	Diethyl phthalate	ND	280	14	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	16	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	10	ug/kg	
206-44-0	Fluoranthene	153	110	15	ug/kg	
86-73-7	Fluorene	ND	110	15	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	560	140	ug/kg	
67-72-1	Hexachloroethane	ND	280	13	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	112	110	12	ug/kg	
78-59-1	Isophorone	ND	280	13	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	14	ug/kg	
88-74-4	2-Nitroaniline	ND	560	14	ug/kg	
99-09-2	3-Nitroaniline	ND	560	30	ug/kg	
100-01-6	4-Nitroaniline	ND	560	14	ug/kg	
91-20-3	Naphthalene	ND	110	18	ug/kg	
98-95-3	Nitrobenzene	ND	280	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	16	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	17	ug/kg	
85-01-8	Phenanthrene	54.9	110	15	ug/kg	J
129-00-0	Pyrene	160	110	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	78%		30-130%
4165-62-2	Phenol-d5	78%		30-130%
118-79-6	2,4,6-Tribromophenol	93%		30-130%
4165-60-0	Nitrobenzene-d5	75%		30-130%
321-60-8	2-Fluorobiphenyl	85%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-306(9.5-10)		
Lab Sample ID:	MC29908-4	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.9
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	98%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-306(9.5-10)
Lab Sample ID: MC29908-4
Matrix: SO - Soil
Date Sampled: 04/17/14
Date Received: 04/18/14
Percent Solids: 88.9
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	17300	18	3.2	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Antimony	ND	0.89	0.13	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Arsenic	1.4	0.89	0.19	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Barium	218	4.5	0.065	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Beryllium	0.64	0.36	0.021	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cadmium	0.089 B	0.36	0.038	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Calcium	4990	450	5.6	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Chromium	32.5	0.89	0.085	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cobalt	16.5	4.5	0.042	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Copper	49.1	2.2	0.50	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Iron	31800	89	7.8	mg/kg	10	04/22/14	04/23/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Lead	21.8	0.89	0.15	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Magnesium	9210	450	4.6	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Manganese	560	1.3	0.036	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Mercury	0.13	0.036	0.0080	mg/kg	1	04/22/14	04/23/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	30.5	3.6	0.039	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Potassium	9100	450	7.6	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Selenium	ND	0.89	0.31	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Silver	ND	0.45	0.11	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Sodium	207 B	450	3.0	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Thallium	ND	0.89	0.12	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Vanadium	43.5	0.89	0.12	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Zinc	78.3	1.8	0.14	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [2]	SW846 3050B [5]

(1) Instrument QC Batch: MA17046
(2) Instrument QC Batch: MA17050
(3) Instrument QC Batch: MA17059
(4) Prep QC Batch: MP22907
(5) Prep QC Batch: MP22908

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-306(9.5-10)		
Lab Sample ID:	MC29908-4	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	88.9
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.13	0.025	mg/kg	1	04/20/14 12:32	MA	SW846 9012 M
Solids, Percent	88.9			%	1	04/21/14	HS	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-306(20-20.5)		
Lab Sample ID:	MC29908-5	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	57.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64841.D	1	04/29/14	KD	n/a	n/a	MSM2279
Run #2							

	Initial Weight	Final Volume
Run #1	5.52 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	49.8 J	16	4.4	ug/kg	
71-43-2	Benzene	ND UJ	0.78	0.53	ug/kg	
75-27-4	Bromodichloromethane	ND	3.1	0.33	ug/kg	
75-25-2	Bromoform	ND	3.1	0.56	ug/kg	
74-83-9	Bromomethane	ND	3.1	0.94	ug/kg	
78-93-3	2-Butanone (MEK)	ND UJ	16	4.8	ug/kg	
75-15-0	Carbon disulfide	13.1	7.8	0.21	ug/kg	
56-23-5	Carbon tetrachloride	ND	3.1	0.35	ug/kg	
108-90-7	Chlorobenzene	ND	3.1	0.25	ug/kg	
75-00-3	Chloroethane	ND	7.8	1.2	ug/kg	
67-66-3	Chloroform	ND	3.1	0.27	ug/kg	
74-87-3	Chloromethane	ND	7.8	0.89	ug/kg	
124-48-1	Dibromochloromethane	ND	3.1	0.51	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.1	0.42	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.1	0.50	ug/kg	
75-35-4	1,1-Dichloroethene	ND UJ	3.1	0.65	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	3.1	0.71	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	3.1	0.66	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.1	0.66	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.1	0.36	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.1	0.41	ug/kg	
100-41-4	Ethylbenzene	ND	3.1	1.1	ug/kg	
591-78-6	2-Hexanone	ND	16	1.2	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	7.8	0.85	ug/kg	
75-09-2	Methylene chloride	ND	3.1	0.83	ug/kg	
100-42-5	Styrene	ND	7.8	0.27	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.1	0.62	ug/kg	
127-18-4	Tetrachloroethene	ND	3.1	0.49	ug/kg	
108-88-3	Toluene	ND	7.8	0.32	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.1	0.34	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.1	0.90	ug/kg	
79-01-6	Trichloroethene	ND UJ	3.1	0.38	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-306(20-20.5)		
Lab Sample ID:	MC29908-5	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	57.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	3.1	1.4	ug/kg	
1330-20-7	Xylene (total)	ND	3.1	0.34	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	90%		70-130%
460-00-4	4-Bromofluorobenzene	80%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-306(20-20.5)		
Lab Sample ID:	MC29908-5	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	57.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38374.D	1	04/23/14	WK	04/21/14	OP37687	MSR1414
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	430	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	860	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	860	25	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	860	140	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1700	220	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	860	110	ug/kg	
95-48-7	2-Methylphenol	ND	860	34	ug/kg	
	3&4-Methylphenol	ND	860	42	ug/kg	
88-75-5	2-Nitrophenol	ND	860	23	ug/kg	
100-02-7	4-Nitrophenol	ND	1700	160	ug/kg	
87-86-5	Pentachlorophenol	ND	860	61	ug/kg	
108-95-2	Phenol	ND	430	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	860	22	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	860	21	ug/kg	
83-32-9	Acenaphthene	ND	170	23	ug/kg	
208-96-8	Acenaphthylene	ND	170	17	ug/kg	
120-12-7	Anthracene	ND	170	21	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	22	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	22	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	26	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	430	22	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	430	18	ug/kg	
91-58-7	2-Chloronaphthalene	ND	430	23	ug/kg	
106-47-8	4-Chloroaniline	ND	860	22	ug/kg	
86-74-8	Carbazole	ND	170	20	ug/kg	
218-01-9	Chrysene	ND	170	21	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	430	20	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	430	26	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	430	31	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	430	26	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-306(20-20.5)		
Lab Sample ID:	MC29908-5	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	57.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	430	22	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	430	25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	430	23	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	860	57	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	860	22	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	430	43	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	20	ug/kg	
132-64-9	Dibenzofuran	ND	170	24	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	430	46	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	430	13	ug/kg	
84-66-2	Diethyl phthalate	ND	430	21	ug/kg	
131-11-3	Dimethyl phthalate	ND	430	25	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	430	16	ug/kg	
206-44-0	Fluoranthene	ND	170	24	ug/kg	
86-73-7	Fluorene	ND	170	23	ug/kg	
118-74-1	Hexachlorobenzene	ND	430	27	ug/kg	
87-68-3	Hexachlorobutadiene	ND	430	25	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	860	220	ug/kg	
67-72-1	Hexachloroethane	ND	430	21	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	19	ug/kg	
78-59-1	Isophorone	ND	430	20	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	22	ug/kg	
88-74-4	2-Nitroaniline	ND	860	22	ug/kg	
99-09-2	3-Nitroaniline	ND	860	47	ug/kg	
100-01-6	4-Nitroaniline	ND	860	22	ug/kg	
91-20-3	Naphthalene	ND	170	28	ug/kg	
98-95-3	Nitrobenzene	ND	430	23	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	430	25	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	430	26	ug/kg	
85-01-8	Phenanthrene	ND	170	23	ug/kg	
129-00-0	Pyrene	ND	170	20	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	430	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	84%		30-130%
4165-62-2	Phenol-d5	80%		30-130%
118-79-6	2,4,6-Tribromophenol	91%		30-130%
4165-60-0	Nitrobenzene-d5	83%		30-130%
321-60-8	2-Fluorobiphenyl	90%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-306(20-20.5)		
Lab Sample ID:	MC29908-5	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	57.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	102%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-306(20-20.5)		
Lab Sample ID:	MC29908-5	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	57.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	19300	26	4.6	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Antimony	ND	1.3	0.19	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Arsenic	10.6	1.3	0.27	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Barium	49.5	6.4	0.093	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Beryllium	0.96	0.51	0.031	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Cadmium	0.13 B	0.51	0.054	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Calcium	2110	640	8.1	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Chromium	38.1	1.3	0.12	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Cobalt	12.9	6.4	0.060	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Copper	13.3	3.2	0.71	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Iron	40400	130	11	mg/kg	10	04/22/14	04/23/14	EAL	SW846 6010C [3]	SW846 3050B [4]
Lead	14.7	1.3	0.22	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Magnesium	8890	640	6.6	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Manganese	654	1.9	0.051	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Mercury	0.025 B	0.045	0.0099	mg/kg	1	04/23/14	04/24/14	SA	SW846 7471B [2]	SW846 7471B [5]
Nickel	27.2	5.1	0.056	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Potassium	5240	640	11	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Selenium	ND	1.3	0.45	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Silver	ND	0.64	0.16	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Sodium	4870	640	4.2	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Thallium	0.44 B	1.3	0.17	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Vanadium	47.0	1.3	0.17	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Zinc	77.9	2.6	0.21	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]

(1) Instrument QC Batch: MA17050
(2) Instrument QC Batch: MA17053
(3) Instrument QC Batch: MA17059
(4) Prep QC Batch: MP22908
(5) Prep QC Batch: MP22919

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-306(20-20.5)		
Lab Sample ID:	MC29908-5	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	57.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.20	0.038	mg/kg	1	04/20/14 12:33	MA	SW846 9012 M
Solids, Percent	57.7			%	1	04/21/14	HS	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-306(42-44)		
Lab Sample ID:	MC29908-6	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	75.3
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	K78581.D	1	04/24/14	JM	n/a	n/a	MSK2504
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.90 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1500	430	ug/kg	
71-43-2	Benzene	ND	76	51	ug/kg	
75-27-4	Bromodichloromethane	ND	300	32	ug/kg	
75-25-2	Bromoform	ND	300	54	ug/kg	
74-83-9	Bromomethane	ND	300	91	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1500	470	ug/kg	
75-15-0	Carbon disulfide	ND	760	20	ug/kg	
56-23-5	Carbon tetrachloride	ND	300	33	ug/kg	
108-90-7	Chlorobenzene	ND	300	24	ug/kg	
75-00-3	Chloroethane	ND	760	110	ug/kg	
67-66-3	Chloroform	ND	300	26	ug/kg	
74-87-3	Chloromethane	ND	760	86	ug/kg	
124-48-1	Dibromochloromethane	ND	300	49	ug/kg	
75-34-3	1,1-Dichloroethane	ND	300	41	ug/kg	
107-06-2	1,2-Dichloroethane	ND	300	49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	300	63	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	300	69	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	300	63	ug/kg	
78-87-5	1,2-Dichloropropane	ND	300	64	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	300	34	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	300	40	ug/kg	
100-41-4	Ethylbenzene	ND	300	100	ug/kg	
591-78-6	2-Hexanone	ND	1500	120	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	760	82	ug/kg	
75-09-2	Methylene chloride	ND	300	81	ug/kg	
100-42-5	Styrene	ND	760	26	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	300	60	ug/kg	
127-18-4	Tetrachloroethene	ND	300	48	ug/kg	
108-88-3	Toluene	ND	760	31	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	300	33	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	300	87	ug/kg	
79-01-6	Trichloroethene	ND	300	37	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-306(42-44)		
Lab Sample ID:	MC29908-6	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	75.3
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	300	140	ug/kg	
1330-20-7	Xylene (total)	ND	300	33	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		70-130%
2037-26-5	Toluene-D8	111%		70-130%
460-00-4	4-Bromofluorobenzene	107%		70-130%

(a) Dilution required due to high concentration of non-target compound.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-306(42-44)		
Lab Sample ID:	MC29908-6	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	75.3
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38375.D	1	04/23/14	WK	04/21/14	OP37687	MSR1414
Run #2							

	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	330	15	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	660	17	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	660	19	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	660	110	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1300	160	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	660	82	ug/kg	
95-48-7	2-Methylphenol	ND	660	26	ug/kg	
	3&4-Methylphenol	ND	660	32	ug/kg	
88-75-5	2-Nitrophenol	ND	660	17	ug/kg	
100-02-7	4-Nitrophenol	ND	1300	120	ug/kg	
87-86-5	Pentachlorophenol	ND	660	46	ug/kg	
108-95-2	Phenol	ND	330	19	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	660	16	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	660	16	ug/kg	
83-32-9	Acenaphthene	ND	130	18	ug/kg	
208-96-8	Acenaphthylene	38.8	130	13	ug/kg	J
120-12-7	Anthracene	ND	130	16	ug/kg	
56-55-3	Benzo(a)anthracene	ND	130	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	130	14	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	130	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	130	13	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	130	20	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	330	17	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	330	13	ug/kg	
91-58-7	2-Chloronaphthalene	ND	330	18	ug/kg	
106-47-8	4-Chloroaniline	ND	660	16	ug/kg	
86-74-8	Carbazole	ND	130	15	ug/kg	
218-01-9	Chrysene	ND	130	16	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	330	15	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	330	20	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	330	24	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	330	20	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-306(42-44)		
Lab Sample ID:	MC29908-6	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	75.3
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	330	17	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	330	19	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	330	17	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	660	44	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	660	16	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	33	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	130	16	ug/kg	
132-64-9	Dibenzofuran	ND	130	18	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	35	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	330	10	ug/kg	
84-66-2	Diethyl phthalate	ND	330	16	ug/kg	
131-11-3	Dimethyl phthalate	ND	330	19	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	12	ug/kg	
206-44-0	Fluoranthene	ND	130	18	ug/kg	
86-73-7	Fluorene	ND	130	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	330	21	ug/kg	
87-68-3	Hexachlorobutadiene	ND	330	19	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	660	160	ug/kg	
67-72-1	Hexachloroethane	ND	330	16	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	130	14	ug/kg	
78-59-1	Isophorone	ND	330	15	ug/kg	
91-57-6	2-Methylnaphthalene	ND	130	17	ug/kg	
88-74-4	2-Nitroaniline	ND	660	16	ug/kg	
99-09-2	3-Nitroaniline	ND	660	36	ug/kg	
100-01-6	4-Nitroaniline	ND	660	16	ug/kg	
91-20-3	Naphthalene	331	130	21	ug/kg	
98-95-3	Nitrobenzene	ND	330	18	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	330	19	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	330	20	ug/kg	
85-01-8	Phenanthrene	29.6	130	18	ug/kg	J
129-00-0	Pyrene	ND	130	15	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	330	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	70%		30-130%
4165-62-2	Phenol-d5	66%		30-130%
118-79-6	2,4,6-Tribromophenol	74%		30-130%
4165-60-0	Nitrobenzene-d5	70%		30-130%
321-60-8	2-Fluorobiphenyl	74%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-306(42-44)		
Lab Sample ID:	MC29908-6	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	75.3
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	84%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-306(42-44)
Lab Sample ID: MC29908-6
Matrix: SO - Soil
Date Sampled: 04/17/14
Date Received: 04/18/14
Percent Solids: 75.3
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	8460	20	3.7	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Antimony	ND	1.0	0.15	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Arsenic	1.0	1.0	0.21	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Barium	74.0	5.1	0.074	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Beryllium	0.26 B	0.41	0.024	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Cadmium	ND	0.41	0.043	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Calcium	1760	510	6.4	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Chromium	23.5	1.0	0.097	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Cobalt	8.1	5.1	0.048	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Copper	18.1	2.6	0.57	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Iron	15200	10	0.89	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Lead	3.0	1.0	0.17	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Magnesium	3730	510	5.2	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Manganese	172	1.5	0.041	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Mercury	ND	0.034	0.0076	mg/kg	1	04/23/14	04/24/14	SA	SW846 7471B [2]	SW846 7471B [4]
Nickel	23.5	4.1	0.045	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Potassium	3790	510	8.7	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Selenium	ND	1.0	0.35	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Silver	ND	0.51	0.13	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Sodium	330 B	510	3.4	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Thallium	ND	1.0	0.14	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Vanadium	25.6	1.0	0.13	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Zinc	33.5	2.0	0.16	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA17050
(2) Instrument QC Batch: MA17053
(3) Prep QC Batch: MP22908
(4) Prep QC Batch: MP22919

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-306(42-44)		
Lab Sample ID:	MC29908-6	**Date Sampled:**	04/17/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	75.3
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.060 B	0.16	0.030	mg/kg	1	04/20/14 12:34	MA	SW846 9012 M
Solids, Percent	75.3			%	1	04/21/14	HS	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-304(10.5-11)		
Lab Sample ID:	MC29908-7	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	71.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64842.D	1	04/29/14	KD	n/a	n/a	MSM2279
Run #2							

	Initial Weight	Final Volume
Run #1	6.15 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	11	3.2	ug/kg	
71-43-2	Benzene	0.59 J	0.57	0.39	ug/kg	
75-27-4	Bromodichloromethane	ND	2.3	0.24	ug/kg	
75-25-2	Bromoform	ND	2.3	0.41	ug/kg	
74-83-9	Bromomethane	ND	2.3	0.69	ug/kg	
78-93-3	2-Butanone (MEK)	ND UJ	11	3.5	ug/kg	
75-15-0	Carbon disulfide	1.2	5.7	0.15	ug/kg	J
56-23-5	Carbon tetrachloride	ND	2.3	0.25	ug/kg	
108-90-7	Chlorobenzene	ND	2.3	0.18	ug/kg	
75-00-3	Chloroethane	ND	5.7	0.87	ug/kg	
67-66-3	Chloroform	ND	2.3	0.19	ug/kg	
74-87-3	Chloromethane	ND	5.7	0.65	ug/kg	
124-48-1	Dibromochloromethane	ND	2.3	0.37	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.3	0.31	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.3	0.37	ug/kg	
75-35-4	1,1-Dichloroethene	ND UJ	2.3	0.47	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.3	0.52	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.3	0.48	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.3	0.48	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	0.26	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	0.30	ug/kg	
100-41-4	Ethylbenzene	ND	2.3	0.79	ug/kg	
591-78-6	2-Hexanone	ND	11	0.87	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.7	0.62	ug/kg	
75-09-2	Methylene chloride	ND	2.3	0.61	ug/kg	
100-42-5	Styrene	ND	5.7	0.20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	0.45	ug/kg	
127-18-4	Tetrachloroethene	ND	2.3	0.36	ug/kg	
108-88-3	Toluene	ND	5.7	0.24	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.3	0.25	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.3	0.66	ug/kg	
79-01-6	Trichloroethene	ND UJ	2.3	0.28	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(10.5-11)		
Lab Sample ID:	MC29908-7	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	71.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	2.3	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	2.3	0.25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	90%		70-130%
460-00-4	4-Bromofluorobenzene	83%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(10.5-11)		
Lab Sample ID:	MC29908-7	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	71.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	R38376.D	5	04/23/14	WK	04/21/14	OP37687	MSR1414
Run #2							

	Initial Weight	Final Volume
Run #1	20.7 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	1700	77	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	3400	86	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	3400	98	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	3400	550	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	6800	850	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	3400	430	ug/kg	
95-48-7	2-Methylphenol	ND	3400	130	ug/kg	
	3&4-Methylphenol	ND	3400	170	ug/kg	
88-75-5	2-Nitrophenol	ND	3400	91	ug/kg	
100-02-7	4-Nitrophenol	ND	6800	640	ug/kg	
87-86-5	Pentachlorophenol	ND	3400	240	ug/kg	
108-95-2	Phenol	ND	1700	97	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	3400	85	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	3400	84	ug/kg	
83-32-9	Acenaphthene	96.1	680	91	ug/kg	J
208-96-8	Acenaphthylene	420	680	68	ug/kg	J
120-12-7	Anthracene	393	680	82	ug/kg	J
56-55-3	Benzo(a)anthracene	1470	680	88	ug/kg	
50-32-8	Benzo(a)pyrene	1330	680	73	ug/kg	
205-99-2	Benzo(b)fluoranthene	1840	680	85	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1100	680	68	ug/kg	
207-08-9	Benzo(k)fluoranthene	624	680	100	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	1700	86	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	1700	69	ug/kg	
91-58-7	2-Chloronaphthalene	ND	1700	92	ug/kg	
106-47-8	4-Chloroaniline	ND	3400	85	ug/kg	
86-74-8	Carbazole	155	680	80	ug/kg	J
218-01-9	Chrysene	1380	680	85	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	1700	80	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	1700	100	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	1700	120	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1700	100	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(10.5-11)		
Lab Sample ID:	MC29908-7	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	71.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1700	88	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1700	97	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1700	90	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	3400	230	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	3400	85	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1700	170	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	246	680	81	ug/kg	J
132-64-9	Dibenzofuran	97.9	680	94	ug/kg	J
84-74-2	Di-n-butyl phthalate	ND	1700	180	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	1700	53	ug/kg	
84-66-2	Diethyl phthalate	ND	1700	85	ug/kg	
131-11-3	Dimethyl phthalate	ND	1700	98	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1700	63	ug/kg	
206-44-0	Fluoranthene	2870	680	93	ug/kg	
86-73-7	Fluorene	129	680	90	ug/kg	J
118-74-1	Hexachlorobenzene	ND	1700	110	ug/kg	
87-68-3	Hexachlorobutadiene	ND	1700	98	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	3400	850	ug/kg	
67-72-1	Hexachloroethane	ND	1700	82	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	946	680	75	ug/kg	
78-59-1	Isophorone	ND	1700	78	ug/kg	
91-57-6	2-Methylnaphthalene	218	680	86	ug/kg	J
88-74-4	2-Nitroaniline	ND	3400	85	ug/kg	
99-09-2	3-Nitroaniline	ND	3400	190	ug/kg	
100-01-6	4-Nitroaniline	ND	3400	85	ug/kg	
91-20-3	Naphthalene	266	680	110	ug/kg	J
98-95-3	Nitrobenzene	ND	1700	92	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	1700	97	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	1700	100	ug/kg	
85-01-8	Phenanthrene	1640	680	92	ug/kg	
129-00-0	Pyrene	2300	680	80	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	1700	94	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	56%		30-130%
4165-62-2	Phenol-d5	58%		30-130%
118-79-6	2,4,6-Tribromophenol	75%		30-130%
4165-60-0	Nitrobenzene-d5	52%		30-130%
321-60-8	2-Fluorobiphenyl	70%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(10.5-11)		
Lab Sample ID:	MC29908-7	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	71.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	77%		30-130%

(a) Elevated RL due to dilution required for matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(10.5-11)		
Lab Sample ID:	MC29908-7	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	71.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	9920	23	4.1	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Antimony	1.5	1.1	0.17	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Arsenic	22.0	1.1	0.24	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Barium	296	5.7	0.083	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Beryllium	5.5	0.46	0.027	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Cadmium	2.3	0.46	0.048	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Calcium	18000	570	7.2	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Chromium	50.0	1.1	0.11	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Cobalt	23.0	5.7	0.054	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Copper	565	2.9	0.64	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Iron	91600	110	10	mg/kg	10	04/22/14	04/23/14	EAL	SW846 6010C [3]	SW846 3050B [4]
Lead	651	1.1	0.19	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Magnesium	5230	570	5.9	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Manganese	637	1.7	0.046	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Mercury	0.41	0.041	0.0090	mg/kg	1	04/23/14	04/24/14	SA	SW846 7471B [2]	SW846 7471B [5]
Nickel	273	4.6	0.050	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Potassium	2210	570	9.8	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Selenium	ND	1.1	0.40	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Silver	0.62	0.57	0.14	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Sodium	422 B	570	3.8	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Thallium	0.19 B	1.1	0.15	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Vanadium	27.7	1.1	0.15	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Zinc	2470	23	1.8	mg/kg	10	04/22/14	04/23/14	EAL	SW846 6010C [3]	SW846 3050B [4]

(1) Instrument QC Batch: MA17050
(2) Instrument QC Batch: MA17053
(3) Instrument QC Batch: MA17059
(4) Prep QC Batch: MP22908
(5) Prep QC Batch: MP22919

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-304(10.5-11)		
Lab Sample ID:	MC29908-7	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	71.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.16	0.030	mg/kg	1	04/20/14 12:35	MA	SW846 9012 M
Solids, Percent	71			%	1	04/21/14	HS	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-304(17-17.5)		
Lab Sample ID:	MC29908-8	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	66.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64843.D	1	04/29/14	KD	n/a	n/a	MSM2279
Run #2							

	Initial Weight	Final Volume
Run #1	4.83 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	56.7 J	16	4.3	ug/kg	
71-43-2	Benzene	ND UJ	0.78	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	3.1	0.32	ug/kg	
75-25-2	Bromoform	ND	3.1	0.55	ug/kg	
74-83-9	Bromomethane	ND	3.1	0.93	ug/kg	
78-93-3	2-Butanone (MEK)	ND UJ	16	4.8	ug/kg	
75-15-0	Carbon disulfide	3.5	7.8	0.20	ug/kg	J
56-23-5	Carbon tetrachloride	ND	3.1	0.34	ug/kg	
108-90-7	Chlorobenzene	ND	3.1	0.24	ug/kg	
75-00-3	Chloroethane	ND	7.8	1.2	ug/kg	
67-66-3	Chloroform	ND	3.1	0.26	ug/kg	
74-87-3	Chloromethane	ND	7.8	0.88	ug/kg	
124-48-1	Dibromochloromethane	ND	3.1	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.1	0.41	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.1	0.50	ug/kg	
75-35-4	1,1-Dichloroethene	ND UJ	3.1	0.64	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	3.1	0.70	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	3.1	0.65	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.1	0.65	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.1	0.35	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.1	0.41	ug/kg	
100-41-4	Ethylbenzene	ND	3.1	1.1	ug/kg	
591-78-6	2-Hexanone	ND	16	1.2	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	7.8	0.84	ug/kg	
75-09-2	Methylene chloride	ND	3.1	0.82	ug/kg	
100-42-5	Styrene	ND	7.8	0.26	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.1	0.61	ug/kg	
127-18-4	Tetrachloroethene	ND	3.1	0.49	ug/kg	
108-88-3	Toluene	ND	7.8	0.32	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.1	0.34	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.1	0.89	ug/kg	
79-01-6	Trichloroethene	ND UJ	3.1	0.38	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(17-17.5)		
Lab Sample ID:	MC29908-8	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	66.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	3.1	1.4	ug/kg	
1330-20-7	Xylene (total)	ND	3.1	0.34	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	90%		70-130%
460-00-4	4-Bromofluorobenzene	81%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(17-17.5)		
Lab Sample ID:	MC29908-8	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	66.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38377.D	1	04/23/14	WK	04/21/14	OP37687	MSR1414
Run #2							

	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	370	16	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	730	19	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	730	21	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	730	120	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1500	180	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	730	91	ug/kg	
95-48-7	2-Methylphenol	ND	730	29	ug/kg	
	3&4-Methylphenol	159	730	36	ug/kg	J
88-75-5	2-Nitrophenol	ND	730	20	ug/kg	
100-02-7	4-Nitrophenol	ND	1500	140	ug/kg	
87-86-5	Pentachlorophenol	ND	730	51	ug/kg	
108-95-2	Phenol	ND	370	21	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	730	18	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	730	18	ug/kg	
83-32-9	Acenaphthene	ND	150	20	ug/kg	
208-96-8	Acenaphthylene	24.8	150	15	ug/kg	J
120-12-7	Anthracene	25.4	150	18	ug/kg	J
56-55-3	Benzo(a)anthracene	58.7	150	19	ug/kg	J
50-32-8	Benzo(a)pyrene	50.0	150	16	ug/kg	J
205-99-2	Benzo(b)fluoranthene	76.9	150	18	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	38.4	150	15	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	150	22	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	370	18	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	370	15	ug/kg	
91-58-7	2-Chloronaphthalene	ND	370	20	ug/kg	
106-47-8	4-Chloroaniline	ND	730	18	ug/kg	
86-74-8	Carbazole	ND	150	17	ug/kg	
218-01-9	Chrysene	57.9	150	18	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	370	17	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	370	22	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	370	26	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	370	22	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(17-17.5)		
Lab Sample ID:	MC29908-8	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	66.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	370	19	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	370	21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	370	19	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	730	49	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	730	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	370	37	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	150	17	ug/kg	
132-64-9	Dibenzofuran	ND	150	20	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	370	39	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	370	11	ug/kg	
84-66-2	Diethyl phthalate	ND	370	18	ug/kg	
131-11-3	Dimethyl phthalate	ND	370	21	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	370	14	ug/kg	
206-44-0	Fluoranthene	104	150	20	ug/kg	J
86-73-7	Fluorene	19.3	150	19	ug/kg	J
118-74-1	Hexachlorobenzene	ND	370	23	ug/kg	
87-68-3	Hexachlorobutadiene	ND	370	21	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	730	180	ug/kg	
67-72-1	Hexachloroethane	ND	370	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	34.9	150	16	ug/kg	J
78-59-1	Isophorone	ND	370	17	ug/kg	
91-57-6	2-Methylnaphthalene	19.5	150	19	ug/kg	J
88-74-4	2-Nitroaniline	ND	730	18	ug/kg	
99-09-2	3-Nitroaniline	ND	730	40	ug/kg	
100-01-6	4-Nitroaniline	ND	730	18	ug/kg	
91-20-3	Naphthalene	40.6	150	23	ug/kg	J
98-95-3	Nitrobenzene	ND	370	20	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	370	21	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	370	22	ug/kg	
85-01-8	Phenanthrene	65.9	150	20	ug/kg	J
129-00-0	Pyrene	101	150	17	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	370	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%		30-130%
4165-62-2	Phenol-d5	68%		30-130%
118-79-6	2,4,6-Tribromophenol	76%		30-130%
4165-60-0	Nitrobenzene-d5	64%		30-130%
321-60-8	2-Fluorobiphenyl	71%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(17-17.5)		
Lab Sample ID:	MC29908-8	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	66.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	77%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(17-17.5)		
Lab Sample ID:	MC29908-8	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	66.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	20200	21	3.8	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Antimony	ND	1.1	0.16	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Arsenic	7.6	1.1	0.22	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Barium	47.8	5.3	0.077	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Beryllium	0.73	0.42	0.025	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Cadmium	0.13 B	0.42	0.045	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Calcium	3630	530	6.6	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Chromium	37.5	1.1	0.10	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Cobalt	13.1	5.3	0.050	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Copper	26.7	2.6	0.59	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Iron	29500	110	9.2	mg/kg	10	04/22/14	04/23/14	EAL	SW846 6010C [3]	SW846 3050B [4]
Lead	87.6	1.1	0.18	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Magnesium	4850	530	5.4	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Manganese	378	1.6	0.042	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Mercury	0.56	0.041	0.0089	mg/kg	1	04/23/14	04/24/14	SA	SW846 7471B [2]	SW846 7471B [5]
Nickel	22.6	4.2	0.046	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Potassium	1640	530	9.0	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Selenium	0.74 B	1.1	0.37	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Silver	0.13 B	0.53	0.13	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Sodium	507 B	530	3.5	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Thallium	0.21 B	1.1	0.14	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Vanadium	43.6	1.1	0.14	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]
Zinc	80.5	2.1	0.17	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [4]

(1) Instrument QC Batch: MA17050
(2) Instrument QC Batch: MA17053
(3) Instrument QC Batch: MA17059
(4) Prep QC Batch: MP22908
(5) Prep QC Batch: MP22919

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-304(17-17.5)		
Lab Sample ID:	MC29908-8	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	66.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.12 B	0.14	0.026	mg/kg	1	04/20/14 12:36	MA	SW846 9012 M
Solids, Percent	66.7			%	1	04/21/14	HS	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-304(28.5-29)		
Lab Sample ID:	MC29908-9	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	87.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64844.D	1	04/29/14	KD	n/a	n/a	MSM2279
Run #2							

	Initial Weight	Final Volume
Run #1	7.65 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	7.5	2.1	ug/kg	
71-43-2	Benzene	NDUJ	0.37	0.25	ug/kg	
75-27-4	Bromodichloromethane	ND	1.5	0.16	ug/kg	
75-25-2	Bromoform	ND	1.5	0.26	ug/kg	
74-83-9	Bromomethane	ND	1.5	0.45	ug/kg	
78-93-3	2-Butanone (MEK)	ND UJ	7.5	2.3	ug/kg	
75-15-0	Carbon disulfide	0.45	3.7	0.098	ug/kg	J
56-23-5	Carbon tetrachloride	ND	1.5	0.16	ug/kg	
108-90-7	Chlorobenzene	ND	1.5	0.12	ug/kg	
75-00-3	Chloroethane	ND	3.7	0.56	ug/kg	
67-66-3	Chloroform	ND	1.5	0.13	ug/kg	
74-87-3	Chloromethane	ND	3.7	0.42	ug/kg	
124-48-1	Dibromochloromethane	ND	1.5	0.24	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.5	0.20	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.5	0.24	ug/kg	
75-35-4	1,1-Dichloroethene	ND UJ	1.5	0.31	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.5	0.34	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.5	0.31	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.5	0.31	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.5	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.5	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.5	0.51	ug/kg	
591-78-6	2-Hexanone	ND	7.5	0.56	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3.7	0.40	ug/kg	
75-09-2	Methylene chloride	ND	1.5	0.40	ug/kg	
100-42-5	Styrene	ND	3.7	0.13	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.5	0.29	ug/kg	
127-18-4	Tetrachloroethene	ND	1.5	0.23	ug/kg	
108-88-3	Toluene	ND	3.7	0.15	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.5	0.16	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.43	ug/kg	
79-01-6	Trichloroethene	ND UJ	1.5	0.18	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(28.5-29)		
Lab Sample ID:	MC29908-9	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	87.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.5	0.68	ug/kg	
1330-20-7	Xylene (total)	ND	1.5	0.16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	92%		70-130%
460-00-4	4-Bromofluorobenzene	79%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(28.5-29)		
Lab Sample ID:	MC29908-9	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	87.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38378.D	1	04/23/14	WK	04/21/14	OP37687	MSR1414
Run #2							

	Initial Weight	Final Volume
Run #1	20.6 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	280	12	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	550	14	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	550	16	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	550	90	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	550	69	ug/kg	
95-48-7	2-Methylphenol	ND	550	22	ug/kg	
	3&4-Methylphenol	ND	550	27	ug/kg	
88-75-5	2-Nitrophenol	ND	550	15	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	100	ug/kg	
87-86-5	Pentachlorophenol	ND	550	39	ug/kg	
108-95-2	Phenol	ND	280	16	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	550	14	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	550	14	ug/kg	
83-32-9	Acenaphthene	ND	110	15	ug/kg	
208-96-8	Acenaphthylene	ND	110	11	ug/kg	
120-12-7	Anthracene	ND	110	13	ug/kg	
56-55-3	Benzo(a)anthracene	ND	110	14	ug/kg	
50-32-8	Benzo(a)pyrene	ND	110	12	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	110	14	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	110	11	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	110	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	11	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	15	ug/kg	
106-47-8	4-Chloroaniline	ND	550	14	ug/kg	
86-74-8	Carbazole	ND	110	13	ug/kg	
218-01-9	Chrysene	ND	110	14	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	13	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	17	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	20	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	280	17	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(28.5-29)		
Lab Sample ID:	MC29908-9	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	87.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	14	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	16	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	15	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	550	37	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	550	14	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	13	ug/kg	
132-64-9	Dibenzofuran	ND	110	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	29	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	8.7	ug/kg	
84-66-2	Diethyl phthalate	ND	280	14	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	16	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	10	ug/kg	
206-44-0	Fluoranthene	ND	110	15	ug/kg	
86-73-7	Fluorene	ND	110	15	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	550	140	ug/kg	
67-72-1	Hexachloroethane	ND	280	13	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	110	12	ug/kg	
78-59-1	Isophorone	ND	280	13	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	14	ug/kg	
88-74-4	2-Nitroaniline	ND	550	14	ug/kg	
99-09-2	3-Nitroaniline	ND	550	30	ug/kg	
100-01-6	4-Nitroaniline	ND	550	14	ug/kg	
91-20-3	Naphthalene	ND	110	18	ug/kg	
98-95-3	Nitrobenzene	ND	280	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	16	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	17	ug/kg	
85-01-8	Phenanthrene	ND	110	15	ug/kg	
129-00-0	Pyrene	ND	110	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	79%		30-130%
4165-62-2	Phenol-d5	76%		30-130%
118-79-6	2,4,6-Tribromophenol	84%		30-130%
4165-60-0	Nitrobenzene-d5	78%		30-130%
321-60-8	2-Fluorobiphenyl	84%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(28.5-29)		
Lab Sample ID:	MC29908-9	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	87.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	93%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-304(28.5-29)		
Lab Sample ID:	MC29908-9	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	87.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	11800	19	3.4	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Antimony	ND	0.94	0.14	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Arsenic	0.85 B	0.94	0.20	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Barium	157	4.7	0.068	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Beryllium	0.28 B	0.38	0.022	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Cadmium	ND	0.38	0.040	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Calcium	1300	470	5.9	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Chromium	31.9	0.94	0.090	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Cobalt	12.0	4.7	0.044	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Copper	31.3	2.4	0.52	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Iron	19900	9.4	0.82	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Lead	3.3	0.94	0.16	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Magnesium	4510	470	4.8	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Manganese	308	1.4	0.038	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Mercury	ND	0.036	0.0078	mg/kg	1	04/23/14	04/24/14	SA	SW846 7471B [2]	SW846 7471B [4]
Nickel	21.5	3.8	0.041	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Potassium	5850	470	8.1	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Selenium	ND	0.94	0.33	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Silver	ND	0.47	0.12	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Sodium	176 B	470	3.1	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Thallium	ND	0.94	0.13	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Vanadium	36.5	0.94	0.12	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]
Zinc	40.7	1.9	0.15	mg/kg	1	04/22/14	04/22/14	EAL	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA17050
(2) Instrument QC Batch: MA17053
(3) Prep QC Batch: MP22908
(4) Prep QC Batch: MP22919

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-304(28.5-29)		
Lab Sample ID:	MC29908-9	**Date Sampled:**	04/18/14
Matrix:	SO - Soil	**Date Received:**	04/18/14
		Percent Solids:	87.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.14	0.026	mg/kg	1	04/20/14 12:37	MA	SW846 9012 M
Solids, Percent	87.7			%	1	04/21/14	HS	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK-02		
Lab Sample ID:	MC29908-10	**Date Sampled:**	04/18/14
Matrix:	SO - Trip Blank Methanol	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K78574.D	1	04/24/14	JM	n/a	n/a	MSK2504
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.0 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	140	ug/kg	
71-43-2	Benzene	ND	25	17	ug/kg	
75-27-4	Bromodichloromethane	ND	100	10	ug/kg	
75-25-2	Bromoform	ND	100	18	ug/kg	
74-83-9	Bromomethane	ND	100	30	ug/kg	
78-93-3	2-Butanone (MEK)	ND	500	150	ug/kg	
75-15-0	Carbon disulfide	ND	250	6.5	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	11	ug/kg	
108-90-7	Chlorobenzene	ND	100	7.9	ug/kg	
75-00-3	Chloroethane	ND	250	38	ug/kg	
67-66-3	Chloroform	ND	100	8.5	ug/kg	
74-87-3	Chloromethane	ND	250	28	ug/kg	
124-48-1	Dibromochloromethane	ND	100	16	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	13	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	21	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	23	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	21	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	21	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	11	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	13	ug/kg	
100-41-4	Ethylbenzene	ND	100	34	ug/kg	
591-78-6	2-Hexanone	ND	500	38	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	27	ug/kg	
75-09-2	Methylene chloride	ND	100	27	ug/kg	
100-42-5	Styrene	ND	250	8.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	20	ug/kg	
127-18-4	Tetrachloroethene	ND	100	16	ug/kg	
108-88-3	Toluene	ND	250	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	11	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	29	ug/kg	
79-01-6	Trichloroethene	ND	100	12	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK-02		
Lab Sample ID:	MC29908-10	**Date Sampled:**	04/18/14
Matrix:	SO - Trip Blank Methanol	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	100	45	ug/kg	
1330-20-7	Xylene (total)	ND	100	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		70-130%
2037-26-5	Toluene-D8	108%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK-02		
Lab Sample ID:	MC29908-10A	**Date Sampled:**	04/18/14
Matrix:	SO - Trip Blank Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64839.D	1	04/29/14	KD	n/a	n/a	MSM2279
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.8	ug/kg	
71-43-2	Benzene	ND UJ	0.50	0.34	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.21	ug/kg	
75-25-2	Bromoform	ND	2.0	0.35	ug/kg	
74-83-9	Bromomethane	ND	2.0	0.60	ug/kg	
78-93-3	2-Butanone (MEK)	ND UJ	10	3.1	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.22	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.16	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.76	ug/kg	
67-66-3	Chloroform	ND	2.0	0.17	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.56	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.32	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.32	ug/kg	
75-35-4	1,1-Dichloroethene	ND UJ	2.0	0.41	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.45	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.42	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.26	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.69	ug/kg	
591-78-6	2-Hexanone	ND	10	0.76	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.54	ug/kg	
75-09-2	Methylene chloride	ND	2.0	0.53	ug/kg	
100-42-5	Styrene	ND	5.0	0.17	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.39	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.31	ug/kg	
108-88-3	Toluene	ND	5.0	0.21	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.22	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.57	ug/kg	
79-01-6	Trichloroethene	ND UJ	2.0	0.24	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK-02		
Lab Sample ID:	MC29908-10A	**Date Sampled:**	04/18/14
Matrix:	SO - Trip Blank Soil	**Date Received:**	04/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	2.0	0.91	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	79%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Consolidated Edison Company of New York, Inc. - Watson Avenue

Data Usability Summary Report

BRONX, NEW YORK

Volatile, Semivolatile, Metals and Miscellaneous Analyses

SDG #MC29971

Analyses Performed By:
Accutest Laboratories
Marlborough, Massachussetts

Report: #21696R
Review Level: Tier III
Project: B0043515.0006.00002

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #MC29971 for samples collected in association with the Con Edison Former Unionport Works site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	PCB	MET	MISC
C29971	SB-307(10-11)	MC29971-1	Soil	4/21/2014		X	X		X	X
	SB-307(12-13)	MC29971-2	Soil	4/21/2014		X	X		X	X
	SB-307(33.5-34)	MC29971-3	Soil	4/21/2014		X	X		X	X
	SB-305(8.5-9)	MC29971-5	Soil	4/22/2014		X	X		X	X
	SB-305(15-15.5)	MC29971-6	Soil	4/22/2014		X	X		X	X
	SB-305(34-35)	MC29971-7	Soil	4/22/2014		X	X		X	X
	SB-305(37-37.5)	MC29971-8	Soil	4/22/2014		X	X		X	X
	RB-04222014	MC29971-9	Water	4/22/2014		X	X		X	X
	TRIP BLANK-03	MC29971-10	Soil	4/22/2014		X				
	TRIP BLANK-03a	MC29971-10A	Soil	4/22/2014		X				

Note:
1. Miscellaneous analysis includes cyanide.
2. The matrx spike/matrix spike duplicate (MS/MSD) analysis was performed on sample SB-307(10-11) for VOCs and SVOCs; SB-305(37-37.5) and RB-04222014 for cyanide analysis.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260 and 8270 as referenced in the NYSDEC ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	14 days from collection to analysis	Cool to <6 °C.

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were detected in the associated QA blanks; however, the associated sample results were greater than the BAL and/or were non-detect. Therefore, no qualification of the sample results was required.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
SB-307(10-11) SB-307(12-13) SB-307(33.5-34) SB-305(8.5-9) SB-305(15-15.5) SB-305(34-35) SB-305(37-37.5) TRIP BLANK-03a	CCV %D	2-butanone	+37.7%
		2-hexanone	+22.8%
		Acetone	+25.3%
		methylene chloride	+22.6%
TRIP BLANK-03		bromomethane	-27.6%
		1,1-dichloroethene	+23.5
		acetone	+37.5%
		trans-1,2-dichloroethene	+27.7%
		2-butanone	+38.7%
		2-hexanone	+30.2%
RB-04222014	ICV %RSD	1,1,1-trichloroethane	17.8%
		2-hexanone	16.3%
	CCV %D	chloroethane	+23.4%
		Acetone	+36.4%
		toluene	+21.2%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
SB-307(10-11)	Benzene	AC	<LL but >10%
	Bromomethane	<LL but >10%	<LL but >10%
	Carbon disulfide	AC	<LL but >10%
	Chlorobenzene	<LL but >10%	<LL but >10%
	Chloroethane	<LL but >10%	AC
	Chloromethane	<LL but >10%	<LL but >10%
	1,1-Dichloroethene	AC	<LL but >10%
	cis-1,2-Dichloroethene	AC	<LL but >10%
	1,2-Dichloropropane	AC	<LL but >10%
	cis-1,3-Dichloropropene	AC	<LL but >10%
	trans-1,3-Dichloropropene	AC	<LL but >10%
	Ethylbenzene	<LL but >10%	<LL but >10%
	Styrene	<LL but >10%	<LL but >10%
	Tetrachloroethene	AC	<LL but >10%
	Toluene	AC	<LL but >10%
	Trichloroethene	<LL but >10%	<LL but >10%
	Vinyl chloride	<LL but >10%	AC
	Xylene (total)	<LL but >10%	<LL but >10%

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
TRIP BLANK-03	Acetone	>UL
	2-Butanone (MEK)	
RB-04222014	Acetone	

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

The field duplicate analysis was not performed on a sample location within this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Field blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X	X		
Laboratory Control Sample Duplicate(LCSD)					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS)		X	X		
Matrix Spike Duplicate(MSD)		X	X		
MS/MSD Precision (RPD)		X		X	
Field Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X	X		
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C.
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were detected in the associated QA blanks; however, the associated sample results were greater than the BAL and/or were non-detect. Therefore, sample results greater than the BAL resulted in the removal of the laboratory qualifier (B). No other qualification of the sample results was required.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
SB-307(10-11) SB-307(12-13) SB-307(33.5-34) SB-305(8.5-9) SB-305(15-15.5) SB-305(34-35) SB-305(37-37.5)	CCAL %D	2,4-Dinitrophenol	-29.4%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
	%RSD >90%	Non-detect	R
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D >90% (increase/decrease in	Non-detect	R

Initial/Continuing	Criteria	Sample Result	Qualification
	sensitivity)	Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
SB-307(10-11)	2,4-Dinitrophenol	<10%	<10%

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ

Control Limit	Sample Result	Qualification
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
RB-04222014	Hexachlorocyclopentadiene	<LL but >10%
	Phenol	

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

The field duplicate analysis was not performed on a sample location within this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Field blanks		X	X		
Laboratory Control Sample (LCS) %R		X	X		
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate(MSD) %R		X	X		
MS/MSD Precision (RPD)		X		X	
Field Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6000/7000 and 9012. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

  B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

  E The reported value is estimated due to the presence of interference.

  N Spiked sample recovery is not within control limits.

  * Duplicate analysis is not within control limits.

- Validation Qualifiers

  J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010B	Water	180 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	180 days from collection to analysis	Cool to <6 °C.
SW-846 7470	Water	28 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
SW-846 7471	Soil	28 days from collection to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All analytes associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the analytes listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
SB-305(34-35) SB-305(37-37.5)	Sodium (RB)	Detected sample results <RL and <BAL	"UB" at the RL
SB-307(33.5-34) SB-305(8.5-9)		Detected sample results >RL and <BAL	"UB" at detected sample concentration

RL = reporting limit
RB = Rinse blank

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing

acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration and Continuing Calibration

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All continuing calibration verification standard recoveries were within the control limit.

3.2 CRDL Check Standard

The CRDL check standard serves to verify the linearity of calibration of the analysis at the CRDL. The CRDL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe), magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the CRDL standard analysis are presented below in the CRDL standards evaluation table.

All analytes associated with CRDL standard recoveries were within control limits.

3.3 ICP Interference Control Sample (ICS)

The ICS verifies the laboratories interelement and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier flag will be removed.

The MS/MSD analysis was not performed on a sample location within this SDG.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices and two times the CRDL for soil matrices.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. However, the MS/MSD analysis was not performed on a sample location within this SDG.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

The field duplicate analysis was not performed on a sample location within this SDG.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit recoveries between the control limits of 80% and 120%. The relative percent difference (RPD) between the LCS and LCSD results must be no greater than the established acceptance limit of 20%.

All analytes associated with the LCS/LCSD analysis exhibited recoveries and RPD within the control limits.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

All serial dilution analysis was not perfomed on a sample location within this SDG.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6000/7000	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X		X	
B. Method Blanks		X		X	
C. Field Blanks		X	X		
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R					X
Matrix Spike Duplicate (MSD) %R					X
MS/MSD Precision (RPD)					X
Laboratory Duplicate (RPD)					X
Field Duplicate (RPD)					X
ICP Serial Dilution					X
Reporting Limit Verification		X		X	
Raw Data		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
CRDL Standard		X		X	
ICP Interference Check		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Cyanide by SW-846 9012	Water	14 days from collection to analysis	Cool to <6 °C.; preserved to a pH of greater than 12.
	Soil		Cool to <6 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the MDL. The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 and all initial calibration verification standard recoveries were within control limits.

All continuing calibration standard recoveries were within the control limit.

4. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS/MSD performed on sample locations where the

analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS analysis exhibited recoveries within the control limits.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices and two times the CRDL for soil matrices.

The laboratory duplicate sample results exhibited RPD within the control limit.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

The field duplicate analysis was not performed on a sample location within this SDG.

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA 9012	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Field blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Lab/Field Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD – relative standard deviation, %R - percent recovery, RPD - relative percent difference,

SAMPLE COMPLIANCE REPORT

SAMPLE COMPLIANCE REPORT

SDG	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PEST/ HERB /PCB	MET	MISC	
MC29971	4/21/2014	SW-846	SB-307(10-11)	Soil	No	No	--	Yes	Yes	VOC-MS/MSD %R SVOC-CCAL %D
	4/21/2014	SW-846	SB-307(12-13)	Soil	No	No	--	Yes	Yes	VOC-CCAL %D SVOC-CCAL %D
	4/21/2014	SW-846	SB-307(33.5-34)	Soil	Yes	No	--	No	Yes	SVOC-CCAL %D Metals-Blank contamination
	4/22/2014	SW-846	SB-305(8.5-9)	Soil	Yes	No	--	No	Yes	SVOC-CCAL %D Metals-Blank contamination
	4/22/2014	SW-846	SB-305(15-15.5)	Soil	No	No	--	Yes	Yes	VOC-CCAL %D SVOC-CCAL %D
	4/22/2014	SW-846	SB-305(34-35)	Soil	Yes	No	--	No	Yes	SVOC-CCAL %D Metals-Blank contamination
	4/22/2014	SW-846	SB-305(37-37.5)	Soil	Yes	No	--	No	Yes	SVOC-CCAL %D Metals-Blank contamination
	4/22/2014	SW-846	RB-04222014	Water	No	No	--	Yes	Yes	VOC-ICAL RSD, CCAL %D SVOC-LCS %R
	4/22/2014	SW-846	TRIP BLANK-03	Soil	No	--	--	--	--	VOC-CCAL %D
	4/22/2014	SW-846	TRIP BLANK-03a	Soil	Yes	--	--	--	--	

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

VALIDATION PERFORMED BY: Todd Church

SIGNATURE: 

DATE: May 28, 2014

PEER REVIEW: Dennis Capria

DATE: June 2, 2014

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

Report of Analysis

Client Sample ID:	SB-307(10-11)		
Lab Sample ID:	MC29971-1	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	88.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64947.D	1	05/01/14	KD	n/a	n/a	MSM2283
Run #2							

	Initial Weight	Final Volume
Run #1	8.48 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	6.6	1.9	ug/kg	
71-43-2	Benzene	0.42	0.33	0.22	ug/kg	J
75-27-4	Bromodichloromethane	ND	1.3	0.14	ug/kg	
75-25-2	Bromoform	ND	1.3	0.24	ug/kg	
74-83-9	Bromomethane	ND	1.3	0.40	ug/kg	UJ
78-93-3	2-Butanone (MEK)	ND	6.6	2.0	ug/kg	
75-15-0	Carbon disulfide	1.7	3.3	0.087	ug/kg	J
56-23-5	Carbon tetrachloride	ND	1.3	0.15	ug/kg	
108-90-7	Chlorobenzene	ND	1.3	0.10	ug/kg	UJ
75-00-3	Chloroethane	ND	3.3	0.50	ug/kg	UJ
67-66-3	Chloroform	ND	1.3	0.11	ug/kg	
74-87-3	Chloromethane	ND	3.3	0.37	ug/kg	UJ
124-48-1	Dibromochloromethane	ND	1.3	0.21	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.3	0.18	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.21	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.3	0.27	ug/kg	UJ
156-59-2	cis-1,2-Dichloroethene	ND	1.3	0.30	ug/kg	UJ
156-60-5	trans-1,2-Dichloroethene	ND	1.3	0.28	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.3	0.28	ug/kg	UJ
10061-01-5	cis-1,3-Dichloropropene	ND	1.3	0.15	ug/kg	UJ
10061-02-6	trans-1,3-Dichloropropene	ND	1.3	0.17	ug/kg	UJ
100-41-4	Ethylbenzene	ND	1.3	0.46	ug/kg	UJ
591-78-6	2-Hexanone	ND	6.6	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3.3	0.36	ug/kg	
75-09-2	Methylene chloride	ND	1.3	0.35	ug/kg	
100-42-5	Styrene	ND	3.3	0.11	ug/kg	UJ
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.3	0.26	ug/kg	
127-18-4	Tetrachloroethene	ND	1.3	0.21	ug/kg	UJ
108-88-3	Toluene	ND	3.3	0.14	ug/kg	UJ
71-55-6	1,1,1-Trichloroethane	ND	1.3	0.14	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.3	0.38	ug/kg	
79-01-6	Trichloroethene	ND	1.3	0.16	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-307(10-11)		
Lab Sample ID:	MC29971-1	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	88.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.3	0.60	ug/kg	UJ
1330-20-7	Xylene (total)	ND	1.3	0.15	ug/kg	UJ

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	89%		70-130%
460-00-4	4-Bromofluorobenzene	80%		70-130%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-307(10-11)		
Lab Sample ID:	MC29971-1	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	R38629.D	5	04/30/14	WK	04/23/14	OP37739	MSR1423
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	1400	63	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	2800	71	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	2800	80	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	2800	450	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	5600	700	ug/kg	R
534-52-1	4,6-Dinitro-o-cresol	ND	2800	350	ug/kg	
95-48-7	2-Methylphenol	ND	2800	110	ug/kg	
	3&4-Methylphenol	ND	2800	140	ug/kg	
88-75-5	2-Nitrophenol	ND	2800	74	ug/kg	
100-02-7	4-Nitrophenol	ND	5600	520	ug/kg	
87-86-5	Pentachlorophenol	ND	2800	200	ug/kg	
108-95-2	Phenol	ND	1400	79	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	2800	70	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	2800	69	ug/kg	
83-32-9	Acenaphthene	ND	560	75	ug/kg	
208-96-8	Acenaphthylene	ND	560	56	ug/kg	
120-12-7	Anthracene	ND	560	67	ug/kg	
56-55-3	Benzo(a)anthracene	245	560	72	ug/kg	J
50-32-8	Benzo(a)pyrene	194	560	60	ug/kg	J
205-99-2	Benzo(b)fluoranthene	258	560	70	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	155	560	56	ug/kg	J
207-08-9	Benzo(k)fluoranthene	97.5	560	84	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	1400	70	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	1400	57	ug/kg	
91-58-7	2-Chloronaphthalene	ND	1400	76	ug/kg	
106-47-8	4-Chloroaniline	ND	2800	70	ug/kg	
86-74-8	Carbazole	ND	560	66	ug/kg	
218-01-9	Chrysene	220	560	69	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	1400	65	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	1400	85	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	1400	100	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1400	85	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-307(10-11)
Lab Sample ID: MC29971-1 **Date Sampled:** 04/21/14
Matrix: SO - Soil **Date Received:** 04/22/14
Method: SW846 8270D SW846 3546 **Percent Solids:** 88.8
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1400	72	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1400	80	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1400	74	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	2800	190	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	2800	70	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1400	140	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	560	66	ug/kg	
132-64-9	Dibenzofuran	ND	560	77	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	1400	150	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	1400	44	ug/kg	
84-66-2	Diethyl phthalate	ND	1400	70	ug/kg	
131-11-3	Dimethyl phthalate	ND	1400	81	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1400	52	ug/kg	
206-44-0	Fluoranthene	428	560	76	ug/kg	J
86-73-7	Fluorene	ND	560	74	ug/kg	
118-74-1	Hexachlorobenzene	ND	1400	87	ug/kg	
87-68-3	Hexachlorobutadiene	ND	1400	81	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	2800	700	ug/kg	
67-72-1	Hexachloroethane	ND	1400	67	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	114	560	62	ug/kg	J
78-59-1	Isophorone	ND	1400	64	ug/kg	
91-57-6	2-Methylnaphthalene	ND	560	71	ug/kg	
88-74-4	2-Nitroaniline	ND	2800	70	ug/kg	
99-09-2	3-Nitroaniline	ND	2800	150	ug/kg	
100-01-6	4-Nitroaniline	ND	2800	70	ug/kg	
91-20-3	Naphthalene	ND	560	89	ug/kg	
98-95-3	Nitrobenzene	ND	1400	75	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	1400	80	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	1400	84	ug/kg	
85-01-8	Phenanthrene	227	560	75	ug/kg	J
129-00-0	Pyrene	420	560	65	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	1400	77	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		30-130%
4165-62-2	Phenol-d5	64%		30-130%
118-79-6	2,4,6-Tribromophenol	60%		30-130%
4165-60-0	Nitrobenzene-d5	62%		30-130%
321-60-8	2-Fluorobiphenyl	76%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-307(10-11)		
Lab Sample ID:	MC29971-1	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	83%		30-130%

(a) Elevated RL due to dilution required for matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-307(10-11)
Lab Sample ID: MC29971-1
Matrix: SO - Soil
Date Sampled: 04/21/14
Date Received: 04/22/14
Percent Solids: 88.8
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	23900	21	3.8	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Antimony [a]	3.0	2.1	0.32	mg/kg	2	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Arsenic	4.4	1.1	0.22	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Barium	444	5.3	0.076	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Beryllium	22.6	0.42	0.025	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cadmium [a]	0.79 B	0.84	0.089	mg/kg	2	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Calcium	9120	530	6.6	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Chromium	232	1.1	0.10	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cobalt	131	5.3	0.049	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Copper	9070	53	12	mg/kg	20	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Iron	95000	53	4.6	mg/kg	5	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Lead	2140	2.1	0.35	mg/kg	2	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Magnesium	15000	530	5.4	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Manganese	806	1.6	0.042	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Mercury	0.032 B	0.036	0.0079	mg/kg	1	04/24/14	04/25/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	330	4.2	0.046	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Potassium	11500	530	9.0	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Selenium [a]	ND	2.1	0.73	mg/kg	2	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Silver [a]	2.5	1.1	0.26	mg/kg	2	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Sodium	1970	530	3.5	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Thallium [a]	0.35 B	2.1	0.28	mg/kg	2	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Vanadium	70.4	1.1	0.14	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Zinc	15300	42	3.4	mg/kg	20	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]

(1) Instrument QC Batch: MA17056
(2) Instrument QC Batch: MA17061
(3) Instrument QC Batch: MA17066
(4) Prep QC Batch: MP22924
(5) Prep QC Batch: MP22926

(a) Elevated RL due to dilution required for matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-307(10-11)		
Lab Sample ID:	MC29971-1	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
		Percent Solids:	88.8
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.13	0.024	mg/kg	1	04/26/14 15:36	MA	SW846 9012 M
Solids, Percent	88.8			%	1	04/24/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-307(12-13)		
Lab Sample ID:	MC29971-2	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	42.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64948.D	1	05/01/14	KD	n/a	n/a	MSM2283
Run #2							

	Initial Weight	Final Volume
Run #1	4.53 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	164	26	7.3	ug/kg	J
71-43-2	Benzene	ND	1.3	0.88	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	0.55	ug/kg	
75-25-2	Bromoform	ND	5.2	0.93	ug/kg	
74-83-9	Bromomethane	ND	5.2	1.6	ug/kg	
78-93-3	2-Butanone (MEK)	ND	26	8.1	ug/kg	
75-15-0	Carbon disulfide	ND	13	0.34	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	0.58	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	0.41	ug/kg	
75-00-3	Chloroethane	ND	13	2.0	ug/kg	
67-66-3	Chloroform	ND	5.2	0.44	ug/kg	
74-87-3	Chloromethane	ND	13	1.5	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	0.85	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.2	0.70	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.2	0.84	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.2	1.1	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.2	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.2	1.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	0.59	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	0.69	ug/kg	
100-41-4	Ethylbenzene	ND	5.2	1.8	ug/kg	
591-78-6	2-Hexanone	ND	26	2.0	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	13	1.4	ug/kg	
75-09-2	Methylene chloride	ND	5.2	1.4	ug/kg	
100-42-5	Styrene	ND	13	0.45	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	1.0	ug/kg	
127-18-4	Tetrachloroethene	ND	5.2	0.82	ug/kg	
108-88-3	Toluene	ND	13	0.54	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.2	0.57	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	1.5	ug/kg	
79-01-6	Trichloroethene	ND	5.2	0.64	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-307(12-13)		
Lab Sample ID:	MC29971-2	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	42.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	5.2	2.4	ug/kg	
1330-20-7	Xylene (total)	ND	5.2	0.57	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
2037-26-5	Toluene-D8	88%		70-130%
460-00-4	4-Bromofluorobenzene	92%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-307(12-13)
Lab Sample ID: MC29971-2
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Date Sampled: 04/21/14
Date Received: 04/22/14
Percent Solids: 42.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	R38630.D	5	04/30/14	WK	04/23/14	OP37739	MSR1423
Run #2							

	Initial Weight	Final Volume
Run #1	20.7 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	2900	130	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	5700	150	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	5700	170	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	5700	940	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	11000	1400	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	5700	720	ug/kg	
95-48-7	2-Methylphenol	ND	5700	230	ug/kg	
	3&4-Methylphenol	ND	5700	280	ug/kg	
88-75-5	2-Nitrophenol	ND	5700	150	ug/kg	
100-02-7	4-Nitrophenol	ND	11000	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	5700	400	ug/kg	
108-95-2	Phenol	ND	2900	160	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	5700	140	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	5700	140	ug/kg	
83-32-9	Acenaphthene	582	1100	150	ug/kg	J
208-96-8	Acenaphthylene	1490	1100	110	ug/kg	
120-12-7	Anthracene	1010	1100	140	ug/kg	J
56-55-3	Benzo(a)anthracene	3750	1100	150	ug/kg	
50-32-8	Benzo(a)pyrene	3650	1100	120	ug/kg	
205-99-2	Benzo(b)fluoranthene	4810	1100	140	ug/kg	
191-24-2	Benzo(g,h,i)perylene	2580	1100	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	1340	1100	170	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	2900	150	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	2900	120	ug/kg	
91-58-7	2-Chloronaphthalene	ND	2900	160	ug/kg	
106-47-8	4-Chloroaniline	ND	5700	140	ug/kg	
86-74-8	Carbazole	299	1100	140	ug/kg	J
218-01-9	Chrysene	3900	1100	140	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	2900	130	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	2900	180	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2900	210	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2900	180	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-307(12-13)
Lab Sample ID: MC29971-2 **Date Sampled:** 04/21/14
Matrix: SO - Soil **Date Received:** 04/22/14
Method: SW846 8270D SW846 3546 **Percent Solids:** 42.1
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2900	150	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2900	160	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2900	150	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	5700	380	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	5700	140	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	2900	290	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	707	1100	140	ug/kg	J
132-64-9	Dibenzofuran	ND	1100	160	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	2900	300	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	2900	90	ug/kg	
84-66-2	Diethyl phthalate	ND	2900	140	ug/kg	
131-11-3	Dimethyl phthalate	ND	2900	170	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2900	110	ug/kg	
206-44-0	Fluoranthene	6830	1100	160	ug/kg	
86-73-7	Fluorene	377	1100	150	ug/kg	J
118-74-1	Hexachlorobenzene	ND	2900	180	ug/kg	
87-68-3	Hexachlorobutadiene	ND	2900	170	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	5700	1400	ug/kg	
67-72-1	Hexachloroethane	ND	2900	140	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	2040	1100	130	ug/kg	
78-59-1	Isophorone	ND	2900	130	ug/kg	
91-57-6	2-Methylnaphthalene	222	1100	150	ug/kg	J
88-74-4	2-Nitroaniline	ND	5700	140	ug/kg	
99-09-2	3-Nitroaniline	ND	5700	310	ug/kg	
100-01-6	4-Nitroaniline	ND	5700	140	ug/kg	
91-20-3	Naphthalene	443	1100	180	ug/kg	J
98-95-3	Nitrobenzene	ND	2900	160	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	2900	160	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	2900	170	ug/kg	
85-01-8	Phenanthrene	3230	1100	160	ug/kg	
129-00-0	Pyrene	7140	1100	130	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2900	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		30-130%
4165-62-2	Phenol-d5	48%		30-130%
118-79-6	2,4,6-Tribromophenol	52%		30-130%
4165-60-0	Nitrobenzene-d5	47%		30-130%
321-60-8	2-Fluorobiphenyl	60%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-307(12-13)		
Lab Sample ID:	MC29971-2	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	42.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	68%		30-130%

(a) Elevated RL due to dilution required for matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-307(12-13)
Lab Sample ID: MC29971-2
Matrix: SO - Soil
Date Sampled: 04/21/14
Date Received: 04/22/14
Percent Solids: 42.1
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	13500	24	4.3	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Antimony	0.94 B	1.2	0.18	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Arsenic	31.5	1.2	0.25	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Barium	173	6.0	0.087	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Beryllium	0.86	0.48	0.029	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cadmium	1.0	0.48	0.051	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Calcium	3080	600	7.5	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Chromium	54.7	1.2	0.11	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cobalt	6.7	6.0	0.056	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Copper	207	3.0	0.67	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Iron	26900	12	1.0	mg/kg	1	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Lead	423	1.2	0.20	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Magnesium	5840	600	6.1	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Manganese	270	1.8	0.048	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Mercury	0.67	0.053	0.012	mg/kg	1	04/24/14	04/25/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	26.4	4.8	0.053	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Potassium	3290	600	10	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Selenium	3.3	1.2	0.42	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Silver	1.9	0.60	0.15	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Sodium	8150	600	4.0	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Thallium	0.48 B	1.2	0.16	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Vanadium	50.2	1.2	0.16	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Zinc	220	2.4	0.19	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]

(1) Instrument QC Batch: MA17056
(2) Instrument QC Batch: MA17061
(3) Instrument QC Batch: MA17066
(4) Prep QC Batch: MP22924
(5) Prep QC Batch: MP22926

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-307(12-13)		
Lab Sample ID:	MC29971-2	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
		Percent Solids:	42.1
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.070 B	0.22	0.041	mg/kg	1	04/26/14 15:39	MA	SW846 9012 M
Solids, Percent	42.1			%	1	04/24/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-307(33.5-34)		
Lab Sample ID:	MC29971-3	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	84.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64949.D	1	05/01/14	KD	n/a	n/a	MSM2283
Run #2							

	Initial Weight	Final Volume
Run #1	7.10 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	8.3	2.3	ug/kg	
71-43-2	Benzene	0.65	0.42	0.28	ug/kg	
75-27-4	Bromodichloromethane	ND	1.7	0.17	ug/kg	
75-25-2	Bromoform	ND	1.7	0.30	ug/kg	
74-83-9	Bromomethane	ND	1.7	0.50	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.3	2.6	ug/kg	
75-15-0	Carbon disulfide	4.6	4.2	0.11	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.7	0.18	ug/kg	
108-90-7	Chlorobenzene	ND	1.7	0.13	ug/kg	
75-00-3	Chloroethane	ND	4.2	0.63	ug/kg	
67-66-3	Chloroform	ND	1.7	0.14	ug/kg	
74-87-3	Chloromethane	ND	4.2	0.47	ug/kg	
124-48-1	Dibromochloromethane	ND	1.7	0.27	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.7	0.22	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.7	0.27	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.7	0.34	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.7	0.38	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.7	0.35	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.7	0.35	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.7	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.7	0.22	ug/kg	
100-41-4	Ethylbenzene	ND	1.7	0.57	ug/kg	
591-78-6	2-Hexanone	ND	8.3	0.63	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.2	0.45	ug/kg	
75-09-2	Methylene chloride	ND	1.7	0.44	ug/kg	
100-42-5	Styrene	ND	4.2	0.14	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.7	0.33	ug/kg	
127-18-4	Tetrachloroethene	ND	1.7	0.26	ug/kg	
108-88-3	Toluene	ND	4.2	0.17	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.7	0.18	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.7	0.48	ug/kg	
79-01-6	Trichloroethene	ND	1.7	0.20	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-307(33.5-34)		
Lab Sample ID:	MC29971-3	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	84.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.7	0.76	ug/kg	
1330-20-7	Xylene (total)	ND	1.7	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	79%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-307(33.5-34)
Lab Sample ID: MC29971-3
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Date Sampled: 04/21/14
Date Received: 04/22/14
Percent Solids: 84.5

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38631.D	1	04/30/14	WK	04/23/14	OP37739	MSR1423
Run #2							

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	300	13	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	590	15	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	590	17	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	590	96	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	150	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	590	74	ug/kg	
95-48-7	2-Methylphenol	ND	590	23	ug/kg	
	3&4-Methylphenol	ND	590	29	ug/kg	
88-75-5	2-Nitrophenol	ND	590	16	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	110	ug/kg	
87-86-5	Pentachlorophenol	ND	590	42	ug/kg	
108-95-2	Phenol	ND	300	17	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	590	15	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	590	15	ug/kg	
83-32-9	Acenaphthene	ND	120	16	ug/kg	
208-96-8	Acenaphthylene	ND	120	12	ug/kg	
120-12-7	Anthracene	ND	120	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	120	15	ug/kg	
50-32-8	Benzo(a)pyrene	ND	120	13	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	120	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	120	12	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	120	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	300	15	ug/kg	
85-68-7	Butyl benzyl phthalate	18.5	300	12	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	300	16	ug/kg	
106-47-8	4-Chloroaniline	ND	590	15	ug/kg	
86-74-8	Carbazole	ND	120	14	ug/kg	
218-01-9	Chrysene	ND	120	15	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	300	14	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	300	18	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	300	21	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	300	18	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-307(33.5-34)		
Lab Sample ID:	MC29971-3	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	300	15	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	300	17	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	300	16	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	590	39	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	590	15	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	300	30	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	120	14	ug/kg	
132-64-9	Dibenzofuran	ND	120	16	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	300	31	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	300	9.2	ug/kg	
84-66-2	Diethyl phthalate	ND	300	15	ug/kg	
131-11-3	Dimethyl phthalate	ND	300	17	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	20.4	300	11	ug/kg	J
206-44-0	Fluoranthene	ND	120	16	ug/kg	
86-73-7	Fluorene	ND	120	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	300	18	ug/kg	
87-68-3	Hexachlorobutadiene	ND	300	17	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	590	150	ug/kg	
67-72-1	Hexachloroethane	ND	300	14	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	120	13	ug/kg	
78-59-1	Isophorone	ND	300	14	ug/kg	
91-57-6	2-Methylnaphthalene	ND	120	15	ug/kg	
88-74-4	2-Nitroaniline	ND	590	15	ug/kg	
99-09-2	3-Nitroaniline	ND	590	32	ug/kg	
100-01-6	4-Nitroaniline	ND	590	15	ug/kg	
91-20-3	Naphthalene	ND	120	19	ug/kg	
98-95-3	Nitrobenzene	ND	300	16	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	300	17	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	300	18	ug/kg	
85-01-8	Phenanthrene	ND	120	16	ug/kg	
129-00-0	Pyrene	ND	120	14	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	300	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	81%		30-130%
4165-62-2	Phenol-d5	79%		30-130%
118-79-6	2,4,6-Tribromophenol	74%		30-130%
4165-60-0	Nitrobenzene-d5	70%		30-130%
321-60-8	2-Fluorobiphenyl	80%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-307(33.5-34)		
Lab Sample ID:	MC29971-3	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	90%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-307(33.5-34)
Lab Sample ID: MC29971-3
Matrix: SO - Soil
Date Sampled: 04/21/14
Date Received: 04/22/14
Percent Solids: 84.5
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	20300	21	3.8	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Antimony	0.24 B	1.1	0.16	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Arsenic	1.7	1.1	0.22	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Barium	336	5.3	0.077	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Beryllium	0.54	0.42	0.025	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cadmium	0.11 B	0.42	0.045	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Calcium	3370	530	6.6	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Chromium	56.4	1.1	0.10	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cobalt	14.5	5.3	0.050	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Copper	47.9	2.6	0.59	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Iron	28900	110	9.2	mg/kg	10	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Lead	110	1.1	0.18	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Magnesium	9990	530	5.4	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Manganese	420	1.6	0.042	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Mercury	ND	0.038	0.0083	mg/kg	1	04/24/14	04/25/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	39.0	4.2	0.046	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Potassium	9570	530	9.0	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Selenium	ND	1.1	0.37	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Silver	ND	0.53	0.13	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Sodium	540	530	3.5	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Thallium	ND	1.1	0.14	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Vanadium	59.3	1.1	0.14	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Zinc	119	2.1	0.17	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]

UB

(1) Instrument QC Batch: MA17056
(2) Instrument QC Batch: MA17061
(3) Instrument QC Batch: MA17066
(4) Prep QC Batch: MP22924
(5) Prep QC Batch: MP22926

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-307(33.5-34)		
Lab Sample ID:	MC29971-3	**Date Sampled:**	04/21/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
		Percent Solids:	84.5
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.14	0.027	mg/kg	1	04/26/14 15:40	MA	SW846 9012 M
Solids, Percent	84.5			%	1	04/24/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-305(8.5-9)		
Lab Sample ID:	MC29971-5	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	91.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64950.D	1	05/01/14	KD	n/a	n/a	MSM2283
Run #2							

	Initial Weight	Final Volume
Run #1	7.12 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	7.7	2.2	ug/kg	
71-43-2	Benzene	ND	0.39	0.26	ug/kg	
75-27-4	Bromodichloromethane	ND	1.5	0.16	ug/kg	
75-25-2	Bromoform	ND	1.5	0.27	ug/kg	
74-83-9	Bromomethane	ND	1.5	0.46	ug/kg	
78-93-3	2-Butanone (MEK)	ND	7.7	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	3.9	0.10	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.5	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	1.5	0.12	ug/kg	
75-00-3	Chloroethane	ND	3.9	0.58	ug/kg	
67-66-3	Chloroform	ND	1.5	0.13	ug/kg	
74-87-3	Chloromethane	ND	3.9	0.44	ug/kg	
124-48-1	Dibromochloromethane	ND	1.5	0.25	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.5	0.21	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.5	0.25	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.5	0.32	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.5	0.35	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.5	0.32	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.5	0.32	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.5	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.5	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.5	0.53	ug/kg	
591-78-6	2-Hexanone	ND	7.7	0.58	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3.9	0.42	ug/kg	
75-09-2	Methylene chloride	ND	1.5	0.41	ug/kg	
100-42-5	Styrene	ND	3.9	0.13	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.5	0.30	ug/kg	
127-18-4	Tetrachloroethene	ND	1.5	0.24	ug/kg	
108-88-3	Toluene	ND	3.9	0.16	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.5	0.17	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.44	ug/kg	
79-01-6	Trichloroethene	ND	1.5	0.19	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-305(8.5-9)		
Lab Sample ID:	MC29971-5	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	91.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.5	0.70	ug/kg	
1330-20-7	Xylene (total)	ND	1.5	0.17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	79%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-305(8.5-9)
Lab Sample ID: MC29971-5 **Date Sampled:** 04/22/14
Matrix: SO - Soil **Date Received:** 04/22/14
Method: SW846 8270D SW846 3546 **Percent Solids:** 91.0
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38633.D	1	04/30/14	WK	04/23/14	OP37739	MSR1423
Run #2							

	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	270	12	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	550	14	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	550	16	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	550	89	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	140	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	550	69	ug/kg	
95-48-7	2-Methylphenol	ND	550	22	ug/kg	
	3&4-Methylphenol	ND	550	27	ug/kg	
88-75-5	2-Nitrophenol	ND	550	15	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	100	ug/kg	
87-86-5	Pentachlorophenol	ND	550	39	ug/kg	
108-95-2	Phenol	ND	270	16	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	550	14	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	550	14	ug/kg	
83-32-9	Acenaphthene	ND	110	15	ug/kg	
208-96-8	Acenaphthylene	16.0	110	11	ug/kg	J
120-12-7	Anthracene	ND	110	13	ug/kg	
56-55-3	Benzo(a)anthracene	43.5	110	14	ug/kg	J
50-32-8	Benzo(a)pyrene	35.7	110	12	ug/kg	J
205-99-2	Benzo(b)fluoranthene	49.4	110	14	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	28.3	110	11	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	110	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	11	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	15	ug/kg	
106-47-8	4-Chloroaniline	ND	550	14	ug/kg	
86-74-8	Carbazole	ND	110	13	ug/kg	
218-01-9	Chrysene	33.9	110	14	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	270	13	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	17	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	20	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	270	17	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-305(8.5-9)		
Lab Sample ID:	MC29971-5	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	270	14	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	270	16	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	270	15	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	550	37	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	550	14	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	270	27	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	13	ug/kg	
132-64-9	Dibenzofuran	ND	110	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	29	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	8.6	ug/kg	
84-66-2	Diethyl phthalate	ND	270	14	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	16	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	270	10	ug/kg	
206-44-0	Fluoranthene	57.7	110	15	ug/kg	J
86-73-7	Fluorene	ND	110	15	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	550	140	ug/kg	
67-72-1	Hexachloroethane	ND	270	13	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	22.1	110	12	ug/kg	J
78-59-1	Isophorone	ND	270	13	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	14	ug/kg	
88-74-4	2-Nitroaniline	ND	550	14	ug/kg	
99-09-2	3-Nitroaniline	ND	550	30	ug/kg	
100-01-6	4-Nitroaniline	ND	550	14	ug/kg	
91-20-3	Naphthalene	ND	110	18	ug/kg	
98-95-3	Nitrobenzene	ND	270	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	16	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	17	ug/kg	
85-01-8	Phenanthrene	36.9	110	15	ug/kg	J
129-00-0	Pyrene	63.5	110	13	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	270	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	75%		30-130%
4165-62-2	Phenol-d5	74%		30-130%
118-79-6	2,4,6-Tribromophenol	68%		30-130%
4165-60-0	Nitrobenzene-d5	66%		30-130%
321-60-8	2-Fluorobiphenyl	74%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-305(8.5-9)		
Lab Sample ID:	MC29971-5	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	84%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-305(8.5-9)
Lab Sample ID: MC29971-5
Matrix: SO - Soil
Date Sampled: 04/22/14
Date Received: 04/22/14
Percent Solids: 91.0
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	11000	20	3.6	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Antimony	0.23 B	1.0	0.15	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Arsenic	0.77 B	1.0	0.21	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Barium	164	5.0	0.073	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Beryllium	0.30 B	0.40	0.024	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Cadmium	0.070 B	0.40	0.042	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Calcium	1250	500	6.3	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Chromium	19.0	1.0	0.095	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Cobalt	13.7	5.0	0.047	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Copper	19.8	2.5	0.55	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Iron	20700	10	0.87	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Lead	7.3	1.0	0.17	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Magnesium	5750	500	5.1	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Manganese	218	1.5	0.040	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Mercury	0.027 B	0.035	0.0078	mg/kg	1	04/24/14	04/25/14	SA	SW846 7471B [1]	SW846 7471B [3]
Nickel	24.1	4.0	0.044	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Potassium	7300	500	8.6	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Selenium	ND	1.0	0.35	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Silver	ND	0.50	0.12	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Sodium	797	500	3.3	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Thallium	0.43 B	1.0	0.13	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Vanadium	29.2	1.0	0.13	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Zinc	73.6	2.0	0.16	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]

UB

(1) Instrument QC Batch: MA17056
(2) Instrument QC Batch: MA17061
(3) Prep QC Batch: MP22924
(4) Prep QC Batch: MP22926

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-305(8.5-9)		
Lab Sample ID:	MC29971-5	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
		Percent Solids:	91.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.13	0.024	mg/kg	1	04/26/14 15:42	MA	SW846 9012 M
Solids, Percent	91			%	1	04/24/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-305(15-15.5)		
Lab Sample ID:	MC29971-6	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	53.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64951.D	1	05/01/14	KD	n/a	n/a	MSM2283
Run #2							

	Initial Weight	Final Volume
Run #1	4.40 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	71.9	21	5.9	ug/kg	J
71-43-2	Benzene	ND	1.1	0.71	ug/kg	
75-27-4	Bromodichloromethane	ND	4.2	0.44	ug/kg	
75-25-2	Bromoform	ND	4.2	0.75	ug/kg	
74-83-9	Bromomethane	ND	4.2	1.3	ug/kg	
78-93-3	2-Butanone (MEK)	ND	21	6.5	ug/kg	
75-15-0	Carbon disulfide	4.2	11	0.28	ug/kg	J
56-23-5	Carbon tetrachloride	ND	4.2	0.47	ug/kg	
108-90-7	Chlorobenzene	ND	4.2	0.33	ug/kg	
75-00-3	Chloroethane	ND	11	1.6	ug/kg	
67-66-3	Chloroform	ND	4.2	0.36	ug/kg	
74-87-3	Chloromethane	ND	11	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	4.2	0.68	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.2	0.56	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.2	0.68	ug/kg	
75-35-4	1,1-Dichloroethene	ND	4.2	0.88	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	4.2	0.96	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	4.2	0.88	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.2	0.89	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.2	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.2	0.56	ug/kg	
100-41-4	Ethylbenzene	ND	4.2	1.5	ug/kg	
591-78-6	2-Hexanone	ND	21	1.6	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	11	1.1	ug/kg	
75-09-2	Methylene chloride	ND	4.2	1.1	ug/kg	
100-42-5	Styrene	ND	11	0.36	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.2	0.83	ug/kg	
127-18-4	Tetrachloroethene	ND	4.2	0.66	ug/kg	
108-88-3	Toluene	ND	11	0.44	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.2	0.46	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.2	1.2	ug/kg	
79-01-6	Trichloroethene	ND	4.2	0.52	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-305(15-15.5)		
Lab Sample ID:	MC29971-6	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	53.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	4.2	1.9	ug/kg	
1330-20-7	Xylene (total)	ND	4.2	0.46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	89%		70-130%
460-00-4	4-Bromofluorobenzene	80%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-305(15-15.5)
Lab Sample ID: MC29971-6 **Date Sampled:** 04/22/14
Matrix: SO - Soil **Date Received:** 04/22/14
Method: SW846 8270D SW846 3546 **Percent Solids:** 53.7
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72792.D	1	04/30/14	MR	04/23/14	OP37739	MSF3233
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	460	21	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	920	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	920	27	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	920	150	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1800	230	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	920	120	ug/kg	
95-48-7	2-Methylphenol	52.9	920	37	ug/kg	J
	3&4-Methylphenol	51.6	920	45	ug/kg	J
88-75-5	2-Nitrophenol	ND	920	25	ug/kg	
100-02-7	4-Nitrophenol	ND	1800	170	ug/kg	
87-86-5	Pentachlorophenol	ND	920	65	ug/kg	
108-95-2	Phenol	ND	460	26	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	920	23	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	920	23	ug/kg	
83-32-9	Acenaphthene	38.1	180	25	ug/kg	J
208-96-8	Acenaphthylene	337	180	18	ug/kg	
120-12-7	Anthracene	218	180	22	ug/kg	
56-55-3	Benzo(a)anthracene	791	180	24	ug/kg	
50-32-8	Benzo(a)pyrene	870	180	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	824	180	23	ug/kg	
191-24-2	Benzo(g,h,i)perylene	606	180	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	284	180	28	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	460	23	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	460	19	ug/kg	
91-58-7	2-Chloronaphthalene	ND	460	25	ug/kg	
106-47-8	4-Chloroaniline	ND	920	23	ug/kg	
86-74-8	Carbazole	ND	180	22	ug/kg	
218-01-9	Chrysene	1020	180	23	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	460	22	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	460	28	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	460	33	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	460	28	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-305(15-15.5)		
Lab Sample ID:	MC29971-6	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	53.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	460	24	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	460	26	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	460	25	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	920	62	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	920	23	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	460	46	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	51.2	180	22	ug/kg	J
132-64-9	Dibenzofuran	ND	180	25	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	460	49	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	460	14	ug/kg	
84-66-2	Diethyl phthalate	ND	460	23	ug/kg	
131-11-3	Dimethyl phthalate	ND	460	27	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	460	17	ug/kg	
206-44-0	Fluoranthene	867	180	25	ug/kg	
86-73-7	Fluorene	56.8	180	25	ug/kg	J
118-74-1	Hexachlorobenzene	ND	460	29	ug/kg	
87-68-3	Hexachlorobutadiene	ND	460	27	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	920	230	ug/kg	
67-72-1	Hexachloroethane	ND	460	22	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	447	180	20	ug/kg	
78-59-1	Isophorone	ND	460	21	ug/kg	
91-57-6	2-Methylnaphthalene	50.2	180	23	ug/kg	J
88-74-4	2-Nitroaniline	ND	920	23	ug/kg	
99-09-2	3-Nitroaniline	ND	920	50	ug/kg	
100-01-6	4-Nitroaniline	ND	920	23	ug/kg	
91-20-3	Naphthalene	126	180	30	ug/kg	J
98-95-3	Nitrobenzene	ND	460	25	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	460	26	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	460	28	ug/kg	
85-01-8	Phenanthrene	356	180	25	ug/kg	
129-00-0	Pyrene	1290	180	22	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	460	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%		30-130%
4165-62-2	Phenol-d5	62%		30-130%
118-79-6	2,4,6-Tribromophenol	75%		30-130%
4165-60-0	Nitrobenzene-d5	71%		30-130%
321-60-8	2-Fluorobiphenyl	78%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-305(15-15.5)		
Lab Sample ID:	MC29971-6	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	53.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	94%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-305(15-15.5)
Lab Sample ID: MC29971-6
Matrix: SO - Soil
Date Sampled: 04/22/14
Date Received: 04/22/14
Percent Solids: 53.7
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	19200	21	3.7	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Antimony	0.27 B	1.0	0.16	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Arsenic	18.0	1.0	0.22	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Barium	65.0	5.2	0.076	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Beryllium	0.70	0.42	0.025	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cadmium	0.26 B	0.42	0.044	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Calcium	2320	520	6.5	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Chromium	57.2	1.0	0.099	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cobalt	9.1	5.2	0.049	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Copper	72.0	2.6	0.58	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Iron	28800	100	9.1	mg/kg	10	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Lead	118	1.0	0.17	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Magnesium	8670	520	5.3	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Manganese	266	1.6	0.042	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Mercury	2.1	0.10	0.023	mg/kg	2	04/24/14	04/25/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	31.0	4.2	0.046	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Potassium	4800	520	8.9	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Selenium	1.4	1.0	0.36	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Silver	0.59	0.52	0.13	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Sodium	7080	520	3.4	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Thallium	0.24 B	1.0	0.14	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Vanadium	52.0	1.0	0.14	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Zinc	119	2.1	0.17	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]

(1) Instrument QC Batch: MA17056
(2) Instrument QC Batch: MA17061
(3) Instrument QC Batch: MA17066
(4) Prep QC Batch: MP22924
(5) Prep QC Batch: MP22926

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-305(15-15.5)		
Lab Sample ID:	MC29971-6	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
		Percent Solids:	53.7
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.18	0.034	mg/kg	1	04/26/14 15:43	MA	SW846 9012 M
Solids, Percent	53.7			%	1	04/24/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-305(34-35)		
Lab Sample ID:	MC29971-7	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	88.9
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64952.D	1	05/01/14	KD	n/a	n/a	MSM2283
Run #2							

	Initial Weight	Final Volume
Run #1	7.47 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	7.5	2.1	ug/kg	
71-43-2	Benzene	ND	0.38	0.25	ug/kg	
75-27-4	Bromodichloromethane	ND	1.5	0.16	ug/kg	
75-25-2	Bromoform	ND	1.5	0.27	ug/kg	
74-83-9	Bromomethane	ND	1.5	0.45	ug/kg	
78-93-3	2-Butanone (MEK)	ND	7.5	2.3	ug/kg	
75-15-0	Carbon disulfide	0.64	3.8	0.099	ug/kg	J
56-23-5	Carbon tetrachloride	ND	1.5	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	1.5	0.12	ug/kg	
75-00-3	Chloroethane	ND	3.8	0.57	ug/kg	
67-66-3	Chloroform	ND	1.5	0.13	ug/kg	
74-87-3	Chloromethane	ND	3.8	0.42	ug/kg	
124-48-1	Dibromochloromethane	ND	1.5	0.24	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.5	0.20	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.5	0.24	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.5	0.31	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.5	0.34	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.5	0.31	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.5	0.32	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.5	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.5	0.20	ug/kg	
100-41-4	Ethylbenzene	ND	1.5	0.52	ug/kg	
591-78-6	2-Hexanone	ND	7.5	0.57	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3.8	0.41	ug/kg	
75-09-2	Methylene chloride	ND	1.5	0.40	ug/kg	
100-42-5	Styrene	ND	3.8	0.13	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.5	0.30	ug/kg	
127-18-4	Tetrachloroethene	ND	1.5	0.24	ug/kg	
108-88-3	Toluene	ND	3.8	0.15	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.5	0.16	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.43	ug/kg	
79-01-6	Trichloroethene	ND	1.5	0.18	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-305(34-35)		
Lab Sample ID:	MC29971-7	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	88.9
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.5	0.68	ug/kg	
1330-20-7	Xylene (total)	ND	1.5	0.16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	80%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-305(34-35)
Lab Sample ID: MC29971-7 **Date Sampled:** 04/22/14
Matrix: SO - Soil **Date Received:** 04/22/14
Method: SW846 8270D SW846 3546 **Percent Solids:** 88.9
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72793.D	1	04/30/14	MR	04/23/14	OP37739	MSF3233
Run #2							

	Initial Weight	Final Volume
Run #1	20.7 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	270	12	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	540	14	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	540	16	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	540	89	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	140	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	540	68	ug/kg	
95-48-7	2-Methylphenol	ND	540	22	ug/kg	
	3&4-Methylphenol	ND	540	26	ug/kg	
88-75-5	2-Nitrophenol	ND	540	15	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	100	ug/kg	
87-86-5	Pentachlorophenol	ND	540	38	ug/kg	
108-95-2	Phenol	ND	270	15	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	540	14	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	540	13	ug/kg	
83-32-9	Acenaphthene	ND	110	15	ug/kg	
208-96-8	Acenaphthylene	ND	110	11	ug/kg	
120-12-7	Anthracene	ND	110	13	ug/kg	
56-55-3	Benzo(a)anthracene	ND	110	14	ug/kg	
50-32-8	Benzo(a)pyrene	ND	110	12	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	110	14	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	110	11	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	110	16	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	11	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	15	ug/kg	
106-47-8	4-Chloroaniline	ND	540	14	ug/kg	
86-74-8	Carbazole	ND	110	13	ug/kg	
218-01-9	Chrysene	ND	110	14	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	270	13	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	17	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	20	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	270	17	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-305(34-35)
Lab Sample ID: MC29971-7 **Date Sampled:** 04/22/14
Matrix: SO - Soil **Date Received:** 04/22/14
Method: SW846 8270D SW846 3546 **Percent Solids:** 88.9
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	270	14	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	270	16	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	270	14	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	540	36	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	540	14	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	270	27	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	13	ug/kg	
132-64-9	Dibenzofuran	ND	110	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	29	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	8.5	ug/kg	
84-66-2	Diethyl phthalate	ND	270	14	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	16	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	12.1	270	10	ug/kg	J
206-44-0	Fluoranthene	ND	110	15	ug/kg	
86-73-7	Fluorene	ND	110	14	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	540	140	ug/kg	
67-72-1	Hexachloroethane	ND	270	13	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	110	12	ug/kg	
78-59-1	Isophorone	ND	270	13	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	14	ug/kg	
88-74-4	2-Nitroaniline	ND	540	14	ug/kg	
99-09-2	3-Nitroaniline	ND	540	30	ug/kg	
100-01-6	4-Nitroaniline	ND	540	14	ug/kg	
91-20-3	Naphthalene	ND	110	17	ug/kg	
98-95-3	Nitrobenzene	ND	270	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	16	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	16	ug/kg	
85-01-8	Phenanthrene	ND	110	15	ug/kg	
129-00-0	Pyrene	ND	110	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	73%		30-130%
4165-62-2	Phenol-d5	68%		30-130%
118-79-6	2,4,6-Tribromophenol	75%		30-130%
4165-60-0	Nitrobenzene-d5	76%		30-130%
321-60-8	2-Fluorobiphenyl	80%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-305(34-35)		
Lab Sample ID:	MC29971-7	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.9
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	91%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-305(34-35)
Lab Sample ID: MC29971-7
Matrix: SO - Soil
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Date Sampled: 04/22/14
Date Received: 04/22/14
Percent Solids: 88.9

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	11800	20	3.5	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Antimony	ND	0.98	0.15	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Arsenic	0.77 B	0.98	0.20	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Barium	163	4.9	0.071	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Beryllium	0.20 B	0.39	0.023	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Cadmium	ND	0.39	0.041	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Calcium	1150	490	6.1	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Chromium	32.8	0.98	0.093	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Cobalt	10.5	4.9	0.046	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Copper	23.3	2.4	0.54	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Iron	21700	9.8	0.85	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Lead	3.7	0.98	0.16	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Magnesium	5390	490	5.0	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Manganese	224	1.5	0.039	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Mercury	ND	0.036	0.0079	mg/kg	1	04/24/14	04/25/14	SA	SW846 7471B [1]	SW846 7471B [3]
Nickel	26.8	3.9	0.043	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Potassium	5740	490	8.4	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Selenium	ND	0.98	0.34	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Silver	ND	0.49	0.12	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Sodium 490	~~195 B~~	490	3.2	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4] UB
Thallium	0.16 B	0.98	0.13	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Vanadium	39.5	0.98	0.13	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]
Zinc	41.3	2.0	0.16	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [4]

(1) Instrument QC Batch: MA17056
(2) Instrument QC Batch: MA17061
(3) Prep QC Batch: MP22924
(4) Prep QC Batch: MP22926

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-305(34-35)		
Lab Sample ID:	MC29971-7	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
		Percent Solids:	88.9
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.13	0.025	mg/kg	1	04/26/14 15:45	MA	SW846 9012 M
Solids, Percent	88.9			%	1	04/24/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-305(37-37.5)		
Lab Sample ID:	MC29971-8	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	89.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64953.D	1	05/01/14	KD	n/a	n/a	MSM2283
Run #2							

	Initial Weight	Final Volume
Run #1	6.35 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	8.8	2.5	ug/kg	
71-43-2	Benzene	ND	0.44	0.30	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.18	ug/kg	
75-25-2	Bromoform	ND	1.8	0.31	ug/kg	
74-83-9	Bromomethane	ND	1.8	0.53	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.8	2.7	ug/kg	
75-15-0	Carbon disulfide	1.8	4.4	0.12	ug/kg	J
56-23-5	Carbon tetrachloride	ND	1.8	0.19	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	0.14	ug/kg	
75-00-3	Chloroethane	ND	4.4	0.67	ug/kg	
67-66-3	Chloroform	ND	1.8	0.15	ug/kg	
74-87-3	Chloromethane	ND	4.4	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.29	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.8	0.24	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.8	0.28	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.8	0.37	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.8	0.40	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.8	0.37	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.37	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.20	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.23	ug/kg	
100-41-4	Ethylbenzene	ND	1.8	0.61	ug/kg	
591-78-6	2-Hexanone	ND	8.8	0.67	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.4	0.48	ug/kg	
75-09-2	Methylene chloride	ND	1.8	0.47	ug/kg	
100-42-5	Styrene	ND	4.4	0.15	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.35	ug/kg	
127-18-4	Tetrachloroethene	ND	1.8	0.28	ug/kg	
108-88-3	Toluene	ND	4.4	0.18	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.19	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.51	ug/kg	
79-01-6	Trichloroethene	ND	1.8	0.22	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-305(37-37.5)		
Lab Sample ID:	MC29971-8	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	89.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.8	0.80	ug/kg	
1330-20-7	Xylene (total)	ND	1.8	0.19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
2037-26-5	Toluene-D8	90%		70-130%
460-00-4	4-Bromofluorobenzene	79%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-305(37-37.5)		
Lab Sample ID:	MC29971-8	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	89.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72794.D	1	04/30/14	MR	04/23/14	OP37739	MSF3233
Run #2							

	Initial Weight	Final Volume
Run #1	20.6 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	270	12	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	550	14	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	550	16	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	550	89	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	140	ug/kg	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	550	68	ug/kg	
95-48-7	2-Methylphenol	ND	550	22	ug/kg	
	3&4-Methylphenol	ND	550	27	ug/kg	
88-75-5	2-Nitrophenol	ND	550	15	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	100	ug/kg	
87-86-5	Pentachlorophenol	ND	550	38	ug/kg	
108-95-2	Phenol	ND	270	15	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	550	14	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	550	13	ug/kg	
83-32-9	Acenaphthene	ND	110	15	ug/kg	
208-96-8	Acenaphthylene	ND	110	11	ug/kg	
120-12-7	Anthracene	ND	110	13	ug/kg	
56-55-3	Benzo(a)anthracene	ND	110	14	ug/kg	
50-32-8	Benzo(a)pyrene	ND	110	12	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	110	14	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	110	11	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	110	16	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	11	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	15	ug/kg	
106-47-8	4-Chloroaniline	ND	550	14	ug/kg	
86-74-8	Carbazole	ND	110	13	ug/kg	
218-01-9	Chrysene	ND	110	14	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	270	13	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	17	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	20	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	270	17	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-305(37-37.5)		
Lab Sample ID:	MC29971-8	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	89.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	270	14	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	270	16	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	270	14	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	550	36	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	550	14	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	270	27	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	13	ug/kg	
132-64-9	Dibenzofuran	ND	110	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	29	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	8.5	ug/kg	
84-66-2	Diethyl phthalate	ND	270	14	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	16	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	270	10	ug/kg	
206-44-0	Fluoranthene	ND	110	15	ug/kg	
86-73-7	Fluorene	ND	110	14	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	550	140	ug/kg	
67-72-1	Hexachloroethane	ND	270	13	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	110	12	ug/kg	
78-59-1	Isophorone	ND	270	13	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	14	ug/kg	
88-74-4	2-Nitroaniline	ND	550	14	ug/kg	
99-09-2	3-Nitroaniline	ND	550	30	ug/kg	
100-01-6	4-Nitroaniline	ND	550	14	ug/kg	
91-20-3	Naphthalene	ND	110	17	ug/kg	
98-95-3	Nitrobenzene	ND	270	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	16	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	16	ug/kg	
85-01-8	Phenanthrene	ND	110	15	ug/kg	
129-00-0	Pyrene	ND	110	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	76%		30-130%
4165-62-2	Phenol-d5	71%		30-130%
118-79-6	2,4,6-Tribromophenol	74%		30-130%
4165-60-0	Nitrobenzene-d5	77%		30-130%
321-60-8	2-Fluorobiphenyl	81%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-305(37-37.5)		
Lab Sample ID:	MC29971-8	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	89.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	91%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-305(37-37.5)
Lab Sample ID: MC29971-8
Matrix: SO - Soil
Date Sampled: 04/22/14
Date Received: 04/22/14
Percent Solids: 89.0
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	17600	21	3.8	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Antimony	0.17 B	1.1	0.16	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Arsenic	0.57 B	1.1	0.22	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Barium	220	5.3	0.076	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Beryllium	0.16 B	0.42	0.025	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cadmium [a]	ND	0.84	0.089	mg/kg	2	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Calcium	1080	530	6.6	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Chromium	52.0	1.1	0.10	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Cobalt	12.1	5.3	0.049	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Copper	34.9	2.6	0.58	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Iron	29600	110	9.1	mg/kg	10	04/24/14	04/25/14	EAL	SW846 6010C [3]	SW846 3050B [5]
Lead	13.7	1.1	0.18	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Magnesium	8530	530	5.4	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Manganese	265	1.6	0.042	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Mercury	ND	0.035	0.0077	mg/kg	1	04/24/14	04/25/14	SA	SW846 7471B [1]	SW846 7471B [4]
Nickel	23.7	4.2	0.046	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Potassium	10100	530	9.0	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Selenium	ND	1.1	0.36	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Silver	ND	0.53	0.13	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Sodium 530	~~270 B~~	530	3.5	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5] UB
Thallium	0.19 B	1.1	0.14	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Vanadium	60.4	1.1	0.14	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]
Zinc	78.4	2.1	0.17	mg/kg	1	04/24/14	04/24/14	EAL	SW846 6010C [2]	SW846 3050B [5]

(1) Instrument QC Batch: MA17056
(2) Instrument QC Batch: MA17061
(3) Instrument QC Batch: MA17066
(4) Prep QC Batch: MP22924
(5) Prep QC Batch: MP22926

(a) Elevated RL due to dilution required for matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SB-305(37-37.5)		
Lab Sample ID:	MC29971-8	**Date Sampled:**	04/22/14
Matrix:	SO - Soil	**Date Received:**	04/22/14
		Percent Solids:	89.0
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.13	0.025	mg/kg	1	04/26/14 15:33	MA	SW846 9012 M
Solids, Percent	89			%	1	04/24/14	MA	SM21 2540 B MOD.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	RB-04222014		
Lab Sample ID:	MC29971-9	**Date Sampled:**	04/22/14
Matrix:	AQ - Equipment Blank	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L83899.D	1	04/30/14	JB	n/a	n/a	MSL3788
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	UJ
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	UJ
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-04222014		
Lab Sample ID:	MC29971-9	**Date Sampled:**	04/22/14
Matrix:	AQ - Equipment Blank	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	113%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-04222014
Lab Sample ID: MC29971-9 **Date Sampled:** 04/22/14
Matrix: AQ - Equipment Blank **Date Received:** 04/22/14
Method: SW846 8270D SW846 3510C **Percent Solids:** n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38526.D	1	04/28/14	WK	04/24/14	OP37761	MSR1420
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.2	0.32	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.86	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.41	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.58	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	2.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	2.0	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.49	ug/l	
88-75-5	2-Nitrophenol	ND	10	3.0	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.56	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.2	ug/l	
108-95-2	Phenol	ND	5.2	0.31	ug/l	UJ
95-95-4	2,4,5-Trichlorophenol	ND	10	0.39	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
83-32-9	Acenaphthene	ND	2.1	0.33	ug/l	
208-96-8	Acenaphthylene	ND	2.1	0.22	ug/l	
120-12-7	Anthracene	ND	2.1	0.20	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.1	0.51	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.1	0.16	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.1	0.26	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.1	0.86	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.1	0.91	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	0.49	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	0.55	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	0.33	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.58	ug/l	
86-74-8	Carbazole	ND	2.1	0.17	ug/l	
218-01-9	Chrysene	ND	2.1	0.17	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	0.30	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	0.36	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	0.35	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	0.26	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-04222014
Lab Sample ID: MC29971-9 **Date Sampled:** 04/22/14
Matrix: AQ - Equipment Blank **Date Received:** 04/22/14
Method: SW846 8270D SW846 3510C **Percent Solids:** n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.2	0.21	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	0.28	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.2	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.48	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.31	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.2	0.28	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.1	0.66	ug/l	
132-64-9	Dibenzofuran	ND	2.1	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	0.47	5.2	0.18	ug/l	JB
117-84-0	Di-n-octyl phthalate	ND	5.2	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	0.21	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.35	ug/l	
206-44-0	Fluoranthene	ND	2.1	0.47	ug/l	
86-73-7	Fluorene	ND	2.1	0.22	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	0.30	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	0.23	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	1.3	ug/l	UJ
67-72-1	Hexachloroethane	ND	5.2	0.31	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.1	0.86	ug/l	
78-59-1	Isophorone	ND	5.2	0.47	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	0.27	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.41	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.3	ug/l	
91-20-3	Naphthalene	ND	2.1	0.31	ug/l	
98-95-3	Nitrobenzene	ND	5.2	0.41	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	0.42	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	0.20	ug/l	
85-01-8	Phenanthrene	ND	2.1	0.14	ug/l	
129-00-0	Pyrene	ND	2.1	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	0.37	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	39%		15-110%
4165-62-2	Phenol-d5	26%		15-110%
118-79-6	2,4,6-Tribromophenol	64%		15-110%
4165-60-0	Nitrobenzene-d5	62%		30-130%
321-60-8	2-Fluorobiphenyl	65%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-04222014		
Lab Sample ID:	MC29971-9	**Date Sampled:**	04/22/14
Matrix:	AQ - Equipment Blank	**Date Received:**	04/22/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	84%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-04222014
Lab Sample ID: MC29971-9
Matrix: AQ - Equipment Blank
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Date Sampled: 04/22/14
Date Received: 04/22/14
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	ND	200	40	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Antimony	ND	6.0	1.9	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Arsenic	ND	4.0	2.9	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Barium	ND	50	0.81	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Beryllium	ND	4.0	0.25	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Cadmium	ND	4.0	0.50	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Calcium	84.7 B	5000	38	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Chromium	ND	10	1.4	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Cobalt	ND	50	0.40	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Copper	ND	25	7.0	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Iron	ND	100	20	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Lead	ND	5.0	1.7	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Magnesium	ND	5000	59	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Manganese	ND	15	0.81	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Mercury	ND	0.20	0.10	ug/l	1	04/23/14	04/24/14	SA	SW846 7470A [1]	SW846 7470A [3]
Nickel	0.70 B	40	0.57	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Potassium	ND	5000	160	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Selenium	ND	10	4.8	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Silver	ND	5.0	1.0	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Sodium	336 B	5000	60	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Thallium	ND	5.0	1.9	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Vanadium	ND	10	2.8	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]
Zinc	1.0 B	20	0.50	ug/l	1	04/25/14	04/28/14	EAL	SW846 6010C [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA17054
(2) Instrument QC Batch: MA17068
(3) Prep QC Batch: MP22920
(4) Prep QC Batch: MP22930

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	RB-04222014		
Lab Sample ID:	MC29971-9	**Date Sampled:**	04/22/14
Matrix:	AQ - Equipment Blank	**Date Received:**	04/22/14
		Percent Solids:	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	ND	0.010	0.0014	mg/l	1	04/24/14 15:23	MA	SW846 9012

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK-03		
Lab Sample ID:	MC29971-10	**Date Sampled:**	04/22/14
Matrix:	SO - Trip Blank Methanol	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G136985.D	1	04/28/14	JM	n/a	n/a	MSG5247
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.0 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	140	ug/kg	
71-43-2	Benzene	ND	25	17	ug/kg	
75-27-4	Bromodichloromethane	ND	100	10	ug/kg	
75-25-2	Bromoform	ND	100	18	ug/kg	
74-83-9	Bromomethane	ND	100	30	ug/kg	UJ
78-93-3	2-Butanone (MEK)	ND	500	150	ug/kg	
75-15-0	Carbon disulfide	ND	250	6.5	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	11	ug/kg	
108-90-7	Chlorobenzene	ND	100	7.9	ug/kg	
75-00-3	Chloroethane	ND	250	38	ug/kg	
67-66-3	Chloroform	ND	100	8.5	ug/kg	
74-87-3	Chloromethane	ND	250	28	ug/kg	
124-48-1	Dibromochloromethane	ND	100	16	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	13	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	21	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	23	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	21	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	21	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	11	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	13	ug/kg	
100-41-4	Ethylbenzene	ND	100	34	ug/kg	
591-78-6	2-Hexanone	ND	500	38	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	27	ug/kg	
75-09-2	Methylene chloride	ND	100	27	ug/kg	
100-42-5	Styrene	ND	250	8.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	20	ug/kg	
127-18-4	Tetrachloroethene	ND	100	16	ug/kg	
108-88-3	Toluene	ND	250	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	11	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	29	ug/kg	
79-01-6	Trichloroethene	ND	100	12	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK-03		
Lab Sample ID:	MC29971-10	**Date Sampled:**	04/22/14
Matrix:	SO - Trip Blank Methanol	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	100	45	ug/kg	
1330-20-7	Xylene (total)	ND	100	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	95%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK-03		
Lab Sample ID:	MC29971-10A	**Date Sampled:**	04/22/14
Matrix:	SO - Trip Blank Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M64945.D	1	05/01/14	KD	n/a	n/a	MSM2283
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/kg	
71-43-2	Benzene	ND	0.50	0.34	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.21	ug/kg	
75-25-2	Bromoform	ND	2.0	0.35	ug/kg	
74-83-9	Bromomethane	ND	2.0	0.60	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	3.1	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.22	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.16	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.76	ug/kg	
67-66-3	Chloroform	ND	2.0	0.17	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.56	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.32	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.32	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	0.41	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.45	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.42	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.26	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.69	ug/kg	
591-78-6	2-Hexanone	ND	10	0.76	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.54	ug/kg	
75-09-2	Methylene chloride	ND	2.0	0.53	ug/kg	
100-42-5	Styrene	ND	5.0	0.17	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.39	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.31	ug/kg	
108-88-3	Toluene	ND	5.0	0.21	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.22	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.57	ug/kg	
79-01-6	Trichloroethene	ND	2.0	0.24	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK-03		
Lab Sample ID:	MC29971-10A	**Date Sampled:**	04/22/14
Matrix:	SO - Trip Blank Soil	**Date Received:**	04/22/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	2.0	0.91	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%
2037-26-5	Toluene-D8	89%		70-130%
460-00-4	4-Bromofluorobenzene	80%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking # | Bottle Order Control #
Accutest Quote # | Accutest Job # MC29971

Client / Reporting Information
Company Name: ARCADIS
Street Address: 6723 TOWPATH RD
City: SYRACUSE State: NY Zip: 13214
Project Contact: DAVID CORNELL E-mail:
Phone #: 315 671 9379 Fax #:
Sampler(s) Name(s): JON LEMESSURIER Phone #: 315 558 1904

Project Information
Project Name: CONED - UNIONPORT
Street: WATSON AVE
City: BRONX
Project#: B0043515
Client PO#:
Project Manager: CHARLES LEARY

Billing Information (If different from Report to)
Company Name:
Street Address:
City: State: Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet): TCL VOC; TCL SVOC, TAL METALS, CN, % Solid; Corrosivity, Ignitability, Reactivity

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB - Equipment Blank; RB - Rinse Blank; TB - Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	TCL VOC	TCL SVOC, TAL METALS, CN, % Solid	Corrosivity, Ignitability, Reactivity								LAB USE ONLY
-1	SB-307 (10-11)		4/21/14	1545	JDL	SO	4					1		1		2	X	X									
-2	SB-307 (12-13)		↓	1550			4					1		1		2	X	X									
-3	SB-307 (33.5-34)		↓	1555	↓	↓	4					1		1		2	X	X									
-4	WC-04222014		4/22/14	0820	JDL	SO	4					1		1		2	X	X	X				~~* 2000 ...~~ JDL				
-5	SB-305 (8.5-9)			0915			4					1		1		2	X	X									
-6	SB-305 (15-15.5)			0920			4					1		1		2	X	X									
-7	SB-305 (34-35)			0925			4					1		1		2	X	X									
-8	SB-305 (37-37.5)			0930	↓	↓	4					1		1		2	X	X									
-9	RB-04222014		↓	1200		WW	7	3	1	1		2					X	X									2C, 1045
-10	TRIP BLANK-03			—			3							1		2	X	X									19A, 6D
																											1G1

Turnaround Time (Business days)
- ☒ Std. 10 Business Days
- ☐ Std. 5 Business Days (By Contract only)
- ☐ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date: CONFIRM WITH DAVID CORNELL

Data Deliverable Information
- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULLT1 (Level 3+4)
- ☐ CT RCP
- ☐ MA MCP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format
- ☐ Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions
- DISPOSE SAMPLES @ LAB
- CONFIRM SUFFICIENT RINSE BLANKS FOR SAMPLE AMOUNT. IF NOT CALL JON LEMESSURIER 315 558 1904

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Jon [signature]	4/22/14 1230	1 [signature]	2 [signature]	4-22-14 1900	2 [signature]
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	☐ Intact ☐ Not intact	Preserved where applicable ☐ On Ice ☒ Cooler Temp. 1.3°C

ACCUTEST SYRACUSE-SC

MC29971: Chain of Custody
Page 1 of 2

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Consolidated Edison Company of New York, Inc. - Watson Avenue

Data Usability Summary Report

BRONX, NEW YORK

Volatile, Semivolatile, Metals and Miscellaneous Analyses

SDG #MC30189

Analyses Performed By:
Accutest Laboratories
Marlborough, Massachussetts

Report: #21821R
Review Level: Tier III
Project: B0043515.0006.00002

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #MC30189 for samples collected in association with the Con Edison Former Unionport Works site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	PCB	MET	MISC
MC30189	MW-114A	MC30189-1	Water	4/30/2014		X	X		X	X
	MW-114B	MC30189-2	Water	4/30/2014		X	X		X	X
	MW-115	MC30189-3	Water	4/30/2014		X	X		X	X
	MW-116	MC30189-4	Water	4/30/2014		X	X		X	X
	MW-117	MC30189-5	Water	4/30/2014		X	X		X	X
	TRIP BLANK-03	MC30189-6	Water	4/30/2014		X				

Note:
1. Miscellaneous analysis includes cyanide.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260 and 8270 as referenced in the NYSDEC ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
MW-114A MW-114B MW-115 MW-116 MW-117 TRIP BLANK-03	ICAL %RSD	Bromomethane	16.6%
		Chloroethane	17.5%
		1,1-Dichloroethene	19.2%
		Methylene chloride	19.7%
		1,1-Dichloroethane	18.0%
		1,1,1-Trichloroethane	17.8%
		Benzene	17.5%
		1,2-Dichloropropane	15.7%
		2-Hexanone	16.3%
		Styrene	15.2%
MW-114A MW-116 TRIP BLANK-03	CCV %D	Acetone	-27.3%
		4-Methyl-2-pentanone	-20.2%
MW-114B MW-115 MW-117		Bromomethane	22.2%
		Acetone	-31.8%
		Carbon disulfide	-23.0%
		2-Butanone	-26.2%
		4-Methyl-2-pentanone	-26.9%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J

Initial/Continuing	Criteria	Sample Result	Qualification
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
	%RSD >90%	Non-detect	R
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D >90% (increase/decrease in sensitivity)	Non-detect	R
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis was not performed on a sample location within this SDG.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
MW-114A MW-114B MW-115 MW-116 MW-117 TRIP BLANK-03	Acetone	> UL

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Field duplicate samples were not collected in association with this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
MW-114A	Ethylbenzene	-	493 D	493 D

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ
Original sample result greater than the calibration range	EJ

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Field blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X	X		
Laboratory Control Sample Duplicate(LCSD)					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS)					X
Matrix Spike Duplicate(MSD)					X
MS/MSD Precision (RPD)					X
Field Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X	X		
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
MW-114A MW-114B MW-115 MW-116 MW-117	Di-n-butyl phthalate	Detected sample results <RL and <BAL	"UB" at the RL
MW-114A MW-114B MW-116	bis(2-Ethylhexyl)phthalate		

RL Reporting limit

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
MW-114A MW-114B MW-115 MW-116 MW-117	CCAL %D	bis(2-Chloroisopropyl)ether	29.6%
		N-nitroso-di-n-propylamine	-29.9%
		Nitrobenzene	-22.5%
		Hexachlorobutadiene	-23.7%
		4-Chlorophenyl phenyl ether	-26.1%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
	%RSD >90%	Non-detect	R

Initial/Continuing	Criteria	Sample Result	Qualification
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D >90% (increase/decrease in sensitivity)	Non-detect	R
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis was not performed on a sample location within this SDG.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
MW-114A MW-114B MW-115 MW-116 MW-117	Phenol	< LL but > 10%
	Hexachlorocyclopentadiene	

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Field duplicate samples were not collected in association with this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
MW-114A	Naphthalene	-	1740 D	1740 D

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ
Original sample result greater than the calibration range	EJ

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Field blanks					X
Laboratory Control Sample (LCS) %R		X	X		
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R					X
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Field Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010C/7470A and 9012. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

  B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

  E The reported value is estimated due to the presence of interference.

  N Spiked sample recovery is not within control limits.

  * Duplicate analysis is not within control limits.

- Validation Qualifiers

  J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010C	Water	180 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
SW-846 7470A	Water	28 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.

s.u. standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration and Continuing Calibration

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All continuing calibration verification standard recoveries were within the control limit.

3.2 CRDL Check Standard

The CRDL check standard serves to verify the linearity of calibration of the analysis at the CRDL. The CRDL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe),

magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the CRDL standard analysis are presented below in the CRDL standards evaluation table.

All analytes associated with CRDL standard recoveries were within control limits.

3.3 ICP Interference Control Sample (ICS)

The ICS verifies the laboratories interelement and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier "N" will be removed.

The MS/MSD analysis was not performed on a sample location within this SDG.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. However, the MS/MSD analysis was not performed on a sample location within this SDG.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Field duplicate samples were not collected in association with this SDG.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit recoveries between the control limits of 80% and 120%. The relative percent difference (RPD) between the LCS and LCSD results must be no greater than the established acceptance limit of 20%.

All analytes associated with the LCS/LCSD analysis exhibited recoveries and RPD within the control limits.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

The serial dilution analysis was not performed on a sample location within this SDG.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010C/7470A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X		X	
B. Method Blanks		X		X	
C. Field Blanks					X
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R					X
Matrix Spike Duplicate (MSD) %R					X
MS/MSD Precision (RPD)					X
Laboratory Duplicate (RPD)					X
Field Duplicate (RPD)					X
ICP Serial Dilution					X
Reporting Limit Verification		X		X	
Raw Data		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
CRDL Standard		X		X	
ICP Interference Check		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Cyanide by SW-846 9012	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of greater than 12 s.u.

s.u. standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the MDL. The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 and all initial calibration verification standard recoveries were within control limits.

All continuing calibration standard recoveries were within the control limit.

4. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier “N” will be removed.

The MS analysis performed on sample location MW-114A exhibited recoveries within the control limits.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices.

The laboratory duplicate sample results exhibited RPD within the control limit.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Field duplicate samples were not collected in association with this SDG.

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA 9012	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Field blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Lab/Field Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R Percent recovery
%RSD Relative standard deviation
RPD Relative percent difference

SAMPLE COMPLIANCE REPORT

SAMPLE COMPLIANCE REPORT

SDG	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PEST/ HERB /PCB	MET	MISC	
MC30189	4/30/2014	SW846	MW-114A	Water	No	No	--	Yes	Yes	VOC – sample analyzed at dilution, ICAL %RSD, CCAL %D SVOC – sample analyzed at dilution, blank contamination, LCS %R, CCAL %D
	4/30/2014	SW846	MW-114B	Water	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCAL %D SVOC – blank contamination, LCS %R, CCAL %D
	4/30/2014	SW846	MW-115	Water	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCAL %D SVOC – blank contamination, LCS %R, CCAL %D
	4/30/2014	SW846	MW-116	Water	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCAL %D SVOC – blank contamination, LCS %R, CCAL %D
	4/30/2014	SW846	MW-117	Water	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCAL %D SVOC – blank contamination, LCS %R, CCAL %D
	4/30/2014	SW846	TRIP BLANK-03	Water	No	--	--	--	--	VOC – ICAL %RSD, CCAL %D

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: 

DATE: June 12, 2014

PEER REVIEW: Dennis Capria

DATE: June 22, 2014

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

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495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
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PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: MC30189

Client / Reporting Information

Company Name: ARCADIS
Street Address: 6723 TOWPATH RD
City: SYR State: NY Zip: 13214
Project Contact: DAVID CORNELL E-mail:
Phone #: 315 671 9379 Fax #:
Sampler(s) Name(s): JON LEMESSURIER Phone #: 315 558 1904

Project Information

Project Name: CONED - WATSON AVE
Street: 10606 ZEREGA AVE
City: BRONX
Project #: B0043515
Client PO#:
Project Manager: CHARLES LEARY

Billing Information (If different from Report to)

Company Name:
Street Address:
City State Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	8260 TCL	8270 TCL	TAL METALS	CYANIDE	LAB USE ONLY
1	MW-114A		4/30/14	1015	JDL	GW	7	3	1	1		2					X	X	X	X	
2	MW-114B			0825	JDL		7	3	1	1		2					X	X	X	X	
3	MW-115			1025	JJ		7	3	1	1		2					X	X	X	X	
4	MW-116			0835	JJ		7	3	1	1		2					X	X	X	X	19E
5	MW-117			1145	JJ		7	3	1	1		2					X	X	X	X	10C
6	TRIP-BLANK-03			—			2	2									X	X	X	X	5B
7	TRIP-BLANK-04			—			2	2									X	X	X	X	2C2

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1		4/30/14 1430		2	4-30-14 1930	2
3		Date Time:	3	4	Date Time:	4
5	Relinquished by:	Date Time:	5	Custody Seal #	Intact / Not intact	Preserved where applicable / On Ice / Cooler Temp. 0.9

ACCUTEST SYRACUSE-SC

MC30189: Chain of Custody
Page 1 of 2

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-114A		
Lab Sample ID:	MC30189-1	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84116.D	1	05/09/14	AMY	n/a	n/a	MSL3796
Run #2	L84145.D	100	05/11/14	AMY	n/a	n/a	MSL3797

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.5	ug/l	
71-43-2	Benzene	206 J	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	1.1 J	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	493 [a] D	100	38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	12.0	1.0	0.33	ug/l	
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114A		
Lab Sample ID:	MC30189-1	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	230	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	93%	70-130%
2037-26-5	Toluene-D8	101%	103%	70-130%
460-00-4	4-Bromofluorobenzene	97%	107%	70-130%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-114A		
Lab Sample ID:	MC30189-1	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72973.D	1	05/06/14	MR	05/03/14	OP37941	MSF3240
Run #2	F73228.D	25	05/14/14	WK	05/03/14	OP37941	MSF3249

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2	980 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.32	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.84	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.40	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.57	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	2.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	2.0	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.48	ug/l	
88-75-5	2-Nitrophenol	ND	10	2.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.55	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.1	ug/l	
108-95-2	Phenol	ND UJ	5.1	0.31	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.38	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
83-32-9	Acenaphthene	91.7	2.0	0.32	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.22	ug/l	
120-12-7	Anthracene	3.3	2.0	0.19	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.50	ug/l	
50-32-8	Benzo(a)pyrene	0.17	2.0	0.16	ug/l	J
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.25	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.85	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.89	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	0.48	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	0.32	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.57	ug/l	
86-74-8	Carbazole	11.1	2.0	0.17	ug/l	
218-01-9	Chrysene	ND	2.0	0.17	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	0.36	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	0.34	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND UJ	5.1	0.26	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114A		
Lab Sample ID:	MC30189-1	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.1	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	0.27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	0.23	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.47	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.31	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.1	0.27	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.65	ug/l	
132-64-9	Dibenzofuran	3.9	2.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate 5.1	~~0.41~~ UB	5.1	0.18	ug/l	~~JB~~
117-84-0	Di-n-octyl phthalate	ND	5.1	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate 2.0	~~0.40~~ UB	2.0	0.34	ug/l	~~JB~~
206-44-0	Fluoranthene	0.72	2.0	0.46	ug/l	J
86-73-7	Fluorene	3.1	2.0	0.22	ug/l	
118-74-1	Hexachlorobenzene	ND	5.1	0.30	ug/l	
87-68-3	Hexachlorobutadiene	ND UJ	5.1	0.23	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND UJ	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.1	0.31	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	0.84	ug/l	
78-59-1	Isophorone	ND	5.1	0.46	ug/l	
91-57-6	2-Methylnaphthalene	10.6	2.0	0.27	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.40	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
91-20-3	Naphthalene	1740 [a] D	51	7.6	ug/l	
98-95-3	Nitrobenzene	ND UJ	5.1	0.40	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND UJ	5.1	0.41	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.20	ug/l	
85-01-8	Phenanthrene	22.3	2.0	0.14	ug/l	
129-00-0	Pyrene	0.81	2.0	0.17	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	0.37	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	23%	16%	15-110%
4165-62-2	Phenol-d5	17%	12% [b]	15-110%
118-79-6	2,4,6-Tribromophenol	66%	58%	15-110%
4165-60-0	Nitrobenzene-d5	46%	31%	30-130%
321-60-8	2-Fluorobiphenyl	52%	58%	30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114A		
Lab Sample ID:	MC30189-1	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	81%	85%	30-130%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-114A
Lab Sample ID: MC30189-1
Matrix: AQ - Ground Water
Date Sampled: 04/30/14
Date Received: 04/30/14
Percent Solids: n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	ND	200	40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Antimony	ND	6.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Arsenic	ND	4.0	2.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Barium	260	50	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Beryllium	ND	4.0	0.25	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cadmium	ND	4.0	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Calcium	90500	5000	38	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Chromium	ND	10	1.4	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cobalt	ND	50	0.40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Copper	ND	25	7.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Iron	10700	100	20	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Lead	ND	5.0	1.7	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Magnesium	91400	5000	59	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Manganese	4720	15	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Mercury	ND	0.20	0.10	ug/l	1	05/05/14	05/06/14	SA	SW846 7470A [2]	SW846 7470A [4]
Nickel	0.80 B	40	0.57	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Potassium	17000	5000	160	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Selenium	ND	10	4.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Silver	ND	5.0	1.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Sodium	203000	5000	60	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Thallium	ND	5.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Vanadium	ND	10	2.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Zinc	ND	20	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17100
(2) Instrument QC Batch: MA17103
(3) Prep QC Batch: MP22981
(4) Prep QC Batch: MP22994

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-114A		
Lab Sample ID:	MC30189-1	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
		Percent Solids:	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.0014 B	0.010	0.0014	mg/l	1	05/06/14 10:48	MA	SW846 9012

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-114B		
Lab Sample ID:	MC30189-2	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84141.D	1	05/11/14	AMY	n/a	n/a	MSL3797
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.5	ug/l	
71-43-2	Benzene	0.62 J	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND UJ	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND UJ	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	2.2	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND UJ	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	27.5	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114B		
Lab Sample ID:	MC30189-2	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	3.5	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
2037-26-5	Toluene-D8	107%		70-130%
460-00-4	4-Bromofluorobenzene	107%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-114B		
Lab Sample ID:	MC30189-2	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72974.D	1	05/06/14	MR	05/03/14	OP37941	MSF3240
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.2	0.32	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.86	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.41	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.58	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	2.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	2.0	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.49	ug/l	
88-75-5	2-Nitrophenol	ND	10	3.0	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.56	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.2	ug/l	
108-95-2	Phenol	ND UJ	5.2	0.31	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.39	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
83-32-9	Acenaphthene	30.1	2.1	0.33	ug/l	
208-96-8	Acenaphthylene	ND	2.1	0.22	ug/l	
120-12-7	Anthracene	1.6	2.1	0.20	ug/l	J
56-55-3	Benzo(a)anthracene	ND	2.1	0.51	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.1	0.16	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.1	0.26	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.1	0.86	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.1	0.91	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	0.49	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	0.55	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	0.33	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.58	ug/l	
86-74-8	Carbazole	0.39	2.1	0.17	ug/l	J
218-01-9	Chrysene	ND	2.1	0.17	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	0.30	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	0.36	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	0.35	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND UJ	5.2	0.26	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114B		
Lab Sample ID:	MC30189-2	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.2	0.21	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	0.28	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.2	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.48	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.31	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.2	0.28	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.1	0.66	ug/l	
132-64-9	Dibenzofuran	1.0	2.1	0.27	ug/l	J
84-74-2	Di-n-butyl phthalate 5.2	~~0.43~~ UB	5.2	0.18	ug/l	~~JB~~
117-84-0	Di-n-octyl phthalate	ND	5.2	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	0.21	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate 2.1	~~0.36~~ UB	2.1	0.35	ug/l	~~JB~~
206-44-0	Fluoranthene	1.1	2.1	0.47	ug/l	J
86-73-7	Fluorene	0.99	2.1	0.22	ug/l	J
118-74-1	Hexachlorobenzene	ND	5.2	0.30	ug/l	
87-68-3	Hexachlorobutadiene	ND UJ	5.2	0.23	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND UJ	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.2	0.31	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.1	0.86	ug/l	
78-59-1	Isophorone	ND	5.2	0.47	ug/l	
91-57-6	2-Methylnaphthalene	2.2	2.1	0.27	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.41	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.3	ug/l	
91-20-3	Naphthalene	30.8	2.1	0.31	ug/l	
98-95-3	Nitrobenzene	ND UJ	5.2	0.41	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND UJ	5.2	0.42	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	0.20	ug/l	
85-01-8	Phenanthrene	6.9	2.1	0.14	ug/l	
129-00-0	Pyrene	1.4	2.1	0.18	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	0.37	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	36%		15-110%
4165-62-2	Phenol-d5	31%		15-110%
118-79-6	2,4,6-Tribromophenol	70%		15-110%
4165-60-0	Nitrobenzene-d5	72%		30-130%
321-60-8	2-Fluorobiphenyl	63%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-114B		
Lab Sample ID:	MC30189-2	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	79%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-114B
Lab Sample ID: MC30189-2
Matrix: AQ - Ground Water
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Date Sampled: 04/30/14
Date Received: 04/30/14
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	ND	200	40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Antimony	ND	6.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Arsenic	5.0	4.0	2.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Barium	213	50	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Beryllium	ND	4.0	0.25	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Cadmium	ND	4.0	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Calcium	215000	5000	38	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Chromium	ND	10	1.4	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Cobalt	ND	50	0.40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Copper	ND	25	7.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Iron	215	100	20	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Lead	ND	5.0	1.7	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Magnesium	648000	5000	59	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Manganese	265	15	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Mercury	ND	0.20	0.10	ug/l	1	05/05/14	05/06/14	SA	SW846 7470A [2]	SW846 7470A [5]
Nickel	4.0 B	40	0.57	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Potassium	189000	5000	160	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Selenium	9.7 B	10	4.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Silver	ND	5.0	1.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Sodium	4820000	500000	6000	ug/l	100	05/02/14	05/06/14	EAL	SW846 6010C [3]	SW846 3010A [4]
Thallium	3.3 B	5.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Vanadium	3.9 B	10	2.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Zinc	14.3 B	20	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]

(1) Instrument QC Batch: MA17100
(2) Instrument QC Batch: MA17103
(3) Instrument QC Batch: MA17109
(4) Prep QC Batch: MP22981
(5) Prep QC Batch: MP22994

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-114B		
Lab Sample ID:	MC30189-2	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
		Percent Solids:	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.010	0.010	0.0014	mg/l	1	05/06/14 10:49	MA	SW846 9012

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-115		
Lab Sample ID:	MC30189-3	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84140.D	1	05/11/14	AMY	n/a	n/a	MSL3797
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.5	ug/l	
71-43-2	Benzene	ND UJ	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND UJ	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND UJ	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND UJ	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	1.4	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	0.63	1.0	0.33	ug/l	J
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115		
Lab Sample ID:	MC30189-3	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	1.4	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-115		
Lab Sample ID:	MC30189-3	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72975.D	1	05/06/14	MR	05/03/14	OP37941	MSF3240
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.31	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.83	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.40	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.57	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	2.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.9	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.47	ug/l	
88-75-5	2-Nitrophenol	ND	10	2.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.54	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.1	ug/l	
108-95-2	Phenol	ND UJ	5.1	0.31	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.37	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
83-32-9	Acenaphthene	0.92	2.0	0.32	ug/l	J
208-96-8	Acenaphthylene	1.0	2.0	0.22	ug/l	J
120-12-7	Anthracene	ND	2.0	0.19	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.50	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.16	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.25	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.84	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.88	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	0.48	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	0.32	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.56	ug/l	
86-74-8	Carbazole	ND	2.0	0.16	ug/l	
218-01-9	Chrysene	ND	2.0	0.17	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	0.34	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND UJ	5.1	0.25	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115		
Lab Sample ID:	MC30189-3	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.1	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	0.27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	0.23	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.46	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.30	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.1	0.27	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.64	ug/l	
132-64-9	Dibenzofuran	ND	2.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate 5.1	~~0.49~~ UB	5.1	0.17	ug/l	~~JB~~
117-84-0	Di-n-octyl phthalate	ND	5.1	0.28	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	0.34	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	3.6	2.0	0.34	ug/l	~~B~~
206-44-0	Fluoranthene	ND	2.0	0.45	ug/l	
86-73-7	Fluorene	ND	2.0	0.21	ug/l	
118-74-1	Hexachlorobenzene	ND	5.1	0.29	ug/l	
87-68-3	Hexachlorobutadiene	ND UJ	5.1	0.23	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND UJ	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.1	0.31	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	0.83	ug/l	
78-59-1	Isophorone	ND	5.1	0.45	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.26	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.40	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
91-20-3	Naphthalene	12.9	2.0	0.30	ug/l	
98-95-3	Nitrobenzene	ND UJ	5.1	0.40	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND UJ	5.1	0.41	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.19	ug/l	
85-01-8	Phenanthrene	0.52	2.0	0.14	ug/l	J
129-00-0	Pyrene	ND	2.0	0.17	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	31%		15-110%
4165-62-2	Phenol-d5	22%		15-110%
118-79-6	2,4,6-Tribromophenol	74%		15-110%
4165-60-0	Nitrobenzene-d5	65%		30-130%
321-60-8	2-Fluorobiphenyl	58%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-115		
Lab Sample ID:	MC30189-3	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	88%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-115
Lab Sample ID: MC30189-3
Matrix: AQ - Ground Water
Date Sampled: 04/30/14
Date Received: 04/30/14
Percent Solids: n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	1500	200	40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Antimony	ND	6.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Arsenic	ND	4.0	2.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Barium	71.5	50	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Beryllium	ND	4.0	0.25	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cadmium	ND	4.0	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Calcium	81700	5000	38	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Chromium	26.8	10	1.4	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cobalt	0.40 B	50	0.40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Copper	50.9	25	7.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Iron	5200	100	20	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Lead	22.6	5.0	1.7	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Magnesium	38100	5000	59	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Manganese	1120	15	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Mercury	ND	0.20	0.10	ug/l	1	05/05/14	05/06/14	SA	SW846 7470A [2]	SW846 7470A [4]
Nickel	4.6 B	40	0.57	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Potassium	53800	5000	160	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Selenium	ND	10	4.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Silver	ND	5.0	1.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Sodium	234000	5000	60	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Thallium	ND	5.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Vanadium	5.6 B	10	2.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Zinc	45.5	20	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17100
(2) Instrument QC Batch: MA17103
(3) Prep QC Batch: MP22981
(4) Prep QC Batch: MP22994

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-115		
Lab Sample ID:	MC30189-3	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
		Percent Solids:	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.0042 B	0.010	0.0014	mg/l	1	05/06/14 10:50	MA	SW846 9012

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-116		
Lab Sample ID:	MC30189-4	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84119.D	1	05/09/14	AMY	n/a	n/a	MSL3796
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.5	ug/l	
71-43-2	Benzene	ND UJ	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	1.2	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	17.4	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND UJ	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	2.9	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	1.4	1.0	0.33	ug/l	
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-116		
Lab Sample ID:	MC30189-4	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	2.9	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-116		
Lab Sample ID:	MC30189-4	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72976.D	1	05/06/14	MR	05/03/14	OP37941	MSF3240
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.2	0.32	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.85	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.41	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.58	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	2.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	2.0	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.48	ug/l	
88-75-5	2-Nitrophenol	ND	10	3.0	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.55	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.2	ug/l	
108-95-2	Phenol	ND UJ	5.2	0.31	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.38	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
83-32-9	Acenaphthene	0.54	2.1	0.33	ug/l	J
208-96-8	Acenaphthylene	1.4	2.1	0.22	ug/l	J
120-12-7	Anthracene	ND	2.1	0.19	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.1	0.51	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.1	0.16	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.1	0.25	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.1	0.85	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.1	0.90	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	0.49	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	0.55	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	0.32	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.57	ug/l	
86-74-8	Carbazole	ND	2.1	0.17	ug/l	
218-01-9	Chrysene	ND	2.1	0.17	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	0.30	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	0.36	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	0.34	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND UJ	5.2	0.26	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-116		
Lab Sample ID:	MC30189-4	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.2	0.21	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	0.27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.2	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.47	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.31	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.2	0.28	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.1	0.66	ug/l	
132-64-9	Dibenzofuran	ND	2.1	0.27	ug/l	
84-74-2	Di-n-butyl phthalate 5.2	~~0.45~~ UB	5.2	0.18	ug/l	~~JB~~
117-84-0	Di-n-octyl phthalate	ND	5.2	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	0.21	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate 2.1	~~1.7~~ UB	2.1	0.34	ug/l	~~JB~~
206-44-0	Fluoranthene	ND	2.1	0.46	ug/l	
86-73-7	Fluorene	ND	2.1	0.22	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	0.30	ug/l	
87-68-3	Hexachlorobutadiene	ND UJ	5.2	0.23	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND UJ	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.2	0.31	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.1	0.85	ug/l	
78-59-1	Isophorone	ND	5.2	0.46	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	0.27	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.41	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
91-20-3	Naphthalene	15.6	2.1	0.31	ug/l	
98-95-3	Nitrobenzene	ND UJ	5.2	0.40	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND UJ	5.2	0.42	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	0.20	ug/l	
85-01-8	Phenanthrene	0.32	2.1	0.14	ug/l	J
129-00-0	Pyrene	ND	2.1	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	0.37	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	27%		15-110%
4165-62-2	Phenol-d5	19%		15-110%
118-79-6	2,4,6-Tribromophenol	66%		15-110%
4165-60-0	Nitrobenzene-d5	59%		30-130%
321-60-8	2-Fluorobiphenyl	54%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-116		
Lab Sample ID:	MC30189-4	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	83%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-116
Lab Sample ID: MC30189-4
Matrix: AQ - Ground Water
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Date Sampled: 04/30/14
Date Received: 04/30/14
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	1090	200	40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Antimony	ND	6.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Arsenic	ND	4.0	2.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Barium	36.0 B	50	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Beryllium	ND	4.0	0.25	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cadmium	ND	4.0	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Calcium	42300	5000	38	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Chromium	63.4	10	1.4	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cobalt	0.70 B	50	0.40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Copper	7.9 B	25	7.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Iron	1070	100	20	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Lead	3.9 B	5.0	1.7	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Magnesium	22200	5000	59	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Manganese	330	15	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Mercury	ND	0.20	0.10	ug/l	1	05/05/14	05/06/14	SA	SW846 7470A [2]	SW846 7470A [4]
Nickel	3.4 B	40	0.57	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Potassium	19100	5000	160	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Selenium	ND	10	4.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Silver	ND	5.0	1.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Sodium	132000	5000	60	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Thallium	ND	5.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Vanadium	15.6	10	2.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Zinc	10.4 B	20	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17100
(2) Instrument QC Batch: MA17103
(3) Prep QC Batch: MP22981
(4) Prep QC Batch: MP22994

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-116		
Lab Sample ID:	MC30189-4	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
		Percent Solids:	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.0031 B	0.010	0.0014	mg/l	1	05/06/14 10:51	MA	SW846 9012

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-117		
Lab Sample ID:	MC30189-5	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84139.D	1	05/11/14	AMY	n/a	n/a	MSL3797
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.5	ug/l	
71-43-2	Benzene	0.42	0.50	0.32	ug/l	J
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND UJ	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND UJ	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	61.1	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND UJ	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-117		
Lab Sample ID:	MC30189-5	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-117		
Lab Sample ID:	MC30189-5	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F72977.D	1	05/06/14	MR	05/03/14	OP37941	MSF3240
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.32	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.84	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.40	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.57	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	2.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	2.0	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.48	ug/l	
88-75-5	2-Nitrophenol	ND	10	2.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.55	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.1	ug/l	
108-95-2	Phenol	ND	5.1	0.31	ug/l	UJ
95-95-4	2,4,5-Trichlorophenol	ND	10	0.38	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.32	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.22	ug/l	
120-12-7	Anthracene	ND	2.0	0.19	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.50	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.16	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.25	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.85	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.89	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	0.48	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	0.32	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.57	ug/l	
86-74-8	Carbazole	ND	2.0	0.17	ug/l	
218-01-9	Chrysene	ND	2.0	0.17	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	0.36	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	0.34	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	0.26	ug/l	UJ

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-117		
Lab Sample ID:	MC30189-5	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.1	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	0.27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	0.23	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.47	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.31	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.1	0.27	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.65	ug/l	
132-64-9	Dibenzofuran	ND	2.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate 5.1	~~0.41~~ UB	5.1	0.18	ug/l	~~JB~~
117-84-0	Di-n-octyl phthalate	ND	5.1	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.34	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.46	ug/l	
86-73-7	Fluorene	ND	2.0	0.22	ug/l	
118-74-1	Hexachlorobenzene	ND	5.1	0.30	ug/l	
87-68-3	Hexachlorobutadiene	ND UJ	5.1	0.23	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND UJ	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.1	0.31	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	0.84	ug/l	
78-59-1	Isophorone	ND	5.1	0.46	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.27	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.40	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
91-20-3	Naphthalene	ND	2.0	0.30	ug/l	
98-95-3	Nitrobenzene	ND UJ	5.1	0.40	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND UJ	5.1	0.41	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.20	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.14	ug/l	
129-00-0	Pyrene	ND	2.0	0.17	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	0.37	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	21%		15-110%
4165-62-2	Phenol-d5	15%		15-110%
118-79-6	2,4,6-Tribromophenol	52%		15-110%
4165-60-0	Nitrobenzene-d5	48%		30-130%
321-60-8	2-Fluorobiphenyl	42%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-117		
Lab Sample ID:	MC30189-5	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	60%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-117
Lab Sample ID: MC30189-5
Matrix: AQ - Ground Water
Date Sampled: 04/30/14
Date Received: 04/30/14
Percent Solids: n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	ND	200	40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Antimony	ND	6.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Arsenic	ND	4.0	2.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Barium	62.9	50	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Beryllium	ND	4.0	0.25	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Cadmium	ND	4.0	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Calcium	101000	5000	38	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Chromium	1.4 B	10	1.4	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Cobalt	ND	50	0.40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Copper	ND	25	7.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Iron	840	100	20	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Lead	ND	5.0	1.7	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Magnesium	85300	5000	59	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Manganese	1060	15	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Mercury	ND	0.20	0.10	ug/l	1	05/05/14	05/06/14	SA	SW846 7470A [2]	SW846 7470A [5]
Nickel	ND	40	0.57	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Potassium	36900	5000	160	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Selenium	ND	10	4.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Silver	ND	5.0	1.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Sodium	591000	50000	600	ug/l	10	05/02/14	05/06/14	EAL	SW846 6010C [3]	SW846 3010A [4]
Thallium	ND	5.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Vanadium	ND	10	2.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]
Zinc	ND	20	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [4]

(1) Instrument QC Batch: MA17100
(2) Instrument QC Batch: MA17103
(3) Instrument QC Batch: MA17109
(4) Prep QC Batch: MP22981
(5) Prep QC Batch: MP22994

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-117		
Lab Sample ID:	MC30189-5	**Date Sampled:**	04/30/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
		Percent Solids:	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.0033 B	0.010	0.0014	mg/l	1	05/06/14 10:54	MA	SW846 9012

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK-03		
Lab Sample ID:	MC30189-6	**Date Sampled:**	04/30/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84107.D	1	05/09/14	AMY	n/a	n/a	MSL3796
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.5	ug/l	
71-43-2	Benzene	ND UJ	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND UJ	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK-03		
Lab Sample ID:	MC30189-6	**Date Sampled:**	04/30/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	115%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Consolidated Edison Company of New York, Inc. - Watson Avenue

Data Usability Summary Report

BRONX, NEW YORK

Volatile, Semivolatile, Metals and Miscellaneous Analyses

SDG #MC30175

Analyses Performed By:
Accutest Laboratories
Marlborough, Massachussetts

Report: #21898R
Review Level: Tier III
Project: B0043515.0006.00002

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #MC30175 for samples collected in association with the Con Edison Former Unionport Works site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	PCB	MET	MISC
MC30175	MW-113A	MC30175-1	Water	04/29/2014		X	X		X	X
	MW-113B	MC30175-2	Water	04/29/2014		X	X		X	X
	MW-107	MC30175-3	Water	04/29/2014		X	X		X	X
	MW-04	MC30175-4	Water	04/29/2014		X	X		X	X
	MW-101A	MC30175-5	Water	04/29/2014		X	X		X	X
	DUP-04292014	MC30175-6	Water	04/29/2014	MW-113A	X	X		X	X
	TRIP BLANK	MC30175-7	Water	04/29/2014		X				

Note:
1. Miscellaneous analysis includes cyanide.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260 and 8270 as referenced in the NYSDEC ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
MW-113A MW-113B MW-107 MW-04 MW-101A DUP-04292014 TRIP BLANK	ICAL %RSD	Bromomethane	16.6%
		Chloroethane	17.5%
		1,1-Dichloroethene	19.2%
		Methylene chloride	19.7%
		1,1-Dichloroethane	18.0%
		1,1,1-Trichloroethane	17.8%
		Benzene	17.5%
		1,2-Dichloropropane	15.7%
		2-Hexanone	16.3%
		Styrene	15.2%
	CCV %D	Acetone	-27.3%
		4-Methyl-2-pentanone	-20.2%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
	%RSD >90%	Non-detect	R
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action

Initial/Continuing	Criteria	Sample Result	Qualification
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D >90% (increase/decrease in sensitivity)	Non-detect	R
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
MW-113A	Acetone	> UL	> UL
	Bromomethane	< LL but > 10%	< LL but > 10%

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
MW-113A MW-113B MW-107 MW-04 MW-101A DUP-04292014 TRIP BLANK	Acetone	> UL

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-113A/ DUP-04292014	All compounds	U	U	AC

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Field blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X	X		
Laboratory Control Sample Duplicate(LCSD)					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS)		X	X		
Matrix Spike Duplicate(MSD)		X	X		
MS/MSD Precision (RPD)		X		X	
Field Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X	X		
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
MW-113A MW-113B MW-04 MW-101A DUP-04292014	Di-n-butyl phthalate (MB)	Detected sample results <RL and <BAL	"UB" at the RL

RL Reporting limit
MB Method blank

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
MW-113A MW-113B MW-107 MW-04 MW-101A DUP-04292014	CCAL %D	2-Methylphenol	-28.3%
		2,4-Dinitrophenol	29.9%
		Pentachlorophenol	26.9%
		Di-n-octyl phthalate	-21.1%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
	%RSD >90%	Non-detect	R
		Detect	J

Initial/Continuing	Criteria	Sample Result	Qualification
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D >90% (increase/decrease in sensitivity)	Non-detect	R
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis was not performed on a sample location within this SDG.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
MW-113A MW-113B MW-107 MW-04 MW-101A DUP-04292014	4-Nitrophenol	< LL but > 10%
	Hexachlorobutadiene	
	Hexachlorocyclopentadiene	

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-113A/ DUP-04292014	Acenaphthene	79.8	70.9	11.8%
	Fluorene	18.1	16.7	8.0%
	Phenanthrene	38.9	36.0	7.7%
	Acenaphthylene	11.0	9.8	AC
	Anthracene	2.5	2.3	
	Carbazole	5.6	5.5	
	Dibenzofuran	3.9	3.6	
	Diethyl phthalate	0.24 J	5.4 U	
	bis(2-Ethylhexyl)phthalate	0.41 J	0.46 J	
	Fluoranthene	3.6	3.4	
	2-Methylnaphthalene	0.40 J	0.35 J	

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
	Naphthalene	10.2	8.1	
	Pyrene	4.8	4.6	

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Field blanks					X
Laboratory Control Sample (LCS) %R		X	X		
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R					X
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Field Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010C/7470A and 9012. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

  B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

  E The reported value is estimated due to the presence of interference.

  N Spiked sample recovery is not within control limits.

  * Duplicate analysis is not within control limits.

- Validation Qualifiers

  J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010C	Water	180 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
SW-846 7470A	Water	28 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.

s.u. standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration and Continuing Calibration

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All continuing calibration verification standard recoveries were within the control limit.

3.2 CRDL Check Standard

The CRDL check standard serves to verify the linearity of calibration of the analysis at the CRDL. The CRDL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe),

magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the CRDL standard analysis are presented below in the CRDL standards evaluation table.

All analytes associated with CRDL standard recoveries were within control limits.

3.3 ICP Interference Control Sample (ICS)

The ICS verifies the laboratories interelement and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier "N" will be removed.

The MS/MSD analysis was not performed on a sample location within this SDG.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. However, the MS/MSD analysis was not performed on a sample location within this SDG.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-113A/ DUP-04292014	Calcium	82700	81700	1.2%
	Iron	20700	20800	0.5%
	Magnesium	83100	84000	1.1%

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
	Manganese	8070	7930	1.8%
	Sodium	209000	216000	3.3%
	Aluminum	55.8 B	63.0 B	AC
	Barium	63.8	62.1	
	Nickel	1.6 B	2.0 B	
	Potassium	16400	16200	

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit recoveries between the control limits of 80% and 120%. The relative percent difference (RPD) between the LCS and LCSD results must be no greater than the established acceptance limit of 20%.

All analytes associated with the LCS/LCSD analysis exhibited recoveries and RPD within the control limits.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

The serial dilution analysis was not performed on a sample location within this SDG.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010C/7470A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X		X	
B. Method Blanks		X		X	
C. Field Blanks					X
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R					X
Matrix Spike Duplicate (MSD) %R					X
MS/MSD Precision (RPD)					X
Laboratory Duplicate (RPD)					X
Field Duplicate (RPD)		X		X	
ICP Serial Dilution					X
Reporting Limit Verification		X		X	
Raw Data		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
CRDL Standard		X		X	
ICP Interference Check		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Cyanide by SW-846 9012	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of greater than 12 s.u.

s.u. standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the MDL. The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 and all initial calibration verification standard recoveries were within control limits.

All continuing calibration standard recoveries were within the control limit.

4. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier “N” will be removed.

The MS analysis was not performed on a sample location within this SDG.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices.

Laboratory duplicate analysis was not performed on a sample location within this SDG.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-113A/ DUP-04292014	Cyanide	0.0058 B	0.0064 B	AC

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA 9012	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Field blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R					X
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Lab/Field Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R Percent recovery
%RSD Relative standard deviation
RPD Relative percent difference

SAMPLE COMPLIANCE REPORT

SAMPLE COMPLIANCE REPORT

SDG	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PEST/HERB/PCB	MET	MISC	
MC301759	04/29/2014	SW846	MW-113A	Water	No	No	--	Yes	Yes	VOC –ICAL %RSD, CCV %D, MS/MSD %R SVOC – blank contamination, LCS %R, CCV %D
	04/29/2014	SW846	MW-113B	Water	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCV %D SVOC – blank contamination, LCS %R, CCV %D
	04/29/2014	SW846	MW-107	Water	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCV %D SVOC – LCS %R, CCV %D
	04/29/2014	SW846	MW-04	Water	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCV %D SVOC – blank contamination, LCS %R, CCV %D
	04/29/2014	SW846	MW-101A	Water	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCV %D SVOC – blank contamination, LCS %R, CCV %D
	04/29/2014	SW846	DUP-04292014	Water	No	No	--	Yes	Yes	VOC – ICAL %RSD, CCV %D SVOC – blank contamination, LCS %R, CCV %D
	04/29/2014	SW846	Trip Blank	Water	No	--	--	--	--	VOC – ICAL %RSD, CCV %D

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: 

DATE: June 23, 2014

PEER REVIEW: Dennis Capria

DATE: June 23, 2014

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: MC30175

Client / Reporting Information

Company Name: ARCADIS
Street Address: 6723 TOWPATH RD
City: SYRACUSE State: NY Zip: 13214
Project Contact: DAVID CORNELL E-mail:
Phone #: 315 6711 9379 Fax #:
Sampler(s) Name(s): JON LEMESSURIER Phone #: 315 558 1904

Project Information

Project Name: CONED - UNIONPORT
Street: WATSON AVE
City: BRONX
Project #: B0043515
Client PO#:
Project Manager: CHARLES LEARY

Billing Information (If different from Report to)

Company Name:
Street Address:
City State Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB- Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	8260 TCL	8270 TCL	TAL METALS	CYANIDE	LAB USE ONLY
-1	MW-113A		4/29/14	0800	JDL	GW	7	3	1	1		2					X	X	X	X	
-2	MW-113B			0945			7	3	1	1		2					X	X	X	X	
-3	MW-107			1135			7	3	1	1		2					X	X	X	X	19D,
-4	MW-04			1125			7	3	1	1		2					X	X	X	X	2B2
-5	MW-101A			1430			7	3	1	1		2					X	X	X	X	5B
-6	DUP-04292014			—			7	3	1	1		2					X	X	X	X	10C
-7																					
																			* 2 COOLERS *		

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [x] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		4/29/14 1600	FED EX	FED EX	4/28/14 9:30	
2	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3						
4	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp.
5						

Custody Seal #: ☐ Intact ☐ Not intact

ACCUTEST

MC30175: Chain of Custody
Page 1 of 3

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-113A		
Lab Sample ID:	MC30175-1	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84110.D	1	05/09/14	AMY	n/a	n/a	MSL3796
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.5	ug/l	
71-43-2	Benzene	ND UJ	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND UJ	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113A		
Lab Sample ID:	MC30175-1	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	112%		70-130%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: MW-113A
Lab Sample ID: MC30175-1 **Date Sampled:** 04/29/14
Matrix: AQ - Ground Water **Date Received:** 04/30/14
Method: SW846 8270D SW846 3510C **Percent Solids:** n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38755.D	1	05/05/14	WK	05/01/14	OP37898	MSR1427
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.5	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.91	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.44	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.62	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	UJ
	3&4-Methylphenol	ND	11	0.51	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.59	ug/l	UJ
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.5	0.33	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.41	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
83-32-9	Acenaphthene	79.8	2.2	0.35	ug/l	
208-96-8	Acenaphthylene	11.0	2.2	0.24	ug/l	
120-12-7	Anthracene	2.5	2.2	0.21	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.2	0.54	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.2	0.17	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.2	0.27	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.2	0.91	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.2	0.96	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.5	0.52	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.5	0.58	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.5	0.34	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.61	ug/l	
86-74-8	Carbazole	5.6	2.2	0.18	ug/l	
218-01-9	Chrysene	ND	2.2	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.5	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.5	0.38	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.5	0.36	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.5	0.28	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113A		
Lab Sample ID:	MC30175-1	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.5	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.5	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.5	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.50	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.5	0.29	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.2	0.70	ug/l	
132-64-9	Dibenzofuran	3.9	2.2	0.28	ug/l	
84-74-2	Di-n-butyl phthalate 5.5	~~1.2~~ UB	5.5	0.19	ug/l	~~JB~~
117-84-0	Di-n-octyl phthalate	ND UJ	5.5	0.31	ug/l	
84-66-2	Diethyl phthalate	0.24	5.5	0.22	ug/l	J
131-11-3	Dimethyl phthalate	ND	5.5	0.37	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	0.41	2.2	0.37	ug/l	J
206-44-0	Fluoranthene	3.6	2.2	0.49	ug/l	
86-73-7	Fluorene	18.1	2.2	0.23	ug/l	
118-74-1	Hexachlorobenzene	ND	5.5	0.32	ug/l	
87-68-3	Hexachlorobutadiene	ND UJ	5.5	0.25	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND UJ	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.5	0.33	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.2	0.91	ug/l	
78-59-1	Isophorone	ND	5.5	0.49	ug/l	
91-57-6	2-Methylnaphthalene	0.40	2.2	0.29	ug/l	J
88-74-4	2-Nitroaniline	ND	11	0.44	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
91-20-3	Naphthalene	10.2	2.2	0.33	ug/l	
98-95-3	Nitrobenzene	ND	5.5	0.43	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.5	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.5	0.21	ug/l	
85-01-8	Phenanthrene	38.9	2.2	0.15	ug/l	
129-00-0	Pyrene	4.8	2.2	0.19	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	0.39	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	26%		15-110%
4165-62-2	Phenol-d5	21%		15-110%
118-79-6	2,4,6-Tribromophenol	73%		15-110%
4165-60-0	Nitrobenzene-d5	52%		30-130%
321-60-8	2-Fluorobiphenyl	58%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113A		
Lab Sample ID:	MC30175-1	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	91%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-113A
Lab Sample ID: MC30175-1
Matrix: AQ - Ground Water
Date Sampled: 04/29/14
Date Received: 04/30/14
Percent Solids: n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	55.8 B	200	40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Antimony	ND	6.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Arsenic	ND	4.0	2.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Barium	63.5	50	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Beryllium	ND	4.0	0.25	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cadmium	ND	4.0	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Calcium	82700	5000	38	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Chromium	ND	10	1.4	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cobalt	ND	50	0.40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Copper	ND	25	7.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Iron	20700	100	20	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Lead	ND	5.0	1.7	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Magnesium	83100	5000	59	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Manganese	8070	15	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Mercury	ND	0.20	0.10	ug/l	1	05/05/14	05/06/14	SA	SW846 7470A [2]	SW846 7470A [4]
Nickel	1.6 B	40	0.57	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Potassium	16400	5000	160	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Selenium	ND	10	4.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Silver	ND	5.0	1.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Sodium	209000	5000	60	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Thallium	ND	5.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Vanadium	ND	10	2.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Zinc	ND	20	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17100
(2) Instrument QC Batch: MA17103
(3) Prep QC Batch: MP22981
(4) Prep QC Batch: MP22994

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-113A		
Lab Sample ID:	MC30175-1	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
		Percent Solids:	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.0058 B	0.010	0.0014	mg/l	1	05/01/14 12:20	MA	SW846 9012

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-113B		
Lab Sample ID:	MC30175-2	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84111.D	1	05/09/14	AMY	n/a	n/a	MSL3796
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.5	ug/l	
71-43-2	Benzene	11.8 J	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND UJ	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	8.2	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	0.46	1.0	0.33	ug/l	J
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113B		
Lab Sample ID:	MC30175-2	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	1.9	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	106%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: MW-113B
Lab Sample ID: MC30175-2 **Date Sampled:** 04/29/14
Matrix: AQ - Ground Water **Date Received:** 04/30/14
Method: SW846 8270D SW846 3510C **Percent Solids:** n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38756.D	1	05/05/14	WK	05/01/14	OP37898	MSR1427
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.7	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.94	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.45	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.64	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.2	ug/l	
95-48-7	2-Methylphenol	ND UJ	11	0.26	ug/l	
	3&4-Methylphenol	ND	11	0.53	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.3	ug/l	
100-02-7	4-Nitrophenol	ND UJ	23	0.61	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.3	ug/l	
108-95-2	Phenol	ND	5.7	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.42	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.20	ug/l	
83-32-9	Acenaphthene	5.6	2.3	0.36	ug/l	
208-96-8	Acenaphthylene	ND	2.3	0.24	ug/l	
120-12-7	Anthracene	1.1	2.3	0.21	ug/l	J
56-55-3	Benzo(a)anthracene	0.78	2.3	0.56	ug/l	J
50-32-8	Benzo(a)pyrene	0.41	2.3	0.18	ug/l	J
205-99-2	Benzo(b)fluoranthene	ND	2.3	0.28	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.3	0.94	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.3	0.99	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.7	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.7	0.60	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.7	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.63	ug/l	
86-74-8	Carbazole	0.48	2.3	0.18	ug/l	J
218-01-9	Chrysene	0.60	2.3	0.19	ug/l	J
111-91-1	bis(2-Chloroethoxy)methane	ND	5.7	0.33	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.7	0.40	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.7	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.7	0.29	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113B		
Lab Sample ID:	MC30175-2	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.7	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.7	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.7	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.52	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.34	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.7	0.30	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.3	0.72	ug/l	
132-64-9	Dibenzofuran	ND	2.3	0.29	ug/l	
84-74-2	Di-n-butyl phthalate 5.7	~~1.8~~ UB	5.7	0.20	ug/l	~~JB~~
117-84-0	Di-n-octyl phthalate	ND UJ	5.7	0.32	ug/l	
84-66-2	Diethyl phthalate	0.34	5.7	0.23	ug/l	J
131-11-3	Dimethyl phthalate	ND	5.7	0.39	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	0.57	2.3	0.38	ug/l	J
206-44-0	Fluoranthene	2.0	2.3	0.51	ug/l	J
86-73-7	Fluorene	1.2	2.3	0.24	ug/l	J
118-74-1	Hexachlorobenzene	ND	5.7	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND UJ	5.7	0.26	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND UJ	11	1.5	ug/l	
67-72-1	Hexachloroethane	ND	5.7	0.34	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.3	0.94	ug/l	
78-59-1	Isophorone	ND	5.7	0.51	ug/l	
91-57-6	2-Methylnaphthalene	0.78	2.3	0.30	ug/l	J
88-74-4	2-Nitroaniline	ND	11	0.45	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.6	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.5	ug/l	
91-20-3	Naphthalene	21.2	2.3	0.34	ug/l	
98-95-3	Nitrobenzene	ND	5.7	0.44	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.7	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.7	0.22	ug/l	
85-01-8	Phenanthrene	3.2	2.3	0.16	ug/l	
129-00-0	Pyrene	3.1	2.3	0.19	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.7	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	28%		15-110%
4165-62-2	Phenol-d5	22%		15-110%
118-79-6	2,4,6-Tribromophenol	75%		15-110%
4165-60-0	Nitrobenzene-d5	52%		30-130%
321-60-8	2-Fluorobiphenyl	57%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-113B		
Lab Sample ID:	MC30175-2	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	94%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-113B
Lab Sample ID: MC30175-2
Matrix: AQ - Ground Water
Date Sampled: 04/29/14
Date Received: 04/30/14
Percent Solids: n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	ND	200	40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Antimony	ND	6.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Arsenic	ND	4.0	2.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Barium	120	50	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Beryllium	ND	4.0	0.25	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cadmium	ND	4.0	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Calcium	145000	5000	38	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Chromium	ND	10	1.4	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cobalt	1.4 B	50	0.40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Copper	ND	25	7.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Iron	3940	100	20	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Lead	3.1 B	5.0	1.7	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Magnesium	37900	5000	59	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Manganese	564	15	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Mercury	ND	0.20	0.10	ug/l	1	05/05/14	05/06/14	SA	SW846 7470A [2]	SW846 7470A [4]
Nickel	16.0 B	40	0.57	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Potassium	12000	5000	160	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Selenium	ND	10	4.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Silver	ND	5.0	1.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Sodium	269000	5000	60	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Thallium	ND	5.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Vanadium	ND	10	2.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Zinc	3.0 B	20	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17100
(2) Instrument QC Batch: MA17103
(3) Prep QC Batch: MP22981
(4) Prep QC Batch: MP22994

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-113B		
Lab Sample ID:	MC30175-2	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
		Percent Solids:	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.11	0.010	0.0014	mg/l	1	05/01/14 12:21	MA	SW846 9012

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-107		
Lab Sample ID:	MC30175-3	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84112.D	1	05/09/14	AMY	n/a	n/a	MSL3796
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.5	ug/l	
71-43-2	Benzene	9.6 J	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND UJ	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	0.34	1.0	0.33	ug/l	J
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-107		
Lab Sample ID:	MC30175-3	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	1.3	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	104%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-107		
Lab Sample ID:	MC30175-3	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38757.D	1	05/05/14	WK	05/01/14	OP37898	MSR1427
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.7	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.94	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.45	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.64	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.2	ug/l	
95-48-7	2-Methylphenol	ND UJ	11	0.26	ug/l	
	3&4-Methylphenol	ND	11	0.53	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.3	ug/l	
100-02-7	4-Nitrophenol	ND UJ	23	0.61	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.3	ug/l	
108-95-2	Phenol	ND	5.7	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.42	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.20	ug/l	
83-32-9	Acenaphthene	12.4	2.3	0.36	ug/l	
208-96-8	Acenaphthylene	ND	2.3	0.24	ug/l	
120-12-7	Anthracene	1.7	2.3	0.21	ug/l	J
56-55-3	Benzo(a)anthracene	ND	2.3	0.56	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.3	0.18	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.3	0.28	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.3	0.94	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.3	0.99	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.7	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.7	0.60	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.7	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.63	ug/l	
86-74-8	Carbazole	ND	2.3	0.18	ug/l	
218-01-9	Chrysene	0.42	2.3	0.19	ug/l	J
111-91-1	bis(2-Chloroethoxy)methane	ND	5.7	0.33	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.7	0.40	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.7	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.7	0.29	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-107		
Lab Sample ID:	MC30175-3	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.7	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.7	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.7	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.52	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.34	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.7	0.30	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.3	0.72	ug/l	
132-64-9	Dibenzofuran	ND	2.3	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.7	0.20	ug/l	
117-84-0	Di-n-octyl phthalate	ND UJ	5.7	0.32	ug/l	
84-66-2	Diethyl phthalate	ND	5.7	0.23	ug/l	
131-11-3	Dimethyl phthalate	ND	5.7	0.39	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	0.53	2.3	0.38	ug/l	J
206-44-0	Fluoranthene	1.7	2.3	0.51	ug/l	J
86-73-7	Fluorene	4.5	2.3	0.24	ug/l	
118-74-1	Hexachlorobenzene	ND	5.7	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND UJ	5.7	0.26	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND UJ	11	1.5	ug/l	
67-72-1	Hexachloroethane	ND	5.7	0.34	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.3	0.94	ug/l	
78-59-1	Isophorone	ND	5.7	0.51	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.3	0.30	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.45	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.6	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.5	ug/l	
91-20-3	Naphthalene	ND	2.3	0.34	ug/l	
98-95-3	Nitrobenzene	ND	5.7	0.44	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.7	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.7	0.22	ug/l	
85-01-8	Phenanthrene	2.1	2.3	0.16	ug/l	J
129-00-0	Pyrene	3.1	2.3	0.19	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.7	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	26%		15-110%
4165-62-2	Phenol-d5	21%		15-110%
118-79-6	2,4,6-Tribromophenol	73%		15-110%
4165-60-0	Nitrobenzene-d5	45%		30-130%
321-60-8	2-Fluorobiphenyl	54%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-107		
Lab Sample ID:	MC30175-3	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	85%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-107
Lab Sample ID: MC30175-3
Matrix: AQ - Ground Water
Date Sampled: 04/29/14
Date Received: 04/30/14
Percent Solids: n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	ND	200	40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Antimony	ND	6.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Arsenic	35.6	4.0	2.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Barium	81.5	50	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Beryllium	ND	4.0	0.25	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cadmium	ND	4.0	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Calcium	131000	5000	38	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Chromium	1.5 B	10	1.4	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cobalt	3.5 B	50	0.40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Copper	ND	25	7.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Iron	26700	100	20	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Lead	3.3 B	5.0	1.7	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Magnesium	67200	5000	59	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Manganese	1160	15	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Mercury	ND	0.20	0.10	ug/l	1	05/05/14	05/06/14	SA	SW846 7470A [2]	SW846 7470A [4]
Nickel	4.0 B	40	0.57	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Potassium	26400	5000	160	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Selenium	ND	10	4.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Silver	ND	5.0	1.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Sodium	502000	5000	60	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Thallium	2.1 B	5.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Vanadium	3.2 B	10	2.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Zinc	1.2 B	20	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17100
(2) Instrument QC Batch: MA17103
(3) Prep QC Batch: MP22981
(4) Prep QC Batch: MP22994

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-107		
Lab Sample ID:	MC30175-3	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
		Percent Solids:	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.14	0.010	0.0014	mg/l	1	05/01/14 12:22	MA	SW846 9012

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-04		
Lab Sample ID:	MC30175-4	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84113.D	1	05/09/14	AMY	n/a	n/a	MSL3796
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.5	ug/l	
71-43-2	Benzene	0.36	0.50	0.32	ug/l	J
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND UJ	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	17.1	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-04		
Lab Sample ID:	MC30175-4	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	1.5	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-04		
Lab Sample ID:	MC30175-4	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38758.D	1	05/05/14	WK	05/01/14	OP37898	MSR1427
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.5	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.91	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.44	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.62	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND UJ	11	0.25	ug/l	
	3&4-Methylphenol	ND	11	0.51	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND UJ	22	0.59	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.5	0.33	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.41	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
83-32-9	Acenaphthene	1.0	2.2	0.35	ug/l	J
208-96-8	Acenaphthylene	0.25	2.2	0.24	ug/l	J
120-12-7	Anthracene	0.30	2.2	0.21	ug/l	J
56-55-3	Benzo(a)anthracene	ND	2.2	0.54	ug/l	
50-32-8	Benzo(a)pyrene	0.31	2.2	0.17	ug/l	J
205-99-2	Benzo(b)fluoranthene	ND	2.2	0.27	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.2	0.91	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.2	0.96	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.5	0.52	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.5	0.58	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.5	0.34	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.61	ug/l	
86-74-8	Carbazole	ND	2.2	0.18	ug/l	
218-01-9	Chrysene	ND	2.2	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.5	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.5	0.38	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.5	0.36	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.5	0.28	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-04		
Lab Sample ID:	MC30175-4	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.5	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.5	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.5	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.50	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.5	0.29	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.2	0.70	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.28	ug/l	
84-74-2	Di-n-butyl phthalate 5.5	~~0.55~~ UB	5.5	0.19	ug/l	~~JB~~
117-84-0	Di-n-octyl phthalate	ND UJ	5.5	0.31	ug/l	
84-66-2	Diethyl phthalate	ND	5.5	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.5	0.37	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	0.38	2.2	0.37	ug/l	J
206-44-0	Fluoranthene	0.73	2.2	0.49	ug/l	J
86-73-7	Fluorene	0.41	2.2	0.23	ug/l	J
118-74-1	Hexachlorobenzene	ND	5.5	0.32	ug/l	
87-68-3	Hexachlorobutadiene	ND UJ	5.5	0.25	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND UJ	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.5	0.33	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.2	0.91	ug/l	
78-59-1	Isophorone	ND	5.5	0.49	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	0.29	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.44	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
91-20-3	Naphthalene	ND	2.2	0.33	ug/l	
98-95-3	Nitrobenzene	ND	5.5	0.43	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.5	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.5	0.21	ug/l	
85-01-8	Phenanthrene	0.55	2.2	0.15	ug/l	J
129-00-0	Pyrene	1.2	2.2	0.19	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	0.39	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	24%		15-110%
4165-62-2	Phenol-d5	17%		15-110%
118-79-6	2,4,6-Tribromophenol	66%		15-110%
4165-60-0	Nitrobenzene-d5	41%		30-130%
321-60-8	2-Fluorobiphenyl	42%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-04		
Lab Sample ID:	MC30175-4	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	85%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-04
Lab Sample ID: MC30175-4
Matrix: AQ - Ground Water
Date Sampled: 04/29/14
Date Received: 04/30/14
Percent Solids: n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	ND	200	40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Antimony	ND	6.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Arsenic	ND	4.0	2.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Barium	189	50	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Beryllium	ND	4.0	0.25	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cadmium	0.60 B	4.0	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Calcium	128000	5000	38	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Chromium	1.5 B	10	1.4	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cobalt	ND	50	0.40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Copper	ND	25	7.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Iron	142	100	20	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Lead	ND	5.0	1.7	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Magnesium	12900	5000	59	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Manganese	153	15	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Mercury	ND	0.20	0.10	ug/l	1	05/05/14	05/06/14	SA	SW846 7470A [2]	SW846 7470A [4]
Nickel	5.5 B	40	0.57	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Potassium	5350	5000	160	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Selenium	5.0 B	10	4.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Silver	ND	5.0	1.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Sodium	163000	5000	60	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Thallium	ND	5.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Vanadium	3.7 B	10	2.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Zinc	72.7	20	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17100
(2) Instrument QC Batch: MA17103
(3) Prep QC Batch: MP22981
(4) Prep QC Batch: MP22994

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-04		
Lab Sample ID:	MC30175-4	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
		Percent Solids:	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.011	0.010	0.0014	mg/l	1	05/01/14 12:25	MA	SW846 9012

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-101A		
Lab Sample ID:	MC30175-5	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84114.D	1	05/09/14	AMY	n/a	n/a	MSL3796
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.5	ug/l	
71-43-2	Benzene	0.55 J	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	1.8 J	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-101A		
Lab Sample ID:	MC30175-5	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	106%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: MW-101A
Lab Sample ID: MC30175-5 **Date Sampled:** 04/29/14
Matrix: AQ - Ground Water **Date Received:** 04/30/14
Method: SW846 8270D SW846 3510C **Percent Solids:** n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38759.D	1	05/05/14	WK	05/01/14	OP37898	MSR1427
Run #2							

	Initial Volume	Final Volume
Run #1	860 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.8	0.36	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	12	0.96	ug/l	
120-83-2	2,4-Dichlorophenol	ND	12	0.46	ug/l	
105-67-9	2,4-Dimethylphenol	ND	12	0.65	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	2.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	12	2.2	ug/l	
95-48-7	2-Methylphenol	ND UJ	12	0.26	ug/l	
	3&4-Methylphenol	ND	12	0.54	ug/l	
88-75-5	2-Nitrophenol	ND	12	3.4	ug/l	
100-02-7	4-Nitrophenol	NDUJ	23	0.62	ug/l	
87-86-5	Pentachlorophenol	ND	12	1.3	ug/l	
108-95-2	Phenol	ND	5.8	0.35	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	12	0.43	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	12	0.20	ug/l	
83-32-9	Acenaphthene	ND	2.3	0.37	ug/l	
208-96-8	Acenaphthylene	0.26	2.3	0.25	ug/l	J
120-12-7	Anthracene	ND	2.3	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.3	0.57	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.3	0.18	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.3	0.29	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.3	0.96	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.3	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.8	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.8	0.62	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.8	0.36	ug/l	
106-47-8	4-Chloroaniline	ND	12	0.65	ug/l	
86-74-8	Carbazole	ND	2.3	0.19	ug/l	
218-01-9	Chrysene	ND	2.3	0.19	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.8	0.33	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.8	0.41	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.8	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.8	0.29	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-101A		
Lab Sample ID:	MC30175-5	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.8	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.8	0.31	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.8	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	12	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	12	0.35	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.8	0.31	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.3	0.74	ug/l	
132-64-9	Dibenzofuran	ND	2.3	0.30	ug/l	
84-74-2	Di-n-butyl phthalate 5.8	~~0.60~~ UB	5.8	0.20	ug/l	~~JB~~
117-84-0	Di-n-octyl phthalate	ND UJ	5.8	0.33	ug/l	
84-66-2	Diethyl phthalate	ND	5.8	0.23	ug/l	
131-11-3	Dimethyl phthalate	ND	5.8	0.40	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	0.61	2.3	0.39	ug/l	J
206-44-0	Fluoranthene	ND	2.3	0.52	ug/l	
86-73-7	Fluorene	ND	2.3	0.25	ug/l	
118-74-1	Hexachlorobenzene	ND	5.8	0.34	ug/l	
87-68-3	Hexachlorobutadiene	ND UJ	5.8	0.26	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND UJ	12	1.5	ug/l	
67-72-1	Hexachloroethane	ND	5.8	0.35	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.3	0.96	ug/l	
78-59-1	Isophorone	ND	5.8	0.52	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.3	0.30	ug/l	
88-74-4	2-Nitroaniline	ND	12	0.46	ug/l	
99-09-2	3-Nitroaniline	ND	12	1.6	ug/l	
100-01-6	4-Nitroaniline	ND	12	2.5	ug/l	
91-20-3	Naphthalene	ND	2.3	0.34	ug/l	
98-95-3	Nitrobenzene	ND	5.8	0.45	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.8	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.8	0.22	ug/l	
85-01-8	Phenanthrene	ND	2.3	0.16	ug/l	
129-00-0	Pyrene	0.30	2.3	0.20	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	5.8	0.42	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	25%		15-110%
4165-62-2	Phenol-d5	19%		15-110%
118-79-6	2,4,6-Tribromophenol	63%		15-110%
4165-60-0	Nitrobenzene-d5	45%		30-130%
321-60-8	2-Fluorobiphenyl	49%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-101A		
Lab Sample ID:	MC30175-5	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	84%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-101A
Lab Sample ID: MC30175-5
Matrix: AQ - Ground Water
Date Sampled: 04/29/14
Date Received: 04/30/14
Percent Solids: n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	511	200	40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Antimony	ND	6.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Arsenic	ND	4.0	2.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Barium	79.6	50	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Beryllium	ND	4.0	0.25	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cadmium	ND	4.0	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Calcium	91400	5000	38	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Chromium	1.4 B	10	1.4	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cobalt	7.8 B	50	0.40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Copper	ND	25	7.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Iron	1770	100	20	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Lead	ND	5.0	1.7	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Magnesium	82000	5000	59	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Manganese	8120	15	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Mercury	ND	0.20	0.10	ug/l	1	05/05/14	05/06/14	SA	SW846 7470A [2]	SW846 7470A [4]
Nickel	7.6 B	40	0.57	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Potassium	8680	5000	160	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Selenium	ND	10	4.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Silver	ND	5.0	1.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Sodium	106000	5000	60	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Thallium	ND	5.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Vanadium	ND	10	2.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Zinc	4.8 B	20	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17100
(2) Instrument QC Batch: MA17103
(3) Prep QC Batch: MP22981
(4) Prep QC Batch: MP22994

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-101A		
Lab Sample ID:	MC30175-5	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
		Percent Solids:	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.020	0.010	0.0014	mg/l	1	05/01/14 12:26	MA	SW846 9012

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP-04292014		
Lab Sample ID:	MC30175-6	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84115.D	1	05/09/14	AMY	n/a	n/a	MSL3796
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.5	ug/l	
71-43-2	Benzene	ND UJ	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND UJ	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-04292014		
Lab Sample ID:	MC30175-6	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	112%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP-04292014		
Lab Sample ID:	MC30175-6	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38760.D	1	05/05/14	WK	05/01/14	OP37898	MSR1427
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.4	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.43	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.60	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.24	ug/l	UJ
	3&4-Methylphenol	ND	11	0.50	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.1	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.57	ug/l	UJ
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.4	0.32	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.40	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
83-32-9	Acenaphthene	70.9	2.2	0.34	ug/l	
208-96-8	Acenaphthylene	9.8	2.2	0.23	ug/l	
120-12-7	Anthracene	2.3	2.2	0.20	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.2	0.53	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.2	0.17	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.2	0.27	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.2	0.89	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.2	0.94	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	0.51	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	0.57	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	0.34	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.60	ug/l	
86-74-8	Carbazole	5.5	2.2	0.17	ug/l	
218-01-9	Chrysene	ND	2.2	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	0.38	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	0.36	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DUP-04292014
Lab Sample ID: MC30175-6
Matrix: AQ - Ground Water
Method: SW846 8270D SW846 3510C
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Date Sampled: 04/29/14
Date Received: 04/30/14
Percent Solids: n/a

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.4	0.21	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.4	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.4	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.49	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.32	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	0.29	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.2	0.68	ug/l	
132-64-9	Dibenzofuran	3.6	2.2	0.28	ug/l	
84-74-2	Di-n-butyl phthalate 5.4	~~0.54~~ UB	5.4	0.19	ug/l	~~JB~~
117-84-0	Di-n-octyl phthalate	ND UJ	5.4	0.30	ug/l	
84-66-2	Diethyl phthalate	ND	5.4	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	0.37	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	0.46	2.2	0.36	ug/l	J
206-44-0	Fluoranthene	3.4	2.2	0.48	ug/l	
86-73-7	Fluorene	16.7	2.2	0.23	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND UJ	5.4	0.24	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND UJ	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.32	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.2	0.89	ug/l	
78-59-1	Isophorone	ND	5.4	0.48	ug/l	
91-57-6	2-Methylnaphthalene	0.35	2.2	0.28	ug/l	J
88-74-4	2-Nitroaniline	ND	11	0.43	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.3	ug/l	
91-20-3	Naphthalene	8.1	2.2	0.32	ug/l	
98-95-3	Nitrobenzene	ND	5.4	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	0.43	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.21	ug/l	
85-01-8	Phenanthrene	36.0	2.2	0.15	ug/l	
129-00-0	Pyrene	4.6	2.2	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	0.38	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	26%		15-110%
4165-62-2	Phenol-d5	20%		15-110%
118-79-6	2,4,6-Tribromophenol	71%		15-110%
4165-60-0	Nitrobenzene-d5	49%		30-130%
321-60-8	2-Fluorobiphenyl	52%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-04292014		
Lab Sample ID:	MC30175-6	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	87%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DUP-04292014
Lab Sample ID: MC30175-6
Matrix: AQ - Ground Water
Date Sampled: 04/29/14
Date Received: 04/30/14
Percent Solids: n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	63.0 B	200	40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Antimony	ND	6.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Arsenic	ND	4.0	2.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Barium	62.1	50	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Beryllium	ND	4.0	0.25	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cadmium	ND	4.0	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Calcium	81700	5000	38	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Chromium	ND	10	1.4	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Cobalt	ND	50	0.40	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Copper	ND	25	7.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Iron	20800	100	20	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Lead	ND	5.0	1.7	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Magnesium	84000	5000	59	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Manganese	7930	15	0.81	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Mercury	ND	0.20	0.10	ug/l	1	05/05/14	05/06/14	SA	SW846 7470A [2]	SW846 7470A [4]
Nickel	2.0 B	40	0.57	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Potassium	16200	5000	160	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Selenium	ND	10	4.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Silver	ND	5.0	1.0	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Sodium	216000	5000	60	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Thallium	ND	5.0	1.9	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Vanadium	ND	10	2.8	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]
Zinc	ND	20	0.50	ug/l	1	05/02/14	05/02/14	EAL	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17100
(2) Instrument QC Batch: MA17103
(3) Prep QC Batch: MP22981
(4) Prep QC Batch: MP22994

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	DUP-04292014		
Lab Sample ID:	MC30175-6	**Date Sampled:**	04/29/14
Matrix:	AQ - Ground Water	**Date Received:**	04/30/14
		Percent Solids:	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.0064 B	0.010	0.0014	mg/l	1	05/01/14 12:27	MA	SW846 9012

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: MC30175-7 **Date Sampled:** 04/29/14
Matrix: AQ - Trip Blank Water **Date Received:** 04/30/14
Method: SW846 8260C **Percent Solids:** n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84106.D	1	05/09/14	AMY	n/a	n/a	MSL3796
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND UJ	10	2.5	ug/l	
71-43-2	Benzene	ND UJ	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND UJ	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND UJ	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC30175-7	**Date Sampled:**	04/29/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/30/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	114%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Consolidated Edison Company of New York, Inc. - Watson Avenue

Data Usability Summary Report

BRONX, NEW YORK

Volatile, Semivolatile, Metals and Miscellaneous Analyses

SDG #MC30145

Analyses Performed By:
Accutest Laboratories
Marlborough, Massachussetts

Report: #21930R
Review Level: Tier III
Project: B0043515.0006.00002

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #MC30145 for samples collected in association with the Con Edison Former Unionport Works site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

SDG Number	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	PCB	MET	MISC
MC30145	MW-05	MC30145-1	Water	04/28/2014		X	X		X	X
	Trip Blank	MC30145-2	Water	04/28/2014		X				

Note:
1. Miscellaneous analysis includes cyanide.
2. The matrix spike/matrix spike duplicate (MS/MSD) was performed using sample MW-05.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260 and 8270 as referenced in the NYSDEC ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
MW-05 Trip Blank	ICAL %RSD	Bromomethane	16.6%
		Chloroethane	17.5%
		1,1-Dichloroethene	19.2%
		Methylene chloride	19.7%
		1,1-Dichloroethane	18.0%
		1,1,1-Trichloroethane	17.8%
		Benzene	17.5%
		1,2-Dichloropropane	15.7%
		2-Hexanone	16.3%
		Styrene	15.2%
	CCV %D	Chloromethane	21.0%
		Bromomethane	31.2%
		Chloroethane	-21.4%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
	%RSD >90%	Non-detect	R

Initial/Continuing	Criteria	Sample Result	Qualification
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D >90% (increase/decrease in sensitivity)	Non-detect	R
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
MW-05	Acetone	> UL	> UL
	4-Methyl-2-pentanone		

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

8. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS/LCSD analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery	LCSD Recovery
MW-05 Trip Blank	Acetone	AC	> UL
	Bromomethane	< LL but > 10%	AC

AC Acceptable

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate sample was not collected in association with this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Field blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X	X		
Laboratory Control Sample Duplicate(LCSD)		X	X		
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS)		X	X		
Matrix Spike Duplicate(MSD)		X	X		
MS/MSD Precision (RPD)		X		X	
Field Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X	X		
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
MW-05	Di-n-butyl phthalate (MB)	Detected sample results < RL and < BAL	"UB" at the RL

RL Reporting limit
MB Method blank

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
MW-05	CCV %D	2-Methylphenol	-32.3%
		Di-n-octylphthalate	-20.6%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
	%RSD >90%	Non-detect	R
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D >90% (increase/decrease in sensitivity)	Non-detect	R
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
MW-05	2,4-Dinitrophenol	< LL but > 10%	< LL but > 10%
	4-Nitrophenol		
	Hexachlorocyclopentadiene		
	Pentachlorophenol		AC

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J

Control Limit	Sample Result	Qualification
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
MW-05	4-Nitrophenol	< LL but > 10%

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate sample was not collected in association with this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra. All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Field blanks					X
Laboratory Control Sample (LCS) %R		X	X		
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate(MSD) %R		X	X		
MS/MSD Precision (RPD)		X		X	
Field Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010C/7470A and 9012. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

  B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

  E The reported value is estimated due to the presence of interference.

  N Spiked sample recovery is not within control limits.

  * Duplicate analysis is not within control limits.

- Validation Qualifiers

  J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010C	Water	180 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.
SW-846 7470A	Water	28 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 2 s.u.

s.u. standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration and Continuing Calibration

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All continuing calibration verification standard recoveries were within the control limit.

3.2 CRDL Check Standard

The CRDL check standard serves to verify the linearity of calibration of the analysis at the CRDL. The CRDL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe),

magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the CRDL standard analysis are presented below in the CRDL standards evaluation table.

All analytes associated with CRDL standard recoveries were within control limits.

3.3 ICP Interference Control Sample (ICS)

The ICS verifies the laboratories interelement and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD analysis performed on sample location MW-05 exhibited recoveries within the control limits.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPD.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate sample was not collected in association with this SDG.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit recoveries between the control limits of 80% and 120%. The relative percent difference (RPD) between the LCS and LCSD results must be no greater than the established acceptance limit of 20%.

All analytes associated with the LCS/LCSD analysis exhibited recoveries and RPD within the control limits.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

The serial dilution performed on sample location MW-05 exhibited %D within the control limit.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010C/7470A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X		X	
B. Method Blanks		X		X	
C. Field Blanks					X
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Laboratory Duplicate (RPD)					X
Field Duplicate (RPD)					X
ICP Serial Dilution		X		X	
Reporting Limit Verification		X		X	
Raw Data		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
CRDL Standard		X		X	
ICP Interference Check		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Cyanide by SW-846 9012	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of greater than 12 s.u.

s.u. standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the MDL. The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 and all initial calibration verification standard recoveries were within control limits.

All continuing calibration standard recoveries were within the control limit.

4. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS analysis performed on sample location MW-05 exhibited recoveries within the control limits.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices.

The laboratory duplicate sample results exhibited RPD within the control limit.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate sample was not collected in association with this SDG.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 80% and 120%. The relative percent difference (RPD) between the LCS and LCSD results must be no greater than the established acceptance limit of 20%.

All analytes associated with the LCS/LCSD analysis exhibited recoveries and RPD within the control limits.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA 9012	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Field blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Lab/Field Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R Percent recovery
%RSD Relative standard deviation
RPD Relative percent difference

SAMPLE COMPLIANCE REPORT

SAMPLE COMPLIANCE REPORT

SDG	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PEST/HERB/PCB	MET	MISC	
MC30145	04/28/2014	SW846	MW-05		No	No	--	Yes	Yes	VOC –ICAL %RSD, CCV %D, MS/MSD %R, LCS %R SVOC – blank contamination, CCV %D, MS/MSD %R, LCS %R
	04/28/2014	SW846	Trip Blank		No	--	--	--	--	VOC – ICAL %RSD, CCV %D, LCS %R

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: 

DATE: June 27, 2014

PEER REVIEW: Todd Church

DATE: June 27, 2014

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: MC30145

Client / Reporting Information

Company Name: ARCADIS
Street Address: 6723 TOWPATH RD. 13214
City: SYRACUSE State: NY Zip:
Project Contact: DAVID CORNELL E-mail:
Phone #: 315 671 9379 Fax #:
Sampler(s) Name(s): JON LEMESSURIER Phone #: 315 558 7104

Project Information

Project Name: CONED-WATSON AVE
Street: 1066 Zerega
City: Bronx, NY
Project#: B0043515
Client PO#:
Project Manager: ~~DAVID CORNELL~~ CHARLES LEARY

Billing Information (If different from Report to)

Company Name:
Street Address:
City State Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfite	8260 TCL	8270 TCL	TAL metals	Cyanide	LAB USE ONLY
SD-1	MW-05		4/28/14	1500	JDL	GW	7	3	1	1		2					X	X	X	X	
	MW-05 MS		↓	↓	↓	↓	7	3	1	1		2					X	X	X	X	
	MW-05 MSD		↓	↓	↓	↓	7	3	1	1		2					X	X	X	X	
																					19D
																					10A
																					5A
																					10A

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB- Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Turnaround Time (Business days) — Approved By (Accutest PM): / Date:

- [x] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:
1	[signature]	4/28/14 1630	1 [signature]
2	Relinquished By:	Date Time: 4/29 9:45	Received By: 2
3	Relinquished by Sampler:	Date Time:	Received By: 3
4	Relinquished By:	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5

Custody Seal # | [ ] Intact [ ] Not Intact | Preserved where applicable [ ] | On Ice [ ] | Cooler Temp. 2.5

ACCUTEST SYRACUSE-SC

MC30145: Chain of Custody
Page 1 of 3

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-05		
Lab Sample ID:	MC30145-1	**Date Sampled:**	04/28/14
Matrix:	AQ - Ground Water	**Date Received:**	04/29/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84090.D	1	05/08/14	GK	n/a	n/a	MSL3795
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND UJ	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND UJ	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND UJ	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-05		
Lab Sample ID:	MC30145-1	**Date Sampled:**	04/28/14
Matrix:	AQ - Ground Water	**Date Received:**	04/29/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-05		
Lab Sample ID:	MC30145-1	**Date Sampled:**	04/28/14
Matrix:	AQ - Ground Water	**Date Received:**	04/29/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R38723.D	1	05/03/14	WK	04/29/14	OP37843	MSR1426
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.3	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.88	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.42	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.60	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	2.7	ug/l	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.24	ug/l	UJ
	3&4-Methylphenol	ND	11	0.50	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.1	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.57	ug/l	UJ
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	UJ
108-95-2	Phenol	ND	5.3	0.32	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.39	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
83-32-9	Acenaphthene	ND	2.1	0.34	ug/l	
208-96-8	Acenaphthylene	ND	2.1	0.23	ug/l	
120-12-7	Anthracene	ND	2.1	0.20	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.1	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.1	0.17	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.1	0.26	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.1	0.88	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.1	0.93	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	0.50	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	0.56	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	0.33	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.59	ug/l	
86-74-8	Carbazole	ND	2.1	0.17	ug/l	
218-01-9	Chrysene	ND	2.1	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	0.30	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	0.37	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	0.35	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-05		
Lab Sample ID:	MC30145-1	**Date Sampled:**	04/28/14
Matrix:	AQ - Ground Water	**Date Received:**	04/29/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.3	0.21	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.3	0.28	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.3	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.49	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.32	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	0.28	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.1	0.68	ug/l	
132-64-9	Dibenzofuran	ND	2.1	0.28	ug/l	
84-74-2	Di-n-butyl phthalate 5.3	~~0.22~~ UB	5.3	0.18	ug/l	~~JB~~
117-84-0	Di-n-octyl phthalate	ND UJ	5.3	0.30	ug/l	
84-66-2	Diethyl phthalate	ND	5.3	0.21	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	0.36	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	2.3	2.1	0.35	ug/l	
206-44-0	Fluoranthene	0.51	2.1	0.48	ug/l	J
86-73-7	Fluorene	ND	2.1	0.23	ug/l	
118-74-1	Hexachlorobenzene	ND	5.3	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.3	0.24	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND UJ	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.3	0.32	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.1	0.88	ug/l	
78-59-1	Isophorone	ND	5.3	0.48	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	0.28	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.42	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.3	ug/l	
91-20-3	Naphthalene	ND	2.1	0.32	ug/l	
98-95-3	Nitrobenzene	ND	5.3	0.42	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	0.43	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.21	ug/l	
85-01-8	Phenanthrene	ND	2.1	0.15	ug/l	
129-00-0	Pyrene	0.64	2.1	0.18	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	0.38	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		15-110%
4165-62-2	Phenol-d5	32%		15-110%
118-79-6	2,4,6-Tribromophenol	68%		15-110%
4165-60-0	Nitrobenzene-d5	62%		30-130%
321-60-8	2-Fluorobiphenyl	66%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-05		
Lab Sample ID:	MC30145-1	**Date Sampled:**	04/28/14
Matrix:	AQ - Ground Water	**Date Received:**	04/29/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	86%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-05
Lab Sample ID: MC30145-1
Matrix: AQ - Ground Water
Date Sampled: 04/28/14
Date Received: 04/29/14
Percent Solids: n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	125 B	200	40	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Antimony	ND	6.0	1.9	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Arsenic	ND	4.0	2.9	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Barium	147	50	0.81	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Beryllium	ND	4.0	0.25	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Cadmium	ND	4.0	0.50	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Calcium	303000	5000	38	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Chromium	ND	10	1.4	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Cobalt	0.90 B	50	0.40	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Copper	ND	25	7.0	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Iron	3380	100	20	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Lead	ND	5.0	1.7	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Magnesium	30800	5000	59	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Manganese	208	15	0.81	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Mercury	ND	0.20	0.10	ug/l	1	05/01/14	05/01/14	SA	SW846 7470A [1]	SW846 7470A [4]
Nickel	1.8 B	40	0.57	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Potassium	11900	5000	160	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Selenium	ND	10	4.8	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Silver	ND	5.0	1.0	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Sodium	381000	5000	60	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Thallium	ND	5.0	1.9	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Vanadium	ND	10	2.8	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]
Zinc	1.3 B	20	0.50	ug/l	1	04/30/14	04/30/14	EAL	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA17084
(2) Instrument QC Batch: MA17088
(3) Prep QC Batch: MP22959
(4) Prep QC Batch: MP22962

RL = Reporting Limit
MDL = Method Detection Limit
ND = Not detected
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-05		
Lab Sample ID:	MC30145-1	**Date Sampled:**	04/28/14
Matrix:	AQ - Ground Water	**Date Received:**	04/29/14
		Percent Solids:	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Cyanide	0.096	0.010	0.0014	mg/l	1	05/01/14 12:19	MA	SW846 9012

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: MC30145-2 **Date Sampled:** 04/28/14
Matrix: AQ - Trip Blank Water **Date Received:** 04/29/14
Method: SW846 8260C **Percent Solids:** n/a
Project: Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L84077.D	1	05/08/14	GK	n/a	n/a	MSL3795
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND UJ	0.50	0.32	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND UJ	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND UJ	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
124-48-1	Dibromochloromethane	ND UJ	1.0	0.38	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND UJ	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND UJ	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
591-78-6	2-Hexanone	ND UJ	5.0	1.6	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
75-09-2	Methylene chloride	ND UJ	2.0	0.28	ug/l	
100-42-5	Styrene	ND UJ	5.0	0.85	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
71-55-6	1,1,1-Trichloroethane	ND UJ	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	MC30145-2	**Date Sampled:**	04/28/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/29/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Con Edison Unionport - Watson Avenue, 1066 Zerega Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	114%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound