37-26 32ND STREET & 37-27 31ST STREET

QUEENS, NEW YORK

Remedial Investigation Report

OER Project Number: 16EHAN005Q

NYC VCP Site Number: 16VCP023Q

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REMEDIAL INVESTIGATION REPORT

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LIST OF ACRONYMS

Acronym	Definition
AOC	Area of Concern
CAMP	Community Air Monitoring Plan
COC	Contaminant of Concern
CPP	Citizen Participation Plan
CSM	Conceptual Site Model
DER-10	New York State Department of Environmental Conservation Technical Guide 10
FID	Flame Ionization Detector
GPS	Global Positioning System
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
IRM	Interim Remedial Measure
NAPL	Non-aqueous Phase Liquid
NYC VCP	New York City Voluntary Cleanup Program
NYC DOHMH	New York City Department of Health and Mental Hygiene
NYC OER	New York City Office of Environmental Remediation
NYS DOH ELAP	New York State Department of Health Environmental Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PID	Photoionization Detector
QEP	Qualified Environmental Professional
RI	Remedial Investigation
RIR	Remedial Investigation Report
SCO	Soil Cleanup Objective
SPEED	Searchable Property Environmental Electronic Database

CERTIFICATION

I, Victoria Whelan, am a Qualified Environmental Professional, as defined in RCNY § 43-1402(ar). I have primary direct responsibility for implementation of the Remedial Investigation for the Site located at 37-26 32nd Street & 37-27 31st Street in Queens NY, (NYC OER Project 16EHAN005Q and NYC VCP Site No. 16VCP023Q). I am responsible for the content of this Remedial Investigation Report (RIR), have reviewed its contents and certify that this RIR is accurate to the best of my knowledge and contains all available environmental information and data regarding the property.

Qualified Environmental Professional Date Signature

EXECUTIVE SUMMARY

The Remedial Investigation Report (RIR) provides sufficient information for establishment of remedial action objectives, evaluation of remedial action alternatives, and selection of a remedy pursuant to RCNY§ 43-1407(f). The remedial investigation (RI) described in this document is consistent with applicable guidance.

Site Location and Current Usage

The Site is located at 37-26 32nd Street and 37-27 31st Street in the Long Island City section of Queens, New York and is identified as Block 373 and Lots 6 and 45 on the New York City Tax Map. A Site map exists as Figure 1 and a Site location map exists as Figure 2. The Site is approximately 16,850-square feet and is bounded by a six-story mixed commercial residential use building (Lot 12) to the north, one-story industrial buildings (Lots 1 and 47) to the south, 32nd Street to the east, and 31st Street to the west. Currently, the Site contains a one-story brick building on each lot. The building on Lot 6 is used as an auto body shop and a food cart manufacturer. The building on Lot 45 is currently vacant and unoccupied.

Summary of Proposed Redevelopment Plan

The proposed future use of the Site will consist of two new mixed-use buildings. The redevelopment includes a six-story building along 31st Street and a seven-story building along 32nd Street. The proposed use includes a mixed use residential building with commercial space on the ground floor. The commercial use (ground floor) is proposed to be utilized for manufacturing use which includes a loading dock and parking entrance. Also located on the ground floor is the residential use lobby and a rear yard for residential recreational space. The upper floors contain several one and two bedroom apartments. A full ventilated parking garage is located in the cellar which includes vehicle and bicycle parking spaces, mechanical, storage, trash, and laundry rooms. The roof for the seven-story building located on 31st Street will include a 5,430 square foot residential tenant terrace. However, the roof for the six-story building located on 32nd Street will not have tenant access. The anticipated excavation depth for the buildings cellar is 10 feet below surface grade. Layout of the proposed site development is presented in Figures 3A- I. According to the NYCOER SPEED application, the current zoning designation is M1-2/R6A which includes light manufacturing and residential use. The proposed

use is consistent with existing zoning for the property. As the depth to water is at 23 feet below grade the excavation is not anticipated below the water table. The Site is currently developed with two, one-story buildings, and therefore, demolition will be required.

Summary of Past Uses of Site and Areas of Concern

The Site and its surrounding properties were undeveloped until circa 1915 when 3rd Avenue traversed the Site from northeast to southwest. By 1936, the Site was improved with a one-story brick building on the east (Lot 45) and was occupied by a kindling wood factory. From 1947 until c. 1950s, a plating works factory occupied Lot 45 while the rest of the Site (Lot 6) was used as a storage facility for second hand lumber.

From circa 1970 until 1979, Lot 45 was occupied by a welding equipment warehouse facility. In 1980, Lot 45 was converted to an auto body facility and was used as such until June 2014. Lot 45 is currently unoccupied.

Lot 6 was improved by a one-story brick building around 1953 and was used by Gotham Lighting as a lighting equipment factory. The lighting factory ceased operations in 1977 and the Property was converted into what is currently an active auto body shop on the northwest area of the Lot. The remainder of the parcel is currently used as a food cart manufacturing/metal shop facility since 2004 along with food cart preparation and refrigeration facility beginning in 2008.

On September 8, 2015, Thomas Brown of CA RICH inspected the Site. At the time of the inspection several containers of petroleum like fluids and motor oil were observed in the active auto body shop on the northwest area of Lot 6.

Summary of the Work Performed under the Remedial Investigation

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Installed four groundwater monitoring wells throughout the Site to establish groundwater flow and collected four groundwater samples for chemical analysis to evaluate groundwater quality;
3. Installed three soil vapor probes around Site perimeter and collected three samples for chemical analysis.

Summary of Environmental Findings

1. Elevation of the property ranges from 40 to 50 feet.

2. Depth to groundwater ranges from 22 to 23 feet at the Site.

3. Groundwater flow is generally towards west towards the East River and to the southwest towards Dutch Kills beneath the Site.

4. Bedrock was not encountered at the Site.

5. The stratigraphy of the site, from the surface down, consists of three feet of medium grain sand and fill underlain by medium grain sand.

6. In February 2015, GZA conducted a Limited Remedial Investigation. Soil/fill samples were compared to 6NYCRR Part 375-6.8 Unrestricted Use Soil Cleanup Objectives (SCOs) and Restricted-Residential SCOs. Soil/fill samples showed one Volatile Organic Compound (VOC), trichloroethene (2 mg/kg) detected in a shallow sample exceeding its Unrestricted Use Soil Cleanup Objective (SCO). Seven Semi-Volatile Organic Compounds (SVOCs) were detected in a sample (3 - 5 foot) exceeding their respective Unrestricted Use SCOs. The SVOCs included benzo(a)anthracene (4 mg/kg), benzo(a)pyrene (3.4 mg/kg), benzo(b)fluoranthene (4.3 mg/kg), benzo(k)fluoranthene (1.4 mg/kg), chrysene (3.8 mg/kg), dibenzo(a,h)anthracene (0.42 mg/kg), and indeno(1,2,3-cd)pyrene (2.1 mg/kg). All but benzo(k)fluoranthene and chrysene also exceeded Restricted Residential Use SCOs. No PCBs or pesticides were detected in any of the analyzed samples. Metals including copper (170 mg/kg), lead (max of 1000 mg/kg), mercury (max of 0.21 mg/kg), and zinc (max of 460 mg/kg) exceeded the Unrestricted Use SCOs. Lead also exceeded its respective Restricted Residential Use SCO at multiple soil sample locations. All metal exceedences of SCOs were observed in shallow samples, collected between 2 – 5 feet bgs. Overall, soil chemistry is unremarkable.

7. Groundwater samples collected during the 2015 Supplemental RI were compared to NYSDEC 6NYCRR Part 703.5 Groundwater Quality Standards (GQS). Groundwater samples were collected during the RI showed two VOCs, chloroform (8 ug/L) and 1,2,4,5-tetramethylbenzene (8.9 ug/L) detected above their respective GQS in MW-1 and MW-4. One SVOC, benzo(a)anthracene (0.02 ug/L) was detected its GQS in MW-2.

8. Soil vapor samples collected during the 2015 Supplemental RI were compared to the compounds in Table 3.1 Air Guidance Valued derived by the New York State of Health (NYSDOH) Final Guidance on Soil Vapor Intrusion (October 2006). Soil vapor samples collected during the Supplemental RI showed petroleum related VOCs present in low concentrations. Total concentrations of petroleum-related VOCs (BTEX) had a maximum concentration of 192.1 $\mu g/m^3$. Samples showed elevated levels of chlorinated VOCs including tetrachloroethene (max. of 250 $\mu g/m^3$) and trichloroethane (max of 12,500 $\mu g/m^3$) in all three samples. The compounds were detected above the monitoring/mitigation ranges established within the NYSDOH Final Guidance on Soil Vapor Intrusion. 1,1,1-trichloroethane and carbon tetrachloride were not detected in any of the samples.

9. REMEDIAL INVESTIGATION REPORT

1.0 SITE BACKGROUND

31/32 LIC, LLC, will be enrolling in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a 0.40-acre site located at 37-26 32nd Street and 37-27 31st Street in the Long Island City section of Queens, New York, see Figure 1, Site Map. Mixed commercial residential use is proposed for the property. In February 2015, GZA performed a Limited Remedial Investigation at the Site (Appendix A.). An additional investigation was performed by CA RICH on September 8, 2015 and September 15, 2015 . This RIR summarizes the nature and extent of contamination and provides sufficient information for establishment of remedial action objectives, evaluation of remedial action alternatives, and selection of a remedy that is protective of human health and the environment consistent with the use of the property pursuant to RCNY§ 43-1407(f).

1.1 Site Location and Current Usage

The Site is located at 37-26 32nd Street and 37-27 31st Street in the Long Island City section in Queens, New York and is identified as Block 373 and Lots 6 and 45 on the New York City Tax Map. Figure 2 shows the Site location. The Site is approximately 16,850-square feet and is bounded by a six-story mixed commercial residential use building (Lot 12) to the north, one-story industrial buildings (Lots 1 and 47) to the south, 32nd Street to the east, and 31st Street to the west. Currently, the Site contains one-story brick buildings on both lots. The building on Lot 6 is used as an auto body shop and a food cart manufacturer. The building on Lot 45 is currently vacant and unoccupied.

1.2 Proposed Redevelopment Plan

The proposed future use of the Site will consist of two new mixed-use buildings. The redevelopment includes a six-story building along 31st Street and a seven-story building along 32nd Street. The proposed use includes a mixed use residential building with commercial space on the ground floor. The commercial use (ground floor) is proposed to be utilized for manufacturing use which includes a loading dock and parking entrance. Also located on the ground floor is the residential use lobby and a rear yard for residential recreational space. The upper floors contain several one and two bedroom apartments. A full ventilated parking garage is located in the cellar which includes vehicle and bicycle parking spaces, mechanical, storage,

trash, and laundry rooms. The roof for the seven-story building located on 31st Street will include a 5,430 square foot residential tenant terrace. However, the roof for the six-story building located on 32nd Street will not have tenant access. The anticipated excavation depth for the buildings cellar is 10 feet below surface grade. Layout of the proposed site development is presented in Figure 3A - I. According to the NYCOER SPEED application, the current zoning designation is M1-2/R6A which includes light manufacturing and residential use. The proposed use is consistent with existing zoning for the property. As the depth to water is at 23 feet below grade the excavation is not anticipated below the water table. The Site is currently developed with two, one-story buildings, and therefore, demolition will be required.

1.3 Description of Surrounding Property

According to the OER's SPEED application the Site is bound by a six-story mixed use residential and commercial building (zoned M1-2/R6A for mixed residential and commercial) to the north, 32nd Street to the east, several one-story industrial buildings (zoned M1-2/R6A for industrial, manufacturing and transportation utility) to the south, and 31st Street to the west. There are no schools, hospitals, or daycare centers within a 500-foot radius.

2.0 SITE HISTORY

2.1 Past Uses and Ownership

The Site and its surrounding properties were undeveloped until circa 1915 when 3rd Avenue traversed the Site from northeast to southwest. By 1936, the Site was improved with a one-story brick building on the east (Lot 45) and was occupied by a kindling wood factory. From 1947 until c. 1950s, a plating works factory occupied Lot 45 while the rest of the Site (Lot 6) was used as a storage facility for second hand lumber.

From circa 1970 until 1979, Lot 45 was occupied by a welding equipment warehouse facility. In 1980, Lot 45 was converted to an auto body facility and was used as such until June 2014. Lot 45 is currently unoccupied.

Lot 6 was improved by a one-story brick building around 1953 and was used by Gotham Lighting as a lighting equipment factory. The lighting factory ceased operations in 1977 and the Property was converted into what is currently an active auto body shop on the northwest area of the Lot. The remainder of the parcel is currently used as a food cart manufacturing/metal shop facility since 2004 along with food cart preparation and refrigeration facility beginning in 2008.

2.2 Previous Investigations

- Pro Test Enterprises provided a tank abandonment letter dated September 24, 1996, New York City Fire Department Certificate # 69151165 for the property at 37-26 32nd Street. The documentation indicated the 550 gallon waste oil tank was abandoned in place by removing lines, cleaning, purging, and backfilling with concrete.
- Environmental Systems Group of Howell, New Jersey performed tank closure activities on September 8, 1998 at 37-27 31st Street. Two, 4,000-gallon carbon-steel underground storage tanks were registered, delisted, and closed-in-place. The tanks were found to only contain water and were emptied. Soil and groundwater samples around the tanks were collected and revealed no indication of impacts. The tanks were filled with 20 cyds of concrete slurry, covered, backfilled and the concrete slab restored.
- GZA performed a Phase I Environmental Site Assessment (ESA) dated February 1, 2015. Based on the Phase I ESA the areas of concern identified include:

37-26 32nd Street:

1. Storage of petroleum-like fluids and floor sump in area between garage bay entry doors
2. Closed-in-place waste oil underground storage tank
3. Hydraulic lift and unknown location of hydraulic fluid tank

37-27 31st Street:

1. Food cart manufacturing area: in the southeast area of space including compressors, drums, and historic aboveground storage tank
2. Food cart manufacturing area: has storage without secondary containment of chemicals and solvents and general operations of sheet metal work using hydraulic machinery and equipment
3. South garage bay entry door: has documented closed-in-place two-4,000 gallon tanks and potential lines and dispenser
4. Storage without secondary containment of chemicals and solvents in auto body space.

- GZA performed a Limited Remedial Investigation Report dated February 13, 2015. A map of the previous investigations soil exceedances identified in the Remedial Investigation are provided as Figure 4.
- Based on previous reports, CA RICH developed a Short Form Phase II Investigation Work Plan which was approved on September 1, 2015

Historical Reports are presented in Appendix A.

2.3 Site Inspection

On September 8, 2015, Thomas Brown of CA RICH inspected the Site. At the time of the inspection hydraulic lifts as well as several containers of petroleum like fluids and motor oil were observed in the active auto body shop on the northwest area of Lot 6. Also identified on Lot 6 were several containers of motor oil associated with the active food card manufacturer.

2.4 Areas of Concern

GZA performed a Phase I Environmental Site Assessment (ESA) dated February 1, 2015. The areas of concern they identified are discussed in section 2.2 of this report. Additionally, The Site is identified as having E designation (E-218) for HAZMAT/Noise/Air. The E designation

requires an environmental review and issuance of a Notice to Proceed before the Property can be redeveloped.

3.0 PROJECT MANAGEMENT

3.1 Project Organization

The Qualified Environmental Profession (QEP) responsible for preparation of this RIR is Victoria Whelan - Associate.

3.2 Health and Safety

All work described in this RIR was performed in full compliance with applicable laws and regulations, including Site and OSHA worker safety requirements and HAZWOPER requirements. Appendix B includes the subject Property's Health and Safety Plan.

3.3 Materials Management

All material encountered during the RI was managed in accordance with applicable laws and regulations.

4.0 REMEDIAL INVESTIGATION ACTIVITIES

CA Rich Consultants, Inc. performed the following scope of work in accordance with the OER approved Phase II Short Form Work Plan:

1 Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);

2 Installed four groundwater monitoring wells throughout the Site to establish groundwater flow and collected four groundwater samples for chemical analysis to evaluate groundwater quality;

3 Installed three soil vapor probes around Site perimeter and collected three samples for chemical analysis.

4.1 Geophysical Investigation

A geophysical investigation was not conducted on the Property.

4.2 Borings and Monitoring Wells

Drilling and Soil Logging

On February 13, 2015 GZA performed a Limited Remedial Investigation. During this Investigation eight soil borings were advanced throughout the property and sixteen soil samples were obtained. Based on the amount of soil data generated during the February 2015 Investigation, it was determined by NYC OER that additional soil samples were not required during CA RICH's Supplemental Remedial Investigation.

A map showing the location of soil borings installed during GZA's Limited Remedial Investigation is shown in Figure 4.

Groundwater Monitoring Well Construction

On September 8, 2015, four, two-inch permanent groundwater monitoring wells (MW-1 through MW-4) were installed utilizing a Geoprobe ™ drilling system to the shallow water table to determine the depth to groundwater as well as the quality of the uppermost groundwater presently occurring beneath the Site. The depth of the shallow groundwater ranged from 22 to 23 feet below grade. All monitoring well locations were based on the February 2015 Limited Remedial Investigation results and CA RICH's approved September 2015 Phase II Work Plan. Monitoring wells MW-1 and MW-2 were installed in the western portion of the Site in the area

of the proposed cellar of the six-story building along 31st Street. Monitoring Well MW-3 was installed in the proposed cellar in the central section of the Property where the proposed residential exterior recreational space will be located. Monitoring well MW-4 was installed in the eastern portion of the Site in the area of the proposed cellar of the seven-story building along 32st Street will be located.

Monitoring wells MW-1 through MW-4 were installed 10 feet through the shallow groundwater table into the uppermost zone of saturation. All monitoring wells were installed to a depth of 30 feet below grade. During drilling, soil samples were continuously collected and examined for evidence of contamination with a Photoionization Detector (PID) and for evidence of chemical staining. No PID readings were identified during monitoring well installation. Monitoring well construction consisted of 15 feet of two-inch diameter well screen and approximately 15 feet of two-inch diameter schedule 40 PVC riser. Each well was finished with a bentonite seal, a watertight j-plug and eight-inch flush mounted well protection box. The wells were developed immediately following the installation of each well.

Monitoring well locations are shown in Figure 5.

Survey

The monitoring wells and soil vapor point locations were installed in accordance with the Phase II Work Plan dated September 2015, to OER. All sample locations were accurately measured in the field and noted on a scaled figure.

Water Level Measurement

The depth to water was measured using a slope indicator. Water level data are included in Appendix D.

4.3 Sample Collection and Chemical Analysis

Sampling performed as part of the field investigation was conducted for all Areas of Concern and also considered other means for bias of sampling based on professional judgment, area history, discolored soil, stressed vegetation, drainage patterns, field instrument measurements, odor, or other field indicators. All media including soil, groundwater and soil vapor have been sampled and evaluated in the RIR. Discrete (grab) samples have been used for final delineation of the nature and extent of contamination and to determine the impact of contaminants on public

health and the environment. The sampling performed and presented in this RIR provides sufficient basis for evaluation of remedial action alternatives, establishment of a qualitative human health exposure assessment, and selection of a final remedy.

Soil Sampling

On February 13, 2015 GZA performed a Limited Remedial Investigation. During this Investigation eight soil borings were advanced throughout the property and sixteen soil samples were obtained. Based on the amount of soil data generated during the February 2015 Investigation, it was determined by NYC OER that additional soil samples were not required during CA RICH's Supplemental Remedial Investigation.

A map showing the location of soil borings installed during GZA's Limited Remedial Investigation is shown in Figure 4

Groundwater Sampling

On September 8, 2015, four groundwater monitoring wells (MW-1 through MW-4) were installed utilizing a Geoprobe ™ drilling system to the shallow water table to determine the depth to groundwater as well as the quality of the uppermost groundwater presently occurring beneath the Site. The depth of the shallow groundwater ranged from 22 to 23 feet below grade. Monitoring wells were installed to a depth of 30 feet below grade.

On September 15, 2015, a groundwater sample was collected from each well utilizing low-flow sampling technology. The sampling pump and slope were decontaminated before and in between each monitoring well collection using a detergent rinse followed by a tap water rinse to prevent cross-contamination between the monitoring wells. All monitoring well samples were sampled in accordance with EPA's Low-Flow (minimal drawdown) Groundwater Sampling Procedures. Groundwater parameters (e.g, turbidity, pH, temperature, conductivity, etc.) were obtained during sampling. Samples were stored on ice pending shipment to Alpha Analytical Laboratories of Mahwah, New Jersey. All samples were uniquely identified and all information associated with the samples were recorded utilizing standard chain-of-custody sampling protocols.

Groundwater sample collection data are reported in Tables 5 and 6. Sampling logs with information on purging and sampling of groundwater monitor wells are included in Appendix D. Figure 5 shows the location of groundwater sampling.

Soil Vapor Sampling

On September 8, 2015, three soil vapor points were installed to approximately two feet below grade using a Geoprobe ™ drilling system, designated SSV-1 through SSV-3. The soil vapor points were constructed of a stainless steel screen connected to stainless steel ¼-inch tubing. The annular space around the screened zone was filled with No. 2 Morie sand. Prior to sampling, three volumes were purged from each soil vapor point. An SKC Pocket Pump™, which includes both a flow meter and a flow totalizer, was used to assure that the purge rate did not exceed 0.2 liters per minute; and that the required volume was purged from the sample point. The points were completed with temporary caps and were removed after the testing was completed.

On September 15, 2015, the soil vapor points were sampled in accordance with New York State Department of Health's (NYSDOH) prevailing Guidance for Evaluating Soil Vapor Intrusion in the State of New York dated October 2006. In addition, the soil vapor samples were chemically analyzed using the procedures and protocols described in the Sample Preparation, and Analysis Requirements of EPA Compendium Method T0-15. A three-way "T" connector valve assembly was connected to a vacuum pump and a pre-cleaned six-liter SUMMA® air sampling canister. Prior to collecting the soil vapor samples, the sample tubing was purged using a vacuum pump set at a rate of approximately 0.2 liters per minute. A helium tracer gas was used to enrich the atmosphere around the sampling location. The tracer gas verifies that interior ambient air is not inadvertently drawn down into the soil vapor sample. Both the purge volume from the sampling tube and the helium-enriched air within the container was screened for the tracer gas using a Gowmac® Model 21-250 gas leak detector.

Following the purging and tracer gas verification steps, the soil vapor samples were collected using the SUMMA® canister set to fill at a rate of not more than 0.2 liters per minute with an approximate fill time of 2-hours. Samples were shipped to Alpha Analytical Laboratories of

Mahwah, New Jersey. All samples were uniquely identified and all information associated with the samples were recorded utilizing standard chain-of-custody sampling protocols.

Soil vapor sampling locations are shown in Figure 5. Soil vapor sample collection data are reported in Table 7. Methodologies used for soil vapor assessment conform to the *NYS DOH Final Guidance on Soil Vapor Intrusion, October 2006.*

Chemical Analysis

Chemical analytical work presented in this RIR has been performed in the following manner:

Factor	Description
Quality Assurance Officer	The chemical analytical quality assurance is directed by Alpha Analytical Laboratories
Chemical Analytical Laboratory	Chemical analytical laboratory used in the RI is NYS ELAP certified and was Alpha Analytical Laboratories
Chemical Analytical Methods	Groundwater analytical methods: • VOCs by EPA Method 8260C (rev. 2006); • SVOCs by EPA Method 8270D (rev. 2007); Soil vapor analytical methods: • VOCs by TO-15 VOC parameters.

Results of Chemical Analyses

Laboratory data for soil, groundwater and soil vapor are summarized in Tables 1 through 7, respectively. Laboratory data deliverables for all samples evaluated in this RIR are provided in digital form in Appendix E.

5.0 ENVIRONMENTAL EVALUATION

5.1 Geological and Hydrogeological Conditions

Based on the information obtained during the Remedial Investigation the Site is underlain by medium grain sand and fill to three feet below grade and medium grain sand from three to 23 feet below grade. The depth of the shallow groundwater ranged from 22 to 23 feet below grade.

Stratigraphy

The stratigraphy of the Site consists of medium grain sand with fill materials to three feet below grade and medium grain sand from three to 23 feet below grade.

Hydrogeology

According to the Remedial Investigation, the depth to groundwater ranged from 22 to 23 feet below surface grade. We anticipate groundwater beneath the Site to generally flow to the west towards the East River and to the southwest towards Dutch Kills.

A table of water level data for all monitor wells is included in Appendix D.

5.2 Soil Chemistry

In February 2015, GZA conducted a Limited Remedial Investigation. Soil/fill samples were compared to 6NYCRR Part 375-6.8 Unrestricted Use Soil Cleanup Objectives (SCOs) and Restricted-Residential SCOs. Soil/fill samples showed one Volatile Organic Compound (VOC), trichloroethene (2 mg/kg) detected in a shallow sample exceeding its Unrestricted Use Soil Cleanup Objective (SCO). Seven Semi-Volatile Organic Compounds (SVOCs) were detected in a sample (3 - 5 foot) exceeding their respective Unrestricted Use SCOs. The SVOCs included benzo(a)anthracene (4 mg/kg), benzo(a)pyrene (3.4 mg/kg), benzo(b)fluoranthene (4.3 mg/kg), benzo(k)fluoranthene (1.4 mg/kg), chrysene (3.8 mg/kg), dibenzo(a,h)anthracene (0.42 mg/kg), and indeno(1,2,3-cd)pyrene (2.1 mg/kg). All but benzo(k)fluoranthene and chrysene also exceeded Restricted Residential Use SCOs. No PCBs or pesticides were detected in any of the analyzed samples. Metals including copper (170 mg/kg), lead (max of 1000 mg/kg), mercury (max of 0.21 mg/kg), and zinc (max of 460 mg/kg) exceeded the Unrestricted Use SCOs. Lead also exceeded its respective Restricted Residential Use SCO at multiple soil sample locations. All metal exceedences of SCOs were observed in shallow samples, collected between 2 – 5 feet bgs.

Data collected during the RI is sufficient to delineate the vertical and horizontal distribution of contaminants in soil/fill at the Site. A summary table of data for chemical analyses performed on soil samples is included in Tables 1 through 4. Figure 4 shows the location and posts the values for soil/fill that exceed the 6NYCRR Part 375-6.8 Track 2 Soil Cleanup Objectives.

5.3 Groundwater Chemistry

Groundwater samples collected during the 2015 Supplemental RI were compared to NYSDEC 6NYCRR Part 703.5 Groundwater Quality Standards (GQS). Groundwater samples were collected during the RI showed two VOCs, chloroform (8 ug/L) and 1,2,4,5-tetramethylbenzene (8.9 ug/L) detected above their respective GQS in MW-1 and MW-4. One SVOC, benzo(a)anthracene (0.02 ug/L) was detected its GQS in MW-2.

Data collected during the RI is sufficient to delineate the distribution of contaminants in groundwater at the Site. A summary table of data for chemical analyses performed on groundwater samples is included in Tables 5 and 6. Exceedence of applicable groundwater standards are shown.

Figure 6 shows the location and posts the values for groundwater that exceed the New York State 6NYCRR Part 703.5 TOGS groundwater standards.

5.4 Soil Vapor Chemistry

Soil vapor samples collected during the 2015 Supplemental RI were compared to the compounds in Table 3.1 Air Guidance Valued derived by the New York State of Health (NYSDOH) Final Guidance on Soil Vapor Intrusion (October 2006). Soil vapor samples collected during the Supplemental RI showed petroleum related VOCs present in low concentrations. Total concentrations of petroleum-related VOCs (BTEX) had a maximum concentration of 192.1 $\mu g/m^3$. Samples showed elevated levels of chlorinated VOCs including tetrachloroethene (max. of 250 $\mu g/m^3$) and trichloroethane (max of 12,500 $\mu g/m^3$) in all three samples. The compounds were detected above the monitoring/mitigation ranges established within the NYSDOH Final Guidance on Soil Vapor Intrusion. 1,1,1-trichloroethane and carbon tetrachloride were not detected in any of the samples.

Data collected during the RI are sufficient to delineate the distribution of contaminants in soil vapor at the Site. A summary table of data for chemical analyses performed on soil vapor

samples is included in Table 7. Figure 7 shows the location and posts the values for soil vapor samples with detected concentrations.

5.5 Prior Activity

Based on an evaluation of the data and information from the RIR, disposal of significant amounts of hazardous waste is not suspected at this site.

5.6 Impediments to Remedial Action

There are no known impediments to remedial action at this property. Soil management practices will be implemented in the Remedial Action Work Plan (RAWP)

Site-Specific Standards, Criteria and Guidance

- 6 NYCRR Part 375 - Inactive Hazardous Waste Disposal Sites
- TOGS 1.1.1 - Ambient Water Quality Standards & Guidance Values and Groundwater Effluent Limitations
- NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (draft October 2004 or subsequent final draft)

FIGURES

0 10 20 30
Graphic Scale in Feet

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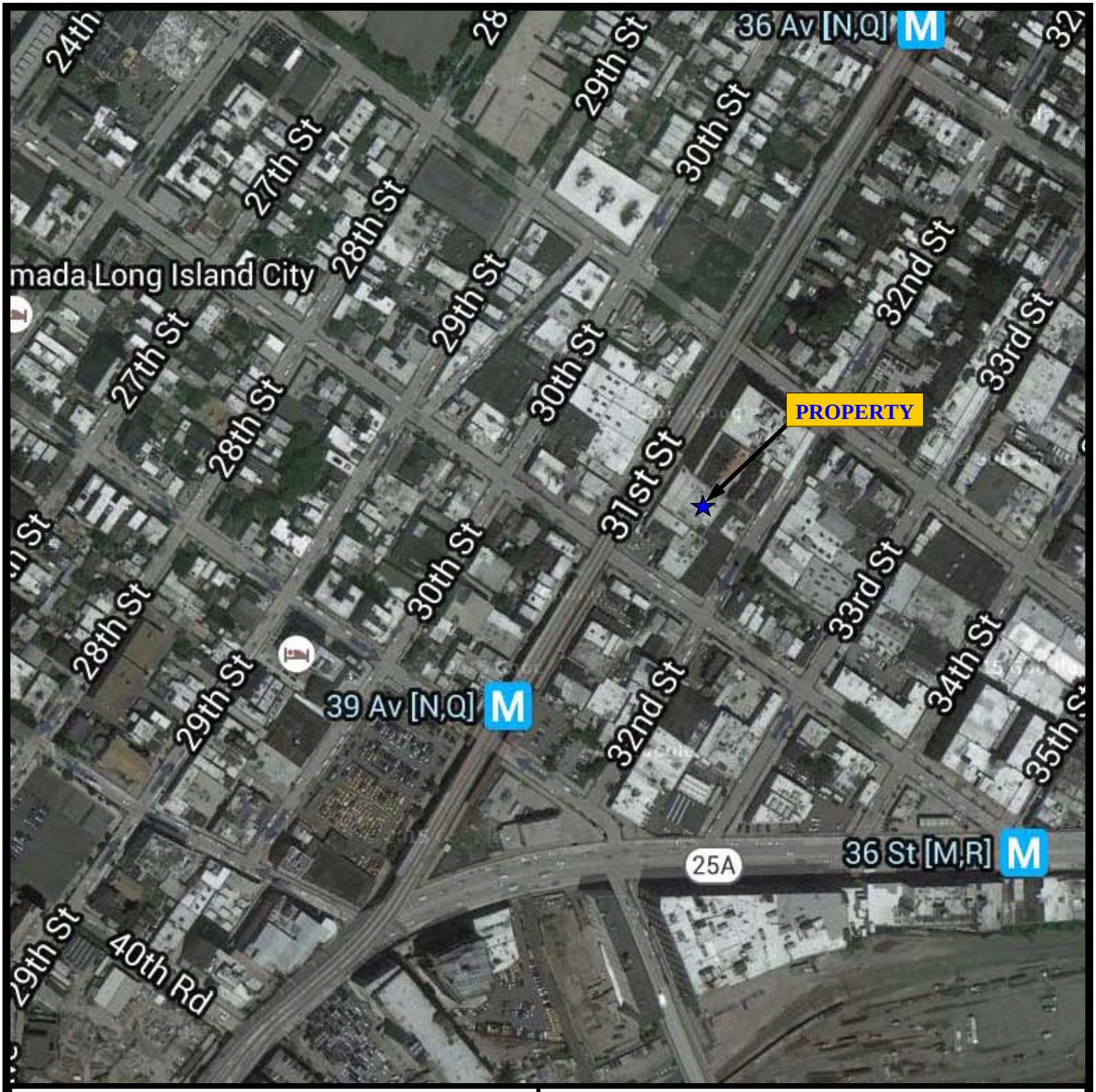
TITLE: Site Map		DATE: 9/24/2015
		SCALE: As Shown
FIGURE: 1	37–27 31st Street Long Island City, NY	DRAWN BY: J.T.C./T.R.B.
DRAWING NO: 2015–3		APPR. BY: J.E.P.

I:\Drawings\31 32 LIC\2015-3



N

Adapted from Google Maps

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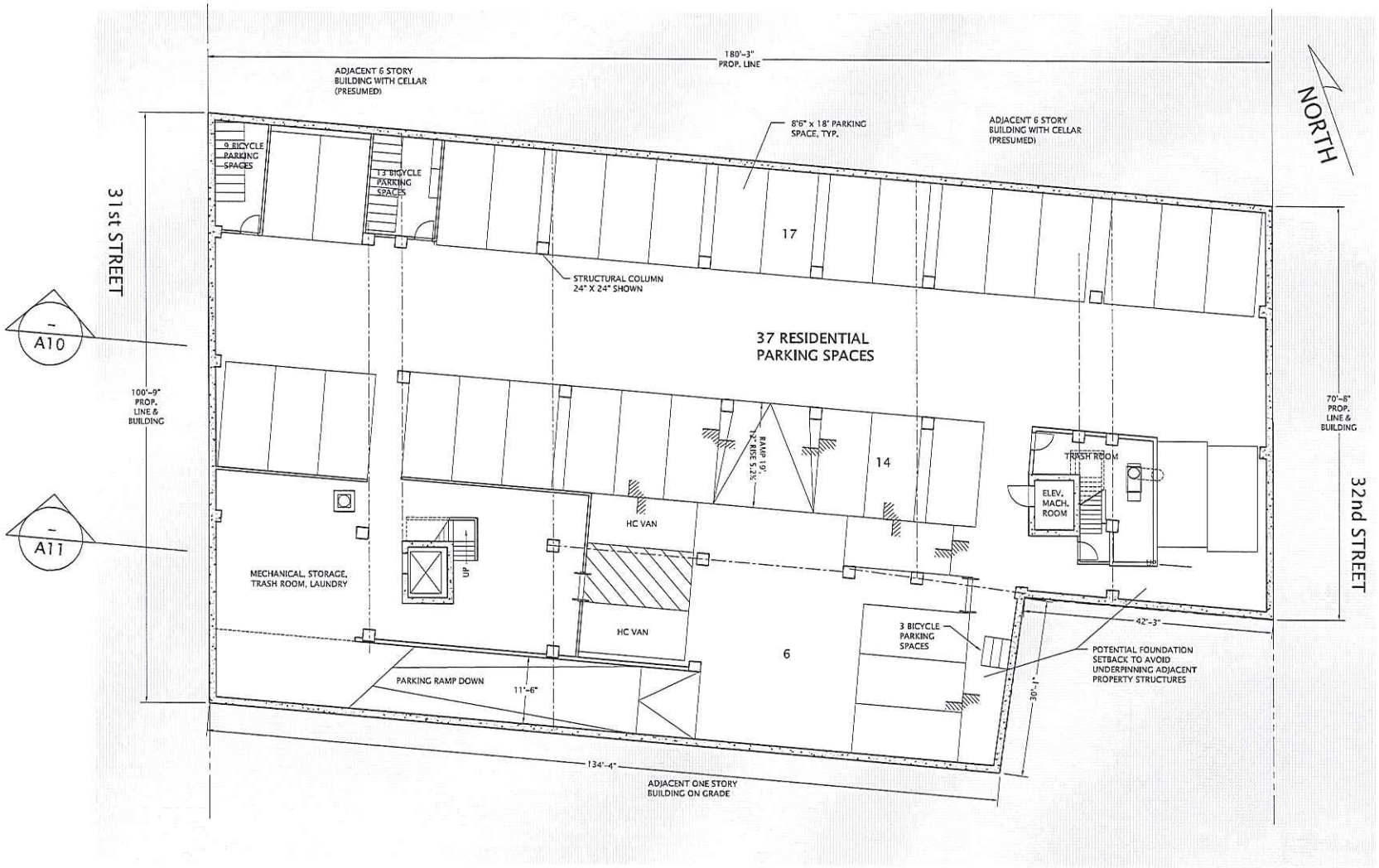
Plainview, NY 11803

TITLE: **SITE LOCATION MAP**	*DATE:* **10/6/15**
	SCALE: **Not Shown**
FIGURE: **2**	*DRAWN BY:* **JEP**
DRAWING:	*APPR. BY:* **VW**

37-27 31st Street
Long Island City, NY



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37-29 31st STREET
LONG ISLAND CITY
NEW YORK

revisions

date	no.	description

Job #:208
drawing: GANY
date: 6.9.2015
scale: 1/8" = 1'-0"

CELLAR
PLAN

Figure 3A

sheet #
A1

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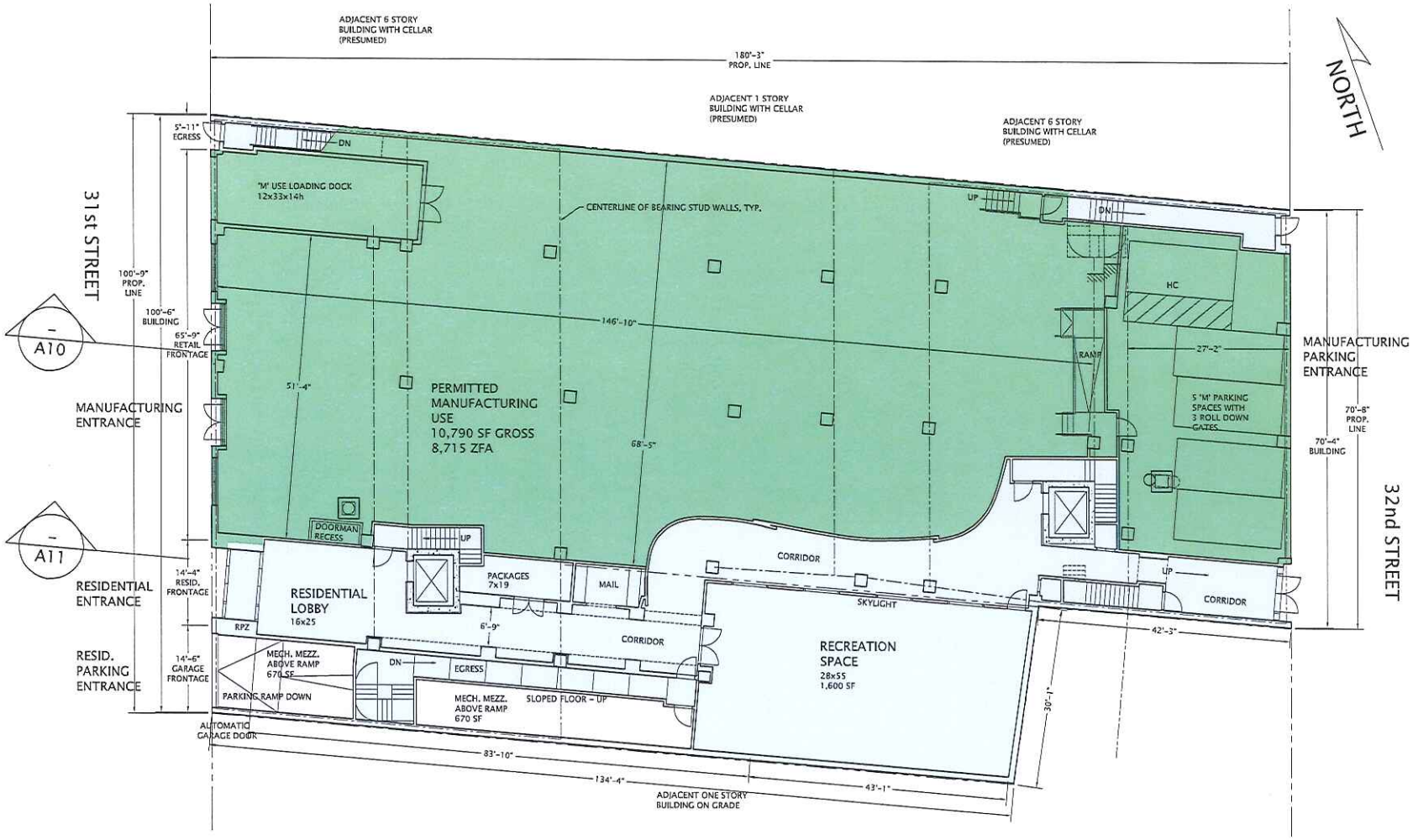

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GROUND FLOOR PLAN

Figure 3B

sheet #

A2

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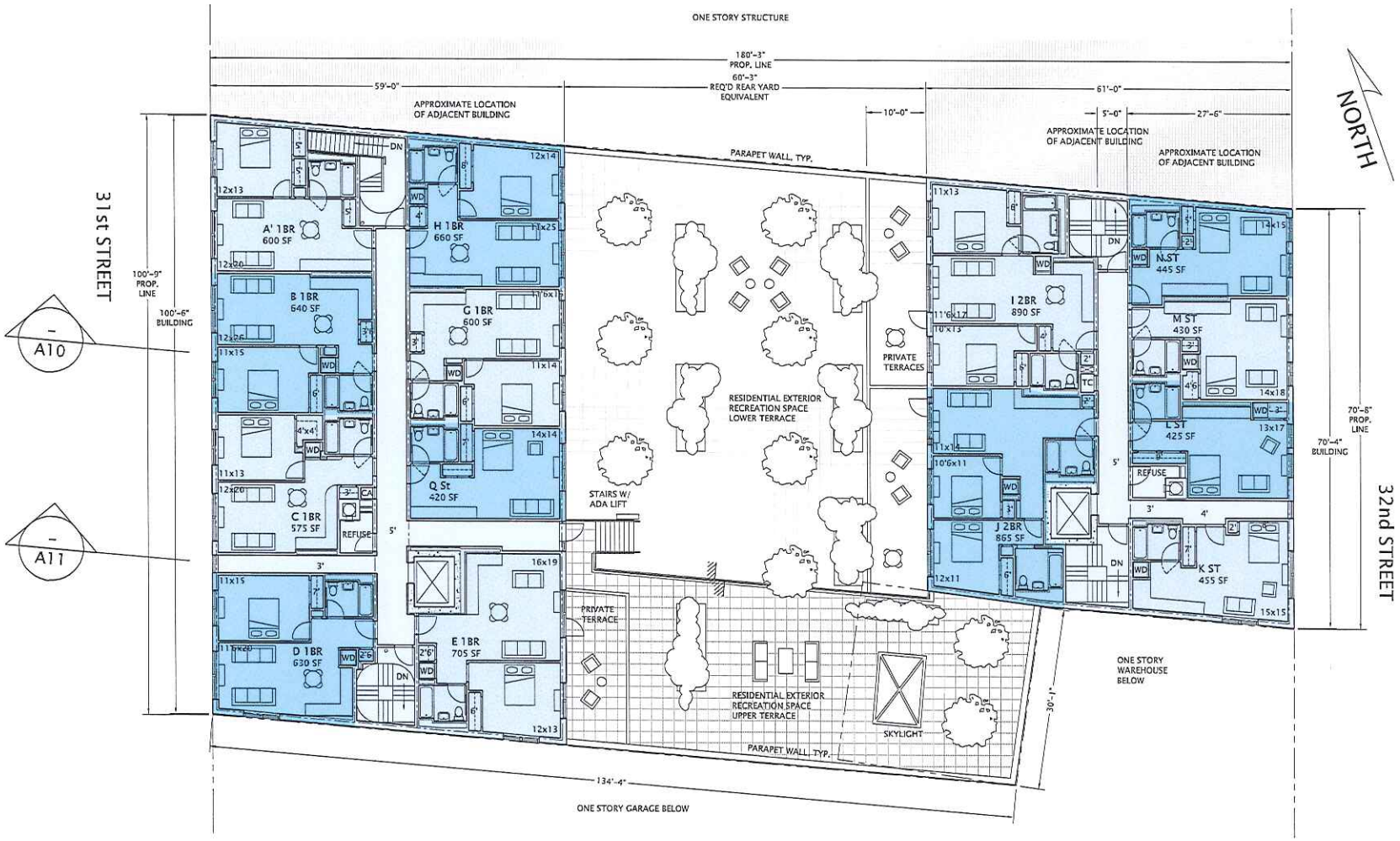

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date	no.	description

Job #:208
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date: 6.9.2015
scale: 1/8" = 1'-0"

2nd FLOOR PLAN
Figure 3C

sheet #
A3

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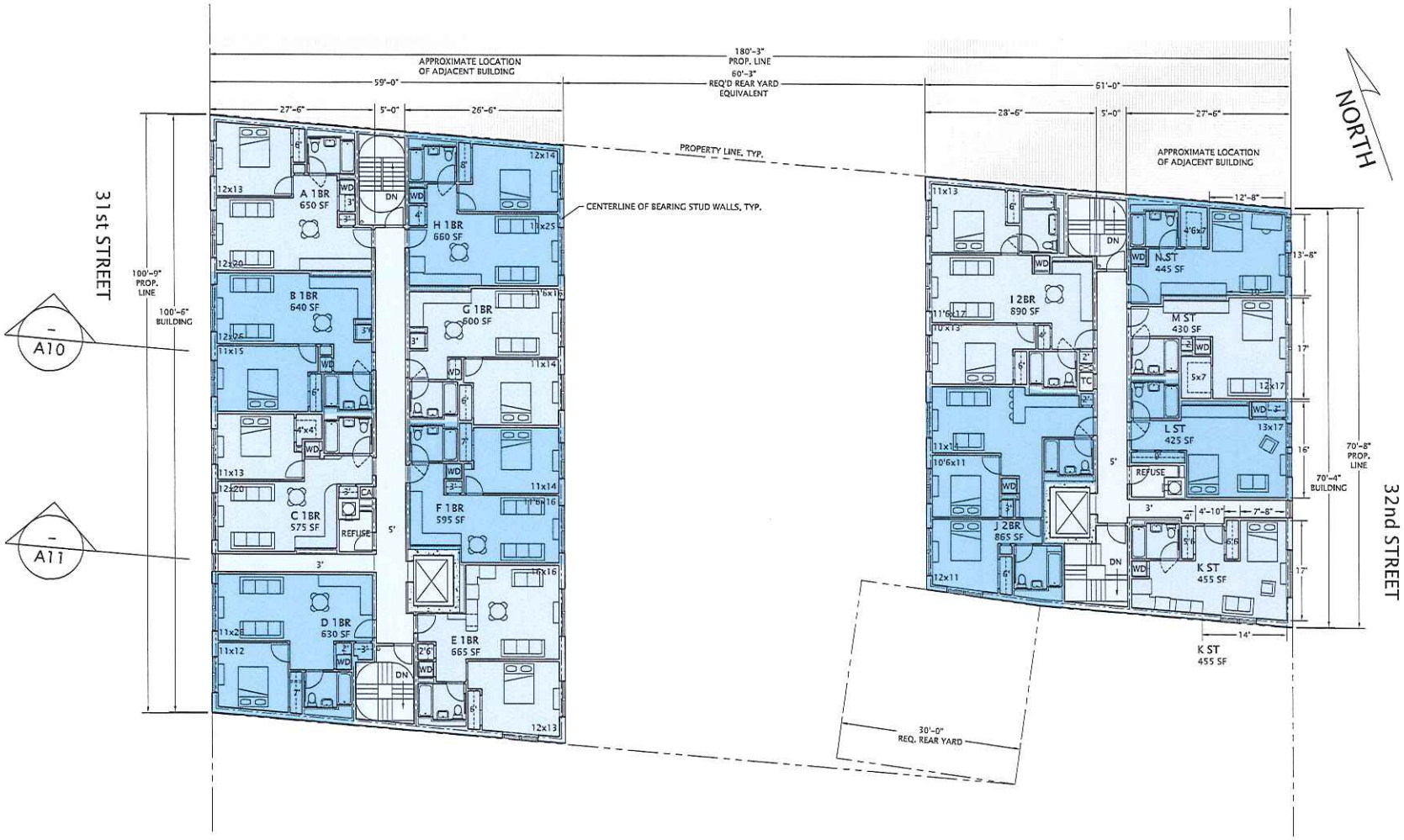

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date	no.	description

Job #:208
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scale: 1/8" = 1'-0"

TYP. RESID
FLOOR PLAN
Figure 3D

sheet #
A4

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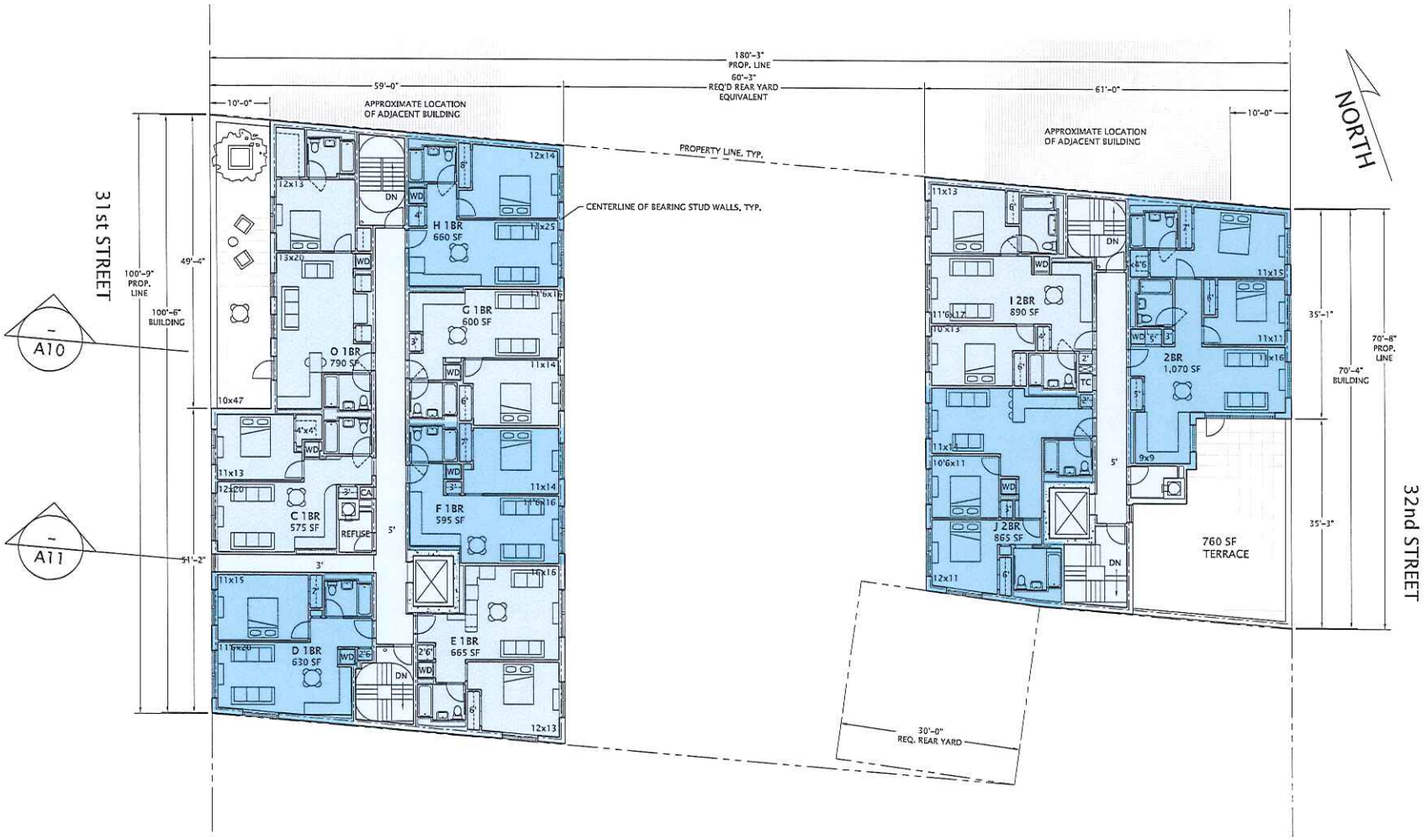

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date	no.	description

job #:208
drawing: GANY
date: 6.9.2015
scale: 1/8" = 1'-0"

6th FL 31st ST
7th FL 32nd ST

Figure 3E

sheet #

A5

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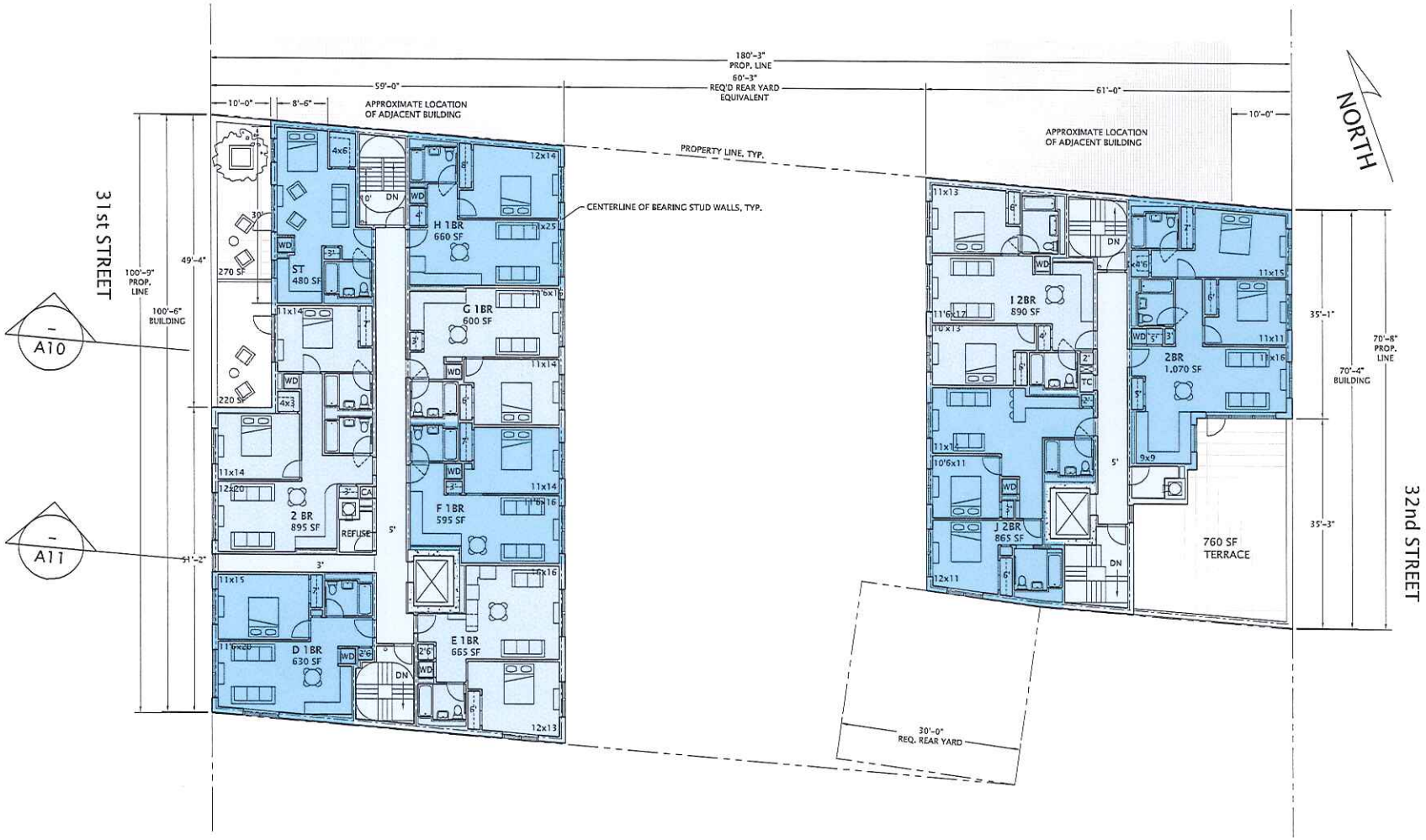

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date	no.	description

Job #:208
drawing: GANY
date: 6.9.2015
scale: 1/8" = 1'-0"

6th FL 31st ST
7th FL 32nd ST

Figure 3F

sheet #

A5

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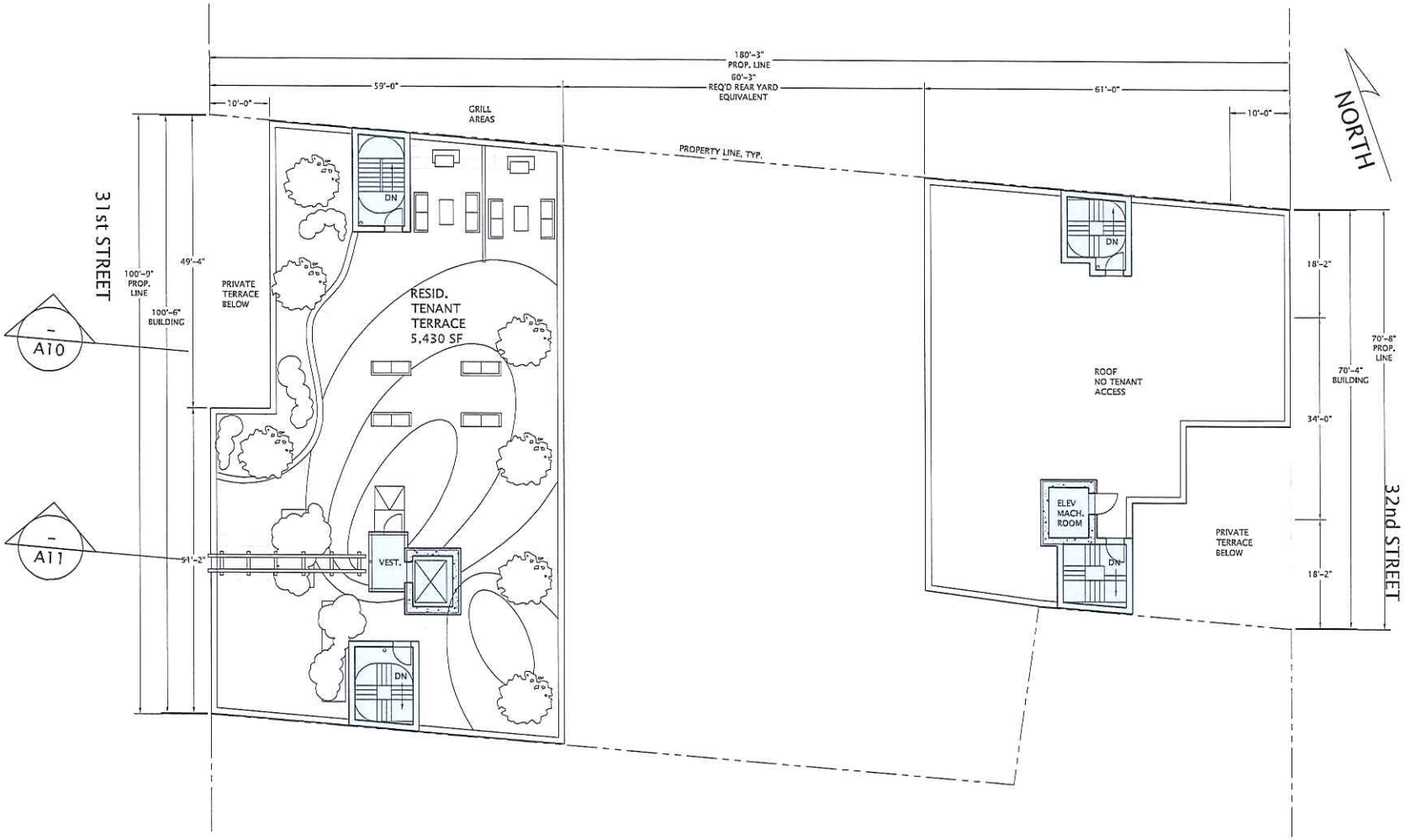

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NEW YORK

revisions

date	no.	description

Job #:208
drawing: GANY
date: 6.9.2015
scale: 1/8" = 1'-0"

ROOF TOP
PLANS

Figure 3G

sheet #

A6

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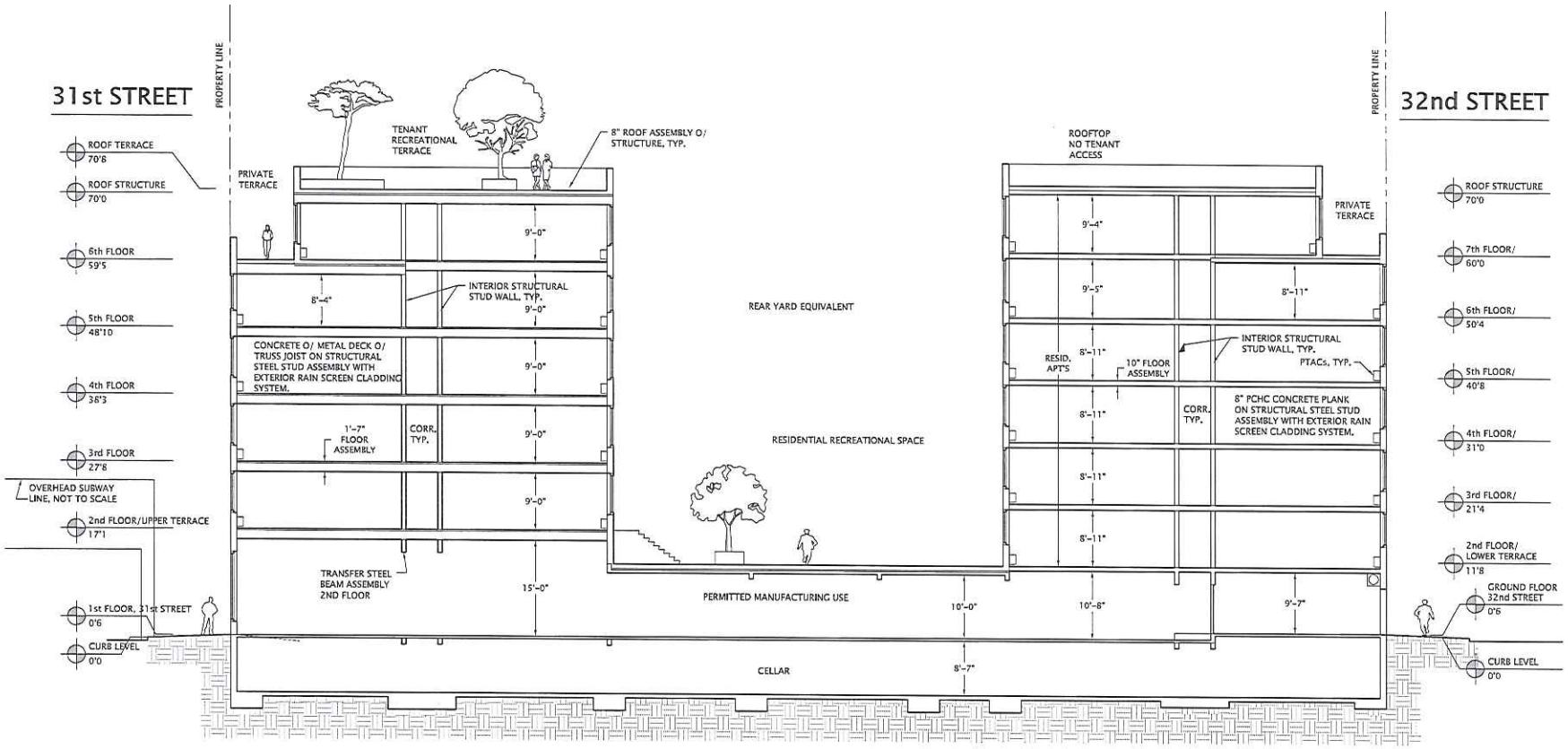

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LONG ISLAND CITY
NEW YORK

revisions

date	no.	description

Job #:208
drawing: GANY
date: 6.9.2015
scale: 1/8" = 1'-0"

EAST/WEST SECTION

Figure 3H

sheet #

A10

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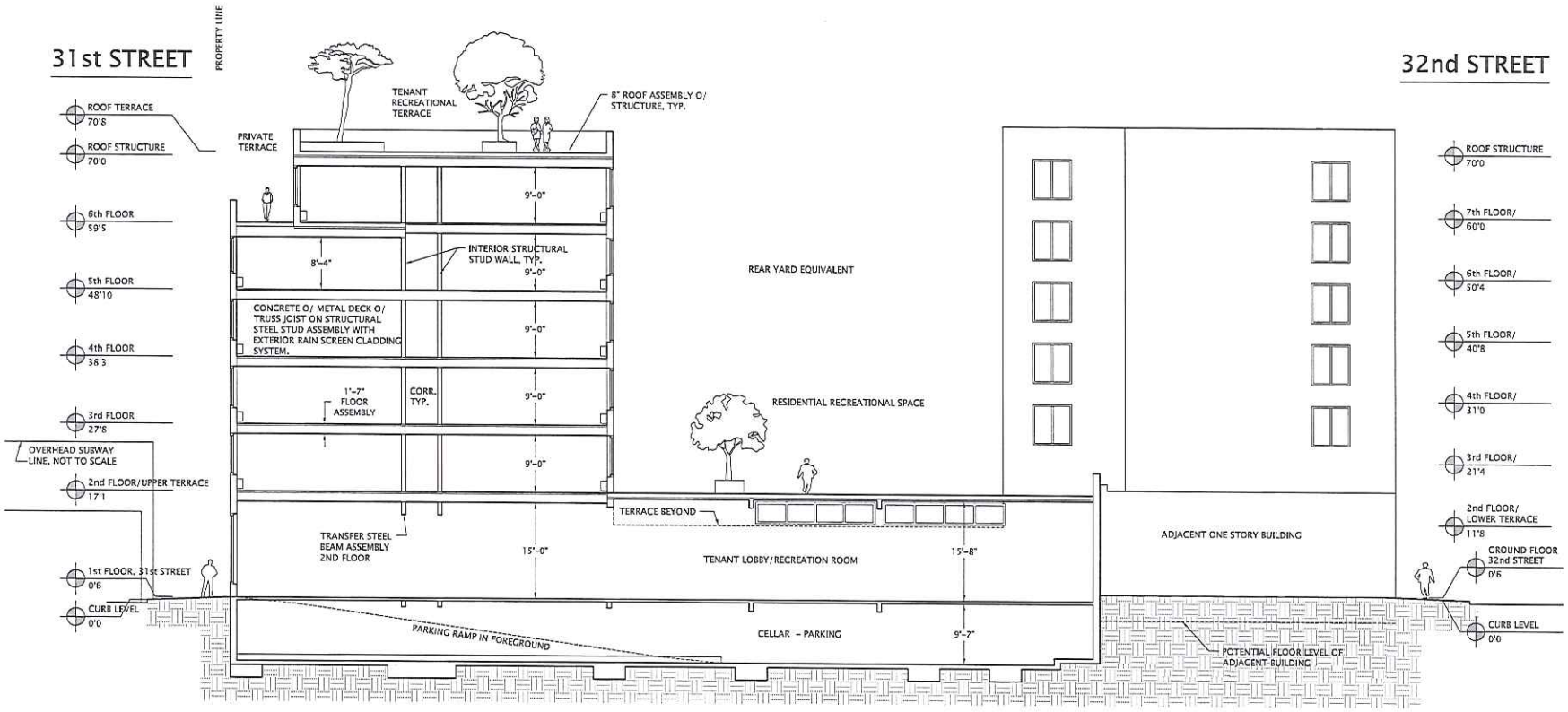

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date	no.	description

Job #:208
drawing: GANY
date: 6.9.2015
scale: 1/8" = 1'-0"

EAST/WEST SECTION

Figure 31

sheet #

A10

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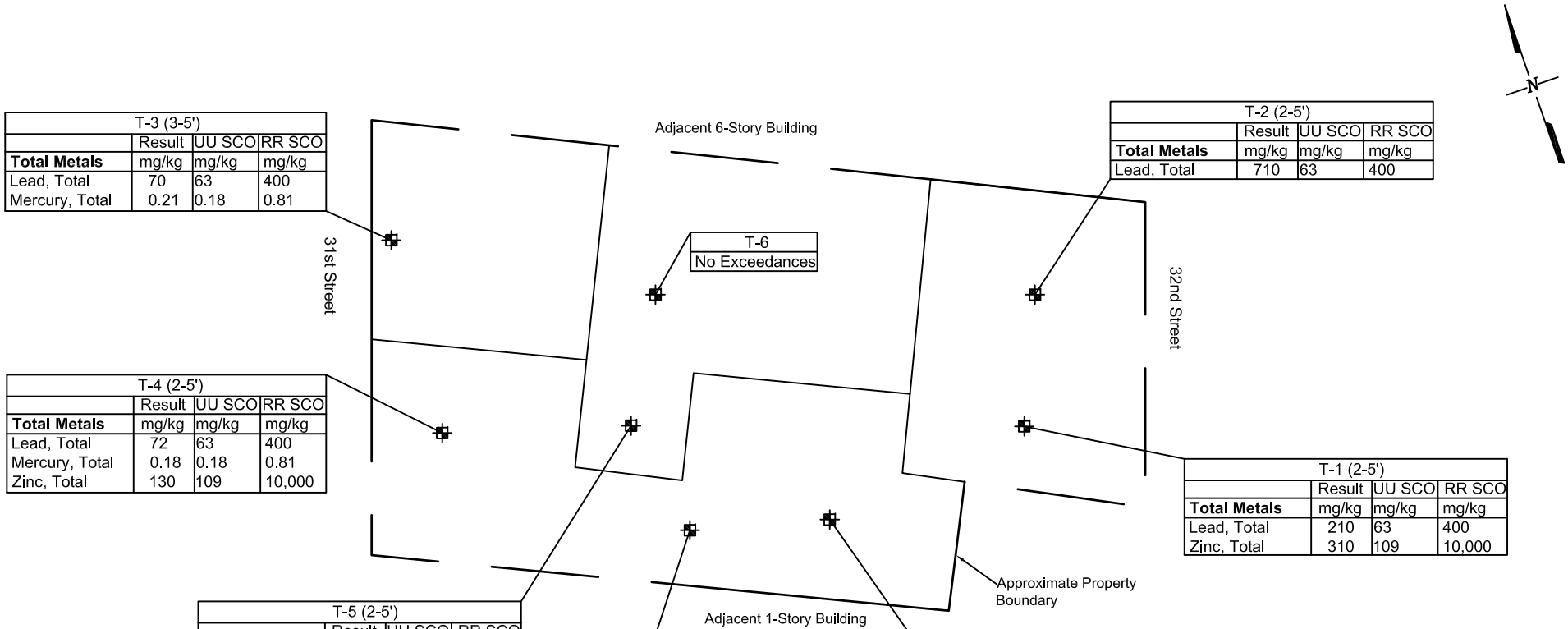

T-3 (3-5')	Result	UU SCO	RR SCO
Total Metals	mg/kg	mg/kg	mg/kg
Lead, Total	70	63	400
Mercury, Total	0.21	0.18	0.81

T-2 (2-5')	Result	UU SCO	RR SCO
Total Metals	mg/kg	mg/kg	mg/kg
Lead, Total	710	63	400

T-4 (2-5')	Result	UU SCO	RR SCO
Total Metals	mg/kg	mg/kg	mg/kg
Lead, Total	72	63	400
Mercury, Total	0.18	0.18	0.81
Zinc, Total	130	109	10,000

T-1 (2-5')	Result	UU SCO	RR SCO
Total Metals	mg/kg	mg/kg	mg/kg
Lead, Total	210	63	400
Zinc, Total	310	109	10,000

T-5 (2-5')	Result	UU SCO	RR SCO
Total Metals	mg/kg	mg/kg	mg/kg
Lead, Total	170	63	400
Zinc, Total	140	109	10,000

T-8 (3-5')	Result	UU SCO	RR SCO
SVOCs	mg/kg	mg/kg	mg/kg
Benzo(a)anthracene	4	1	1
Benzo(a)pyrene	3.4	1	1
Benzo(b)fluoranthene	4.3	1	1
Benzo(k)fluoranthene	1.4	0.8	3.9
Chrysene	3.8	1	3.9
Dibenzo(a,h)anthracene	0.42	0.33	0.33
Indeno(1,2,3-cd)pyrene	2.1	0.5	0.5
Total Metals	mg/kg	mg/kg	mg/kg
Lead, Total	170	63	400
Zinc, Total	460	109	10,000

T-7 (3-5')	Result	UU SCO	RR SCO
VOCs	mg/kg	mg/kg	mg/kg
Trichloroethene	2	0.47	21
Total Metals	mg/kg	mg/kg	mg/kg
Copper, Total	170	50	270
Lead, Total	1,000	63	400
Zinc, Total	400	109	10,000

Note: Adapted from GZA Limited Remedial Investigation Report, February 2015.

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TITLE: Previous Remedial Investigation Soil Exceedances Map	DATE: 10/14/2015
	SCALE: As Shown
FIGURE: 4	DRAWN BY: J.T.C./T.R.B.
DRAWING NO: 2015–5	APPR. BY: J.E.P.

37–27 31st Street
Long Island City, NY

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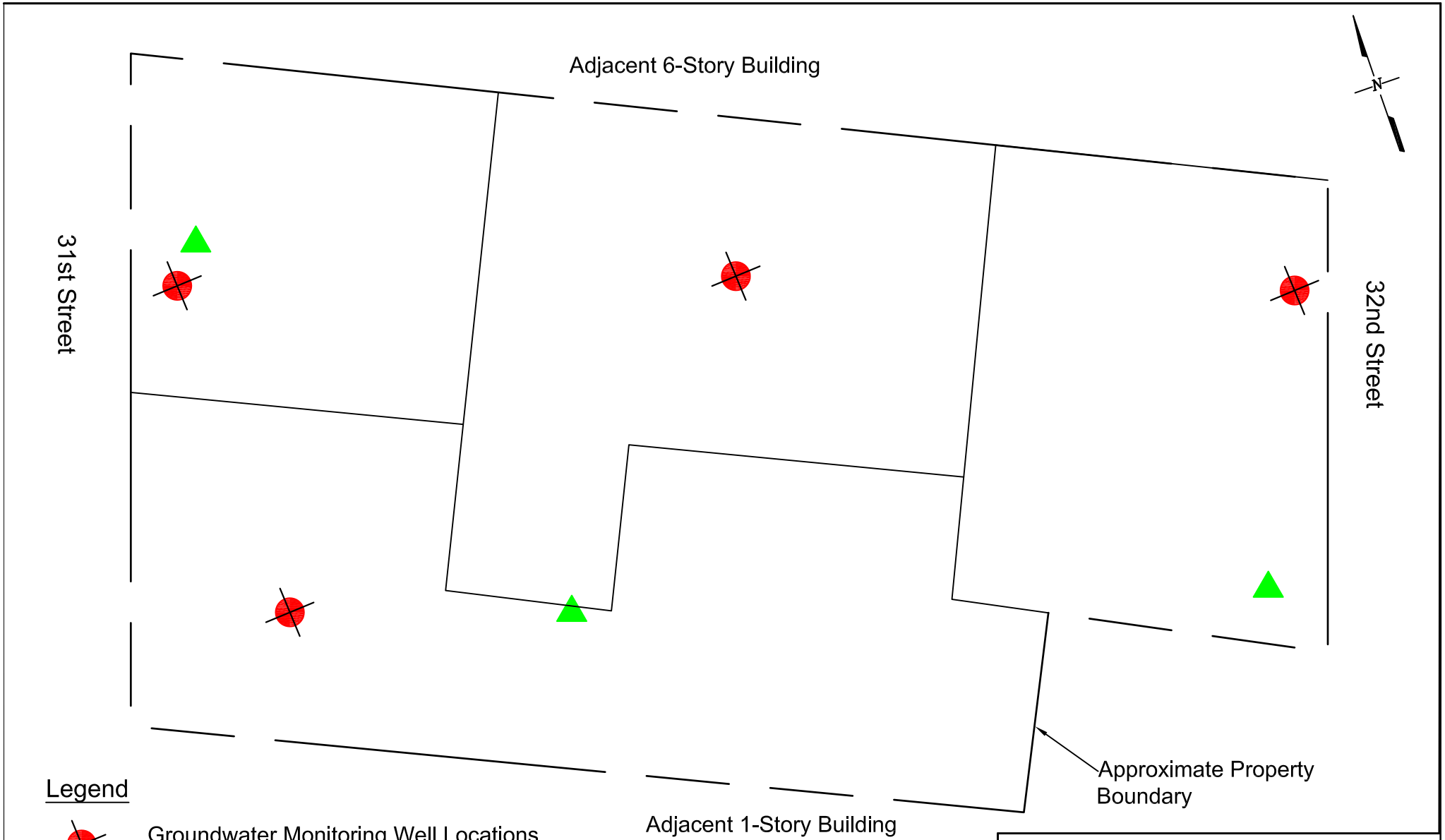

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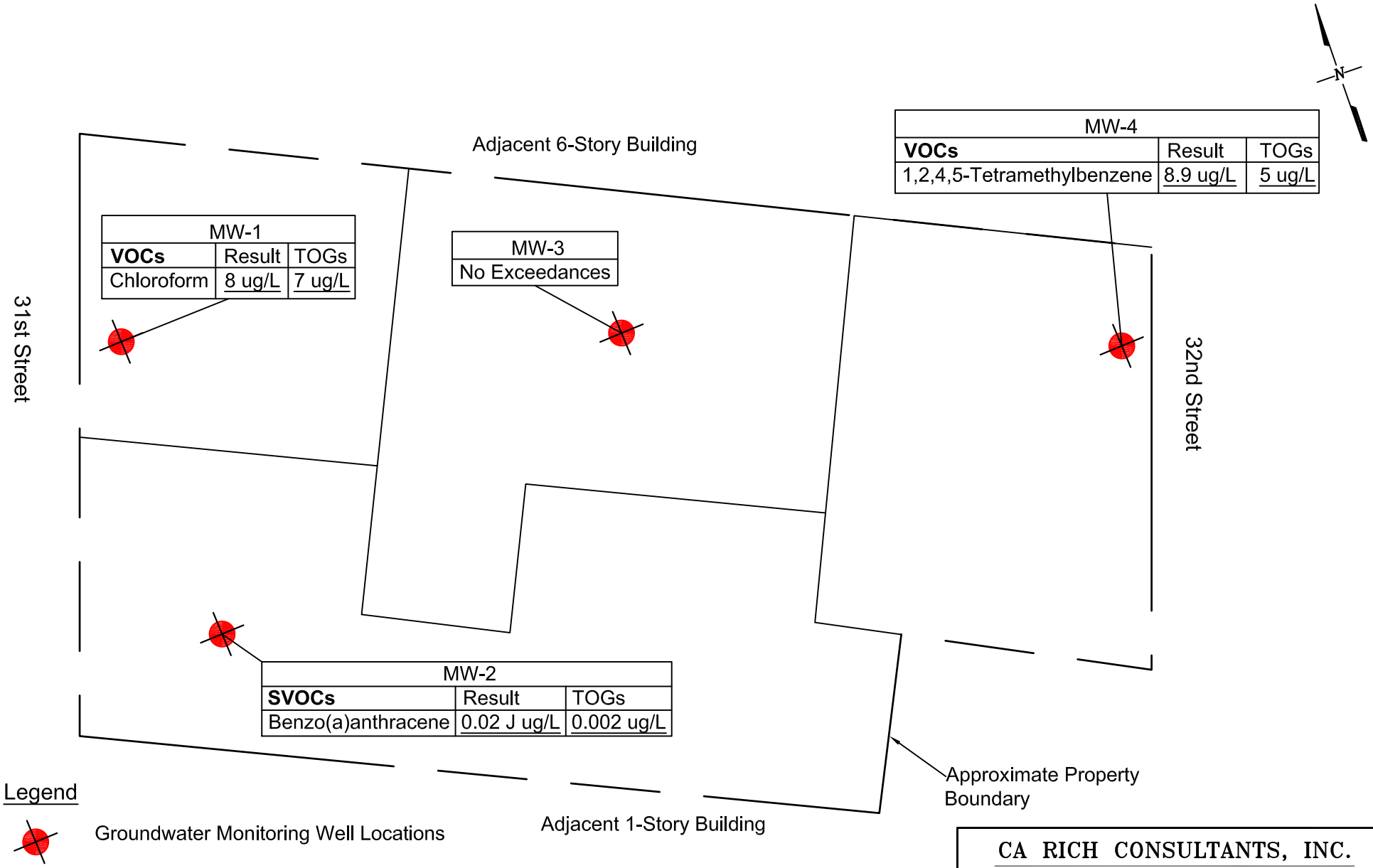
TITLE: Locations of Groundwater Wells and Soil Vapor Samples		DATE: 10/14/2015
		SCALE: As Shown
FIGURE: 5	37–27 31st Street Long Island City, NY	DRAWN BY: J.T.C./T.R.B.
DRAWING NO: 2015–2		APPR. BY: J.E.P.

I:\Drawings\31 32 LIC\2015-2



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TITLE: Map of Groundwater Chemistry Exceedance Results	DATE: 10/14/2015
	SCALE: As Shown
FIGURE: 6	DRAWN BY: J.T.C./T.R.B.
DRAWING NO: 2015-7	APPR. BY: J.E.P.

37-27 31st Street
Long Island City, NY

I:\Drawings\31 32 LIC\2015-7

SSV-2	
VOC	ug/m³
Dichlorodicluoromethane	46.2
Ethanol	52.4
Acetone	333
Trichlorofluoromethane	15.5
Isopropanol	15.5
Tertiary butyl Alcohol	47.9
Carbon disulfide	16.7
2-Butanone	72
Chloroform	18.1
n-Hexane	173
Benzene	21
Cyclohexane	9.64
Trichloroethene	4,760
2,2,4-Trimethylpentane	16.1
Heptane	145
4-Methyl-2-pentanone	46.7
Toluene	70.8
2-Hexanone	11.6
Tetrachloroethene	59.5
Ethylbenzene	17
p/m-Xylene	58.6
Styrene	49.4
o-Xylene	24.7
1,3,5-Trimethylbenzene	10.8
1,2,4-Trimethylbenzene	31.3

SSV-1	
VOC	ug/m³
Dichlorodicluoromethane	8.31
Ethanol	27.7
Acetone	124
Isopropanol	7.62
Tertiary butyl Alcohol	19.1
2-Butanone	30.4
Chloroform	54.2
Benzene	4.09
Trichloroethene	1,780
Heptane	5.16
4-Methyl-2-pentanone	17.6
Toluene	43.3
2-Hexanone	6.8
Tetrachloroethene	250
Ethylbenzene	10.3
p/m-Xylene	37.6
Styrene	50.2
o-Xylene	16.1
4-Ethyltoluene	7.67
1,3,5-Trimethylbenzene	8.31
1,2,4-Trimethylbenzene	29.3

SSV-3	
VOC	ug/m³
Acetone	264
n-Hexane	29.9
Trichloroethene	12,500
Tetrachloroethene	142

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TITLE: Map of Soil Vapor Chemistry Results	DATE: 9/24/2015
	SCALE: As Shown
FIGURE: 7	DRAWN BY: J.T.C./T.R.B.
DRAWING NO: 2015-4	APPR. BY: J.E.P.

37-27 31st Street
Long Island City, NY

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TABLES

Table 1
Volatile Organic Compounds Soil Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, NY 11101

LOCATION		Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Residential Soil Cleanup Objectives	T-1 (2-5)'		T-1 (13-15)'		T-2 (2-5)'		T-2 (13-15)'		T-4 (2-5)'		T-4 (13-15)'		T-5 (2-5)'		T-5 (13-15)'		T-6 (2-5)'		T-6 (13-15)'		T3 (3-5)		T3 (13-15)		T3 (13-15)		T7 (3-5)		T7 (13-15)		T8 (3-5)		T8 (3-5)		T8 (13-15)	
SAMPLING DATE				12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014	
LAB SAMPLE ID				L1430448-01		L1430448-02		L1430448-03		L1430448-04		L1430448-05		L1430448-06		L1430448-07		L1430448-08		L1430448-09		L1430448-10		L1430558-01		L1430558-02		L1430558-02 R1		L1430558-03		L1430558-04		L1430558-05		L1430558-05 R1		L1430558-06	
SAMPLE TYPE				Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
SAMPLE DEPTH (ft.)				2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		3-5'		13-15'		13-15'		3-5'		13-15'		3-5'		3-5'		13-15'	
	Units			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatile Organics by 8260/5035																																							
Methylene chloride	mg/kg	0.05	100	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
1,1-Dichloroethane	mg/kg	0.27	26	0.0017	U	0.0017	U	0.0017	U	0.0018	U	0.0018	U	0.0019	U	0.0016	U	0.0018	U	0.0017	U	0.0018	U	0.0016	U	0.002	U	-		0.076	U	0.0018	U	0.0025	U	-		0.0019	U
Chloroform	mg/kg	0.37	49	0.0017	U	0.0017	U	0.0017	U	0.0018	U	0.0018	U	0.0019	U	0.0016	U	0.0018	U	0.0017	U	0.0018	U	0.0016	U	0.002	U	-		0.076	U	0.0018	U	0.0025	U	-		0.0019	U
Carbon tetrachloride	mg/kg	0.76	2.4	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,2-Dichloropropane	mg/kg	--	--	0.0039	U	0.0041	U	0.0039	U	0.0042	U	0.0041	U	0.0044	U	0.0038	U	0.0043	U	0.004	U	0.0041	U	0.0036	U	0.0047	U	-		0.18	U	0.0042	U	0.0058	U	-		0.0044	U
Dibromochloromethane	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,1,2-Trichloroethane	mg/kg	--	--	0.0017	U	0.0017	U	0.0017	U	0.0018	U	0.0018	U	0.0019	U	0.0016	U	0.0018	U	0.0017	U	0.0018	U	0.0016	U	0.002	U	-		0.076	U	0.0018	U	0.0025	U	-		0.0019	U
Tetrachloroethene	mg/kg	1.3	19	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.09		0.0012	U	0.0016	U	-		0.0012	U
Chlorobenzene	mg/kg	1.1	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Trichlorofluoromethane	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,2-Dichloroethane	mg/kg	0.02	3.1	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,1,1-Trichloroethane	mg/kg	0.68	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Bromodichloromethane	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
trans-1,3-Dichloropropen	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
cis-1,3-Dichloropropene	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,3-Dichloropropene, To	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,1-Dichloropropene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
Bromoform	mg/kg	--	--	0.0045	U	0.0047	U	0.0045	U	0.0047	U	0.0047	U	0.0051	U	0.0043	U	0.0049	U	0.0045	U	0.0047	U	0.0042	U	0.0054	U	-		0.2	U	0.0048	U	0.0066	U	-		0.005	U
1,1,2,2-Tetrachloroethan	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Benzene	mg/kg	0.06	4.8	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Toluene	mg/kg	0.7	100	0.0017	U	0.0017	U	0.0017	U	0.0018	U	0.0018	U	0.0019	U	0.0016	U	0.0018	U	0.0017	U	0.0018	U	0.0016	U	0.002	U	-		0.01	J	0.0018	U	0.0025	U	-		0.0019	U
Ethylbenzene	mg/kg	1	41	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Chloromethane	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
Bromomethane	mg/kg	--	--	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.1	U	0.0024	U	0.0033	U	-		0.0025	U
Vinyl chloride	mg/kg	0.02	0.9	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.1	U	0.0024	U	0.0033	U	-		0.0025	U
Chloroethane	mg/kg	--	--	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.1	U	0.0024	U	0.0033	U	-		0.0025	U
1,1-Dichloroethene	mg/kg	0.33	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
trans-1,2-Dichloroethene	mg/kg	0.19	100	0.0017	U	0.0017	U	0.0017	U	0.0018	U	0.0018	U	0.0019	U	0.0016	U	0.0018	U	0.0017	U	0.0018	U	0.0016	U	0.002	U	-		0.076	U	0.0018	U	0.0025	U	-		0.0019	U
Trichloroethene	mg/kg	0.47	21	0.0011	U	0.0012	U	0.0019		0.0012	U	0.0061		0.0013	U	0.015		0.0012	U	0.0011	U	0.0012	U	0.00092	J	0.0015		-		2		0.0012	U	0.0016	U	-		0.0012	U
1,2-Dichlorobenzene	mg/kg	1.1	100	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,3-Dichlorobenzene	mg/kg	2.4	49	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,4-Dichlorobenzene	mg/kg	1.8	13	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
Methyl tert butyl ether	mg/kg	0.93	100	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.1	U	0.0024	U	0.0033	U	-		0.0025	U
p/m-Xylene	mg/kg	--	--	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.012	J	0.0024	U	0.0033	U	-		0.0025	U
o-Xylene	mg/kg	--	--	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.1	U	0.0024	U	0.0033	U	-		0.0025	U
Xylene (Total)	mg/kg	0.26	100	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.012	J	0.0024	U	0.0033	U	-		0.0025	U
cis-1,2-Dichloroethene	mg/kg	0.25	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,2-Dichloroethene (total	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Dibromomethane	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
Styrene	mg/kg	--	--	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.1	U	0.0024	U	0.0033	U	-		0.0025	U
Dichlorodifluoromethane	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
Acetone	mg/kg	0.05	100	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.0047	J	0.0059	J	-		0.51	U	0.0049	J	0.016	U	-		0.0071	J
Carbon disulfide	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
2-Butanone	mg/kg	0.12	100	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
Vinyl acetate	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
4-Methyl-2-pentanone	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
1,2,3-Trichloropropane	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
2-Hexanone	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
Bromochloromethane	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
2,2-Dichloropropane	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,2-Dibromoethane	mg/kg	--	--	0.0045	U	0.0047	U	0.0045	U	0.0047	U	0.0047	U	0.0051	U	0.0043	U	0.0049	U	0.0045	U	0.0047	U	0.0042	U	0.0054	U	-		0.2	U	0.0048	U	0.0066	U	-		0.005	U
1,3-Dichloropropane	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,1,1,2-Tetrachloroethan	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Bromobenzene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
n-Butylbenzene	mg/kg	12	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
sec-Butylbenzene	mg/kg	11	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
tert-Butylbenzene	mg/kg	5.9	100	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
o-Chlorotoluene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
p-Chlorotoluene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,2-Dibromo-3-chloropro	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
Hexachlorobutadiene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
Isopropylbenzene	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
p-Isopropyltoluene	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Naphthalene	mg/kg	12	100	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.049	J	0.006	U	0.0083	U	-		0.0062	U
Acrylonitrile	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
n-Propylbenzene	mg/kg	3.9	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,2,3-Trichlorobenzene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,2,4-Trichlorobenzene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,3,5-Trimethylbenzene	mg/kg	8.4	52	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,2,4-Trimethylbenzene	mg/kg	3.6	52	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.014	J	0.006	U	0.0083	U	-		0.0062	U
1,4-Dioxane	mg/kg	0.1	13	0.11	U	0.12	U	0.11	U	0.12	U	0.12	U	0.13	U	0.11	U	0.12	U	0.11	U	0.12	U	0.1	U	0.14	U	-		5.1	U	0.12	U	0.16	U	-		0.12	U
1,4-Diethylbenzene	mg/kg	--	--	0.0045	U	0.0047	U	0.0045	U	0.0047	U	0.0047	U	0.0051	U	0.0043	U	0.0049	U	0.0045	U	0.0047	U	0.0042	U	0.0054	U	-		0.2	U	0.0048	U	0.0066	U	-		0.005	U
4-Ethyltoluene	mg/kg	--	--	0.0045	U	0.0047	U	0.0045	U	0.0047	U	0.0047	U	0.0051	U	0.0043	U	0.0049	U	0.0045	U	0.0047	U	0.0042	U	0.0054	U	-		0.2	U	0.0048	U	0.0066	U	-		0.005	U
1,2,4,5-Tetramethylbenze	mg/kg	--	--	0.0045	U	0.0047	U	0.0045	U	0.0047	U	0.0047	U	0.0051	U	0.0043	U	0.0049	U	0.0045	U	0.0047	U	0.0042	U	0.0054	U	-		0.2	U	0.0048	U	0.0066	U	-		0.005	U
Ethyl ether	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
trans-1,4-Dichloro-2-buta	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U

TABLE NOTES:

	Value Exceeds Unrestricted Use Soil Cleanup Objectives (SCO)
	Non Detect Value with a reporting limit which exceeds either Unrestricted Use and/or Residential Restricted Use SCO
J	Estimated Value. The target analyte concentration is below the quantitative limit (RL), but above the method detection limit (MDL) or estimated detection limit (EDL) for SPME-related analyses
U	Not detected at the reported detection limit for the sample
--	No Guidance Value
mg/kg	= milligram per kilogram

Adapted from GZA Limited Remedial Investigation Report, February 2015

Table 2

Semivolatile Organic Compounds Soil Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, NY 11101

LOCATION		Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Residential Soil Cleanup Objectives	T-1 (2-5)'		T-1 (13-15)'		T-2 (2-5)'		T-2 (13-15)'		T-4 (2-5)'		T-4 (13-15)'		T-5 (2-5)'		T-5 (13-15)'		T-6 (2-5)'		T-6 (13-15)'		T3 (3-5)		T3 (13-15)		T3 (13-15)		T7 (3-5)		T7 (13-15)		T8 (3-5)		T8 (3-5)		T8 (13-15)	
SAMPLING DATE				12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014	
LAB SAMPLE ID				L1430448-01		L1430448-02		L1430448-03		L1430448-04		L1430448-05		L1430448-06		L1430448-07		L1430448-08		L1430448-09		L1430448-10		L1430558-01		L1430558-02		L1430558-02 R1		L1430558-03		L1430558-04		L1430558-05		L1430558-05 R1		L1430558-06	
SAMPLE TYPE				Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
SAMPLE DEPTH (ft.)				2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		3-5'		13-15'		13-15'		3-5'		13-15'		3-5'		3-5'		13-15'	
	Units			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Semivolatile Organics by GC/MS																																							
Acenaphthene	mg/kg	20	100	0.13	U	0.14	U	0.14	U	0.14	U	0.13	U	0.14	U	0.037	J	0.14	U	0.14	U	0.14	U	0.14	U	0.15	U	-		0.045	J	0.14	U	1		-		0.15	U
1,2,4-Trichlorobenzene	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Hexachlorobenzene	mg/kg	0.33	1.2	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.11	U	-		0.1	U	0.1	U	0.1	U	-		0.11	U
Bis(2-chloroethyl)ether	mg/kg	--	--	0.15	U	0.15	U	0.16	U	0.15	U	0.15	U	0.15	U	0.15	U	0.16	U	0.16	U	0.16	U	0.16	U	0.17	U	-		0.15	U	0.15	U	0.15	U	-		0.17	U
2-Chloronaphthalene	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
1,2-Dichlorobenzene	mg/kg	1.1	100	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
1,3-Dichlorobenzene	mg/kg	2.4	49	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
1,4-Dichlorobenzene	mg/kg	1.8	13	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
3,3'-Dichlorobenzidine	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2,4-Dinitrotoluene	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2,6-Dinitrotoluene	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Fluoranthene	mg/kg	100	100	0.085	J	0.1	U	0.13		0.1	U	1.1		0.1	U	0.97		0.1	U	0.1	U	0.1	U	0.29		0.11	U	-		0.71		0.1	U	8.9	E	9.3		0.11	U
4-Chlorophenyl phenyl e	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
4-Bromophenyl phenyl e	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Bis(2-chloroisopropyl)et	mg/kg	--	--	0.2	U	0.2	U	0.21	U	0.2	U	0.2	U	0.2	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.22	U	-		0.21	U	0.2	U	0.21	U	-		0.22	U
Bis(2-chloroethoxy)metl	mg/kg	--	--	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U	0.19	U	0.19	U	0.19	U	0.2	U	-		0.18	U	0.18	U	0.18	U	-		0.2	U
Hexachlorobutadiene	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Hexachlorocyclopentadi	mg/kg	--	--	0.48	U	0.49	U	0.5	U	0.49	U	0.48	U	0.48	U	0.49	U	0.51	U	0.5	U	0.5	U	0.49	U	0.54	U	-		0.49	U	0.49	U	0.49	U	-		0.53	U
Hexachloroethane	mg/kg	--	--	0.13	U	0.14	U	0.14	U	0.14	U	0.13	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.15	U	-		0.14	U	0.14	U	0.14	U	-		0.15	U
Isophorone	mg/kg	--	--	0.15	U	0.15	U	0.16	U	0.15	U	0.15	U	0.15	U	0.15	U	0.16	U	0.16	U	0.16	U	0.16	U	0.17	U	-		0.15	U	0.15	U	0.15	U	-		0.17	U
Naphthalene	mg/kg	12	100	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.092	J	-		0.18	U
Nitrobenzene	mg/kg	--	15	0.15	U	0.15	U	0.16	U	0.15	U	0.15	U	0.15	U	0.15	U	0.16	U	0.16	U	0.16	U	0.16	U	0.17	U	-		0.15	U	0.15	U	0.15	U	-		0.17	U
NitrosoDiPhenylAmine(	mg/kg	--	--	0.13	U	0.14	U	0.14	U	0.14	U	0.13	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.15	U	-		0.14	U	0.14	U	0.14	U	-		0.15	U
n-Nitrosodi-n-propylami	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Bis(2-Ethylhexyl)phthal	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.16	J	0.17	U	0.28		-		0.051	J
Butyl benzyl phthalate	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Di-n-butylphthalate	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Di-n-octylphthalate	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Diethyl phthalate	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Dimethyl phthalate	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Benzo(a)anthracene	mg/kg	1	1	0.044	J	0.1	U	0.068	J	0.1	U	0.54		0.1	U	0.62		0.1	U	0.1	U	0.1	U	0.14		0.11	U	-		0.35		0.1	U	4		-		0.11	U
Benzo(a)pyrene	mg/kg	1	1	0.13	U	0.14	U	0.063	J	0.14	U	0.47		0.14	U	0.65		0.14	U	0.14	U	0.14	U	0.12	J	0.15	U	-		0.29		0.14	U	3.4		-		0.15	U
Benzo(b)fluoranthene	mg/kg	1	1	0.054	J	0.1	U	0.075	J	0.1	U	0.63		0.1	U	0.81		0.1	U	0.1	U	0.1	U	0.16		0.11	U	-		0.37		0.1	U	4.3		-		0.11	U
Benzo(k)fluoranthene	mg/kg	0.8	3.9	0.1	U	0.1	U	0.1	U	0.1	U	0.21		0.1	U	0.29		0.1	U	0.1	U	0.1	U	0.06	J	0.11	U	-		0.15		0.1	U	1.4		-		0.11	U
Chrysene	mg/kg	1	3.9	0.051	J	0.1	U	0.065	J	0.1	U	0.52		0.1	U	0.63		0.1	U	0.1	U	0.1	U	0.13		0.11	U	-		0.34		0.1	U	3.8		-		0.11	U
Acenaphthylene	mg/kg	100	100	0.13	U	0.14	U	0.14	U	0.14	U	0.07	J	0.14	U	0.12	J	0.14	U	0.14	U	0.14	U	0.14	U	0.15	U	-		0.14	U	0.14	U	0.11	J	-		0.15	U
Anthracene	mg/kg	100	100	0.1	U	0.1	U	0.1	U	0.1	U	0.15		0.1	U	0.13		0.1	U	0.1	U	0.1	U	0.038	J	0.11	U	-		0.088	J	0.1	U	2.2		-		0.11	U
Benzo(ghi)perylene	mg/kg	100	100	0.13	U	0.14	U	0.041	J	0.14	U	0.28		0.14	U	0.39		0.14	U	0.14	U	0.14	U	0.073	J	0.15	U	-		0.18		0.14	U	1.9		-		0.15	U
Fluorene	mg/kg	30	100	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.8		-		0.18	U
Phenanthrene	mg/kg	100	100	0.044	J	0.1	U	0.073	J	0.1	U	0.64		0.1	U	0.53		0.1	U	0.1	U	0.1	U	0.16		0.11	U	-		0.52		0.1	U	8.4	E	8.8		0.11	U
Dibenzo(a,h)anthracene	mg/kg	0.33	0.33	0.1	U	0.1	U	0.1	U	0.1	U	0.079	J	0.1	U	0.1		0.1	U	0.1	U	0.1	U	0.1	U	0.11	U	-		0.041	J	0.1	U	0.42		-		0.11	U
Indeno(1,2,3-cd)Pyrene	mg/kg	0.5	0.5	0.13	U	0.14	U	0.044	J	0.14	U	0.31		0.14	U	0.44		0.14	U	0.14	U	0.14	U	0.082	J	0.15	U	-		0.19		0.14	U	2.1		-		0.15	U
Pyrene	mg/kg	100	100	0.072	J	0.1	U	0.12		0.1	U	0.86		0.1	U	1		0.1	U	0.1	U	0.1	U	0.23		0.11	U	-		0.67		0.1	U	8.3	E	8.6		0.11	U
Biphenyl	mg/kg	--	--	0.38	U	0.39	U	0.4	U	0.39	U	0.38	U	0.38	U	0.39	U	0.4	U	0.39	U	0.4	U	0.39	U	0.43	U	-		0.39	U	0.39	U	0.064	J	-		0.42	U
4-Chloroaniline	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2-Nitroaniline	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
3-Nitroaniline	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
4-Nitroaniline	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Dibenzofuran	mg/kg	7	59	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.34		-		0.18	U
2-Methylnaphthalene	mg/kg	--	--	0.2	U	0.2	U	0.21	U	0.2	U	0.2	U	0.2	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.22	U	-		0.21	U	0.2	U	0.17	J	-		0.22	U
1,2,4,5-Tetrachlorobenze	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Acetophenone	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2,4,6-Trichlorophenol	mg/kg	--	--	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.11	U	-		0.1	U	0.1	U	0.1	U	-		0.11	U
P-Chloro-M-Cresol	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2-Chlorophenol	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2,4-Dichlorophenol	mg/kg	--	--	0.15	U	0.15	U	0.16	U	0.15	U	0.15	U	0.15	U	0.15	U	0.16	U	0.16	U	0.16	U	0.16	U	0.17	U	-		0.15	U	0.15	U	0.15	U	-		0.17	U
2,4-Dimethylphenol	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2-Nitrophenol	mg/kg	--	--	0.36	U	0.37	U	0.38	U	0.37	U	0.36	U	0.36	U	0.37	U	0.38	U	0.37	U	0.38	U	0.37	U	0.4	U	-		0.37	U	0.37	U	0.37	U	-		0.4	U
4-Nitrophenol	mg/kg	--	--	0.24	U	0.24	U	0.24	U	0.24	U	0.23	U	0.24	U	0.24	U	0.25	U	0.24	U	0.24	U	0.24	U	0.26	U	-		0.24	U	0.24	U	0.24	U	-		0.26	U
2,4-Dinitrophenol	mg/kg	--	--	0.81	U	0.82	U	0.84	U	0.81	U	0.8	U	0.81	U	0.82	U	0.85	U	0.83	U	0.84	U	0.83	U	0.9	U	-		0.82	U	0.82	U	0.82	U	-		0.89	U
4,6-Dinitro-o-cresol	mg/kg	--	--	0.44	U	0.44	U	0.45	U	0.44	U	0.44	U	0.44	U	0.45	U	0.46	U	0.45	U	0.46	U	0.45	U	0.49	U	-		0.45	U	0.44	U	0.45	U	-		0.48	U
Pentachlorophenol	mg/kg	0.8	6.7	0.13	U	0.14	U	0.14	U	0.14	U	0.13	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.15	U	-		0.14	U	0.14	U	0.14	U	-		0.15	U
Phenol	mg/kg	0.33	100	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2-Methylphenol	mg/kg	0.33	100	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
3-Methylphenol/4-Methy	mg/kg	0.33	100	0.24	U	0.24	U	0.25	U	0.24	U	0.24	U	0.24	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.27	U	-		0.25	U	0.24	U	0.25	U	-		0.27	U
2,4,5-Trichlorophenol	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Benzoic Acid	mg/kg	--	--	0.54	U	0.55	U	0.56	U	0.55	U	0.54	U	0.55	U	0.56	U	0.57	U	0.56	U	0.57	U	0.56	U	0.61	U	-		0.56	U	0.55	U	0.56	U	-		0.6	U
Benzyl Alcohol	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Carbazole	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.074	J	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.25		-		0.18	U

TABLE NOTES:

	Value Exceeds Unrestricted Use Soil Cleanup Objectives (SCO)
J	Estimated Value. The target analyte concentration is below the quantitative limit (RL), but above the method detection limit (MDL) or estimated detection limit (EDL) for SPME-related analyses
E	Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
U	Not detected at the reported detection limit for the sample
--	No Guidance Value
mg/kg	= milligram per kilogram

Adapted from GZA Limited Remedial Investigation Report, February 2015

Table 3

Pesticides and Polychlorinated Biphenyls Soil Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, NY 11101

LOCATION		Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Residential Soil Cleanup Objectives	T-1 (2-5)'		T-1 (13-15)'		T-2 (2-5)'		T-2 (13-15)'		T-4 (2-5)'		T-4 (13-15)'		T-5 (2-5)'		T-5 (13-15)'		T-6 (2-5)'		T-6 (13-15)'		T3 (3-5)		T3 (13-15)		T3 (13-15)		T7 (3-5)		T7 (13-15)		T8 (3-5)		T8 (3-5)		T8 (13-15)	
SAMPLING DATE				12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014	
LAB SAMPLE ID				L1430448-01		L1430448-02		L1430448-03		L1430448-04		L1430448-05		L1430448-06		L1430448-07		L1430448-08		L1430448-09		L1430448-10		L1430558-01		L1430558-02		L1430558-02 R1		L1430558-03		L1430558-04		L1430558-05		L1430558-05 R1		L1430558-06	
SAMPLE TYPE				Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
SAMPLE DEPTH (ft.)				2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		3-5'		13-15'		13-15'		3-5'		13-15'		3-5'		3-5'		13-15'	
	Units			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Organochlorine Pesticides by GC																																							
Delta-BHC	mg/kg	0.04	100	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
Lindane	mg/kg	0.1	1.3	0.000662	U	0.000656	U	0.000662	U	0.000655	U	0.000681	U	0.000661	U	0.000691	U	0.000703	U	0.000669	U	0.000674	U	0.00069	U	0.000748	U	-		0.000652	U	0.000667	U	0.000685	U	-		0.000721	U
Alpha-BHC	mg/kg	0.02	0.48	0.000662	U	0.000656	U	0.000662	U	0.000655	U	0.000681	U	0.000661	U	0.000691	U	0.000703	U	0.000669	U	0.000674	U	0.00069	U	0.000748	U	-		0.000652	U	0.000667	U	0.000685	U	-		0.000721	U
Beta-BHC	mg/kg	0.036	0.36	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
Heptachlor	mg/kg	0.042	2.1	0.000794	U	0.000787	U	0.000794	U	0.000786	U	0.000818	U	0.000793	U	0.000829	U	0.000843	U	0.000803	U	0.000808	U	0.000828	U	0.000898	U	-		0.000783	U	0.000801	U	0.000822	U	-		0.000865	U
Aldrin	mg/kg	0.005	0.097	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
Heptachlor epoxide	mg/kg	--	--	0.00298	U	0.00295	U	0.00298	U	0.00295	U	0.00307	U	0.00297	U	0.00311	U	0.00316	U	0.00301	U	0.00303	U	0.0031	U	0.00337	U	-		0.00294	U	0.003	U	0.00308	U	-		0.00324	U
Endrin	mg/kg	0.014	11	0.000662	U	0.000656	U	0.000662	U	0.000655	U	0.000681	U	0.000661	U	0.000691	U	0.000703	U	0.000669	U	0.000674	U	0.00069	U	0.000748	U	-		0.000652	U	0.000667	U	0.000685	U	-		0.000721	U
Endrin ketone	mg/kg	--	--	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
Dieldrin	mg/kg	0.005	0.2	0.000992	U	0.000984	U	0.000993	U	0.000983	U	0.00102	U	0.000991	U	0.00104	U	0.00105	U	0.001	U	0.00101	U	0.00104	U	0.00112	U	-		0.000979	U	0.001	U	0.00103	U	-		0.00108	U
4,4'-DDE	mg/kg	0.0033	8.9	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
4,4'-DDD	mg/kg	0.0033	13	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
4,4'-DDT	mg/kg	0.0033	7.9	0.00298	U	0.00295	U	0.00298	U	0.00295	U	0.00307	U	0.00297	U	0.00311	U	0.00316	U	0.00301	U	0.00303	U	0.0031	U	0.00337	U	-		0.00294	U	0.003	U	0.00308	U	-		0.00324	U
Endosulfan I	mg/kg	2.4	24	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
Endosulfan II	mg/kg	2.4	24	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
Endosulfan sulfate	mg/kg	2.4	24	0.000662	U	0.000656	U	0.000662	U	0.000655	U	0.000681	U	0.000661	U	0.000691	U	0.000703	U	0.000669	U	0.000674	U	0.00069	U	0.000748	U	-		0.000652	U	0.000667	U	0.000685	U	-		0.000721	U
Methoxychlor	mg/kg	--	--	0.00298	U	0.00295	U	0.00298	U	0.00295	U	0.00307	U	0.00297	U	0.00311	U	0.00316	U	0.00301	U	0.00303	U	0.0031	U	0.00337	U	-		0.00294	U	0.003	U	0.00308	U	-		0.00324	U
Toxaphene	mg/kg	--	--	0.0298	U	0.0295	U	0.0298	U	0.0295	U	0.0307	U	0.0297	U	0.0311	U	0.0316	U	0.0301	U	0.0303	U	0.031	U	0.0337	U	-		0.0294	U	0.03	U	0.0308	U	-		0.0324	U
cis-Chlordane	mg/kg	0.094	4.2	0.00198	U	0.00197	U	0.00198	U	0.00197	U	0.00204	U	0.00198	U	0.00207	U	0.00211	U	0.00201	U	0.00202	U	0.00207	U	0.00224	U	-		0.00196	U	0.002	U	0.00205	U	-		0.00216	U
trans-Chlordane	mg/kg	--	--	0.00198	U	0.00197	U	0.00198	U	0.00197	U	0.00204	U	0.00198	U	0.00207	U	0.00211	U	0.00201	U	0.00202	U	0.00207	U	0.00224	U	-		0.00196	U	0.002	U	0.00205	U	-		0.00216	U
Chlordane	mg/kg	--	--	0.00708	J	0.0128	U	0.0129	U	0.0128	U	0.0133	U	0.0129	U	0.0135	U	0.0137	U	0.013	U	0.0131	U	0.0134	U	0.0146	U	-		0.0127	U	0.013	U	0.0134	U	-		0.014	U
Polychlorinated Biphenyls by GC																																							
Aroclor 1016	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1221	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1232	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1242	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1248	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1254	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1260	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1262	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1268	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U

TABLE NOTES:

	Non Detect Value with a reporting limit which exceeds either Unrestricted Use and/or Residential Restricted Use SCO
J	Estimated Value. The target analyte concentration is below the quantitative limit (RL), but above the method detection limit (MDL) or estimated detection limit (EDL) for SPME-related analyses
U	Not detected at the reported detection limit for the sample
--	No Guidance Value
mg/kg	= milligram per kilogram

Adapted from GZA Limited Remedial Investigation Report, February 2015

Table 4

Metals Soil Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, NY 11101

LOCATION		Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Residential Soil Cleanup Objectives	T-1 (2-5)'		T-1 (13-15)'		T-2 (2-5)'		T-2 (13-15)'		T-4 (2-5)'		T-4 (13-15)'		T-5 (2-5)'		T-5 (13-15)'		T-6 (2-5)'		T-6 (13-15)'		T3 (3-5)		T3 (13-15)		T3 (13-15)		T7 (3-5)		T7 (13-15)		T8 (3-5)		T8 (3-5)		T8 (13-15)	
SAMPLING DATE				12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014	
LAB SAMPLE ID				L1430448-01		L1430448-02		L1430448-03		L1430448-04		L1430448-05		L1430448-06		L1430448-07		L1430448-08		L1430448-09		L1430448-10		L1430558-01		L1430558-02		L1430558-02 R1		L1430558-03		L1430558-04		L1430558-05		L1430558-05 R1		L1430558-06	
SAMPLE TYPE				Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
SAMPLE DEPTH (ft.)				2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		3-5'		13-15'		13-15'		3-5'		13-15'		3-5'		3-5'		13-15'	
	Units			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Total Metals																																							
Aluminum, Total	mg/kg	--	--	4000		3500		5900		3300		4500		4400		4100		5000		3000		5700		4500		3000		-		5300		4000		3000		-		7300	
Antimony, Total	mg/kg	--	--	3.9	U	4.5		4.2	U	4	U	4	U	4	U	4	U	4.2	U	4	U	4.2	U	3.9	U	4.4	U	-		4.2		4	U	1.7	J	-		4.4	U
Arsenic, Total	mg/kg	13	16	2.6		1		2.1		1.3		3.4		1.2		2.2		1.8		0.5	J	1.4		2.9		-		1.9		12		2.2		5.5		-		3.4	
Barium, Total	mg/kg	350	400	240		23		120		18		48		26		62		27		18		58		70		22		-		270		33		49		-		53	
Beryllium, Total	mg/kg	7.2	72	0.19	J	0.14	J	0.23	J	0.13	J	0.22	J	0.14	J	0.17	J	0.17	J	0.12	J	0.18	J	0.19	J	0.12	J	-		0.24	J	0.16	J	0.16	J	-		0.25	J
Cadmium, Total	mg/kg	2.5	4.3	0.23	J	0.78	U	0.83	U	0.79	U	0.19	J	0.81	U	0.1	J	0.84	U	0.8	U	0.84	U	0.07	J	0.87	U	-		0.45	J	0.8	U	1.1		-		0.87	U
Calcium, Total	mg/kg	--	--	800		1300		1300		6400		2200		1200		1300		2000		960		18000		4400		940		-		9300		16000		2000		-		1200	
Chromium, Total	mg/kg	--	--	18		21		18		8.2		8.3		11		11		13		7.1		14		9.9		8.6		-		15		9.6		7.8		-		14	
Cobalt, Total	mg/kg	--	--	3.4		4.8		5		4.6		3.6		4.5		4.4		5.4		2.7		5.4		4		3.6		-		5.1		4.2		3.3		-		5.9	
Copper, Total	mg/kg	50	270	20		11		20		11		22		10		31		15		7.1		14		18		7.3		-		170		11		31		-		15	
Iron, Total	mg/kg	--	--	8500		8600		11000		8100		9500		8900		9900		12000		5400		12000		8800		6600		-		16000		8700		11000		-		13000	
Lead, Total	mg/kg	63	400	210		1.6	J	710		2.6	J	72		1.4	J	170		2.1	J	1.3	J	1.4	J	70		1.3	J	-		1000		1.8	J	170		-		2.1	J
Magnesium, Total	mg/kg	--	--	1900		2400		2600		5300		1900		2600		2300		2700		1500		11000		2100		1700		-		2800		8200		1600		-		3000	
Manganese, Total	mg/kg	1600	2000	210		200		280		170		240		230		200		280		140		230		220		160		-		180		180		210		-		340	
Mercury, Total	mg/kg	0.18	0.81	0.05	J	0.07	U	0.11		0.07	U	0.18		0.08	U	0.13		0.07	U	0.07	U	0.08	U	0.21		0.07	U	-		0.13		0.07	U	0.12		-		0.03	J
Nickel, Total	mg/kg	30	310	13		9.9		11		8.6		8.2		9.8		10		12		5.6		11		9.2		7.6		-		16		9.2		7.9		-		13	
Potassium, Total	mg/kg	--	--	450		660		900		760		520		900		870		920		650		2200		680		480		-		520		960		380		-		970	
Selenium, Total	mg/kg	3.9	180	1.6	U	1.6	U	1.7	U	1.6	U	0.54	J	1.6	U	1.6	U	1.7	U	1.6	U	1.7	U	1.6	U	1.7	U	-		0.44	J	1.6	U	1.6	U	-		1.7	U
Silver, Total	mg/kg	2	180	0.78	U	0.78	U	0.83	U	0.79	U	0.8	U	0.81	U	0.8	U	0.84	U	0.8	U	0.84	U	0.78	U	0.87	U	-		0.52	J	0.8	U	0.8	U	-		0.87	U
Sodium, Total	mg/kg	--	--	130	J	100	J	160	J	83	J	160		80	J	110	J	140	J	66	J	110	J	92	J	72	J	-		130	J	170		140	J	-		150	J
Thallium, Total	mg/kg	--	--	1.6	U	1.6	U	1.7	U	1.6	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.7	U	1.6	U	1.7	U	-		1.6	U	1.6	U	1.6	U	-		1.7	U
Vanadium, Total	mg/kg	--	--	11		13		19		12		12		15		19		20		8.3		20		12		12		-		24		13		11		-		21	
Zinc, Total	mg/kg	109	10000	310		28		73		27		130		23		140		27		22		34		68		17		-		400		25		460		-		29	

TABLE NOTES:

	Value Exceeds Unrestricted and/or Restricted Use "Restricted Residential" SCOs
J	Estimated Value. The target analyte concentration is below the quantitative limit (RL), but above the method detection limit (MDL) or estimated detection limit (EDL) for SPME-related analyses
U	Not detected at the reported detection limit for the sample
--	No Guidance Value
mg/kg	= milligram per kilogram

Adapted from GZA Limited Remedial Investigation Report, February 2015

Table 5
Summary of Volatile Organic Compounds in Groundwater Samples
37-27 31st Street
Long Island City, NY

LOCATION		MW-1		MW-2		MW-3		MW-4		Field Blank		Trip Blank	
SAMPLING DATE		9/15/2015		9/15/2015		9/15/2015		9/15/2015		9/15/2015		9/15/2015	
	*NY TOGS Units		Qual		Qual		Qual		Qual		Qual		Qual
VOCs													
Methylene chloride	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	8.1		2.5	
1,1-Dichloroethane	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Chloroform	7 ug/l	8		6.8		1.4	J	2.5	U	2.5	U	2.5	U
Carbon tetrachloride	5 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	1 ug/l	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	50 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	1 ug/l	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Tetrachloroethene	5 ug/l	0.45	J	0.55		0.61		0.66		0.43	J	0.5	U
Chlorobenzene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Trichlorofluoromethane	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichloroethane	0.6 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Bromodichloromethane	50 ug/l	0.46	J	0.34	J	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.4 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.4 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropene, Total	NA ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Bromoform	50 ug/l	2	U	2	U	2	U	2	U	2	U	2	U
1,1,2,2-Tetrachloroethane	5 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	1 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Ethylbenzene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Chloromethane	NA ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Bromomethane	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Vinyl chloride	2 ug/l	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,1-Dichloroethene	5 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Trichloroethene	5 ug/l	1.2		2.3		2.6		1.9		0.5	U	0.5	U
1,2-Dichlorobenzene	3 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,3-Dichlorobenzene	3 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,4-Dichlorobenzene	3 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Methyl tert butyl ether	10 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p/m-Xylene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
o-Xylene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Xylenes, Total	NA ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichloroethene, Total	NA ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Dibromomethane	5 ug/l	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichloropropane	0.04 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Acrylonitrile	5 ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Styrene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Dichlorodifluoromethane	5 ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	50 ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Carbon disulfide	60 ug/l	5	U	5	U	5	U	5	U	5	U	5	U
2-Butanone	50 ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Vinyl acetate	NA ug/l	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-pentanone	NA ug/l	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	50 ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
2,2-Dichloropropane	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dibromoethane	0.0006 ug/l	2	U	2	U	2	U	2	U	2	U	2	U
1,3-Dichloropropane	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,1,1,2-Tetrachloroethane	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Bromobenzene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
n-Butylbenzene	5 ug/l	2.5	U	2.5	U	2.5	U	0.97	J	2.5	U	2.5	U
sec-Butylbenzene	5 ug/l	2.5	U	2.5	U	2.5	U	1.9	J	2.5	U	2.5	U
tert-Butylbenzene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
o-Chlorotoluene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p-Chlorotoluene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dibromo-3-chloropropane	0.04 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Hexachlorobutadiene	0.5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Isopropylbenzene	5 ug/l	2.5	U	2.5	U	2.5	U	0.97	J	2.5	U	2.5	U
p-Isopropyltoluene	5 ug/l	2.5	U	2.5	U	2.5	U	2	J	2.5	U	2.5	U
Naphthalene	10 ug/l	2.5	U	2.5	U	2.5	U	3.7		2.5	U	2.5	U
n-Propylbenzene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2,3-Trichlorobenzene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2,4-Trichlorobenzene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,3,5-Trimethylbenzene	5 ug/l	2.5	U	2.5	U	2.5	U	0.87	J	2.5	U	2.5	U
1,2,4-Trimethylbenzene	5 ug/l	2.5	U	2.5	U	2.5	U	1.2	J	2.5	U	2.5	U
1,4-Dioxane	NA ug/l	250	U	250	U	250	U	250	U	250	U	250	U
p-Diethylbenzene	NA ug/l	2	U	2	U	2	U	6		2	U	2	U
p-Ethyltoluene	NA ug/l	2	U	2	U	2	U	1.2	J	2	U	2	U
1,2,4,5-Tetramethylbenzene	5 ug/l	2	U	2	U	2	U	8.9		2	U	2	U
Ethyl ether	NA ug/l	2.5	U	2.5	U	2.5	U	2.5	U	1	J	2.5	U
trans-1,4-Dichloro-2-butene	5 ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U

Notes
U - Not Detected
J - Estimated Value
NA - Not Available
- Value over NYSDEC TOGS
All concentrations are reported in micrograms per liter (ug/L) or parts per billion.

*NYSDEC Technical and Operational Guidance Series (1.1.1)
Ambient water Quality Standards and Guidance Values and
Groundwater Effluent Limitations June 1998

Table 6
Summary of Semi-Volatile Organic Compounds in Groundwater Samples
37-27 31st Street
Long Island City, NY

LOCATION		MW-1		MW-2		MW-3		MW-4		Field Blank	
SAMPLING DATE		9/15/2015		9/15/2015		9/15/2015		9/15/2015		9/15/2015	
	*NY TOGS Units		Qual		Qual		Qual		Qual		Qual
SVOCs											
1,2,4-Trichlorobenzene	5 ug/l	5	U	5	U	5	U	5	U	5	U
Bis(2-chloroethyl)ether	1 ug/l	2	U	2	U	2	U	2	U	2	U
1,2-Dichlorobenzene	3 ug/l	2	U	2	U	2	U	2	U	2	U
1,3-Dichlorobenzene	3 ug/l	2	U	2	U	2	U	2	U	2	U
1,4-Dichlorobenzene	3 ug/l	2	U	2	U	2	U	2	U	2	U
3,3'-Dichlorobenzidine	5 ug/l	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrotoluene	5 ug/l	5	U	5	U	5	U	5	U	5	U
2,6-Dinitrotoluene	5 ug/l	5	U	5	U	5	U	5	U	5	U
4-Chlorophenyl phenyl ether	NA ug/l	2	U	2	U	2	U	2	U	2	U
4-Bromophenyl phenyl ether	NA ug/l	2	U	2	U	2	U	2	U	2	U
Bis(2-chloroisopropyl)ether	5 ug/l	2	U	2	U	2	U	2	U	2	U
Bis(2-chloroethoxy)methane	5 ug/l	5	U	5	U	5	U	5	U	5	U
Hexachlorocyclopentadiene	5 ug/l	20	U	20	U	20	U	20	U	20	U
Isophorone	50 ug/l	5	U	5	U	5	U	5	U	5	U
Nitrobenzene	0.4 ug/l	2	U	2	U	2	U	2	U	2	U
NitrosoDiPhenylAmine(NDPA)/DPA	50 ug/l	2	U	2	U	2	U	2	U	2	U
n-Nitrosodi-n-propylamine	NA ug/l	5	U	5	U	5	U	5	U	5	U
Bis(2-Ethylhexyl)phthalate	5 ug/l	3	U	3	U	3	U	3	U	3	U
Butyl benzyl phthalate	50 ug/l	5	U	5	U	5	U	5	U	5	U
Di-n-butylphthalate	50 ug/l	5	U	5	U	5	U	5	U	5	U
Di-n-octylphthalate	50 ug/l	5	U	5	U	5	U	5	U	5	U
Diethyl phthalate	50 ug/l	5	U	5	U	5	U	5	U	5	U
Dimethyl phthalate	50 ug/l	5	U	5	U	5	U	5	U	5	U
Biphenyl	5 ug/l	2	U	2	U	2	U	0.96	J	2	U
4-Chloroaniline	5 ug/l	5	U	5	U	5	U	5	U	5	U
2-Nitroaniline	5 ug/l	5	U	5	U	5	U	5	U	5	U
3-Nitroaniline	5 ug/l	5	U	5	U	5	U	5	U	5	U
4-Nitroaniline	5 ug/l	5	U	5	U	5	U	5	U	5	U
Dibenzofuran	NA ug/l	2	U	2	U	2	U	2	U	2	U
1,2,4,5-Tetrachlorobenzene	5 ug/l	10	U	10	U	10	U	10	U	10	U
Acetophenone	NA ug/l	5	U	5	U	5	U	5	U	2.4	J
2,4,6-Trichlorophenol	NA ug/l	5	U	5	U	5	U	5	U	5	U
P-Chloro-M-Cresol	NA ug/l	2	U	2	U	2	U	2	U	2	U
2-Chlorophenol	NA ug/l	2	U	2	U	2	U	2	U	2	U
2,4-Dichlorophenol	2 ug/l	5	U	5	U	5	U	5	U	5	U
2,4-Dimethylphenol	2 ug/l	5	U	5	U	5	U	5	U	5	U
2-Nitrophenol	NA ug/l	10	U	10	U	10	U	10	U	10	U
4-Nitrophenol	NA ug/l	10	U	10	U	10	U	10	U	10	U
2,4-Dinitrophenol	2 ug/l	20	U	20	U	20	U	20	U	20	U
4,6-Dinitro-o-cresol	NA ug/l	10	U	10	U	10	U	10	U	10	U
Phenol	2 ug/l	5	U	5	U	5	U	5	U	5	U
2-Methylphenol	NA ug/l	5	U	5	U	5	U	5	U	5	U
3-Methylphenol/4-Methylphenol	NA ug/l	5	U	5	U	5	U	5	U	5	U
2,4,5-Trichlorophenol	NA ug/l	5	U	5	U	5	U	5	U	5	U
Benzoic Acid	NA ug/l	50	U	50	U	50	U	50	U	50	U
Benzyl Alcohol	NA ug/l	2	U	2	U	2	U	2	U	2	U
Carbazole	NA ug/l	2	U	2	U	2	U	2	U	2	U
Acenaphthene	20 ug/l	0.2	U	0.2	U	0.2	U	1.7		0.2	U
2-Chloronaphthalene	10 ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Fluoranthene	50 ug/l	0.2	U	0.2	U	0.2	U	0.11	J	0.2	U
Hexachlorobutadiene	0.5 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	10 ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Benzo(a)anthracene	0.002 ug/l	0.2	U	0.02	J	0.2	U	0.2	U	0.2	U
Benzo(a)pyrene	0 ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Benzo(b)fluoranthene	0.002 ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Benzo(k)fluoranthene	0.002 ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Chrysene	0.002 ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Acenaphthylene	NA ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Anthracene	50 ug/l	0.2	U	0.2	U	0.2	U	0.56		0.2	U
Benzo(ghi)perylene	NA ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Fluorene	50 ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Phenanthrene	50 ug/l	0.05	J	0.04	J	0.2	U	0.96		0.2	U
Dibenzo(a,h)anthracene	NA ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Indeno(1,2,3-cd)Pyrene	0.002 ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Pyrene	50 ug/l	0.2	U	0.2	U	0.2	U	0.36		0.2	U
2-Methylnaphthalene	NA ug/l	0.05	J	0.2	U	0.2	U	4.4		0.2	U
Pentachlorophenol	2 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Hexachlorobenzene	0.04 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Hexachloroethane	5 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

Notes
U - Not Detected
J - Value is Estimated
NA - Not Available
All concentrations are reported in micrograms per liter (ug/L) or parts per billion.

-Indicates value over NYSDEC TOGS

*NYSDEC Technical and Operational Guidance Series (1.1.1) Ambient water Quality Standards and Guidance Values and Groundwater Effluent Limitations June 1998

Table 7
Volatile Organic Compounds in Soil Vapor Samples
37-26 32nd Street & 37-27 31st Street
Queens, NY

Sample ID Matrix Date Sampled	SSV-1 Soil Vapor 9/8/2015	SSV-2 Soil Vapor 9/8/2015	SSV-3 Soil Vapor 9/8/2015	*NYSDOH 2006 Matrix1/Matrix 2 Sub-Slab Vapor
Volatile Organic Compounds				
Units	ug/m^3	ug/m^3	ug/m^3	ug/m^3
Dichlorodifluoromethane	8.31	46.2	ND	NVG
Chloromethane	ND	ND	ND	NVG
Freon-114	ND	ND	ND	NVG
Vinyl chloride	ND	ND	ND	5
1,3-Butadiene	ND	ND	ND	NVG
Bromomethane	ND	ND	ND	NVG
Chloroethane	ND	ND	ND	NVG
Ethanol	27.7	52.4	ND	NVG
Vinyl bromide	ND	ND	ND	NVG
Acetone	124	333	264	NVG
Trichlorofluoromethane	ND	15.5	ND	NVG
Isopropanol	7.62	15.5	ND	NVG
1,1-Dichloroethene	ND	ND	ND	100
Tertiary butyl Alcohol	19.1	47.9	ND	NVG
Methylene chloride	ND	ND	ND	NVG
3-Chloropropene	ND	ND	ND	NVG
Carbon disulfide	ND	16.7	ND	NVG
Freon-113	ND	ND	ND	NVG
trans-1,2-Dichloroethene	ND	ND	ND	NVG
1,1-Dichloroethane	ND	ND	ND	NVG
Methyl tert butyl ether	ND	ND	ND	NVG
2-Butanone	30.4	72	ND	NVG
cis-1,2-Dichloroethene	ND	ND	ND	100
Ethyl Acetate	ND	ND	ND	NVG
Chloroform	54.2	18.1	ND	NVG
Tetrahydrofuran	ND	ND	ND	NVG
1,2-Dichloroethane	ND	ND	ND	NVG
n-Hexane	ND	173	29.9	NVG
1,1,1-Trichloroethane	ND	ND	ND	100
Benzene	4.09	21	ND	NVG
Carbon tetrachloride	ND	ND	ND	5
Cyclohexane	ND	9.64	ND	NVG
1,2-Dichloropropane	ND	ND	ND	NVG
Bromodichloromethane	ND	ND	ND	NVG
1,4-Dioxane	ND	ND	ND	NVG
Trichloroethene	1,780	4,760	12,500	5
2,2,4-Trimethylpentane	ND	16.1	ND	NVG
Heptane	5.16	145	ND	NVG
cis-1,3-Dichloropropene	ND	ND	ND	NVG
4-Methyl-2-pentanone	17.6	46.7	ND	NVG
trans-1,3-Dichloropropene	ND	ND	ND	NVG
1,1,2-Trichloroethane	ND	ND	ND	NVG
Toluene	43.3	70.8	ND	NVG
2-Hexanone	6.8	11.6	ND	NVG
Dibromochloromethane	ND	ND	ND	NVG
1,2-Dibromoethane	ND	ND	ND	NVG
Tetrachloroethene	250	59.5	142	NVG
Chlorobenzene	ND	ND	ND	NVG
Ethylbenzene	10.3	17	ND	NVG
p/m-Xylene	37.6	58.6	ND	NVG
Bromoform	ND	ND	ND	NVG
Styrene	50.2	49.4	ND	NVG
1,1,2,2-Tetrachloroethane	ND	ND	ND	NVG
o-Xylene	16.1	24.7	ND	NVG
4-Ethyltoluene	7.67	ND	ND	NVG
1,3,5-Trimethylbenzene	8.31	10.8	ND	NVG
1,2,4-Trimethylbenzene	29.3	31.3	ND	NVG
Benzyl chloride	ND	ND	ND	NVG
1,3-Dichlorobenzene	ND	ND	ND	NVG
1,4-Dichlorobenzene	ND	ND	ND	NVG
1,2-Dichlorobenzene	ND	ND	ND	NVG
1,2,4-Trichlorobenzene	ND	ND	ND	NVG
Hexachlorobutadiene	ND	ND	ND	NVG

Notes:
ND - below the detection limits
NVG- No Value Given
ug/m^3 - micrograms per cubic meters

*NYSDOH guidence for evaluating Soil Vapor in the State of New York
Oct. 2006 Matrix 1 & 2 levels for "No Further Action"

Appendix A

Historical Reports

Tank Closure and Site Assessment Report

Prepared For
Steve Feinberg
37-27 31st St.
Long Island City, N.Y.

Prepared By
Mark Turoff, BS, MA, PEA, CSP
30 Barre Drive
Howell, N.J. 07731

October 17, 1998

Environmental Systems Group
M. Turoff, BS, MA, PEA, CSP

30 Barre Drive
Howell, New Jersey 07731-2052

Phone (917) 281-3740
Email ENVCOM30@AOL.COM

October 17, 1998

S. Feinberg
23 Heron Drive
Marlboro, N.J. 07746

Site: 37-27 31st St.
Long Island City, N.Y.

Tank Closure and Site Assessment Report

Background

M. Turoff, of Environmental Systems Group was contracted by Mr. Steve Feinberg to perform tank closure activities at the above location. The site is used as a warehouse to store various items used for shipping merchandise manufactured elsewhere. Storage of boxes, pallets, etc. is the general content of the building. At one time small delivery trucks were fueled by one pump alongside the overhead door to the warehouse.

Two 4000 gallon unleaded gasoline tanks exist on this site. They are of carbon steel and are buried. At the time of contract with Mr. Feinberg there was no known Petroleum Bulk Storage registration in existence for this site. An application was filed along with the appropriate fee to register and delist these tanks due to closure. According to the site owner these tanks had been emptied many years prior to this present activity.

As the tanks were within a building there were no gauge line openings to be able to sound the tanks. New York City Fire Code prohibits tanks within structures to have any openings to grade. Two old unusable Petrometers existed but were of no use in determing what, if anything was remaining in each tank. Two fill boxes existed directly in line with the tanks at the curbline in front of the building. Two vent lines traversed through the roof.

Field Activities

Field activities began on September 8, 1998 to begin excavation of two 4000 gallon unleaded gasoline tanks at the above captioned location.A 4'x4' area of concrete was broken out over each tank and hand digging was done to expose the tops of each tank. Soil over the tops of the tanks was screened with a Photoionization Detector and no hits were obtained. The vent and suction lines were blown back to the tanks to ensure that no product remained. A small opening was placed in each tank in order to sound the tanks and determine what was in them. The tanks were found to contain some water which was pumped by G and D Waste Recovery System for disposal. The tank atmospheres were monitored using a Combustible Gas Indicator to determine LEL and O2 levels. Dry ice was placed in each tank to vapor free them for additional cutting. Once the tanks were deemed safe the original openings were expanded to 3'x3' to accommodate entrance to the confined space.
The tanks were entered for cleaning and no sludge or other residue was found other than the water which was pumped out for disposal. The tanks were rag wiped clean. In addition, borings were also done around three sides (tanks were against the building wall) for sample collection. A sample from around the fills which had been inactive

for many years was screened and no hits were found on the PID. The former pump (which was no longer there sat on a containment box on top of a small island. The suction stubs were surrounded by concrete directly into the collection box. A sample was collected close to the island which was representative of the short piping run as well Screening of soils using a PID was done at various depths. Two groundwater samples were collected PID readings were very low, ranging from 0.0 to 2.6 ppm. (Appendix B) During interior tank cleaning procedures the tank interiors were inspected for rust, pitting, scaling and holes. The tank interiors were found to be in excellent condition.

The tanks were then filled with concrete slurry to the top of each tank. Each tank was filled with 20 cubic yards of slurry material. Tank tops were covered and the tanks were backfilled. The building floor was then recemented.

Laboratory Analysis

Samples were collected and placed in clean, laboratory supplied glassware for pickup by the laboratory. Groundwater was collected in tubes and preserved with HCl. All samples were placed in a cooler for preservation and transport. The samples were analyzed by EPA Method 8021 STARS protocol by a New York State Certified Laboratory. Laboratory results are found in Appendix C.

Summary

Laboratory analysis and field screening activities reveal no indication of any leakage from the tanks. No further action is recommended.

Disclaimer

This tank closure and site assessment report were prepared for the use of Steven Feinberg. Reasonable due diligence was exercised by the contractor in conducting this site assessment. The conclusions provided in this report are based solely on the information in this document. Migration of contaminants from surrounding sites in the future is always a possibility. It is also possible that unknown tanks may exist on this site as well, however this cannot be forseen. At the time of this investigation the conditions were as reported in this document. The conclusions are based on the current regulatory climate and may require revision if future regulatory changes occur. This investigation and report have been conducted in accordance with generally accepted practice. No other warranty expressed or implied is made.

Appendix A
Site Map

M. Turoff, BS, MA, PEA, CSP
Environmental Consulting Services
Phase I and II Assessments, Soil/Groundwater Testing, Remedial Systems
Page (917)281-3740
Voice Mail (917)335-5298
E-mail: Envcom 30 @ aol.com

Site Sampling Map

Client Feinberg Address

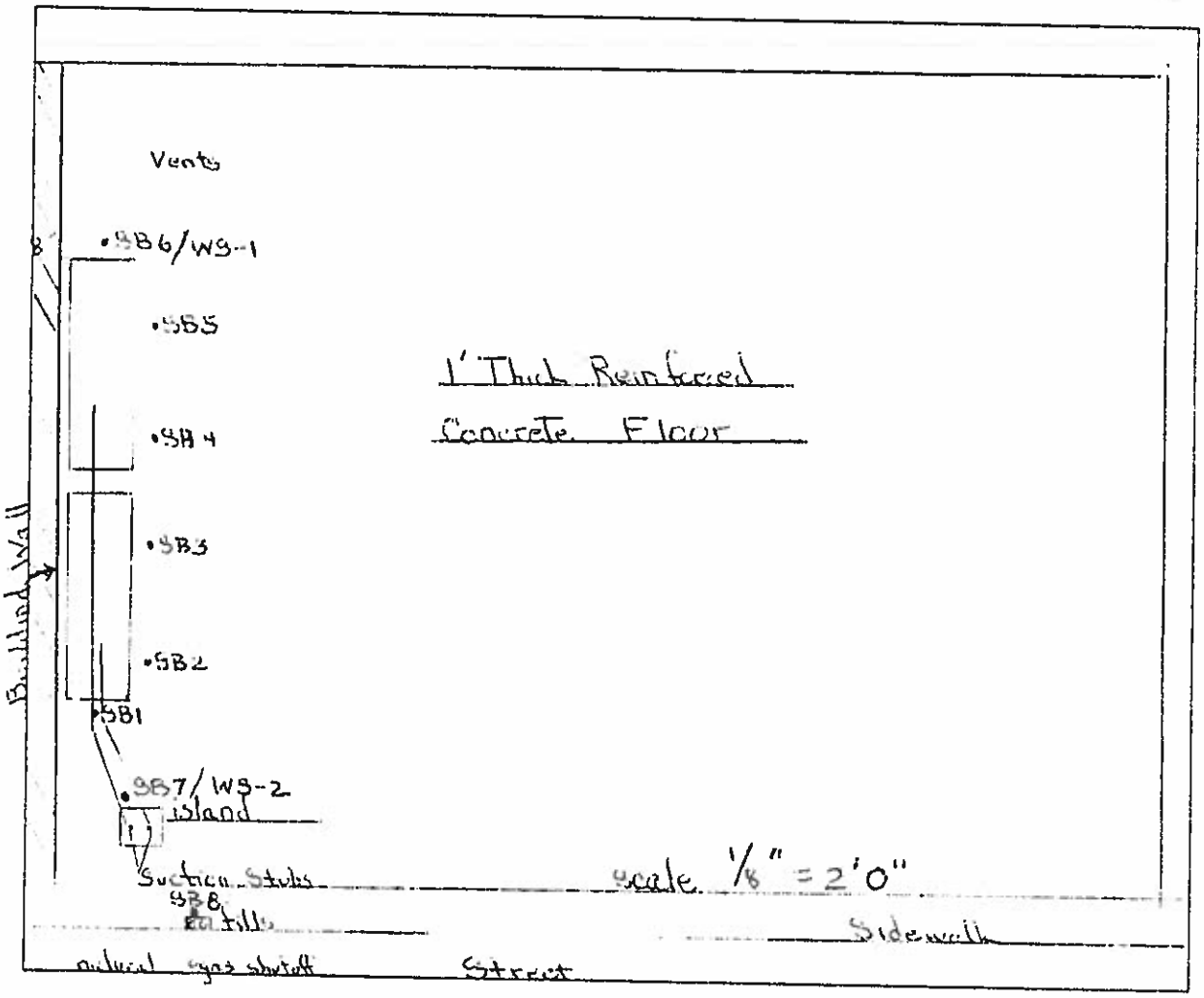
City Long Island City State NY Phone Fax

Tanks Removed/Sealed? Number 2 Sizes 4000 gal Material Steel SW/DW Encased Y/N

No. Soil Samples Collected 8 Collected Via: Drill Rig ✓ Geoprobe Excavation

No. Groundwater Samples 2 Collected Via: Wells Trapped Water Bore Hole ✓

Certified Laboratory ALI Date Samples Delivered 9-18-98



Appendix B

PID Readings

Environmental Systems Group

30 Barre Drive
Howell, New Jersey 07731-2052

Phone (917) 281-3740
Fax (718) 761-1248

9-8-98
Feinberg

PID Field Readings

Sample #	Depth	PID ppm
SB1	3-5	0.0
	5-7	0.2
	7-9	0.0
	9-11	0.0
SB2	3-5	0.0
	5-7	0.0
	7-9	0.0
	9-11	0.0
SB 3	3-5	0.2
	5-7	0.2
	7-9	0.0
	9-11	0.1
	11-13	0.0
SB-4	3-5	0.0
	5-7	(Concrete NS)
	7-9	(Concrete dust)
	9-11	0.0
	11-13	0.0
SB-5	3-5	0.0
	5-7	0.2
	7-9	0.1
	9-11	0.1
	11-13	0.0

Sample #	Depth	PID ppm
SB-6	3-5	0.0
	5-7	0.0
	7-9	0.0
	9-11	0.1
	11-13	0.0
	13-15	0.0 (Wet)
	15-17	0.0 (Wet)
	21'	G.W
SB-7	3-5	0.0
	5-7	0.2
	7-9	0.5
	9-11	2.6
	11-13	1.8
	13-15	0.6
	15-17	0.2 (Wet)
	17-19	0.0 (Wet)
	22'±6"	G.W.
SB-8	3-5	0.9
		Shallow Sample at fills

MJ

Appendix C
Laboratory Results

2 copies
orig to client
dup to client for DEC
dup to office.

ACCREDITED LABORATORIES, INC.
Implementing Tomorrow's Technology, Today™...

-1-

Analytical Data Report

for

Mark Turoff
30 Barre Drive
Howell, NJ 07731

Project: Feinberg

Accredited Laboratories Case No.: 1782
Date Received: 09/18/98

Field ID	Laboratory Sample #
SB-1	9810780
SB-2	9810781
SB-3	9810782
SB-4	9810783
SB-5	9810784
SB-6	9810785
SB-7	9810786
SB-8	9810787
WS-1	9810788
WS-2	9810789

Accredited Laboratories, Inc. New Jersey Certification Number 12007. This data has been reviewed and accepted by:

Yun-shen Lee, Ph.D. 10/1/98
Technical Director

(732) 541-2025
CORPORATE OFFICES
20 Pershing Avenue
Carteret, New Jersey 07008
FAX (732) 541-1383

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Accredited Labs

Chain of Custody

Client: Mark Turoff
Address: 30 Barre Drive
Howell, NJ 07731-2052

Project - Feinberg
Contact - Mark Turoff
Page - (917) 281-3740

ALI Sample	Field ID	*C	**M	Date/Time Sampled	Sample Description	Analysis
9810780	SB-1	1	S	9-8-98 9:10 AM	Bottom Street End ②	8021 STARS
9810781	SB-2	1	S	9-8-98 9:50 AM	Side	
9810782	SB-3	1	S	9-8-98 10:35 AM	Side	
9810783	SB-4	1	S	9-8-98 11:00 AM	Side	
9810784	SB-5	1	S	9-8-98 12:10 PM	Side	
10785	SB-6	1	S	9-8-98 1:05 PM	Bottom Back Wall End	
9810786	SB-7	1	S	9-8-98 1:50 PM	Island	
9810787	SB-8	1	S	9-8-98 2:40 PM	Fills	
9810788	WS-1	1	A	9-8-98 9:20 AM	Upgrad	8021 STARS
9810789	WS-2	1	A	11:05 AM	Downgrad	

Turnaround: Standard
Deliverables: Reduced

Relinquished By: Print	Sign	Received By: Print	Sign	Org	Date	Time	Reason
M Turoff		N Antonelli		ALI	9/18/98	14:00	Analysis

Person Assuming Responsibility for Sampling: M Turoff

Comments: 8021 STARS NYS

01782

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J.

Name: N. ANTONELLI Title: SRC

Field Sample Seal No. None Date Broken: __/__/__ Military Time Seal Broken _____

Case No. 1782 ✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
SB-1	9810780	VO	08/15/98	09/18/98
SB-2	9810781	VO	08/15/98	09/18/98
SB-3	9810782	VO	08/15/98	09/18/98
SB-4	9810783	VO	08/15/98	09/18/98
SB-5	9810784	VO	08/15/98	09/18/98
SB-6	9810785	VO	08/15/98	09/18/98
SB-7	9810786	VO	08/15/98	09/18/98
SB-8	9810787	VO	08/15/98	09/18/98
WS-1	9810788	VO	08/15/98	09/18/98
WS-2	9810789	VO	08/15/98	09/18/98

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
9/24		Printed Name N. ANTONELLI Signature	Printed Name J SAUERBRO Signature	ANALYSIS
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

FORM: 291COC

METHODOLOGY SUMMARY

Volatile Organics - EPA 8021 (aqueous)

An inert gas is purged through a 5 ml sample at room temperature. The vapor is swept through a sorbent column where the purgeables are trapped. After purging is completed, the sorbent column is heated and back-flushed with the inert gas to desorb the purgeables onto a capillary GC column. The GC is temperature programmed to separate the purgeables which are then detected with a photoionization detector for aromatics and/or an electrolytic conductivity detector for chlorinated volatiles.

Volatile Organics - EPA 8021 (soil)

An inert gas is purged through a 5 g sample at elevated temperature. Alternatively the soil is extracted with methanol. A portion of extract is spiked into a purging vessel and purged by an inert gas. The vapor is swept through a sorbent column where the purgeables are trapped. After purging is completed, the sorbent column is heated and back-flushed with the inert gas to desorb the purgeables onto a GC column. The GC is temperature programmed to separate the purgeables which are then detected with a photoionization detector.

Date: 09/21/98 ACCREDITED LABORATORIES, INC. Time: 14:15:55

ORGANIC ANALYSIS LABORATORY CHRONICLE

STARS 8021

Client: Mark Turoff
Fax Data Due: **09/21/98**
Test Date Due: 08/29/98
Hard Copy Due: **09/21/98**
Client Project Name: Feinberg

Date Sampled:08/15/98 Date Received:09/18/98 Report Package: Reduced

Test: VO
Test Description:Volatile Organics (VO)
QC#:

By Method:

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
SB-1	1782	9810780	S				9/24/98			
SB-2	1782	9810781	S							
SB-3	1782	9810782	S							
SB-4	1782	9810783	S							
SB-5	1782	9810784	S							
SB-6	1782	9810785	S							
SB-7	1782	9810786	S							
SB-8	1782	9810787	S				9/25/98			
WS-1	1782	9810788	A							
WS-2	1782	9810789	A							

Reviewed by: S.Q. Date: 9/30/98

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other

RPT:Report01

STATE OF NEW JERSEY

DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

Let's protect our earth

Certifies That

Accredited Laboratories, Inc.
Foot of Pershing Avenue
P.O. Box 369
Carteret, New Jersey 07008

having duly met the requirements of the

Regulations Governing Laboratory Certification
And Standards Of Performance N.J.A.C. 7:18 et. seq.

is hereby approved as a

State Certified Environmental Laboratory

To perform the analyses as indicated on the Annual Certified Parameter List which must accompany this certificate to be valid

12007
PERMANENT CERTIFICATION NUMBER

October 28, 1994
DATE

COMMISSIONER, DEPARTMENT OF
ENVIRONMENTAL PROTECTION AND ENERGY

This certification is subject to unannounced laboratory inspections as specified by N.J.A.C. 7:18-2.11(d) and agreed to by the Laboratory Manager on filing the application

ACCREDITED LABORATORIES, INC.
SW-846 METHOD 8021

CASE NUMBER	1782	MATRIX	Soil
SAMPLE NUMBER	9810780	DILUTION FACTOR	1
DATA FILE	>N1231	DATE EXTRACTED	
CLIENT NAME	MT	DATE ANALYZED	09/24/98
FIELD ID	SB-1	ANALYZED BY	JANICE

CAS #	COMPOUND	ug/Kg	MDL
71432	Benzene	U	2.0
108883	Toluene	U	2.0
100414	Ethylbenzene	U	2.0
1330207	m+p-Xylene	U	2.0
95476	o-Xylene	U	2.0
98828	Isopropylbenzene	U	1.0
103651	n-Propylbenzene	U	1.0
108678	1,3,5-Trimethylbenzene	U	1.0
98066	tert-Butylbenzene	U	1.0
95636	1,2,4-Trimethylbenzene	U	1.0
135988	sec-Butylbenzene	U	1.0
99876	4-Isopropyltoluene	U	1.0
104518	n-Butylbenzene	U	1.0
91203	Naphthalene	U	1.0
1634044	Methyl t-butyl ether	U	1.0

Percent Solid of 99.2 is used for all target compounds.

U - Indicates compound analyzed for but not detected
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.
SW-846 METHOD 8021

CASE NUMBER	1782	MATRIX	Soil
SAMPLE NUMBER	9810781	DILUTION FACTOR	1
DATA FILE	>N1232	DATE EXTRACTED	
CLIENT NAME	MT	DATE ANALYZED	09/24/98
FIELD ID	SB-2	ANALYZED BY	JANICE

CAS #	COMPOUND	ug/Kg	MDL
71432	Benzene	U	2.0
108883	Toluene	U	2.0
100414	Ethylbenzene	U	2.0
1330207	m+p-Xylene	U	2.0
95476	o-Xylene	U	2.0
98828	Isopropylbenzene	U	1.0
103651	n-Propylbenzene	U	1.0
108678	1,3,5-Trimethylbenzene	U	1.0
98066	tert-Butylbenzene	U	1.0
95636	1,2,4-Trimethylbenzene	U	1.0
135988	sec-Butylbenzene	U	1.0
99876	4-Isopropyltoluene	U	1.0
104518	n-Butylbenzene	U	1.0
91203	Naphthalene	U	1.0
1634044	Methyl t-butyl ether	U	1.0

Percent Solid of 98.9 is used for all target compounds.

U - Indicates compound analyzed for but not detected
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.
SW-846 METHOD 8021

CASE NUMBER	1782	MATRIX	Soil
SAMPLE NUMBER	9810782	DILUTION FACTOR	1
DATA FILE	>N1233	DATE EXTRACTED	
CLIENT NAME	MT	DATE ANALYZED	09/24/98
FIELD ID	SB-3	ANALYZED BY	JANICE

CAS #	COMPOUND	ug/Kg	MDL
71432	Benzene	U	2.0
108883	Toluene	U	2.0
100414	Ethylbenzene	U	2.0
1330207	m+p-Xylene	U	2.0
95476	o-Xylene	U	2.0
98828	Isopropylbenzene	U	1.0
103651	n-Propylbenzene	U	1.0
108678	1,3,5-Trimethylbenzene	U	1.0
98066	tert-Butylbenzene	U	1.0
95636	1,2,4-Trimethylbenzene	U	1.0
135988	sec-Butylbenzene	U	1.0
99876	4-Isopropyltoluene	U	1.0
104518	n-Butylbenzene	U	1.0
91203	Naphthalene	U	1.0
1634044	Methyl t-butyl ether	U	1.0

Percent Solid of 98.3 is used for all target compounds.

U - Indicates compound analyzed for but not detected
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.
SW-846 METHOD 8021

CASE NUMBER	1782	MATRIX	Soil
SAMPLE NUMBER	9810783	DILUTION FACTOR	1
DATA FILE	>N1234	DATE EXTRACTED	
CLIENT NAME	MT	DATE ANALYZED	09/24/98
FIELD ID	SB-4	ANALYZED BY	JANICE

CAS #	COMPOUND	ug/Kg	MDL
71432	Benzene	U	2.0
108883	Toluene	U	2.0
100414	Ethylbenzene	U	2.0
1330207	m+p-Xylene	U	2.0
95476	o-Xylene	U	2.0
98828	Isopropylbenzene	U	1.0
103651	n-Propylbenzene	U	1.0
108678	1,3,5-Trimethylbenzene	U	1.0
98066	tert-Butylbenzene	U	1.0
95636	1,2,4-Trimethylbenzene	U	1.0
135988	sec-Butylbenzene	U	1.0
99876	4-Isopropyltoluene	U	1.0
104518	n-Butylbenzene	U	1.0
91203	Naphthalene	U	1.0
1634044	Methyl t-butyl ether	U	1.0

Percent Solid of 98.3 is used for all target compounds.

U - Indicates compound analyzed for but not detected
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.
SW-846 METHOD 8021

CASE NUMBER	1782	MATRIX	Soil
SAMPLE NUMBER	9810784	DILUTION FACTOR	1
DATA FILE	>N1235	DATE EXTRACTED	
CLIENT NAME	MT	DATE ANALYZED	09/24/98
FIELD ID	SB-5	ANALYZED BY	JANICE

CAS #	COMPOUND	ug/Kg	MDL
71432	Benzene	U	2.6
108883	Toluene	U	2.6
100414	Ethylbenzene	U	2.6
1330207	m+p-Xylene	U	2.6
95476	o-Xylene	U	2.6
98828	Isopropylbenzene	U	1.3
103651	n-Propylbenzene	U	1.3
108678	1,3,5-Trimethylbenzene	U	1.3
98066	tert-Butylbenzene	U	1.3
95636	1,2,4-Trimethylbenzene	U	1.3
135988	sec-Butylbenzene	U	1.3
99876	4-Isopropyltoluene	U	1.3
104518	n-Butylbenzene	U	1.3
91203	Naphthalene	U	1.3
1634044	Methyl t-butyl ether	U	1.3

Percent Solid of 77.4 is used for all target compounds.

U - Indicates compound analyzed for but not detected
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

11

ACCREDITED LABORATORIES, INC.
SW-846 METHOD 8021

CASE NUMBER	1782	MATRIX	Soil
SAMPLE NUMBER	9810785	DILUTION FACTOR	1
DATA FILE	>N1236	DATE EXTRACTED	
CLIENT NAME	MT	DATE ANALYZED	09/24/98
FIELD ID	SB-6	ANALYZED BY	JANICE

CAS #	COMPOUND	ug/Kg	MDL
71432	Benzene	U	2.4
108883	Toluene	U	2.4
100414	Ethylbenzene	U	2.4
1330207	m+p-Xylene	U	2.4
95476	o-Xylene	U	2.4
98828	Isopropylbenzene	U	1.2
103651	n-Propylbenzene	U	1.2
108678	1,3,5-Trimethylbenzene	U	1.2
98066	tert-Butylbenzene	U	1.2
95636	1,2,4-Trimethylbenzene	U	1.2
135988	sec-Butylbenzene	U	1.2
99876	4-Isopropyltoluene	U	1.2
104518	n-Butylbenzene	U	1.2
91203	Naphthalene	U	1.2
1634044	Methyl t-butyl ether	U	1.2

Percent Solid of 81.9 is used for all target compounds.

U - Indicates compound analyzed for but not detected
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.
SW-846 METHOD 8021

CASE NUMBER	1782	MATRIX	Soil
SAMPLE NUMBER	9810786	DILUTION FACTOR	1
DATA FILE	>N1237	DATE EXTRACTED	
CLIENT NAME	MT	DATE ANALYZED	09/24/98
FIELD ID	SB-7	ANALYZED BY	JANICE

CAS #	COMPOUND	ug/Kg	MDL
71432	Benzene	U	2.5
108883	Toluene	U	2.5
100414	Ethylbenzene	U	2.5
1330207	m+p-Xylene	U	2.5
95476	o-Xylene	U	2.5
98828	Isopropylbenzene	U	1.2
103651	n-Propylbenzene	U	1.2
108678	1,3,5-Trimethylbenzene	U	1.2
98066	tert-Butylbenzene	U	1.2
95636	1,2,4-Trimethylbenzene	U	1.2
135988	sec-Butylbenzene	U	1.2
99876	4-Isopropyltoluene	U	1.2
104518	n-Butylbenzene	U	1.2
91203	Naphthalene	U	1.2
1634044	Methyl t-butyl ether	U	1.2

Percent Solid of 80.5 is used for all target compounds.

U - Indicates compound analyzed for but not detected
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.
SW-846 METHOD 8021

CASE NUMBER	1782	MATRIX	Soil
SAMPLE NUMBER	9810787	DILUTION FACTOR	1
DATA FILE	>N1246	DATE EXTRACTED	
CLIENT NAME	MT	DATE ANALYZED	09/25/98
FIELD ID	SB-8	ANALYZED BY	JANICE

CAS #	COMPOUND	ug/Kg	MDL
71432	Benzene	U	2.4
108883	Toluene	U	2.4
100414	Ethylbenzene	U	2.4
1330207	m+p-Xylene	U	2.4
95476	o-Xylene	U	2.4
98828	Isopropylbenzene	U	1.2
103651	n-Propylbenzene	U	1.2
108678	1,3,5-Trimethylbenzene	U	1.2
98066	tert-Butylbenzene	U	1.2
95636	1,2,4-Trimethylbenzene	U	1.2
135988	sec-Butylbenzene	U	1.2
99876	4-Isopropyltoluene	U	1.2
104518	n-Butylbenzene	U	1.2
91203	Naphthalene	U	1.2
1634044	Methyl t-butyl ether	U	1.2

Percent Solid of 82.9 is used for all target compounds.

U - Indicates compound analyzed for but not detected
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.
SW-846 METHOD 8021

CASE NUMBER	1782	MATRIX	Aqueous
SAMPLE NUMBER	9810788	DILUTION FACTOR	1
DATA FILE	>N1250	DATE EXTRACTED	
CLIENT NAME	MT	DATE ANALYZED	09/25/98
FIELD ID	WS-1	ANALYZED BY	JANICE

CAS #	COMPOUND	ug/L	MDL
71432	Benzene	U	1.0
108883	Toluene	U	1.0
100414	Ethylbenzene	U	1.0
1330207	m+p-Xylene	U	2.0
95476	o-Xylene	U	2.0
98828	Isopropylbenzene	U	1.0
103651	n-Propylbenzene	U	1.0
108678	1,3,5-Trimethylbenzene	U	1.0
98066	tert-Butylbenzene	U	1.0
95636	1,2,4-Trimethylbenzene	U	1.0
135988	sec-Butylbenzene	U	1.0
99876	4-Isopropyltoluene	U	1.0
104518	n-Butylbenzene	U	1.0
91203	Naphthalene	U	1.0
1634044	Methyl t-butyl ether	U	1.0

U - Indicates compound analyzed for but not detected
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.
SW-846 METHOD 8021

CASE NUMBER	1782	MATRIX	Aqueous
SAMPLE NUMBER	9810789	DILUTION FACTOR	1
DATA FILE	>N1251	DATE EXTRACTED	
CLIENT NAME	MT	DATE ANALYZED	09/25/98
FIELD ID	WS-2	ANALYZED BY	JANICE

CAS #	COMPOUND	ug/L	MDL
71432	Benzene	U	1.0
108883	Toluene	U	1.0
100414	Ethylbenzene	U	1.0
1330207	m+p-Xylene	U	2.0
95476	o-Xylene	U	2.0
98828	Isopropylbenzene	U	1.0
103651	n-Propylbenzene	U	1.0
108678	1,3,5-Trimethylbenzene	U	1.0
98066	tert-Butylbenzene	U	1.0
95636	1,2,4-Trimethylbenzene	U	1.0
135988	sec-Butylbenzene	U	1.0
99876	4-Isopropyltoluene	U	1.0
104518	n-Butylbenzene	U	1.0
91203	Naphthalene	U	1.0
1634044	Methyl t-butyl ether	U	1.0

U - Indicates compound analyzed for but not detected
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

GZA
GeoEnvironmental, Inc.

Engineers and Scientists

February 13, 2015
GZA Project No.: 41.016268.20

Charles Herzka
Managing Member
31/32 LIC, LLC

c/o NorthEnd Equities, LLC
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New York, NY 10006

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Re: Limited Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
Long Island City, NY

Dear Mr. Herzka:

Please find attached the above referenced Report for 37-21 31st Street and 37-26 32nd Street, Long Island City, NY. If you have any questions or comments please contact the undersigned at 212-594-8140.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Clifford Bell, CPG, LEED AP
Senior Project Manager

for Ben Alter, P.G.
Consultant Reviewer

John M. Gavras, P.G., CPG
Associate Principal-in-Charge

Attachments:
Limited Remedial Investigation Report

An Equal Opportunity Employer M/F/V/H

LIMITED REMEDIAL INVESTIGATION REPORT
37-27 31ST STREET
AND 37-26 32ND STREET
LONG ISLAND CITY, NEW YORK

Prepared for:

31/32 LIC, LLC
c/o NorthEnd Equities, LLC
45 Broadway, Suite 630
New York, NY 10006

Prepared by:

GZA GeoEnvironmental, Inc.
104 West 29th Street, 10th Floor
New York, New York 10001

February 2015
File No. 41.0162268.00

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REMEDIAL INVESTIGATION REPORT

1.0 SITE BACKGROUND

At the request of 31/32 LIC, LLC (the Client), GZA GeoEnvironmental, Inc. (GZA) was retained to perform a Limited Remedial Investigation (LRI) of an approximate 0.40-acre parcel located at 37-27 31st Street and 37-26 32nd Street in Long Island City, Queens, New York (the Site). The future proposed use of the Site will be for residential use. The LRI work was performed between December 16 and December 18, 2014 and on January 22, 2015 in accordance with our proposal to the client dated December 4, 2014. Limitations to this Report are presented in **Appendix A**.

Please note that this Limited Remedial Investigation was performed to support the Client's pre-purchase due diligence activities and to meet the intent of but not the minimum requirements of the New York City Office of Environmental Remediation OER Hazmat "E"-Designation for the sites. These full requirements would be finalized during a Pre-Application meeting with the OER prior to formalizing OER required documents.

1.1 Site Location and Current Usage

Collectively, the Site comprises 37-27 31st Street and 37-26 32nd Street in the Long Island City, New York and is identified as Block 373 and Lot Nos. 6 and 45 on the New York City Tax Map. **Figure 1** shows the Site location. The Site is approximately 16,850 square feet and is bounded by 31st Street to the west, 32nd Street to the east, Lot 12 to the north (developed with a six-story commercial/ residential building), and Lots 1 and 47 to the south (developed with one-story commercial/light manufacturing buildings). A map of the site boundary is shown in **Figure 2**. Currently, the Site is developed with one-story brick buildings on both lots. The building on Lot 6 was built circa 1953, and at the time of GZA's Site reconnaissance on December 14, 2014, the Lot 6 building was partitioned into spaces that were occupied by an auto body shop, a food cart preparation and refrigeration shop and a food cart manufacturing shop. The building on Lot 45 was built around 1930, and the building was unoccupied at the time of GZA's inspection.

1.2 Proposed Redevelopment Plan

The proposed future use of the Site will consist of redeveloping the lots with a six-story residential building potentially including basement levels.

1.3 Description of Surrounding Property

During the Site reconnaissance, GZA observed the following land use on properties in the immediate vicinity of the Site:

Direction From the Site		Street Address	Property Use
North	Adjoining	37-21 31st Street	Mixed Residential/Commercial
East	Across 32nd Street	37-27 32nd Street	Commercial
		37-29 32nd Street	Industrial Manufacturing
South	Adjoining	31-01 38th Avenue	Transportation and Utility
		31-17 38th Avenue	Industrial Manufacturing
West	Across 31st Street	37-11 30th Street	Industrial Manufacturing

The Site is located in an area predominantly zoned for light manufacturing/medium density residential (M1-2/R6A) based on the City of New York Department of City Planning zoning maps. The Site is also within the *Long Island City Special Purpose District*, a zoning resolution that promotes the area's redevelopment.

1.4 Physiography

Regional Physiography

Based on information published by the United States Geological Survey 7.5 Minute Series 2013 Topographic Map of Central Park, New York Quadrangle, the Site is located between 30 to 40 feet above mean sea level (NAVD 88). The topographic gradient of the Site and the surrounding area gradually slopes to the nearest water bodies – to the west towards the East River (approximately 4,700 feet from the Site), and to the southwest towards Dutch Kills (approximately 4,500 feet from the Site).

Soil and Rock Conditions

The regional geology of Queens County is comprised of sequences of Wisconsin age Upper Pleistocene glacial moraine (northern part) and outwash (southern part) deposits comprised of sand, gravel, cobbles, silt and clay; and glacial-drift materials comprised of lacustrine deposits, till, sand, gravel, and in some areas, fossil plant material disseminated in fine grained deposits. Pre-Cambrian metamorphic bedrock underlying Queens is comprised of folded and faulted Ravenswood Granodiorite, and in some areas, Proterozoic Fordham Gneiss. The estimated depth to bedrock is greater than 100 feet below ground surface (bgs).

Groundwater Conditions

Physiographically, Queens County is part of Long Island's hydrogeologic system. In a roughly north-south section, the geology can be characterized as a wedge shaped layer of Cretaceous and Pleistocene unconsolidated sediments, thickening south-southeast with several impermeable layers creating three distinct glacial aquifers. The water table is within the uppermost hydrogeologic unit or the Upper Glacial Aquifer.

Based on the review of data provided by Environmental Data Resources Inc. (EDR) and the Site topography, groundwater is inferred to flow south-southwest towards Dutch Kills. However, localized flow direction in the vicinity of the Site might vary as a result of underground utilities, dewatering pumping or heterogeneous subsurface conditions. Subsequent references to upgradient and downgradient properties are based on the estimated southwesterly groundwater flow direction.

2.0 SITE HISTORY

2.1 Past Uses and Ownership

The Site and its surrounding properties were undeveloped until circa 1915 when 3rd Avenue traversed the Site from northeast to southwest. By 1936, the Site was improved by a one-story brick building on the east (on what is now Lot 45) and was occupied by a kindling wood factory. From 1947 until c. 1950s, a plating works factory occupied Lot 45 while the rest of the Site (on what is now Lot 6) was used as a storage facility for second hand lumber.

From circa 1970 until 1979, Lot 45 was occupied by a welding equipment warehouse facility. In 1980 the property on Lot 45 was converted to an auto body facility and was used as such until June 2014. Lot 45 is currently unoccupied.

Lot 6 was improved by a one-story brick building around 1953 and was used by Gotham Lighting as a lighting equipment factory. The lighting factory ceased operations in 1977 and the property was converted into what is currently an active auto body shop on the northwest area of the Lot. The remainder of the parcel was used as a food cart manufacturing/metal shop facility beginning in 2004 and a food cart preparation and refrigeration facility beginning in 2008.

2.2 Previous Investigations

A tank abandonment letter dated September 24, 1996 was provided by Pro Test Enterprises, NYCFD Certificate 69151165 for the property at 37-26 32nd Street. The documentation indicated the 550 gallon waste oil tank was abandoned in place by removing lines, cleaning and purging, and backfilling with concrete.

A Phase I Site Assessment dated September 24, 1996 was provided by Freudenthal & Elkowitz Consulting Group, Inc. for the property at 37-26 32nd Street.

On September 8, 1998, Mark Turoff of Environmental Systems Group of Howell, New Jersey performed tank closure activities at 37-27 31st Street Site at the request of Steve Fienberg. Two-4,000-gallon carbon-steel underground storage tanks were registered, delisted, and closed-in-place. The tanks were found to only contain water and were emptied by G and D Waste Recovery. Soil and groundwater samples around the tanks were collected and revealed no indication of impacts. The tanks were filled with 20 cubic yards of concrete slurry, covered, backfilled and the concrete slab restored.

GZA performed a Phase I Environmental Site Assessment (ESA) dated February 1, 2015 as a companion document to this Remedial Investigation. The Phase I ESA is summarized in **Sections 2.3 and 2.4**.

2.3 Site Reconnaissance

GZA performed Site reconnaissance on December 15, 2014 to make surficial observations for evidence of RECs that could result in the presence of oil or hazardous materials in the environment. GZA Project Scientist Reinbill Maniquez conducted the reconnaissance under the direction of Clifford Bell, the Qualified Environmental Professional (QEP). The reconnaissance occurred in the presence of owner Pablo Cosma of 37-26 32nd Street and owner Mr. Feinberg of 37-27 31st Street. Observations were documented, and pertinent features and/or areas of environmental concern were photographed and referenced in the text. Pertinent Site features and areas of environmental concern are depicted in **Figure 2 - Site Plan**. A summary of each area assessed is presented below.

2.4 Areas of Concern

The AOCs identified for this Site include:

37-26 32nd Street:

1. Storage of Petroleum-like fluids and floor sump in area between Garage Bay Entry Doors
2. Closed-in-Place Waste Oil Underground Storage Tank
3. Hydraulic lift and unknown location of hydraulic fluid tank

37-27 31st Street:

1. Food Cart Manufacturing Area: area in southeast area of space including compressors, drums, and historic aboveground storage tank
2. Food Cart Manufacturing Area: storage without secondary containment of chemicals and solvents and general operations of sheet metal work using hydraulic machinery and equipment
3. South Garage Bay Entry Door: Documented Closed-in-place two-4,000 gallon tanks and potential lines and dispenser
4. Storage without secondary containment of chemicals and solvents in Auto Body Space

3.0 PROJECT MANAGEMENT

3.1 Project Organization

The Qualified Environmental Professional (QEP) responsible for preparation of this RIR is Clifford Bell. The Principal-in-Charge is John M. Gavras. All fieldwork was performed under the direction of Messrs. Bell and Gavras.

3.2 Health and Safety

All work described in this RIR was performed in full compliance with applicable laws and regulations, including Site and OSHA worker safety requirements and HAZWOPER requirements. All field personnel and subcontractors read and signed GZA's OSHA-required, site-specific health and safety plan prior to the start of work.

3.3 Materials Management

Drill cuttings and groundwater were generated during drilling activities. These materials were disposed of in the respective boreholes after drilling of each boring as there were no indications of olfactory or visual contamination. Aquifer Drilling and Testing (ADT), the drilling subcontractor, filled and grouted all slab openings after drilling was complete.

4.0 REMEDIAL INVESTIGATION ACTIVITIES

The Client contracted GZA with the support of GZA's subcontractors to perform the following scope of work relative to RECs identified during Phase I activities:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.)

2. A geophysical survey was performed to investigate for the presence of subsurface structures including: subsurface piping, utility lines and buried structures. The survey was also implemented as a means to identify additional environmental factors such as potential Underground Storage Tanks (USTs)

3. Installed eight (8) soil borings across the entire project Site to 15 feet below grades surface (bgs), and collected sixteen (16) soil samples for chemical analysis from the soil borings to evaluate soil quality

4. Installed two (2) temporary groundwater well points to approximately 30 feet bgs and collected 2 groundwater samples for chemical analysis to evaluate groundwater quality

5. Installed four (4) soil vapor probes to a maximum depth of 17 feet and collected samples for chemical analysis

6. Collected six (6) shallow core samples from the building's floor to evaluate potential impacts to the concrete slab.

4.1 Geophysical Investigation

On December 16, 2014, NOVA Geophysical Engineering of Douglaston, NY performed a geophysical survey at the Site. NOVA conducted a Subsurface Utility Engineering (SUE) survey utilizing a Comprehensive Surface Utility Locator (CSUL) Pipe and Cable Locator (a magnetic detector), a Ditch-Witch utility locator and an Electromagnetic (EM) detector (Geonics EM61), to identify any current or former utilities or other embedded conduits that maybe located within the Site boundaries. NOVA also surveyed the Site with a Noggin's ground penetrating radar (GPR) with 250 MHz antennas to identify anomalies, to identify the presence of USTs and associated subsurface piping, voids, and other abnormalities that maybe located at the project area.

As detailed in a Geophysical Survey Report prepared by NOVA dated December 18, 2014, several subsurface anomalies were detected at the Site during the geophysical survey. In summary:

1. The survey identified scattered anomalies located throughout the project site. Based on

their rates and proximity, these anomalies were inconsistent with any USTs. These areas were indicated on the on-site.

2. Several utilities (sewer, gas, water and electric) were located on the site. These utilities were marked out both at the site and on the survey map.

3. A large anomaly, potentially consistent with a known UST, was located on site at 37-26 32nd Street. This was marked out on the site and is indicated on the survey map. Due to lack of access the technician was unable to scan an area in the property on 37-27 31st Street likely containing USTs.

4. Nova cleared and marked all of the proposed boring locations at the time of the survey.

The Geophysical Report including a figure depicting structures is presented in **Appendix B**.

4.2 Borings and Monitoring Wells

Drilling and Soil Logging

GZA subcontracted Aquifer Drilling and Testing (ADT) to install eight (8) soil borings on December 17-18, 2014. Soil borings are identified as T-1 through T-8.

ADT advanced the soil borings using a Geoprobe® 6620 equipped with a 2-inch inside diameter Macrocore® soil sampling unit with an acetate liner sleeve. Soil core was collected continuously at 5- foot intervals beginning from surface grade to a depth of 15 feet bgs. GZA personnel screened the soil cores for the presence of total organic vapors (TOVs) using a photoionization detector (PID) equipped with a 10.6 eV lamp, visually observed for staining, and classified recovered soil using the modified Burmister soil classification system. Visual and olfactory evidence of impacted soil was not observed in any of the 8 borings. TOV screening results showed impacts of < 20 parts per million (ppm) across the eight (8) boring locations, with one exception. A PID reading of 37.1 ppm was observed in boring T-8 at 3 feet bgs. Boring logs are provided in **Appendix C**. The location of soil borings are shown in **Figure 2**.

Groundwater Monitoring Well Construction

On December 17-18, 2014, GZA observed the installation of two (2) temporary groundwater monitoring wells, identified as TW-1, and TW-2. ADT installed the wells utilizing their Geoprobe® drill rig. The 1-inch diameter PVC monitoring wells were set at 30 feet bgs and were constructed with 10 feet of 0.020 slot screen and 20 feet of solid PVC riser. The locations of TW-1 and TW-2 are shown in **Figure 2**. The boring logs and well constructions are presented in **Appendix C**.

Metal Tape Survey

The location of each exploration was measured from at least two permanent site features using a standard metal tape measure to the nearest 0.5 feet. These measurements were used to position the location of the explorations on a scaled base map. Exploration locations are presented in **Figure 2**.

Water Level Measurement

On December 17-18, 2014, prior to sampling of the temporary wells, depth to water in well TW-1 and TW-2 was gauged using a water-level meter. Depth to groundwater was measured at approximately 23.0 feet bgs in TW-1, and 23.5 feet bgs in TW-2. These measurements should be considered approximate representations of depth to groundwater. More accurate measurements might be obtained from a permanently constructed well that is allowed to stabilize for a minimum period of one week.

4.3 Sample Collection and Chemical Analysis

Sampling was conducted for all Areas of Concern and also considered other means for bias of sampling based on professional judgment, area history, discolored soil, stressed vegetation, drainage patterns, field instrument measurements, odor, or other field indicators. Media including soil, groundwater and soil vapor have been sampled and evaluated as part of this RIR. Discrete (grab) samples have been used for final delineation of the nature and extent of contamination and to determine the impact of contaminants on public health and the environment.

Soil Sampling

Soil core was collected continuously within acetate liner sleeves inside the Macrocore® samplers to refusal. All borings were advanced to a depth of 15 feet bgs. A new acetate sleeve was used for each sample interval (i.e. 0 to 5 feet and 5 to 10 feet).

Visual and olfactory evidence of impacted soil was not observed in any of the eight (8) borings and there was no significantly higher PID response other than the value observed at T-8 (3- to 5-foot). Therefore, GZA collected one discrete (grab) shallow sample from the 3- to 5- foot depth interval, and a second sample from the 13- to 15- foot interval within each boring. Samples were collected analyzed for Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs), organochlorine pesticides and Polychlorinated Biphenyls (PCBs), and Target Analyte List (TAL) metals.

Construction details, including depths for the soil borings, are included in Table 1 Construction Details for Subsurface Explorations. Table 2 at the end of this section presents the chemical analytical methods performed.

Groundwater Sampling

Two groundwater samples were collected for chemical analysis during this RI. Wells were first purged using a peristaltic pump while field parameters were monitored using a YSI meter. After purge waters from well points TW-1 and TW-2 were adequately stabilized using low flow sampling techniques, samples were collected in laboratory supplied bottleware preserved as appropriate. Groundwater samples were packed in ice and transported under proper chain-of-custody procedures to Alpha Analytical Laboratories (Alpha) of Westborough, Massachusetts. Alpha is accredited in the Environmental Laboratory Approval Program, (ELAP License No. 11148), and is a certified lab for SW-846 solid and hazardous waste methods. A sampling log with information on purging and sampling of groundwater from the temporary wells is included in **Appendix D**. Laboratories and analytical methods are presented at the end of this section.

Soil Vapor Sampling

Four soil vapor probes were installed and four soil vapor samples were collected for chemical analysis during this RI. Soil vapor sampling locations (SV-1, SV-1D, SV-2 and SV-2D) are shown in **Figure 2**. All soil vapor points were installed using a Geoprobe® equipped with a 2-inch diameter hammer rod, continuously advanced into the subsurface to approximately 5 to 15 feet bgs. SV-1 and SV-2 were installed to a depth of 5 feet bgs, while SV-1D and SV-2D were installed at a depth of 15 feet bgs. Polyethylene tubing (1/4-inch) retrofitted with moisture filters were placed in each borehole and backfilled with sand. Bentonite was placed at the top of each soil vapor point to create a seal. Prior to sampling, a helium leak-detection test was performed at each soil vapor sampling location, and no leaks were observed. One-liter summa canisters collected soil vapor for TO-15 VOC analysis. Soil vapor sampling logs are included in **Appendix D**. Methodologies used for soil vapor assessment conform to the New York State Department of Health (NYSDOH) Final Guidance on Soil Vapor Intrusion, October 2006.

Concrete Core Sampling

On January, 22nd 2015 GZA collected six discrete (grab) samples from the concrete floor slab of the two buildings in accordance with *New Jersey Department of Environmental Protection Guidance for the Sampling and Analyses of Concrete Designated for Recycling 2007*. This protocol was used since the concrete might be transported and disposed of in a New Jersey facility. Locations are identified in Figure 4. They were selected based on proximity to potential sources of contamination as discerned from the Phase I Environmental Site Assessment and are identified in **Figure 4**. Drilling was conducted by ADT using a 6” diameter core drill and chips were removed with the assistance of an electric jackhammer. The core drill was advanced to a depth of 1” below the slab surface per the NJDEP guidance protocol. All holes were patched with grout upon completion. Samples were analyzed for VOCs, SVOCs, PCBs, trivalent and hexavalent chromium, TAL Metals, Cyanide and Total Petroleum Hydrocarbons.

GZA also requested the laboratory proceed to composite samples CC-2, CC-3, CC-4, CC-5 and

CC-6 and conduct hazardous parameter analysis. The composite sample was analyzed for Resource Conservation Recovery Act (RCRA) hazardous parameters including Ignitibility, Corrosivity, and Reactivity, Toxic Characteristic Leaching Procedure (TCLP) VOCs and SVOCs, Pesticides and Herbicides, and Metals.

Chemical Analysis

Chemical analytical work presented in this RIR has been performed in the following manner:

Chemical Analytical Methods Performed

Factor	Description
Quality Assurance Officer	See below
Chemical Analytical Laboratory	The chemical analytical laboratory used in the RI is NYS ELAP-certified; Alpha Analytical Laboratories (Alpha) of Westborough, Massachusetts (Christopher J. Anderson).
Chemical Analytical Methods	Soil analytical methods: • TAL Metals by EPA Method 6010C (rev. 2007); • VOCs by EPA Method 8260C (rev. 2006); • SVOCs by EPA Method 8270D (rev. 2007); • Pesticides by EPA Method 8081B (rev. 2000); • PCBs by EPA Method 8082A (rev. 2000); Groundwater analytical methods: • TAL Metals by EPA Method 6010C (rev. 2007); • VOCs by EPA Method 8260C (rev. 2006); • SVOCs by EPA Method 8270D (rev. 2007); • Pesticides by EPA Method 8081B (rev. 2000); • PCBs by EPA Method 8082A (rev. 2000); Soil vapor analytical methods: • VOCs by TO-15 VOC parameters. Concrete core analytical methods: • TAL Metals by EPA Method 6010C (rev. 2007); • Trivalent and hexavalent chromium • VOCs by EPA Method 8260C (rev. 2006); • SVOCs by EPA Method 8270D (rev. 2007); • PCBs by EPA Method 8082A (rev. 2000); Concrete composite sample RCRA analyses: • RCRA Characteristics Ignitability, Corrosivity, Reactivity

	• Total Organic Halides • RCRA Toxicity via Toxicity Characteristic Leaching Procedure (TCLP) • Molybdenum

Results of Chemical Analyses

Laboratory analytical soil results including dates of collection and sample depths are summarized in **Tables 2** through **5**. Laboratory analytical results from the groundwater samples collected are reported in **Tables 6** through **9**. Soil vapor sample collection results are reported in **Table 10**. Concrete core sample results are presented in **Tables 11.1** through **11.4** and hazardous waste analytical results of the composite concrete sample are presented in **Table 12.1** through **12.4**. Laboratory data deliverables for all samples evaluated in this RIR are provided in digital form in **Appendix E**.

5.0 ENVIRONMENTAL EVALUATION

5.1 Geological and Hydrogeological Conditions

Stratigraphy

The following Site stratigraphy is based on the RI activities recently completed by GZA. The surface cover at the Site generally consists of approximately 6 to 12 inches of concrete slab and underlying crushed stone. Urban Fill comprised of red, brown and tan, fine to coarse sand, with varying amounts of clay, silt and gravel, coal ash, and brick was observed in the recovered soil samples immediately below the surface cover in all the boreholes. The Fill stratum was 2 to 3 feet thick and ranged from 3 to 5 feet bgs. The underlying native stratum consists of light brown fine to medium Sand with up to 10 percent silt and extended to the bottom of each borehole at about 15 feet bgs. Environmental borings were not logged below 15 feet.

Hydrogeology

Groundwater was encountered at approximately 23.0 feet bgs in TW-1, and 23.5 feet bgs in TW-2 as shown in the groundwater sampling field log in **Appendix D**. Note that these measurements are estimates from a temporary well construction. Factors controlling the depth to groundwater include fluctuations due to changes in temperature, precipitation, seasonal effects, and other factors that might not have been evident at the time of our exploration. Regional groundwater flow direction is generally controlled by regional topography, with groundwater flow from higher to lower elevations. Therefore, we anticipate groundwater beneath the Site to generally flow to the west towards the East River and to the southwest towards Dutch Kills. However, the direction of localized groundwater flow in the area of the Site might vary because of underground utilities, subway structures, or heterogeneous subsurface conditions.

5.2 Soil Chemistry

GZA collected sixteen soil samples for laboratory analyses. Analytical results were compared to the NYSDEC Part 375 Unrestricted Use (Track 1) and Restricted Residential Use (Track 2) Soil Cleanup Objectives (SCO).

Volatile Organic Compounds (VOCs):

- Trichloroethene (TCE) (2.0 milligrams per kilogram (mg/kg) was detected in shallow sample T-7 (3- to 5- foot) exceeding the Unrestricted Use SCO, and was the only VOC exceedance.

- Several other VOCs were detected in soil samples and or qualified as an estimated quantity, all below their respective Unrestricted Use SCOs.

Semi-volatile organic compounds (SVOC):

- Seven SVOCs were detected in sample T-8 (3- to 5- foot) exceeding their respective Unrestricted Use SCOs. The SVOCs included benzo(a)anthracene (max. of 4 mg/kg), benzo(a)pyrene (max. of 3.4 mg/kg), benzo(b)fluoranthene (max. of 4.3 mg/kg), benzo(k)fluoranthene (max. of 1.4 mg/kg), chrysene (max. of 3.8 mg/kg), dibenzo(a,h)anthracene (max. of 0.42 mg/kg), and indeno(1,2,3-cd)pyrene (max. of 2.1 mg/kg). All but benzo(k)fluoranthene and chrysene also exceeded Restricted Residential Use SCOs.

- Each of the shallow samples exhibited detectable concentrations of SVOCs below Unrestricted Use SCOs, with the exception of T-6 (2- to 5- foot), which had no detectable concentrations.

- There was one detectable SVOC found in T-8 (13- to 15- foot), below the Unrestricted Use SCO. There were no other SVOCs detected.

Polychlorinated Biphenyls:

- PCBs were not detected in any of the soil samples collected at the Site.

Organochlorine Pesticides

- No pesticides were detected in any of the analyzed samples.

Metals:

- Metals including copper (max. of 170 mg/kg), lead (max. of 1,000 mg/kg), mercury (max. of 0.21 mg/kg), and zinc (max of 460 mg/kg) exceeded the Unrestricted Use SCOs. Lead also exceeded its respective Restricted Residential Use SCO at multiple soil sample locations.

- All metal exceedences of SCOs were observed in shallow samples (collected at 2- to 5- foot bgs).

A summary table of data for chemical analyses performed on soil samples is included in Tables 3, 4, 5 and 6. **Figure 2** illustrates the soil boring locations. **Figure 3** presents the soil exceedances.

5.3 Groundwater Chemistry

GZA collected groundwater samples from each of TW-1 and TW-2:

VOCs:

- Three VOCs, (chloroform (max. of 4.4 ug/l), tetrachloroethene (max. of .69 ug/l), and trichloroethene (max. of 2.1 ug/l) were detected in TW-1 and TW-2 groundwater samples, but not above the NYSDEC's Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standard (AWQS).

SVOCs:

- Several SVOCs were detected in the filtered groundwater sample of TW-1, all below their respective AWQS. Three SVOCs were detected in the filtered groundwater sample of TW-2 at an estimated quantity, but below their respective AWQS.

Polychlorinated Biphenyls:

- No PCBs were detected in TW-1 and TW-2.

Organochlorine Pesticides

- No Pesticides were detected in TW-1 and TW-2.

Dissolved Metals:

- Multiple dissolved metals were detected in the filtered groundwater samples. Only sodium in TW-1 (65,500 micrograms per liter (ug/l) maximum) and sodium at 117,000 ug/l and magnesium in TW-2 (40,400 ug/l) were identified above the respective AWQS.

A summary table of data for chemical analyses performed on the groundwater samples is included in **Tables 6, 7, 8, and 9**. Exceedence of applicable groundwater standards are shown in highlighted cells. **Figure 4** shows the metal exceedances of TW-1 and TW-2.

5.4 Soil Vapor Chemistry

VOCs:

- Multiple VOCs were detected in the four soil vapor samples collected at the Site. Trichloroethene was detected in all four samples (max. 5100 micrograms per cubic meter (ug/m^3) at concentrations above its NYDOH Air Guideline Value (AGV) of 5 ug/m^3, and was the only exceedance.

A summary table of data for chemical analyses performed on soil vapor samples is included in **Table 10**. **Figure 4** presents vapor exceedances of the compounds which exceeded DOH AGV.

5.5 Concrete Core Grab Sample Chemistry

VOCs:

- VOCs including acetone, toluene, ethylbenzene and xylene were detected in CC-3 and CC-5 in exceedance of either the New Jersey Residential Direct Contact Soil Remediation Standards (NJRDCSRS) or the New York Unrestricted Use SCOs. New Jersey standards are being presented for the purposes of disposal considerations.

SVOCs:

- Only bis(2-ethylhexyl)phthalate was identified in CC-3 in excess of the NJRDCSRS.

Polychlorinated Biphenyls:

- One PCB was detected in CC-3 in excess of the Part 375 Unrestricted Use SCO.

Metals:

- Metals barium, cadmium, copper, lead, nickel, zinc and hexavalent chromium were found in excess of either the NJRDCSRS or the Part 375 Unrestricted Use SCOs.

Total Petroleum Hydrocarbons

- Total Petroleum Hydrocarbons ranged from 31.9 to 4,119 milligrams per kilogram.

A summary table of data for chemical analyses performed on the concrete grab samples is included in **Tables 11.1** through **11.4**

5.6 Concrete Composite Sample Chemistry

There were no exceedances of any of the RCRA parameters including ignitability, corrosivity, and reactivity.

There were no exceedances of any of the RCRA TCLP VOCs, SVOCs, Pesticides, or Metals.

A summary table of data for chemical analyses performed on the concrete grab samples is included in **Tables 12.1** through **12.4**.

6.0 FINDINGS

GZA conducted a Limited Remedial Investigation for the property located at 37-27 31st Street and 37-26 32nd Street in the in the Long Island City, Queens, New York. The Phase II ESI included a geophysical survey and a subsurface investigation consisting of sub-slab soil-vapor sampling, soil sampling, groundwater sampling, and concrete floor slab sampling.

The significant findings of the Limited Remedial Investigation are summarized as follows:

- The geophysical survey might have confirmed the location of the 550-gallon UST on the property at 37-26 32nd Street identified in Site background information. GZA identified two additional USTs at 37-27 31st Street based on site background information

- Eight soil borings were drilled throughout the Site to evaluate environmental impacts. The borings extended to a depth of 15 feet below the floor slab. The soil encountered directly below the basement slab is characterized as urban fill underlain by native soil consisting of fine to medium sand

- Groundwater was encountered from 23.0 to 23.5 feet below the floor slab

- Olfactory evidence of contaminants was not observed in borings. PID readings were observed to be < 20 ppm in all borings, with the exception of T-8 (3- to 5- feet), which exhibited a value of 37.1 ppm

- Trichloroethene (2.0 mg/kg) was detected in one shallow soil sample T-7 (3- to 5-feet) exceeding the Unrestricted Use SCO and was the only VOC exceedence

- Seven SVOCs were detected in sample T-8 (3- to 5-feet) exceeding their respective Unrestricted Use SCOs. These SVOCs included benzo(a)anthracene (max. of 4 mg/kg), benzo(a)pyrene (max. of 3.4 mg/kg), benzo(b)fluoranthene (max. of 4.3 mg/kg), benzo(k)fluoranthene (max. of 1.4 mg/kg), chrysene (max. of 3.8 mg/kg), dibenzo(a,h)anthracene (max. of 0.42 mg/kg), and indeno(1,2,3-cd)pyrene (max. of 2.1 mg/kg). All but benzo(k)fluoranthene and chrysene also exceeded Restricted Residential Use SCOs. There were no other exceedances of SVOCs of SCOs

- No pesticides were detected in any of the analyzed soil samples

- Metals including copper (max. of 170 mg/kg), lead (max. of 1,000 mg/kg), mercury (max. of 0.21 mg/kg), and zinc (max of 460 mg/kg) exceeded the Unrestricted Use SCOs in soil. Lead also exceeded its respective Restricted Residential Use SCO at multiple soil sample locations

- All metal exceedences of SCOs were observed only in the shallow (i.e., 3-5' feet bgs) soil samples

- Three VOCs, (chloroform (max. of 4.4 ug/l), tetrachloroethene (max. of .69 ug/l), and trichloroethene (max. of 2.1 ug/l) were detected in the TW-1 and TW-2 groundwater samples, but not above the NYSDEC's Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standard (AWQS)

- Several SVOCs were detected in the filtered groundwater sample of TW-1, all below their respective AWQS. Three SVOCs in were detected in the filtered groundwater sample of TW-2 at an estimated quantity, but below their respective AWQS

- No pesticides were detected in groundwater samples obtained from TW-1 and TW-2

- No PCBs were detected in TW-1 and TW-2

- Multiple dissolved metals were detected in the filtered groundwater samples. Only sodium in TW-1 (65,500 ug/l maximum) and sodium at 117,000 ug/l and magnesium in TW-2 (40,400 ug/l) were identified above the respective AWQS

- Trichloroethene was detected at concentrations (max. 5,100 ug/m^3) of up to three orders of magnitude above its NYSDOH AGV of 5 ug/m^3 in four sub-slab vapor samples

- Results of the six concrete grab samples indicated exceedance of VOCs in two of the samples, an exceedance of one SVOC in one of the samples, an exceedance of one PCB aroclor in one of the samples, and exceedances of metals in five of the six samples of either the NJDCSRS or the Part 375 Unrestricted Use SCOs

- The results of the hazardous waste analytical testing on the concrete sample composite indicated no exceedances of any of the RCRA parameters

- Waste Characterization sampling and analysis of excavated media as required by disposal facilities and associated Waste Characterization Report.

- Appropriate segregation of excavated media on Site

- Transportation and off-Site disposal of all soil/fill material to permitted facilities in accordance with applicable laws and regulations for the handling, transportation, and disposal as stipulated in the RAWP

GZA considered Henry's Law to assess whether TCE concentrations in soil vapor at the Site might be the result of vapor migrating into the vadose zone from regionally impacted

groundwater, or from a historic source at the Site. The distribution or partitioning of a compound between air and water is driven by Henry's Law constant, which is defined as follows:

$H = C_{air}/C_{water}$ where C_{air} and C_{water} are concentrations of a compound in the air and water phases, respectively.

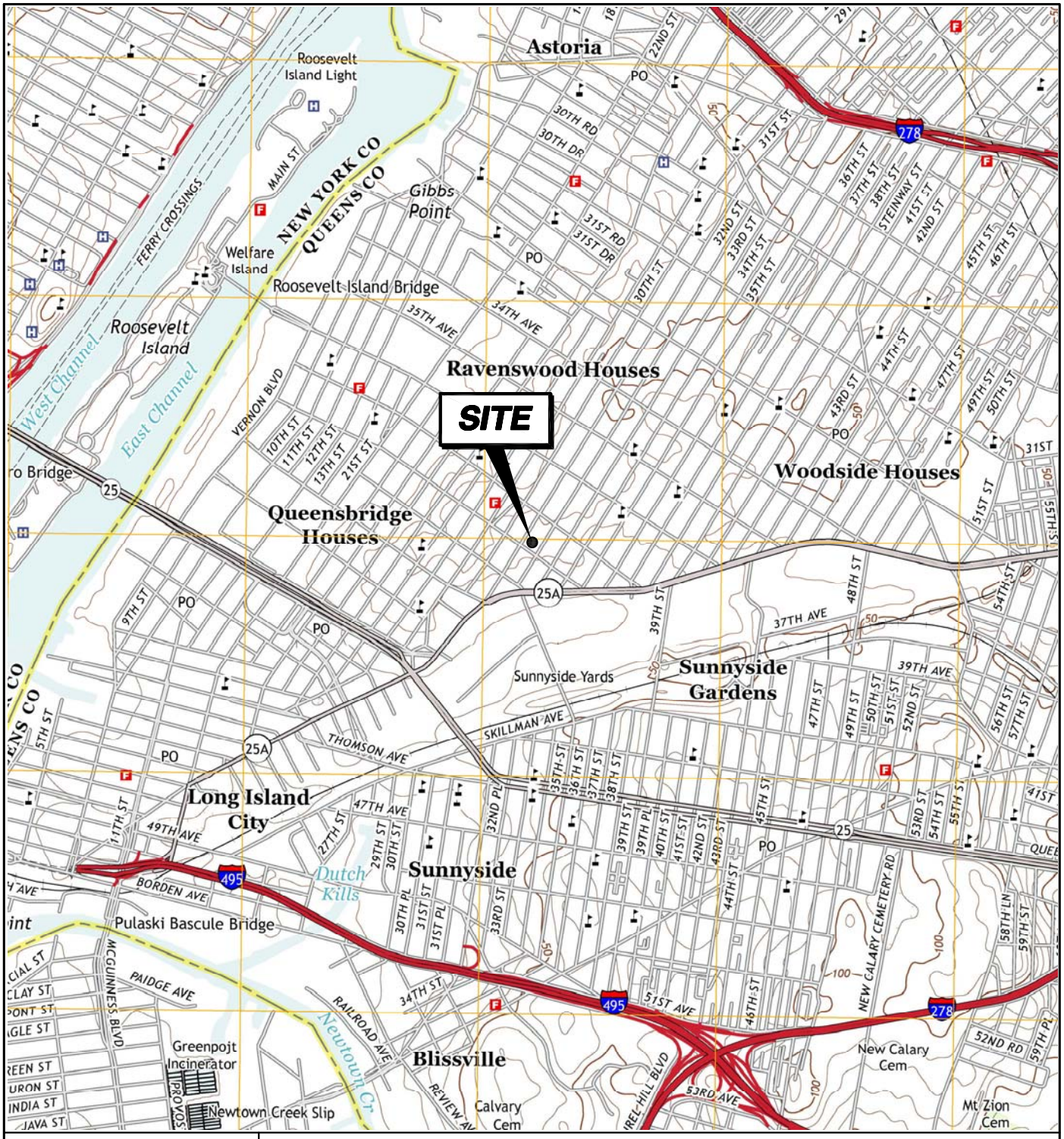
and,

$C_{water} = C_{air}*H$

Henry's Constant for TCE is 0.204 at 10°C, which is roughly the yearly average groundwater temperature. Assuming the maximum concentration of TCE found at the Site of 2.1 ug/l in TW-2 represents regional groundwater concentrations, the resulting concentration of TCE in the soil vapor would be expected to be no higher than 408 ug/m^3 based on Henry's Law. Since the maximum concentration observed at the Site is 5,100 ug/m3, GZA concludes that this concentration is not likely the result of assumed regional groundwater concentrations.

Therefore, it is our opinion that there might be an unidentified source of TCE at the Site causing the high vapor concentrations.

FIGURES



NEW YORK

QUADRANGLE LOCATION

SOURCE:
USGS TOPOGRAPHIC MAPS: CENTRAL PARK, NY-NJ (2013) & BROOKLYN, NY (2013). CONTOUR INTERVAL 10 FT., NAVD-1988, ORIGINAL SCALE 1:24,000 (1"=2,000 FT.).

N W E S

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37-27 31st STREET
37-26 32nd STREET
LONG ISLAND CITY, NEW YORK

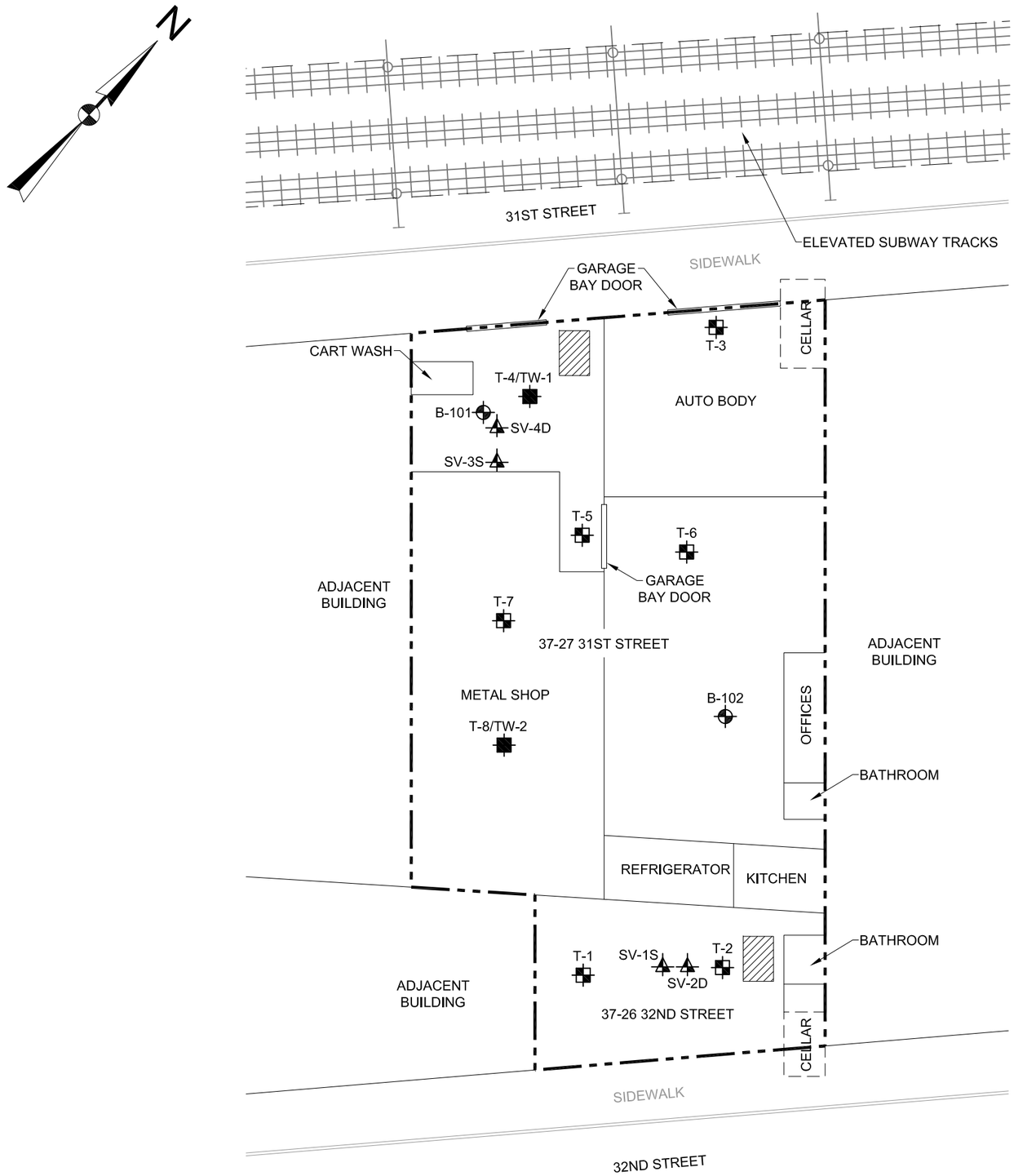
PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
31/32 LIC, LLC
45 BROADWAY, SUITE 630
NEW YORK, NY 10006

SITE LOCATION PLAN

PROJ MGR: PM	REVIEWED BY: PM	CHECKED BY: RM	FIGURE
DESIGNED BY: RM	DRAWN BY: MT	SCALE: 1" = 2000'	1
DATE: FEB. 2015	PROJECT NO. 41.0162268.20	REVISION NO.	SHEET NO.

© 2015 – GZA GeoEnvironmental, Inc. GZA–J:\162200's\41.0162268.00\Figures\CAD\162268.20\162268.20.01.002.dwg [1] February 12, 2015 – 12:46pm edward.morris



LEGEND:

- GEOTECHNICAL BORING
- ENVIRONMENTAL BORING
- ENVIRONMENTAL BORING AND TEMPORARY MONITORING WELL
- SOIL VAPOR POINT
- SITE BOUNDARY
- UNDERGROUND STORAGE TANK
- CELLAR BOUNDARY

NOTES:

1) BASE MAP DEVELOPED FROM PLAN ENTITLED "TAX MAP BLOCK 373 AND LOTS 6 & 45," ORIGINAL SCALE 1" = 25'.

2) SUBWAY LOCATION DEVELOPED FROM A PLAN ENTITLED "ROUTE 36 & 37 SECTION NO. 2 STRUCTURAL PLANS, SECOND AVE. - BOROUGH OF QUEENS AT FREEMAN AVE. PLAN AND PROFILE" DATED APRIL 8, 1913, ORIGINAL SCALE 1" = 20'.

3) THE LOCATIONS OF THE BORINGS AND POINTS WERE APPROXIMATELY DETERMINED BY TAPE MEASUREMENTS FROM EXISTING TOPOGRAPHIC AND MAN-MADE FEATURES. THE DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

4) BORINGS WERE PERFORMED BY AQUIFER DRILLING & TESTING AND LOGGED BY GZA PERSONNEL ON DECEMBER 17 THROUGH DECEMBER 22, 2014.

0 15 30 60

SCALE IN FEET

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37-27 31st STREET
37-26 32nd STREET
LONG ISLAND CITY, NEW YORK

BORING LOCATION PLAN

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: 31/32 LIC, LLC 45 BROADWAY, SUITE 630 NEW YORK, NY 10006	
PROJ MGR: PM	REVIEWED BY: PM	CHECKED BY: CW	FIGURE
DESIGNED BY: MY	DRAWN BY: MT	SCALE: 1" = 30'	2
DATE: FEB. 2015	PROJECT NO. 41.0162268.20	REVISION NO.	SHEET NO.

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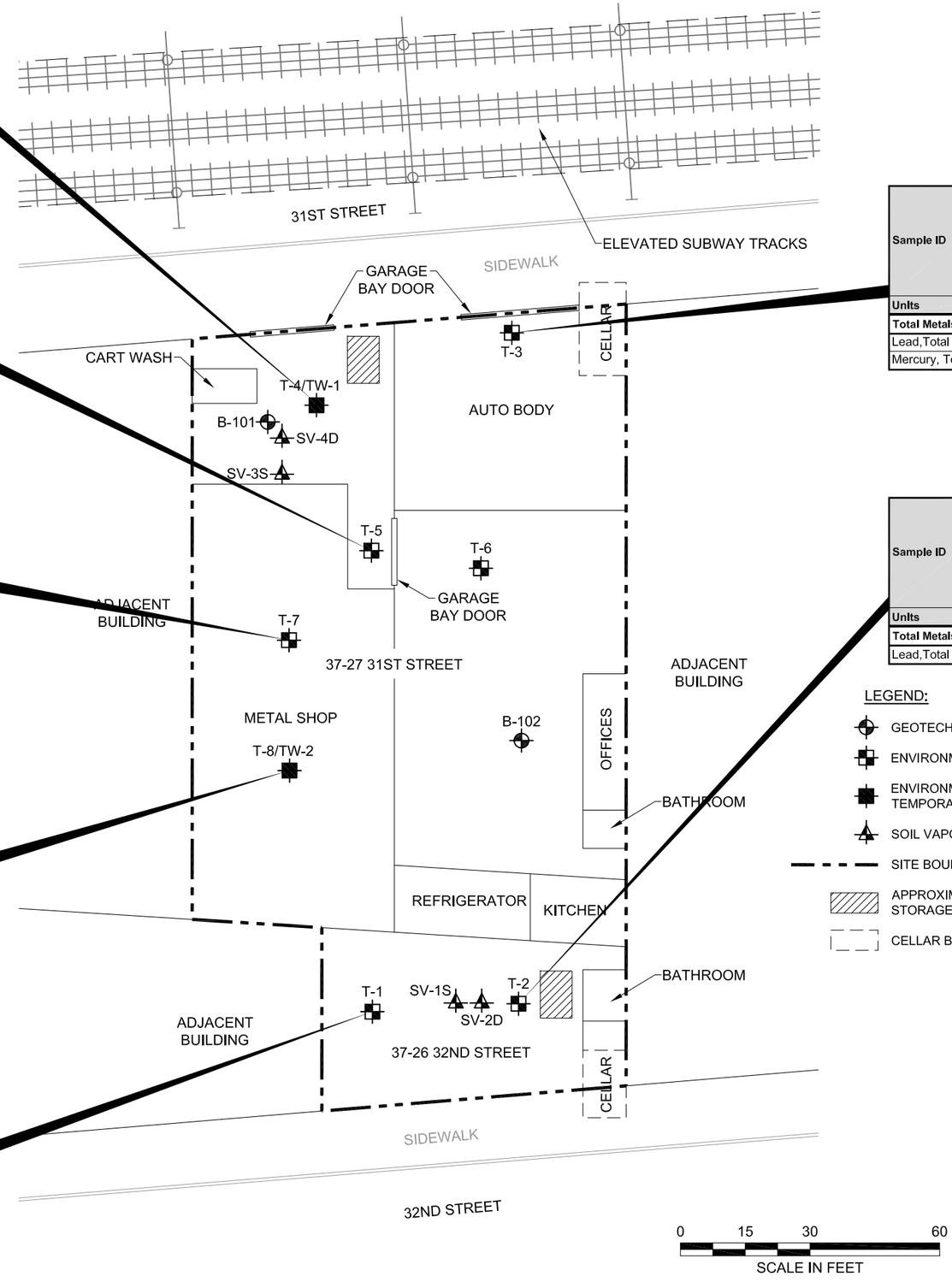
Sample ID	Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Use "Restricted Residential" Soil Cleanup Objectives	T-4 (2-5)'	T-4 (13-15)'
Units	(mg/Kg)	(mg/Kg)	(mg/kg)	(mg/kg)
Total Metals				
Lead,Total	63	400	72	~
Mercury, Total	0.18	0.81	0.18	~
Zinc, Total	109	10,000	130	~

Sample ID	Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Use "Restricted Residential" Soil Cleanup Objectives	T-5 (2-5)'	T-5 (13-15)'
Units	(mg/Kg)	(mg/Kg)	(mg/kg)	(mg/kg)
Total Metals				
Lead,Total	63	400	170	~
Zinc, Total	109	10,000	140	~

Sample ID	Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Use "Restricted Residential" Soil Cleanup Objectives	T-7 (2-5)'	T-7 (13-15)'
Units	(mg/Kg)	(mg/Kg)	(mg/kg)	(mg/kg)
Volatile Organics by 8260/5035				
Trichloroethene	0.47	21	2	~
Total Metals				
Copper, Total	50	270	170	~
Lead,Total	63	400	1,000	~
Zinc, Total	109	10,000	400	~

Sample ID	Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Use "Restricted Residential" Soil Cleanup Objectives	T-8 (2-5)'	T-8 (13-15)'
Units	(mg/Kg)	(mg/Kg)	(mg/kg)	(mg/kg)
Semivolatile Organics by GC/MS				
Benzo(a)anthracene	1	1	4	~
Benzo(a)pyrene	1	1	3.4	~
Benzo(b)fluoranthene	1	1	4.3	~
Benzo(k)fluoranthene	0.8	3.9	1.4	~
Chrysene	1	3.9	3.8	~
Dibenzo(a,h)anthracene	0.33	0.33	0.42	~
Indeno(1,2,3-cd)Pyrene	0.5	0.5	2.1	~
Total Metals				
Lead,Total	63	400	170	~
Zinc, Total	109	10,000	460	~

Sample ID	Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Use "Restricted Residential" Soil Cleanup Objectives	T-1 (2-5)'	T-1 (13-15)'
Units	(mg/Kg)	(mg/Kg)	(mg/kg)	(mg/kg)
Total Metals				
Lead,Total	**63**	**400**	210	~
Zinc, Total	109	10,000	310	~



Sample ID	Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Use "Restricted Residential" Soil Cleanup Objectives	T-3 (2-5)'	T-3 (13-15)'
Units	(mg/Kg)	(mg/Kg)	(mg/kg)	(mg/kg)
Total Metals				
Lead,Total	63	400	70	~
Mercury, Total	0.18	0.81	0.21	~

Sample ID	Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Use "Restricted Residential" Soil Cleanup Objectives	T-2 (2-5)'	T-2 (13-15)'
Units	(mg/Kg)	(mg/Kg)	(mg/kg)	(mg/kg)
Total Metals				
Lead,Total	63	400	710	~

LEGEND:

- GEOTECHNICAL BORING
- ENVIRONMENTAL BORING
- ENVIRONMENTAL BORING AND TEMPORARY MONITORING WELL
- SOIL VAPOR POINT
- SITE BOUNDARY
- APPROXIMATE UNDERGROUND STORAGE TANK LOCATIONS
- CELLAR BOUNDARY

270 — VALUE EXCEEDS UNRESTRICTED USE SCOS

0.52 — VALUE EXCEEDS BOTH UNRESTRICTED & RESTRICTED USE "RESTRICTED RESIDENTIAL" SCOS

~ — NON-EXCEEDANCE

(mg/kg) — MILLIGRAMS PER KILOGRAM

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37-27 31st STREET
37-26 32nd STREET
LONG ISLAND CITY, NEW YORK

SOIL EXEEDANCES

PREPARED BY:
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45 BROADWAY, SUITE 630
NEW YORK, NY 10006

PROJ MGR: PM	REVIEWED BY: PM	CHECKED BY: CW	FIGURE
DESIGNED BY: MY	DRAWN BY: MT	SCALE: 1" = 30'	3
DATE: FEB. 2015	PROJECT NO. 41.0162268.20	REVISION NO.	SHEET NO.

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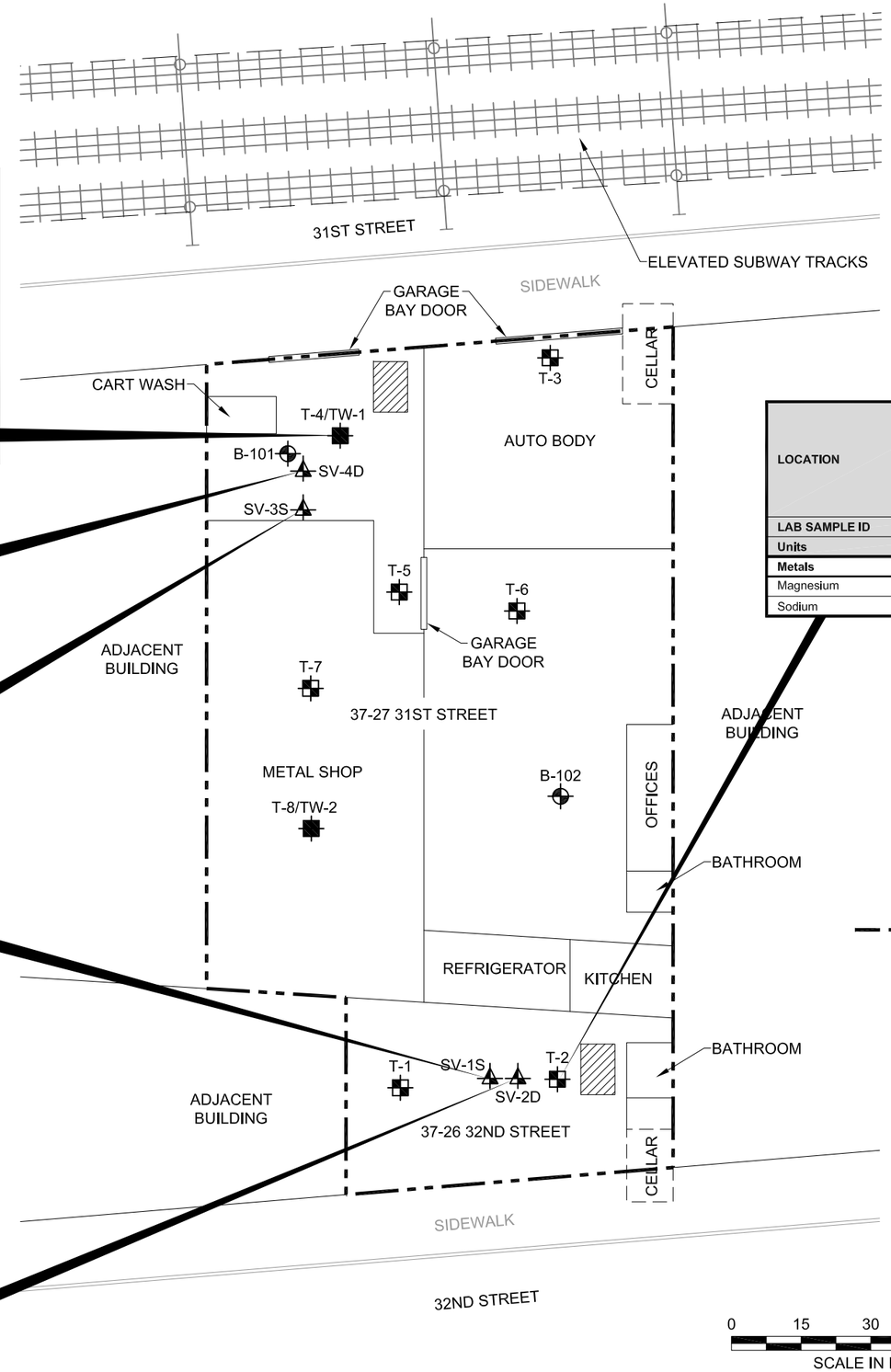
LOCATION	New York TOGS 1.1.1 Ambient Water Quality Standards (AWQS)	TW-1	TW-1	TW-1 FILTERED
LAB SAMPLE ID		L1430448-11	L1430448-11 R1	L1430448-12
Units		(ug/l)	(ug/l)	(ug/l)
Metals				
Antimony	3	***90.97***	~	2.63
Iron	300	***682***	~	12.4
Lead	25	***87.4***	~	1
Magnesium	35,000	21200	~	21,100
Sodium	20,000	~	***65,400***	***65,500***
Thallium	0.5	***8.32***	~	0.2

LOCATION	NYSDOH Soil Vapor/Air Guidance Values	SV-4B
Units	ug/m3	ug/m3
Trichloroethene	5	***1,030***

LOCATION	NYSDOH Soil Vapor/Air Guidance Values	SV-3S
Units	ug/m3	ug/m3
Trichloroethene	5	***801***

LOCATION	NYSDOH Soil Vapor/Air Guidance Values	SV-1S
Units	ug/m3	ug/m3
Trichloroethene	5	***5,100***

LOCATION	NYSDOH Soil Vapor/Air Guidance Values	SV-2B
Units	ug/m3	ug/m3
Trichloroethene	5	***3600***



LOCATION	New York TOGS 1.1.1 Ambient Water Quality Standards (AWQS)	TW-2	TW-2	TW-2 FILTERED	TW-2 FILTERED
LAB SAMPLE ID		L1430583-01	L1430583-01 R1	L1430583-02	L1430583-02 R1
Units		ug/l	ug/l	ug/l	ug/l
Metals					
Magnesium	35,000	***37,600***	~	***40,400***	~
Sodium	20,000	~	***96,500***	~	***117,000***

LEGEND:

- GEOTECHNICAL BORING
- ENVIRONMENTAL BORING
- ENVIRONMENTAL BORING AND TEMPORARY MONITORING WELL
- SOIL VAPOR POINT
- SITE BOUNDARY
- UNDERGROUND STORAGE TANK
- CELLAR BOUNDARY

8.32 Result exceeds NY TOGS AWQS

1030 RESULT EXCEEDS NYSDOH SOIL VAPOR/AIR GUIDE LINE VALUES

~ NON-EXCEEDANCE

(ug/L) MICROGRAMS PER LITER

(ug/m3) MICROGRAMS PER CUBIC METER OF AIR

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37-27 31st STREET
37-26 32nd STREET
LONG ISLAND CITY, NEW YORK

SOIL VAPOR AND GROUNDWATER EXEEDANCES

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31/32 LIC, LLC
45 BROADWAY, SUITE 630
NEW YORK, NY 10006

PROJ MGR: PM	REVIEWED BY: PM	CHECKED BY: CW	FIGURE 4
DESIGNED BY: MY	DRAWN BY: MT	SCALE: 1" = 30'	
DATE: FEB. 2015	PROJECT NO. 41.0162268.20	REVISION NO.	SHEET NO.

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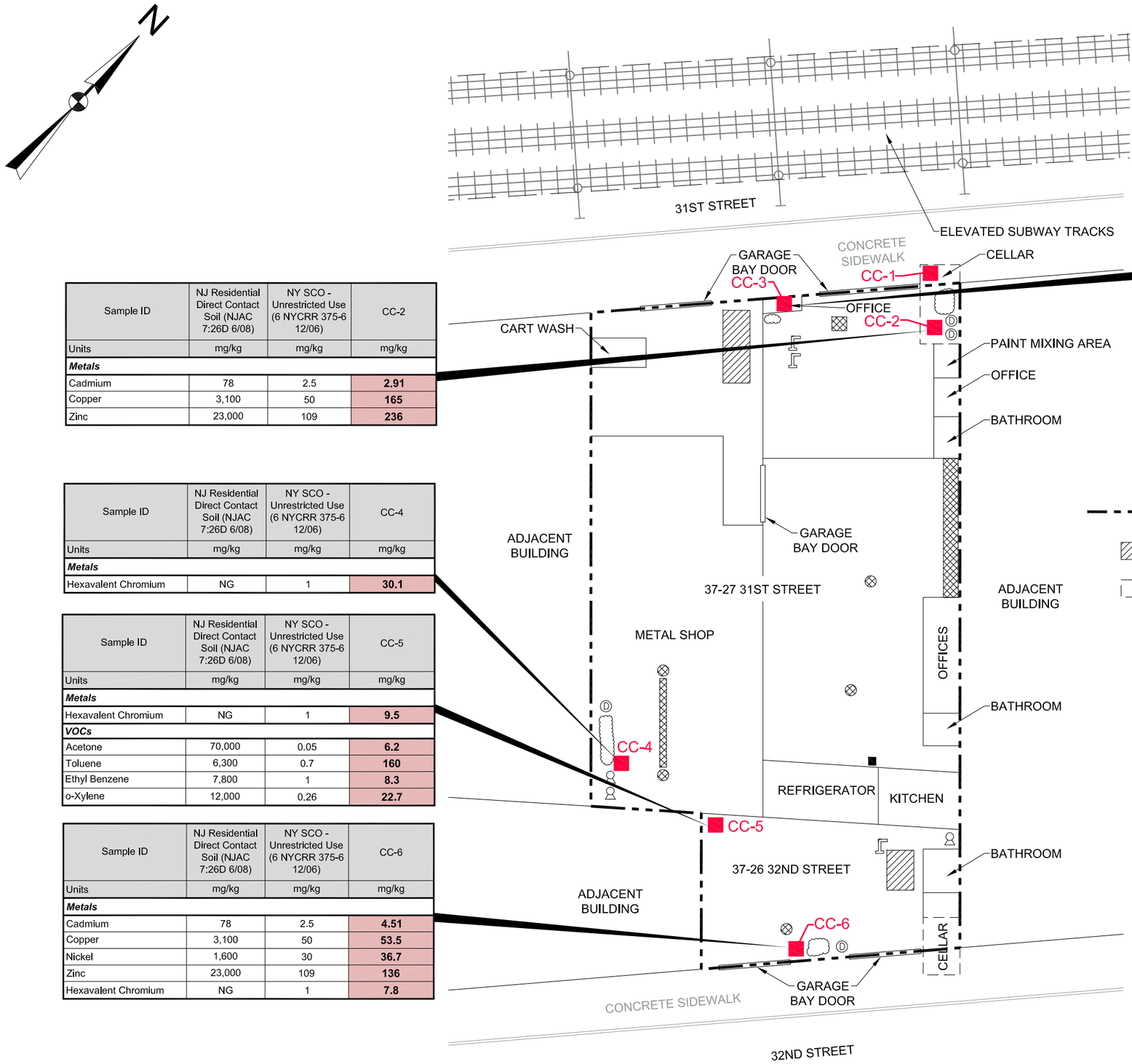

Sample ID	NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)	NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	CC-2
Units	mg/kg	mg/kg	mg/kg
Metals			
Cadmium	78	2.5	**2.91**
Copper	3,100	50	**165**
Zinc	23,000	109	**236**

Sample ID	NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)	NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	CC-3
Units	mg/kg	mg/kg	mg/kg
Metals			
Barium	16,000	350	**1,420**
Cadmium	78	2.5	**15.5**
Copper	3,100	50	**79.7**
Lead	400	63	**817**
Nickel	1,600	30	**49.3**
Zinc	23,000	109	**941**
Hexavalent Chromium		1	**11.3**
PCBs			
Aroclor-1254	0.2	0.1	**0.11**
VOCs			
Acetone	70,000	0.05	**3.8**
Toluene	6,300	0.7	**54.8**
Ethyl Benzene	7,800	1	**3.5**
o-Xylene	12,000	0.26	**9.4**
SVOCs			
Bis(2-ethylhexyl)phthalate	35	NG	**37.7**

Sample ID	NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)	NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	CC-4
Units	mg/kg	mg/kg	mg/kg
Metals			
Hexavalent Chromium	NG	1	**30.1**

Sample ID	NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)	NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	CC-5
Units	mg/kg	mg/kg	mg/kg
Metals			
Hexavalent Chromium	NG	1	**9.5**
VOCs			
Acetone	70,000	0.05	**6.2**
Toluene	6,300	0.7	**160**
Ethyl Benzene	7,800	1	**8.3**
o-Xylene	12,000	0.26	**22.7**

Sample ID	NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)	NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	CC-6
Units	mg/kg	mg/kg	mg/kg
Metals			
Cadmium	78	2.5	**4.51**
Copper	3,100	50	**53.5**
Nickel	1,600	30	**36.7**
Zinc	23,000	109	**136**
Hexavalent Chromium	NG	1	**7.8**

LEGEND:

- SITE BOUNDARY
- APPROXIMATE AREA OF FORMER UNDERGROUND STORAGE TANK(S)
- CELLAR BOUNDARY
- FLOOR DRAIN
- 55-GALLON DRUM
- COMPRESSOR
- AREA OF OPEN CONTAINERS
- HYDRAULIC LIFT
- CONCRETE CORE SAMPLE
- MILLIGRAMS PER KILOGRAM VALUE EXCEEDS NJ RESIDENTIAL DIRECT CONTACT SOIL VALUES AND/OR NY UNRESTRICTED USE SCOS
- NG NO GUIDANCE VALUE

0 15 30 60
SCALE IN FEET

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37-27 31st STREET
37-26 32nd STREET
LONG ISLAND CITY, NEW YORK

CONCRETE CORE SAMPLE EXCEEDANCES

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
31/32 LIC, LLC
45 BROADWAY, SUITE 630
NEW YORK, NY 10006

PROJ MGR: PM	REVIEWED BY: PM	CHECKED BY: CW	FIGURE
DESIGNED BY: MY	DRAWN BY: MT	SCALE: 1" = 30'	5
DATE: FEB. 2015	PROJECT NO. 41.0162268.20	REVISION NO.	SHEET NO.

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TABLES

Table 1 - Construction Details for Subsurface Explorations
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
Long Island City, NY

Type of Exploration	Identification Number	Date of Construction	Total Depth (ft.)	Diameter (in.)	Approximate Ground Surface Elevation (NAVD 88)	Construction Material (PVC, steel, etc.)
Soil Vapor Monitoring Points	SV-1S	12/17/2014	3-5	0.25	33-35	0.25" Poly Tube, Stainless Steel Soil Vapor Probe
	SV-2B		13-15	0.25	23-25	
	SV-3S		3-5	0.25	33-35	
	SV-4B		13-15	0.25	23-25	
Soil Borings	T-1	12/17/14 thru 12/18/14	15	2	23.0	N/A
	T-2		15	2	23.0	
	T-3		15	2	23.0	
	T-4		15	2	23.0	
	T-5		15	2	23.0	
	T-6		15	2	23.0	
	T-7		15	2	23.0	
	T-8		15	2	23.0	
Temporary Wells Points	TW-1	12/17/2014	23	1	15.0	PVC
	TW-2	12/18/2014	20	1	18.0	
Concrete Cores	CC-1	1/22/2015	0.1	6	37.9	N/A
	CC-2		0.1	6	37.9	
	CC-3		0.1	6	37.9	
	CC-4		0.1	6	37.9	
	CC-5		0.1	6	37.9	
	CC-6		0.1	6	37.9	

Table 2 - Volatile Organic Compounds Soil Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, NY 11101

LOCATION		Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Residential Soil Cleanup Objectives	T-1 (2-5)'		T-1 (13-15)'		T-2 (2-5)'		T-2 (13-15)'		T-4 (2-5)'		T-4 (13-15)'		T-5 (2-5)'		T-5 (13-15)'		T-6 (2-5)'		T-6 (13-15)'		T3 (3-5)		T3 (13-15)		T3 (13-15)		T7 (3-5)		T7 (13-15)		T8 (3-5)		T8 (3-5)		T8 (13-15)	
SAMPLING DATE				12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014	
LAB SAMPLE ID				L1430448-01		L1430448-02		L1430448-03		L1430448-04		L1430448-05		L1430448-06		L1430448-07		L1430448-08		L1430448-09		L1430448-10		L1430558-01		L1430558-02		L1430558-02 R1		L1430558-03		L1430558-04		L1430558-05		L1430558-05 R1		L1430558-06	
SAMPLE TYPE				Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
SAMPLE DEPTH (ft.)				2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		3-5'		13-15'		13-15'		3-5'		13-15'		3-5'		3-5'		13-15'	
	Units			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Volatile Organics by 8260/5035																																							
Methylene chloride	mg/kg	0.05	100	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
1,1-Dichloroethane	mg/kg	0.27	26	0.0017	U	0.0017	U	0.0017	U	0.0018	U	0.0018	U	0.0019	U	0.0016	U	0.0018	U	0.0017	U	0.0018	U	0.0016	U	0.002	U	-		0.076	U	0.0018	U	0.0025	U	-		0.0019	U
Chloroform	mg/kg	0.37	49	0.0017	U	0.0017	U	0.0017	U	0.0018	U	0.0018	U	0.0019	U	0.0016	U	0.0018	U	0.0017	U	0.0018	U	0.0016	U	0.002	U	-		0.076	U	0.0018	U	0.0025	U	-		0.0019	U
Carbon tetrachloride	mg/kg	0.76	2.4	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,2-Dichloropropane	mg/kg	--	--	0.0039	U	0.0041	U	0.0039	U	0.0042	U	0.0041	U	0.0044	U	0.0038	U	0.0043	U	0.004	U	0.0041	U	0.0036	U	0.0047	U	-		0.18	U	0.0042	U	0.0058	U	-		0.0044	U
Dibromochloromethane	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,1,2-Trichloroethane	mg/kg	--	--	0.0017	U	0.0017	U	0.0017	U	0.0018	U	0.0018	U	0.0019	U	0.0016	U	0.0018	U	0.0017	U	0.0018	U	0.0016	U	0.002	U	-		0.076	U	0.0018	U	0.0025	U	-		0.0019	U
Tetrachloroethene	mg/kg	1.3	19	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.09		0.0012	U	0.0016	U	-		0.0012	U
Chlorobenzene	mg/kg	1.1	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Trichlorofluoromethane	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,2-Dichloroethane	mg/kg	0.02	3.1	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,1,1-Trichloroethane	mg/kg	0.68	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Bromodichloromethane	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
trans-1,3-Dichloropropen	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
cis-1,3-Dichloropropene	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,3-Dichloropropene, To	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,1-Dichloropropene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
Bromoform	mg/kg	--	--	0.0045	U	0.0047	U	0.0045	U	0.0047	U	0.0047	U	0.0051	U	0.0043	U	0.0049	U	0.0045	U	0.0047	U	0.0042	U	0.0054	U	-		0.2	U	0.0048	U	0.0066	U	-		0.005	U
1,1,2,2-Tetrachloroethan	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Benzene	mg/kg	0.06	4.8	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Toluene	mg/kg	0.7	100	0.0017	U	0.0017	U	0.0017	U	0.0018	U	0.0018	U	0.0019	U	0.0016	U	0.0018	U	0.0017	U	0.0018	U	0.0016	U	0.002	U	-		0.01	J	0.0018	U	0.0025	U	-		0.0019	U
Ethylbenzene	mg/kg	1	41	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Chloromethane	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
Bromomethane	mg/kg	--	--	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.1	U	0.0024	U	0.0033	U	-		0.0025	U
Vinyl chloride	mg/kg	0.02	0.9	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.1	U	0.0024	U	0.0033	U	-		0.0025	U
Chloroethane	mg/kg	--	--	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.1	U	0.0024	U	0.0033	U	-		0.0025	U
1,1-Dichloroethene	mg/kg	0.33	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
trans-1,2-Dichloroethene	mg/kg	0.19	100	0.0017	U	0.0017	U	0.0017	U	0.0018	U	0.0018	U	0.0019	U	0.0016	U	0.0018	U	0.0017	U	0.0018	U	0.0016	U	0.002	U	-		0.076	U	0.0018	U	0.0025	U	-		0.0019	U
Trichloroethene	mg/kg	0.47	21	0.0011	U	0.0012	U	0.0019		0.0012	U	0.0061		0.0013	U	0.015		0.0012	U	0.0011	U	0.0012	U	0.00092	J	0.0015		-		2		0.0012	U	0.0016	U	-		0.0012	U
1,2-Dichlorobenzene	mg/kg	1.1	100	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,3-Dichlorobenzene	mg/kg	2.4	49	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,4-Dichlorobenzene	mg/kg	1.8	13	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
Methyl tert butyl ether	mg/kg	0.93	100	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.1	U	0.0024	U	0.0033	U	-		0.0025	U
p/m-Xylene	mg/kg	--	--	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.012	J	0.0024	U	0.0033	U	-		0.0025	U
o-Xylene	mg/kg	--	--	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.1	U	0.0024	U	0.0033	U	-		0.0025	U
Xylene (Total)	mg/kg	0.26	100	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.012	J	0.0024	U	0.0033	U	-		0.0025	U
cis-1,2-Dichloroethene	mg/kg	0.25	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,2-Dichloroethene (total	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Dibromomethane	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
Styrene	mg/kg	--	--	0.0022	U	0.0023	U	0.0022	U	0.0024	U	0.0024	U	0.0025	U	0.0022	U	0.0024	U	0.0023	U	0.0024	U	0.0021	U	0.0027	U	-		0.1	U	0.0024	U	0.0033	U	-		0.0025	U
Dichlorodifluoromethane	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
Acetone	mg/kg	0.05	100	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.0047	J	0.0059	J	-		0.51	U	0.0049	J	0.016	U	-		0.0071	J
Carbon disulfide	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
2-Butanone	mg/kg	0.12	100	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
Vinyl acetate	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
4-Methyl-2-pentanone	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
1,2,3-Trichloropropane	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
2-Hexanone	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
Bromochloromethane	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
2,2-Dichloropropane	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,2-Dibromoethane	mg/kg	--	--	0.0045	U	0.0047	U	0.0045	U	0.0047	U	0.0047	U	0.0051	U	0.0043	U	0.0049	U	0.0045	U	0.0047	U	0.0042	U	0.0054	U	-		0.2	U	0.0048	U	0.0066	U	-		0.005	U
1,3-Dichloropropane	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,1,1,2-Tetrachloroethan	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Bromobenzene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
n-Butylbenzene	mg/kg	12	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
sec-Butylbenzene	mg/kg	11	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
tert-Butylbenzene	mg/kg	5.9	100	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
o-Chlorotoluene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
p-Chlorotoluene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,2-Dibromo-3-chloropro	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
Hexachlorobutadiene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
Isopropylbenzene	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
p-Isopropyltoluene	mg/kg	--	--	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
Naphthalene	mg/kg	12	100	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.049	J	0.006	U	0.0083	U	-		0.0062	U
Acrylonitrile	mg/kg	--	--	0.011	U	0.012	U	0.011	U	0.012	U	0.012	U	0.013	U	0.011	U	0.012	U	0.011	U	0.012	U	0.01	U	0.014	U	-		0.51	U	0.012	U	0.016	U	-		0.012	U
n-Propylbenzene	mg/kg	3.9	100	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0013	U	0.0011	U	0.0012	U	0.0011	U	0.0012	U	0.001	U	0.0014	U	-		0.051	U	0.0012	U	0.0016	U	-		0.0012	U
1,2,3-Trichlorobenzene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,2,4-Trichlorobenzene	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,3,5-Trimethylbenzene	mg/kg	8.4	52	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
1,2,4-Trimethylbenzene	mg/kg	3.6	52	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.014	J	0.006	U	0.0083	U	-		0.0062	U
1,4-Dioxane	mg/kg	0.1	13	0.11	U	0.12	U	0.11	U	0.12	U	0.12	U	0.13	U	0.11	U	0.12	U	0.11	U	0.12	U	0.1	U	0.14	U	-		5.1	U	0.12	U	0.16	U	-		0.12	U
1,4-Diethylbenzene	mg/kg	--	--	0.0045	U	0.0047	U	0.0045	U	0.0047	U	0.0047	U	0.0051	U	0.0043	U	0.0049	U	0.0045	U	0.0047	U	0.0042	U	0.0054	U	-		0.2	U	0.0048	U	0.0066	U	-		0.005	U
4-Ethyltoluene	mg/kg	--	--	0.0045	U	0.0047	U	0.0045	U	0.0047	U	0.0047	U	0.0051	U	0.0043	U	0.0049	U	0.0045	U	0.0047	U	0.0042	U	0.0054	U	-		0.2	U	0.0048	U	0.0066	U	-		0.005	U
1,2,4,5-Tetramethylbenze	mg/kg	--	--	0.0045	U	0.0047	U	0.0045	U	0.0047	U	0.0047	U	0.0051	U	0.0043	U	0.0049	U	0.0045	U	0.0047	U	0.0042	U	0.0054	U	-		0.2	U	0.0048	U	0.0066	U	-		0.005	U
Ethyl ether	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U
trans-1,4-Dichloro-2-buta	mg/kg	--	--	0.0056	U	0.0058	U	0.0056	U	0.0059	U	0.0059	U	0.0063	U	0.0054	U	0.0061	U	0.0057	U	0.0059	U	0.0052	U	0.0068	U	-		0.25	U	0.006	U	0.0083	U	-		0.0062	U

TABLE NOTES:

	Value Exceeds Unrestricted Use Soil Cleanup Objectives (SCO)
	Non Detect Value with a reporting limit which exceeds either Unrestricted Use and/or Residential Restricted Use SCO
J	Estimated Value. The target analyte concentration is below the quantitative limit (RL), but above the method detection limit (MDL) or estimated detection limit (EDL) for SPME-related analyses
U	Not detected at the reported detection limit for the sample
--	No Guidance Value
mg/kg	= milligram per kilogram

Table 3 - Semivolatile Organic Compounds Soil Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, NY 11101

LOCATION		Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Residential Soil Cleanup Objectives	T-1 (2-5)'		T-1 (13-15)'		T-2 (2-5)'		T-2 (13-15)'		T-4 (2-5)'		T-4 (13-15)'		T-5 (2-5)'		T-5 (13-15)'		T-6 (2-5)'		T-6 (13-15)'		T3 (3-5)		T3 (13-15)		T3 (13-15)		T7 (3-5)		T7 (13-15)		T8 (3-5)		T8 (3-5)		T8 (13-15)	
SAMPLING DATE				12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014	
LAB SAMPLE ID				L1430448-01		L1430448-02		L1430448-03		L1430448-04		L1430448-05		L1430448-06		L1430448-07		L1430448-08		L1430448-09		L1430448-10		L1430558-01		L1430558-02		L1430558-02 R1		L1430558-03		L1430558-04		L1430558-05		L1430558-05 R1		L1430558-06	
SAMPLE TYPE				Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
SAMPLE DEPTH (ft.)				2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		3-5'		13-15'		13-15'		3-5'		13-15'		3-5'		3-5'		13-15'	
	Units			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Semivolatile Organics by GC/MS																																							
Acenaphthene	mg/kg	20	100	0.13	U	0.14	U	0.14	U	0.14	U	0.13	U	0.14	U	0.037	J	0.14	U	0.14	U	0.14	U	0.14	U	0.15	U	-		0.045	J	0.14	U	1		-		0.15	U
1,2,4-Trichlorobenzene	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Hexachlorobenzene	mg/kg	0.33	1.2	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.11	U	-		0.1	U	0.1	U	0.1	U	-		0.11	U
Bis(2-chloroethyl)ether	mg/kg	--	--	0.15	U	0.15	U	0.16	U	0.15	U	0.15	U	0.15	U	0.15	U	0.16	U	0.16	U	0.16	U	0.16	U	0.17	U	-		0.15	U	0.15	U	0.15	U	-		0.17	U
2-Chloronaphthalene	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
1,2-Dichlorobenzene	mg/kg	1.1	100	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
1,3-Dichlorobenzene	mg/kg	2.4	49	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
1,4-Dichlorobenzene	mg/kg	1.8	13	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
3,3'-Dichlorobenzidine	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2,4-Dinitrotoluene	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2,6-Dinitrotoluene	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Fluoranthene	mg/kg	100	100	0.085	J	0.1	U	0.13		0.1	U	1.1		0.1	U	0.97		0.1	U	0.1	U	0.1	U	0.29		0.11	U	-		0.71		0.1	U	8.9	E	9.3		0.11	U
4-Chlorophenyl phenyl e	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
4-Bromophenyl phenyl e	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Bis(2-chloroisopropyl)et	mg/kg	--	--	0.2	U	0.2	U	0.21	U	0.2	U	0.2	U	0.2	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.22	U	-		0.21	U	0.2	U	0.21	U	-		0.22	U
Bis(2-chloroethoxy)metl	mg/kg	--	--	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U	0.19	U	0.19	U	0.19	U	0.2	U	-		0.18	U	0.18	U	0.18	U	-		0.2	U
Hexachlorobutadiene	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Hexachlorocyclopentadi	mg/kg	--	--	0.48	U	0.49	U	0.5	U	0.49	U	0.48	U	0.48	U	0.49	U	0.51	U	0.5	U	0.5	U	0.49	U	0.54	U	-		0.49	U	0.49	U	0.49	U	-		0.53	U
Hexachloroethane	mg/kg	--	--	0.13	U	0.14	U	0.14	U	0.14	U	0.13	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.15	U	-		0.14	U	0.14	U	0.14	U	-		0.15	U
Isophorone	mg/kg	--	--	0.15	U	0.15	U	0.16	U	0.15	U	0.15	U	0.15	U	0.15	U	0.16	U	0.16	U	0.16	U	0.16	U	0.17	U	-		0.15	U	0.15	U	0.15	U	-		0.17	U
Naphthalene	mg/kg	12	100	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.092	J	-		0.18	U
Nitrobenzene	mg/kg	--	15	0.15	U	0.15	U	0.16	U	0.15	U	0.15	U	0.15	U	0.15	U	0.16	U	0.16	U	0.16	U	0.16	U	0.17	U	-		0.15	U	0.15	U	0.15	U	-		0.17	U
NitrosoDiPhenylAmine(	mg/kg	--	--	0.13	U	0.14	U	0.14	U	0.14	U	0.13	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.15	U	-		0.14	U	0.14	U	0.14	U	-		0.15	U
n-Nitrosodi-n-propylami	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Bis(2-Ethylhexyl)phthal	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.16	J	0.17	U	0.28		-		0.051	J
Butyl benzyl phthalate	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Di-n-butylphthalate	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Di-n-octylphthalate	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Diethyl phthalate	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Dimethyl phthalate	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Benzo(a)anthracene	mg/kg	1	1	0.044	J	0.1	U	0.068	J	0.1	U	0.54		0.1	U	0.62		0.1	U	0.1	U	0.1	U	0.14		0.11	U	-		0.35		0.1	U	4		-		0.11	U
Benzo(a)pyrene	mg/kg	1	1	0.13	U	0.14	U	0.063	J	0.14	U	0.47		0.14	U	0.65		0.14	U	0.14	U	0.14	U	0.12	J	0.15	U	-		0.29		0.14	U	3.4		-		0.15	U
Benzo(b)fluoranthene	mg/kg	1	1	0.054	J	0.1	U	0.075	J	0.1	U	0.63		0.1	U	0.81		0.1	U	0.1	U	0.1	U	0.16		0.11	U	-		0.37		0.1	U	4.3		-		0.11	U
Benzo(k)fluoranthene	mg/kg	0.8	3.9	0.1	U	0.1	U	0.1	U	0.1	U	0.21		0.1	U	0.29		0.1	U	0.1	U	0.1	U	0.06	J	0.11	U	-		0.15		0.1	U	1.4		-		0.11	U
Chrysene	mg/kg	1	3.9	0.051	J	0.1	U	0.065	J	0.1	U	0.52		0.1	U	0.63		0.1	U	0.1	U	0.1	U	0.13		0.11	U	-		0.34		0.1	U	3.8		-		0.11	U
Acenaphthylene	mg/kg	100	100	0.13	U	0.14	U	0.14	U	0.14	U	0.07	J	0.14	U	0.12	J	0.14	U	0.14	U	0.14	U	0.14	U	0.15	U	-		0.14	U	0.14	U	0.11	J	-		0.15	U
Anthracene	mg/kg	100	100	0.1	U	0.1	U	0.1	U	0.1	U	0.15		0.1	U	0.13		0.1	U	0.1	U	0.1	U	0.038	J	0.11	U	-		0.088	J	0.1	U	2.2		-		0.11	U
Benzo(ghi)perylene	mg/kg	100	100	0.13	U	0.14	U	0.041	J	0.14	U	0.28		0.14	U	0.39		0.14	U	0.14	U	0.14	U	0.073	J	0.15	U	-		0.18		0.14	U	1.9		-		0.15	U
Fluorene	mg/kg	30	100	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.8		-		0.18	U
Phenanthrene	mg/kg	100	100	0.044	J	0.1	U	0.073	J	0.1	U	0.64		0.1	U	0.53		0.1	U	0.1	U	0.1	U	0.16		0.11	U	-		0.52		0.1	U	8.4	E	8.8		0.11	U
Dibenzo(a,h)anthracene	mg/kg	0.33	0.33	0.1	U	0.1	U	0.1	U	0.1	U	0.079	J	0.1	U	0.1		0.1	U	0.1	U	0.1	U	0.1	U	0.11	U	-		0.041	J	0.1	U	0.42		-		0.11	U
Indeno(1,2,3-cd)Pyrene	mg/kg	0.5	0.5	0.13	U	0.14	U	0.044	J	0.14	U	0.31		0.14	U	0.44		0.14	U	0.14	U	0.14	U	0.082	J	0.15	U	-		0.19		0.14	U	2.1		-		0.15	U
Pyrene	mg/kg	100	100	0.072	J	0.1	U	0.12		0.1	U	0.86		0.1	U	1		0.1	U	0.1	U	0.1	U	0.23		0.11	U	-		0.67		0.1	U	8.3	E	8.6		0.11	U
Biphenyl	mg/kg	--	--	0.38	U	0.39	U	0.4	U	0.39	U	0.38	U	0.38	U	0.39	U	0.4	U	0.39	U	0.4	U	0.39	U	0.43	U	-		0.39	U	0.39	U	0.064	J	-		0.42	U
4-Chloroaniline	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2-Nitroaniline	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
3-Nitroaniline	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
4-Nitroaniline	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Dibenzofuran	mg/kg	7	59	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.34		-		0.18	U
2-Methylnaphthalene	mg/kg	--	--	0.2	U	0.2	U	0.21	U	0.2	U	0.2	U	0.2	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.22	U	-		0.21	U	0.2	U	0.17	J	-		0.22	U
1,2,4,5-Tetrachlorobenze	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Acetophenone	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2,4,6-Trichlorophenol	mg/kg	--	--	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.11	U	-		0.1	U	0.1	U	0.1	U	-		0.11	U
P-Chloro-M-Cresol	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2-Chlorophenol	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2,4-Dichlorophenol	mg/kg	--	--	0.15	U	0.15	U	0.16	U	0.15	U	0.15	U	0.15	U	0.15	U	0.16	U	0.16	U	0.16	U	0.16	U	0.17	U	-		0.15	U	0.15	U	0.15	U	-		0.17	U
2,4-Dimethylphenol	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2-Nitrophenol	mg/kg	--	--	0.36	U	0.37	U	0.38	U	0.37	U	0.36	U	0.36	U	0.37	U	0.38	U	0.37	U	0.38	U	0.37	U	0.4	U	-		0.37	U	0.37	U	0.37	U	-		0.4	U
4-Nitrophenol	mg/kg	--	--	0.24	U	0.24	U	0.24	U	0.24	U	0.23	U	0.24	U	0.24	U	0.25	U	0.24	U	0.24	U	0.24	U	0.26	U	-		0.24	U	0.24	U	0.24	U	-		0.26	U
2,4-Dinitrophenol	mg/kg	--	--	0.81	U	0.82	U	0.84	U	0.81	U	0.8	U	0.81	U	0.82	U	0.85	U	0.83	U	0.84	U	0.83	U	0.9	U	-		0.82	U	0.82	U	0.82	U	-		0.89	U
4,6-Dinitro-o-cresol	mg/kg	--	--	0.44	U	0.44	U	0.45	U	0.44	U	0.44	U	0.44	U	0.45	U	0.46	U	0.45	U	0.46	U	0.45	U	0.49	U	-		0.45	U	0.44	U	0.45	U	-		0.48	U
Pentachlorophenol	mg/kg	0.8	6.7	0.13	U	0.14	U	0.14	U	0.14	U	0.13	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.15	U	-		0.14	U	0.14	U	0.14	U	-		0.15	U
Phenol	mg/kg	0.33	100	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
2-Methylphenol	mg/kg	0.33	100	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
3-Methylphenol/4-Methy	mg/kg	0.33	100	0.24	U	0.24	U	0.25	U	0.24	U	0.24	U	0.24	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.27	U	-		0.25	U	0.24	U	0.25	U	-		0.27	U
2,4,5-Trichlorophenol	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Benzoic Acid	mg/kg	--	--	0.54	U	0.55	U	0.56	U	0.55	U	0.54	U	0.55	U	0.56	U	0.57	U	0.56	U	0.57	U	0.56	U	0.61	U	-		0.56	U	0.55	U	0.56	U	-		0.6	U
Benzyl Alcohol	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.17	U	-		0.18	U
Carbazole	mg/kg	--	--	0.17	U	0.17	U	0.17	U	0.17	U	0.074	J	0.17	U	0.17	U	0.18	U	0.17	U	0.18	U	0.17	U	0.19	U	-		0.17	U	0.17	U	0.25		-		0.18	U

TABLE NOTES:

	Value Exceeds Unrestricted Use Soil Cleanup Objectives (SCO)
J	Estimated Value. The target analyte concentration is below the quantitative limit (RL), but above the method detection limit (MDL) or estimated detection limit (EDL) for SPME-related analyses
E	Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
U	Not detected at the reported detection limit for the sample
--	No Guidance Value
mg/kg	= milligram per kilogram

Table 4 - Pesticides and Polychlorinated Biphenyls Soil Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, NY 11101

LOCATION		Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Residential Soil Cleanup Objectives	T-1 (2-5)'		T-1 (13-15)'		T-2 (2-5)'		T-2 (13-15)'		T-4 (2-5)'		T-4 (13-15)'		T-5 (2-5)'		T-5 (13-15)'		T-6 (2-5)'		T-6 (13-15)'		T3 (3-5)		T3 (13-15)		T3 (13-15)		T7 (3-5)		T7 (13-15)		T8 (3-5)		T8 (3-5)		T8 (13-15)	
SAMPLING DATE				12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014	
LAB SAMPLE ID				L1430448-01		L1430448-02		L1430448-03		L1430448-04		L1430448-05		L1430448-06		L1430448-07		L1430448-08		L1430448-09		L1430448-10		L1430558-01		L1430558-02		L1430558-02 R1		L1430558-03		L1430558-04		L1430558-05		L1430558-05 R1		L1430558-06	
SAMPLE TYPE				Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
SAMPLE DEPTH (ft.)				2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		3-5'		13-15'		13-15'		3-5'		13-15'		3-5'		3-5'		13-15'	
	Units			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Organochlorine Pesticides by GC																																							
Delta-BHC	mg/kg	0.04	100	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
Lindane	mg/kg	0.1	1.3	0.000662	U	0.000656	U	0.000662	U	0.000655	U	0.000681	U	0.000661	U	0.000691	U	0.000703	U	0.000669	U	0.000674	U	0.00069	U	0.000748	U	-		0.000652	U	0.000667	U	0.000685	U	-		0.000721	U
Alpha-BHC	mg/kg	0.02	0.48	0.000662	U	0.000656	U	0.000662	U	0.000655	U	0.000681	U	0.000661	U	0.000691	U	0.000703	U	0.000669	U	0.000674	U	0.00069	U	0.000748	U	-		0.000652	U	0.000667	U	0.000685	U	-		0.000721	U
Beta-BHC	mg/kg	0.036	0.36	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
Heptachlor	mg/kg	0.042	2.1	0.000794	U	0.000787	U	0.000794	U	0.000786	U	0.000818	U	0.000793	U	0.000829	U	0.000843	U	0.000803	U	0.000808	U	0.000828	U	0.000898	U	-		0.000783	U	0.000801	U	0.000822	U	-		0.000865	U
Aldrin	mg/kg	0.005	0.097	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
Heptachlor epoxide	mg/kg	--	--	0.00298	U	0.00295	U	0.00298	U	0.00295	U	0.00307	U	0.00297	U	0.00311	U	0.00316	U	0.00301	U	0.00303	U	0.0031	U	0.00337	U	-		0.00294	U	0.003	U	0.00308	U	-		0.00324	U
Endrin	mg/kg	0.014	11	0.000662	U	0.000656	U	0.000662	U	0.000655	U	0.000681	U	0.000661	U	0.000691	U	0.000703	U	0.000669	U	0.000674	U	0.00069	U	0.000748	U	-		0.000652	U	0.000667	U	0.000685	U	-		0.000721	U
Endrin ketone	mg/kg	--	--	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
Dieldrin	mg/kg	0.005	0.2	0.000992	U	0.000984	U	0.000993	U	0.000983	U	0.00102	U	0.000991	U	0.00104	U	0.00105	U	0.001	U	0.00101	U	0.00104	U	0.00112	U	-		0.000979	U	0.001	U	0.00103	U	-		0.00108	U
4,4'-DDE	mg/kg	0.0033	8.9	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
4,4'-DDD	mg/kg	0.0033	13	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
4,4'-DDT	mg/kg	0.0033	7.9	0.00298	U	0.00295	U	0.00298	U	0.00295	U	0.00307	U	0.00297	U	0.00311	U	0.00316	U	0.00301	U	0.00303	U	0.0031	U	0.00337	U	-		0.00294	U	0.003	U	0.00308	U	-		0.00324	U
Endosulfan I	mg/kg	2.4	24	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
Endosulfan II	mg/kg	2.4	24	0.00159	U	0.00157	U	0.00159	U	0.00157	U	0.00164	U	0.00158	U	0.00166	U	0.00169	U	0.00161	U	0.00162	U	0.00166	U	0.0018	U	-		0.00156	U	0.0016	U	0.00164	U	-		0.00173	U
Endosulfan sulfate	mg/kg	2.4	24	0.000662	U	0.000656	U	0.000662	U	0.000655	U	0.000681	U	0.000661	U	0.000691	U	0.000703	U	0.000669	U	0.000674	U	0.00069	U	0.000748	U	-		0.000652	U	0.000667	U	0.000685	U	-		0.000721	U
Methoxychlor	mg/kg	--	--	0.00298	U	0.00295	U	0.00298	U	0.00295	U	0.00307	U	0.00297	U	0.00311	U	0.00316	U	0.00301	U	0.00303	U	0.0031	U	0.00337	U	-		0.00294	U	0.003	U	0.00308	U	-		0.00324	U
Toxaphene	mg/kg	--	--	0.0298	U	0.0295	U	0.0298	U	0.0295	U	0.0307	U	0.0297	U	0.0311	U	0.0316	U	0.0301	U	0.0303	U	0.031	U	0.0337	U	-		0.0294	U	0.03	U	0.0308	U	-		0.0324	U
cis-Chlordane	mg/kg	0.094	4.2	0.00198	U	0.00197	U	0.00198	U	0.00197	U	0.00204	U	0.00198	U	0.00207	U	0.00211	U	0.00201	U	0.00202	U	0.00207	U	0.00224	U	-		0.00196	U	0.002	U	0.00205	U	-		0.00216	U
trans-Chlordane	mg/kg	--	--	0.00198	U	0.00197	U	0.00198	U	0.00197	U	0.00204	U	0.00198	U	0.00207	U	0.00211	U	0.00201	U	0.00202	U	0.00207	U	0.00224	U	-		0.00196	U	0.002	U	0.00205	U	-		0.00216	U
Chlordane	mg/kg	--	--	0.00708	J	0.0128	U	0.0129	U	0.0128	U	0.0133	U	0.0129	U	0.0135	U	0.0137	U	0.013	U	0.0131	U	0.0134	U	0.0146	U	-		0.0127	U	0.013	U	0.0134	U	-		0.014	U
Polychlorinated Biphenyls by GC																																							
Aroclor 1016	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1221	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1232	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1242	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1248	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1254	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1260	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1262	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U
Aroclor 1268	mg/kg	0.1	1	0.0334	U	0.034	U	0.0342	U	0.0334	U	0.0332	U	0.0334	U	0.0326	U	0.0351	U	0.0332	U	0.0349	U	0.033	U	0.0379	U	-		0.0337	U	0.0338	U	0.0351	U	-		0.0364	U

TABLE NOTES:

	Non Detect Value with a reporting limit which exceeds either Unrestricted Use and/or Residential Restricted Use SCO
J	Estimated Value. The target analyte concentration is below the quantitative limit (RL), but above the method detection limit (MDL) or estimated detection limit (EDL) for SPME-related analyses
U	Not detected at the reported detection limit for the sample
--	No Guidance Value
mg/kg	= milligram per kilogram

Table 5 - Metals Soil Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, NY 11101

LOCATION		Part 375 Unrestricted Use Soil Cleanup Objectives	Part 375 Restricted Residential Soil Cleanup Objectives	T-1 (2-5)'		T-1 (13-15)'		T-2 (2-5)'		T-2 (13-15)'		T-4 (2-5)'		T-4 (13-15)'		T-5 (2-5)'		T-5 (13-15)'		T-6 (2-5)'		T-6 (13-15)'		T3 (3-5)		T3 (13-15)		T3 (13-15)		T7 (3-5)		T7 (13-15)		T8 (3-5)		T8 (3-5)		T8 (13-15)	
SAMPLING DATE				12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/17/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014	
LAB SAMPLE ID				L1430448-01		L1430448-02		L1430448-03		L1430448-04		L1430448-05		L1430448-06		L1430448-07		L1430448-08		L1430448-09		L1430448-10		L1430558-01		L1430558-02		L1430558-02 R1		L1430558-03		L1430558-04		L1430558-05		L1430558-05 R1		L1430558-06	
SAMPLE TYPE				Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
SAMPLE DEPTH (ft.)				2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		2-5'		13-15'		3-5'		13-15'		13-15'		3-5'		13-15'		3-5'		3-5'		13-15'	
	Units			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Total Metals																																							
Aluminum, Total	mg/kg	--	--	4000		3500		5900		3300		4500		4400		4100		5000		3000		5700		4500		3000		-		5300		4000		3000		-		7300	
Antimony, Total	mg/kg	--	--	3.9	U	4.5		4.2	U	4	U	4	U	4	U	4	U	4.2	U	4	U	4.2	U	3.9	U	4.4	U	-		4.2		4	U	1.7	J	-		4.4	U
Arsenic, Total	mg/kg	13	16	2.6		1		2.1		1.3		3.4		1.2		2.2		1.8		0.5	J	1.4		2.9		-		1.9		12		2.2		5.5		-		3.4	
Barium, Total	mg/kg	350	400	240		23		120		18		48		26		62		27		18		58		70		22		-		270		33		49		-		53	
Beryllium, Total	mg/kg	7.2	72	0.19	J	0.14	J	0.23	J	0.13	J	0.22	J	0.14	J	0.17	J	0.17	J	0.12	J	0.18	J	0.19	J	0.12	J	-		0.24	J	0.16	J	0.16	J	-		0.25	J
Cadmium, Total	mg/kg	2.5	4.3	0.23	J	0.78	U	0.83	U	0.79	U	0.19	J	0.81	U	0.1	J	0.84	U	0.8	U	0.84	U	0.07	J	0.87	U	-		0.45	J	0.8	U	1.1		-		0.87	U
Calcium, Total	mg/kg	--	--	800		1300		1300		6400		2200		1200		1300		2000		960		18000		4400		940		-		9300		16000		2000		-		1200	
Chromium, Total	mg/kg	--	--	18		21		18		8.2		8.3		11		11		13		7.1		14		9.9		8.6		-		15		9.6		7.8		-		14	
Cobalt, Total	mg/kg	--	--	3.4		4.8		5		4.6		3.6		4.5		4.4		5.4		2.7		5.4		4		3.6		-		5.1		4.2		3.3		-		5.9	
Copper, Total	mg/kg	50	270	20		11		20		11		22		10		31		15		7.1		14		18		7.3		-		170		11		31		-		15	
Iron, Total	mg/kg	--	--	8500		8600		11000		8100		9500		8900		9900		12000		5400		12000		8800		6600		-		16000		8700		11000		-		13000	
Lead, Total	mg/kg	63	400	210		1.6	J	710		2.6	J	72		1.4	J	170		2.1	J	1.3	J	1.4	J	70		1.3	J	-		1000		1.8	J	170		-		2.1	J
Magnesium, Total	mg/kg	--	--	1900		2400		2600		5300		1900		2600		2300		2700		1500		11000		2100		1700		-		2800		8200		1600		-		3000	
Manganese, Total	mg/kg	1600	2000	210		200		280		170		240		230		200		280		140		230		220		160		-		180		180		210		-		340	
Mercury, Total	mg/kg	0.18	0.81	0.05	J	0.07	U	0.11		0.07	U	0.18		0.08	U	0.13		0.07	U	0.07	U	0.08	U	0.21		0.07	U	-		0.13		0.07	U	0.12		-		0.03	J
Nickel, Total	mg/kg	30	310	13		9.9		11		8.6		8.2		9.8		10		12		5.6		11		9.2		7.6		-		16		9.2		7.9		-		13	
Potassium, Total	mg/kg	--	--	450		660		900		760		520		900		870		920		650		2200		680		480		-		520		960		380		-		970	
Selenium, Total	mg/kg	3.9	180	1.6	U	1.6	U	1.7	U	1.6	U	0.54	J	1.6	U	1.6	U	1.7	U	1.6	U	1.7	U	1.6	U	1.7	U	-		0.44	J	1.6	U	1.6	U	-		1.7	U
Silver, Total	mg/kg	2	180	0.78	U	0.78	U	0.83	U	0.79	U	0.8	U	0.81	U	0.8	U	0.84	U	0.8	U	0.84	U	0.78	U	0.87	U	-		0.52	J	0.8	U	0.8	U	-		0.87	U
Sodium, Total	mg/kg	--	--	130	J	100	J	160	J	83	J	160		80	J	110	J	140	J	66	J	110	J	92	J	72	J	-		130	J	170		140	J	-		150	J
Thallium, Total	mg/kg	--	--	1.6	U	1.6	U	1.7	U	1.6	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.7	U	1.6	U	1.7	U	-		1.6	U	1.6	U	1.6	U	-		1.7	U
Vanadium, Total	mg/kg	--	--	11		13		19		12		12		15		19		20		8.3		20		12		12		-		24		13		11		-		21	
Zinc, Total	mg/kg	109	10000	310		28		73		27		130		23		140		27		22		34		68		17		-		400		25		460		-		29	

TABLE NOTES:

	Value Exceeds Unrestricted and/or Restricted Use "Restricted Residential" SCOs
J	Estimated Value. The target analyte concentration is below the quantitative limit (RL), but above the method detection limit (MDL) or estimated detection limit (EDL) for SPME-related analyses
U	Not detected at the reported detection limit for the sample
--	No Guidance Value
mg/kg	= milligram per kilogram

Table 6 - Volatile Organic Compounds - Groundwater Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, NY 11101

LOCATION		New York TOGS 1.1.1 Ambient Water Quality Standards (AWQS)	TW-1		TW-2	
SAMPLING DATE			12/17/2014		12/18/2014	
LAB SAMPLE ID			L1430448-11		L1430583-01	
	Units		Results	Qual	Results	Qual
Volatile Organics by GC/MS						
Methylene chloride	ug/l	5	2.5	U	2.5	U
1,1-Dichloroethane	ug/l	5	2.5	U	2.5	U
Chloroform	ug/l	7	4.4		2.8	
Carbon tetrachloride	ug/l	5	0.5	U	0.5	U
1,2-Dichloropropane	ug/l	1	1	U	1	U
Dibromochloromethane	ug/l	50	0.5	U	0.5	U
1,1,2-Trichloroethane	ug/l	1	1.5	U	1.5	U
Tetrachloroethene	ug/l	5	0.64		0.69	
Chlorobenzene	ug/l	5	2.5	U	2.5	U
Trichlorofluoromethane	ug/l	5	2.5	U	2.5	U
1,2-Dichloroethane	ug/l	0.6	0.5	U	0.5	U
1,1,1-Trichloroethane	ug/l	5	2.5	U	2.5	U
Bromodichloromethane	ug/l	50	0.5	U	0.5	U
trans-1,3-Dichloropropene	ug/l	0.4	0.5	U	0.5	U
cis-1,3-Dichloropropene	ug/l	0.4	0.5	U	0.5	U
1,3-Dichloropropene, Total	ug/l	--	0.5	U	0.5	U
1,1-Dichloropropene	ug/l	5	2.5	U	2.5	U
Bromoform	ug/l	50	2	U	2	U
1,1,2,2-Tetrachloroethane	ug/l	5	0.5	U	0.5	U
Benzene	ug/l	1	0.5	U	0.5	U
Toluene	ug/l	5	2.5	U	2.5	U
Ethylbenzene	ug/l	5	2.5	U	2.5	U
Chloromethane	ug/l	--	2.5	U	2.5	U
Bromomethane	ug/l	5	2.5	U	2.5	U
Vinyl chloride	ug/l	2	1	U	1	U
Chloroethane	ug/l	5	2.5	U	2.5	U
1,1-Dichloroethene	ug/l	5	0.5	U	0.5	U
trans-1,2-Dichloroethene	ug/l	5	2.5	U	2.5	U
Trichloroethene	ug/l	5	1.9		2.1	
1,2-Dichlorobenzene	ug/l	3	2.5	U	2.5	U
1,3-Dichlorobenzene	ug/l	3	2.5	U	2.5	U
1,4-Dichlorobenzene	ug/l	3	2.5	U	2.5	U
Methyl tert butyl ether	ug/l	10	2.5	U	2.5	U
p/m-Xylene	ug/l	5	2.5	U	2.5	U
o-Xylene	ug/l	5	2.5	U	2.5	U
Xylenes, Total	ug/l	--	2.5	U	2.5	U
cis-1,2-Dichloroethene	ug/l	5	2.5	U	2.5	U
1,2-Dichloroethene, Total	ug/l	--	2.5	U	2.5	U
Dibromomethane	ug/l	5	5	U	5	U
1,2,3-Trichloropropane	ug/l	0.04	2.5	U	2.5	U
Acrylonitrile	ug/l	5	5	U	5	U
Styrene	ug/l	5	2.5	U	2.5	U
Dichlorodifluoromethane	ug/l	5	5	U	5	U
Acetone	ug/l	50	5	U	5	U
Carbon disulfide	ug/l	60	5	U	5	U
2-Butanone	ug/l	50	5	U	5	U
Vinyl acetate	ug/l	--	5	U	5	U
4-Methyl-2-pentanone	ug/l	--	5	U	5	U
2-Hexanone	ug/l	50	5	U	5	U
Bromochloromethane	ug/l	5	2.5	U	2.5	U
2,2-Dichloropropane	ug/l	5	2.5	U	2.5	U
1,2-Dibromoethane	ug/l	0.0006	2	U	2	U
1,3-Dichloropropane	ug/l	5	2.5	U	2.5	U
1,1,1,2-Tetrachloroethane	ug/l	5	2.5	U	2.5	U
Bromobenzene	ug/l	5	2.5	U	2.5	U
n-Butylbenzene	ug/l	5	2.5	U	2.5	U
sec-Butylbenzene	ug/l	5	2.5	U	2.5	U
tert-Butylbenzene	ug/l	5	2.5	U	2.5	U
o-Chlorotoluene	ug/l	5	2.5	U	2.5	U
p-Chlorotoluene	ug/l	5	2.5	U	2.5	U
1,2-Dibromo-3-chloropropane	ug/l	0.04	2.5	U	2.5	U
Hexachlorobutadiene	ug/l	0.5	2.5	U	2.5	U
Isopropylbenzene	ug/l	5	2.5	U	2.5	U
p-Isopropyltoluene	ug/l	5	2.5	U	2.5	U
Naphthalene	ug/l	10	2.5	U	2.5	U
n-Propylbenzene	ug/l	5	2.5	U	2.5	U
1,2,3-Trichlorobenzene	ug/l	5	2.5	U	2.5	U
1,2,4-Trichlorobenzene	ug/l	5	2.5	U	2.5	U
1,3,5-Trimethylbenzene	ug/l	5	2.5	U	2.5	U
1,2,4-Trimethylbenzene	ug/l	5	2.5	U	2.5	U
1,4-Dioxane	ug/l	--	250	U	250	U
p-Diethylbenzene	ug/l	--	2	U	2	U
p-Ethyltoluene	ug/l	--	2	U	2	U
1,2,4,5-Tetramethylbenzene	ug/l	--	2	U	2	U
Ethyl ether	ug/l	--	2.5	U	2.5	U
trans-1,4-Dichloro-2-butene	ug/l	5	2.5	U	2.5	U

Table Notes:

	Non-Detect Value - with a Reporting Limit that exceeds the AWQS
J	Estimated Value. The target analyte concentration is below the quantitative limit (RL), but above the method detection limit (MDL) or estimated detection limit (EDL) for SPME-related analyses
U	Not detected at the reported detection limit for the sample
--	No Guidance Value
ug/l	= microgram per liter

Table 7 - Semivolatile Organic Compounds Groundwater Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, NY 11101

LOCATION		New York TOGS 1.1.1 Ambient Water Quality Standards (AWQS)	TW-1		TW-1 FILTERED		TW-1 FILTERED		TW-2		TW-2 FILTERED	
SAMPLING DATE			12/17/2014		12/17/2014		12/17/2014		12/18/2014		12/18/2014	
LAB SAMPLE ID			L1430448-11		L1430448-12		L1430448-12 R1		L1430583-01		L1430583-02 R1	
	Units		Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Semivolatile Organics by GC/MS												
1,2,4-Trichlorobenzene	ug/l	5	5	U	5	U	-		5	U	5	U
Bis(2-chloroethyl)ether	ug/l	1	2	U	2	U	-		2	U	2	U
1,2-Dichlorobenzene	ug/l	3	2	U	2	U	-		2	U	2	U
1,3-Dichlorobenzene	ug/l	3	2	U	2	U	-		2	U	2	U
1,4-Dichlorobenzene	ug/l	3	2	U	2	U	-		2	U	2	U
3,3'-Dichlorobenzidine	ug/l	5	5	U	5	U	-		5	U	5	U
2,4-Dinitrotoluene	ug/l	5	5	U	5	U	-		5	U	5	U
2,6-Dinitrotoluene	ug/l	5	5	U	5	U	-		5	U	5	U
4-Chlorophenyl phenyl ether	ug/l	--	2	U	2	U	-		2	U	2	U
4-Bromophenyl phenyl ether	ug/l	--	2	U	2	U	-		2	U	2	U
Bis(2-chloroisopropyl)ether	ug/l	5	2	U	2	U	-		2	U	2	U
Bis(2-chloroethoxy)methane	ug/l	5	5	U	5	U	-		5	U	5	U
Hexachlorocyclopentadiene	ug/l	5	20	U	20	U	-		20	U	20	U
Isophorone	ug/l	50	5	U	5	U	-		5	U	5	U
Nitrobenzene	ug/l	0.4	2	U	2	U	-		2	U	2	U
NitrosoDiPhenylAmine(NDPA)/DPA	ug/l	50	2	U	2	U	-		2	U	2	U
n-Nitrosodi-n-propylamine	ug/l	--	5	U	5	U	-		5	U	5	U
Bis(2-Ethylhexyl)phthalate	ug/l	5	3	U	3	U	-		3	U	3	U
Butyl benzyl phthalate	ug/l	50	5	U	5	U	-		5	U	5	U
Di-n-butylphthalate	ug/l	50	5	U	5	U	-		5	U	5	U
Di-n-octylphthalate	ug/l	50	5	U	5	U	-		5	U	5	U
Diethyl phthalate	ug/l	50	5	U	5	U	-		5	U	5	U
Dimethyl phthalate	ug/l	50	5	U	5	U	-		5	U	5	U
Biphenyl	ug/l	--	2	U	2	U	-		2	U	0.61	J
4-Chloroaniline	ug/l	5	5	U	5	U	-		5	U	5	U
2-Nitroaniline	ug/l	5	5	U	5	U	-		5	U	5	U
3-Nitroaniline	ug/l	5	5	U	5	U	-		5	U	5	U
4-Nitroaniline	ug/l	5	5	U	5	U	-		5	U	5	U
Dibenzofuran	ug/l	--	2	U	2	U	-		2	U	2	U
1,2,4,5-Tetrachlorobenzene	ug/l	5	10	U	10	U	-		10	U	10	U
Acetophenone	ug/l	--	5	U	5	U	-		5	U	5	U
2,4,6-Trichlorophenol	ug/l	--	5	U	5	U	-		5	U	5	U
P-Chloro-M-Cresol	ug/l	--	2	U	2	U	-		2	U	2	U
2-Chlorophenol	ug/l	--	2	U	2	U	-		2	U	2	U
2,4-Dichlorophenol	ug/l	1	5	U	5	U	-		5	U	5	U
2,4-Dimethylphenol	ug/l	50	5	U	5	U	-		5	U	5	U
2-Nitrophenol	ug/l	--	10	U	10	U	-		10	U	10	U
4-Nitrophenol	ug/l	--	10	U	10	U	-		10	U	10	U
2,4-Dinitrophenol	ug/l	10	20	U	20	U	-		20	U	20	U
4,6-Dinitro-o-cresol	ug/l	--	10	U	10	U	-		10	U	10	U
Phenol	ug/l	1	5	U	5	U	-		5	U	5	U
2-Methylphenol	ug/l	--	5	U	5	U	-		5	U	5	U
3-Methylphenol/4-Methylphenol	ug/l	--	5	U	5	U	-		5	U	5	U
2,4,5-Trichlorophenol	ug/l	--	5	U	5	U	-		5	U	5	U
Benzoic Acid	ug/l	--	50	U	50	U	-		50	U	10	J
Benzyl Alcohol	ug/l	--	2	U	2	U	-		2	U	2	U
Carbazole	ug/l	--	2	U	2	U	-		2	U	2	U
Acenaphthene	ug/l	20	0.2	U	-		0.2	U	0.2	U	0.2	U
2-Chloronaphthalene	ug/l	10	0.2	U	-		0.2	U	0.2	U	0.2	U
Fluoranthene	ug/l	50	0.2	U	-		0.23		0.2	U	0.2	U
Hexachlorobutadiene	ug/l	0.5	0.5	U	-		0.5	U	0.5	U	0.5	U
Naphthalene	ug/l	10	0.07	J	-		0.1	J	0.2	U	0.08	J
Benzo(a)anthracene	ug/l	--	0.2	U	-		0.2	U	0.2	U	0.2	U
Benzo(a)pyrene	ug/l	0.0	0.2	U	-		0.2	U	0.2	U	0.2	U
Benzo(b)fluoranthene	ug/l	0.002	0.2	U	-		0.2	U	0.2	U	0.2	U
Benzo(k)fluoranthene	ug/l	0.002	0.2	U	-		0.2	U	0.2	U	0.2	U
Chrysene	ug/l	0.002	0.2	U	-		0.2	U	0.2	U	0.2	U
Acenaphthylene	ug/l	--	0.2	U	-		0.2	U	0.2	U	0.2	U
Anthracene	ug/l	50	0.2	U	-		0.2	U	0.2	U	0.2	U
Benzo(ghi)perylene	ug/l	--	0.2	U	-		0.2	U	0.2	U	0.2	U
Fluorene	ug/l	50	0.2	U	-		0.06	J	0.2	U	0.2	U
Phenanthrene	ug/l	50	0.2	U	-		0.26		0.2	U	0.2	U
Dibenzo(a,h)anthracene	ug/l	--	0.2	U	-		0.2	U	0.2	U	0.2	U
Indeno(1,2,3-cd)Pyrene	ug/l	0.002	0.2	U	-		0.2	U	0.2	U	0.2	U
Pyrene	ug/l	50	0.2	U	-		0.22		0.2	U	0.2	U
2-Methylnaphthalene	ug/l	--	0.2	U	-		0.2	U	0.2	U	0.2	U
Pentachlorophenol	ug/l	1	0.8	U	-		0.8	U	0.8	U	0.8	U
Hexachlorobenzene	ug/l	0.04	0.8	U	-		0.8	U	0.8	U	0.8	U
Hexachloroethane	ug/l	5	0.8	U	-		0.8	U	0.8	U	0.8	U

Table Notes:

	Non-Detect Value - with a Reporting Limit that exceeds the AWQS
J	Estimated Value. The target analyte concentration is below the quantitative limit (RL), but above the method detection limit (MDL) or estimated detection limit (EDL) for SPME-related analyses
U	Not detected at the reported detection limit for the sample
--	No Guidance Value
ug/l	= microgram per liter

Table 8 - Pesticides and Polychlorinated Biphenyls Groundwater Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, NY 11101

LOCATION		New York TOGS 1.1.1 Ambient Water Quality Standards (AWQS)	TW-1		TW-2	
SAMPLING DATE			12/17/2014		12/18/2014	
LAB SAMPLE ID			L1430448-11		L1430583-01	
	Units		Results	Qual	Results	Qual
Organochlorine Pesticides by GC						
Delta-BHC	ug/l	0.04	0.02	U	0.02	U
Lindane	ug/l	0.05	0.02	U	0.02	U
Alpha-BHC	ug/l	0.01	0.02	U	0.02	U
Beta-BHC	ug/l	0.04	0.02	U	0.02	U
Heptachlor	ug/l	0.04	0.02	U	0.02	U
Aldrin	ug/l	0.0	0.02	U	0.02	U
Heptachlor epoxide	ug/l	0.03	0.02	U	0.02	U
Endrin	ug/l	0	0.04	U	0.04	U
Endrin ketone	ug/l	5	0.04	U	0.04	U
Dieldrin	ug/l	0.004	0.04	U	0.04	U
4,4'-DDE	ug/l	0.2	0.04	U	0.04	U
4,4'-DDD	ug/l	0.3	0.04	U	0.04	U
4,4'-DDT	ug/l	0.2	0.04	U	0.04	U
Endosulfan I	ug/l	--	0.02	U	0.02	U
Endosulfan II	ug/l	--	0.04	U	0.04	U
Endosulfan sulfate	ug/l	--	0.04	U	0.04	U
Methoxychlor	ug/l	35	0.2	U	0.2	U
Toxaphene	ug/l	0.06	0.2	U	0.2	U
cis-Chlordane	ug/l	--	0.02	U	0.02	U
trans-Chlordane	ug/l	--	0.02	U	0.02	U
Chlordane	ug/l	0.05	0.2	U	0.2	U
Polychlorinated Biphenyls by GC						
Aroclor 1016	ug/l	0.09	0.083	U	0.083	U
Aroclor 1221	ug/l	0.09	0.083	U	0.083	U
Aroclor 1232	ug/l	0.09	0.083	U	0.083	U
Aroclor 1242	ug/l	0.09	0.083	U	0.083	U
Aroclor 1248	ug/l	0.09	0.083	U	0.083	U
Aroclor 1254	ug/l	0.09	0.083	U	0.083	U
Aroclor 1260	ug/l	0.09	0.083	U	0.083	U
Aroclor 1262	ug/l	0.09	0.083	U	0.083	U
Aroclor 1268	ug/l	0.09	0.083	U	0.083	U

Table Notes:

	Non-Detect Value - with a Reporting Limit that exceeds the AWQS
U	Not detected at the reported detection limit for the sample
--	No Guidance Value
ug/l	= microgram per liter

Table 9 - Metals Groundwater Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, New York 11101

LOCATION		New York TOGS 1.1.1 Ambient Water Quality Standards (AWQS)	TW-1		TW-1		TW-1 FILTERED		TW-2		TW-2		TW-2 FILTERED		TW-2 FILTERED	
SAMPLING DATE			12/17/2014		12/17/2014		12/17/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014	
LAB SAMPLE ID			L1430448-11		L1430448-11 R1		L1430448-12		L1430583-01		L1430583-01 R1		L1430583-02		L1430583-02 R1	
	Units		Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Dissolved Metals																
Aluminum, Dissolved	ug/l	--	-		-		7.46	J	-		-		14		-	-
Antimony, Dissolved	ug/l	3	-		-		2.63		-		-		0.3	J	-	-
Arsenic, Dissolved	ug/l	25	-		-		0.14	J	-		-		0.5	U	-	-
Barium, Dissolved	ug/l	1000	-		-		65.17		-		-		109.2		-	-
Beryllium, Dissolved	ug/l	3	-		-		0.5	U	-		-		0.5	U	-	-
Cadmium, Dissolved	ug/l	5	-		-		0.2	U	-		-		0.2	U	-	-
Calcium, Dissolved	ug/l	--	-		-		59300		-		-		-		87700	
Chromium, Dissolved	ug/l	50	-		-		2.44		-		-		0.6	J	-	-
Cobalt, Dissolved	ug/l	--	-		-		0.79		-		-		1.3		-	-
Copper, Dissolved	ug/l	200	-		-		1.33		-		-		0.99	J	-	-
Iron, Dissolved	ug/l	300	-		-		12.4	J	-		-		30	J	-	-
Lead, Dissolved	ug/l	25	-		-		1	U	-		-		0.2	J	-	-
Magnesium, Dissolved	ug/l	35000	-		-		21100		-		-		40400		-	-
Manganese, Dissolved	ug/l	300	-		-		63.88		-		-		73.5		-	-
Mercury, Dissolved	ug/l	0.7	-		-		0.2	U	-		-		0.2	U	-	-
Nickel, Dissolved	ug/l	100	-		-		2.48		-		-		2.4		-	-
Potassium, Dissolved	ug/l	--	-		-		1560		-		-		5330		-	-
Selenium, Dissolved	ug/l	10	-		-		5	U	-		-		5	U	-	-
Silver, Dissolved	ug/l	50	-		-		0.25	U	-		-		0.3	U	-	-
Sodium, Dissolved	ug/l	20000	-		-		65500		-		-		-		117000	
Thallium, Dissolved	ug/l	0.5	-		-		0.2	U	-		-		0.2	U	-	-
Vanadium, Dissolved	ug/l	--	-		-		5	U	-		-		5	U	-	-
Zinc, Dissolved	ug/l	2000	-		-		2.65	J	-		-		10	U	-	-
Total Metals																
Aluminum, Total	ug/l	--	-		276		-		72.2		-	-	-	-	-	-
Antimony, Total	ug/l	3	90.97		-		-		2.23	J	-	-	-	-	-	-
Arsenic, Total	ug/l	25	0.33	J	-		-		0.26	J	-	-	-	-	-	-
Barium, Total	ug/l	1000	93.3		-		-		104.2		-	-	-	-	-	-
Beryllium, Total	ug/l	3	0.5	U	-		-		0.5	U	-	-	-	-	-	-
Cadmium, Total	ug/l	5	0.2	U	-		-		0.2	U	-	-	-	-	-	-
Calcium, Total	ug/l	--	-		65300		-		-		88400		-	-	-	-
Chromium, Total	ug/l	50	5.19		-		-		1.39		-	-	-	-	-	-
Cobalt, Total	ug/l	--	1.16		-		-		1.1		-	-	-	-	-	-
Copper, Total	ug/l	200	3.05		-		-		1.46		-	-	-	-	-	-
Iron, Total	ug/l	300	682		-		-		271		-	-	-	-	-	-
Lead, Total	ug/l	25	87.4		-		-		0.16	J	-	-	-	-	-	-
Magnesium, Total	ug/l	35000	21200		-		-		37600		-	-	-	-	-	-
Manganese, Total	ug/l	300	103.1		-		-		71.42		-	-	-	-	-	-
Mercury, Total	ug/l	0.7	0.2	U	-		-		0.2	U	-	-	-	-	-	-
Nickel, Total	ug/l	100	3.88		-		-		2.29		-	-	-	-	-	-
Potassium, Total	ug/l	--	2700		-		-		4790		-	-	-	-	-	-
Selenium, Total	ug/l	10	5	U	-		-		5	U	-	-	-	-	-	-
Silver, Total	ug/l	50	0.4	U	-		-		0.25	U	-	-	-	-	-	-
Sodium, Total	ug/l	20000	-		65400		-		-		96500		-	-	-	-
Thallium, Total	ug/l	0.5	8.32		-		-		0.2	U	-	-	-	-	-	-
Vanadium, Total	ug/l	--	1.69	J	-		-		0.92	J	-	-	-	-	-	-
Zinc, Total	ug/l	2000	28.87		-		-		13.9		-	-	-	-	-	-

Table Notes:

	Result exceeds NY TOGS AWQS
J	Estimated Value. The target analyte concentration is below the quantitative limit (RL), but above the method detection limit (MDL) or estimated detection limit (EDL) for SPME-related analyses
U	Not detected at the reported detection limit for the sample
--	No Guidance Value
ug/l	= microgram/liter

Table 10 - Soil Vapor Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, NY 11101

LOCATION	NYSDOH Air Guideline Values	Units	SV-1S		SV-2B		SV-3S		SV-4B	
SAMPLING DATE			12/17/2014		12/17/2014		12/17/2014		12/17/2014	
LAB SAMPLE ID			L1430475-01		L1430475-02		L1430475-03		L1430475-04	
SAMPLE TYPE			Soil Vapor		Soil Vapor		Soil Vapor		Soil Vapor	
SAMPLE DEPTH (ft.)			5.0		15.0		5.0		15.0	
Volatile Organics in Air			**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Dichlorodifluoromethane	--	ug/m3	16.4		19.1		10.6		19.4	
Chloromethane	--	ug/m3	4.13	U	4.13	U	0.826	U	0.826	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	--	ug/m3	14	U	14	U	2.8	U	2.8	U
Vinyl chloride	--	ug/m3	5.11	U	5.11	U	1.02	U	1.02	U
1,3-Butadiene	--	ug/m3	4.42	U	6.06		0.898		1.2	
Bromomethane	--	ug/m3	7.77	U	7.77	U	1.55	U	1.55	U
Chloroethane	--	ug/m3	5.28	U	5.28	U	1.06	U	1.06	U
Ethyl Alcohol	--	ug/m3	47.1	U	47.1	U	15.4		21.3	
Vinyl bromide	--	ug/m3	8.74	U	8.74	U	1.75	U	1.75	U
Acetone	--	ug/m3	70.1		273		247		404	
Trichlorofluoromethane	--	ug/m3	11.2	U	11.2	U	7.36		8.94	
iso-Propyl Alcohol	--	ug/m3	12.3	U	12.3	U	4.52		8.23	
1,1-Dichloroethene	--	ug/m3	7.93	U	7.93	U	1.59	U	1.59	U
tert-Butyl Alcohol	--	ug/m3	17.8		54.6		42.7		74.3	
Methylene chloride	60	ug/m3	17.4	U	17.4	U	3.47	U	4	
3-Chloropropene	--	ug/m3	6.26	U	6.26	U	1.25	U	1.25	U
Carbon disulfide	--	ug/m3	6.23	U	6.29		1.59		2.78	
1,1,2-Trichloro-1,2,2-Trifluoroethane	--	ug/m3	15.3	U	15.3	U	3.07	U	3.07	U
trans-1,2-Dichloroethene	--	ug/m3	7.93	U	7.93	U	2.11		2.78	
1,1-Dichloroethane	--	ug/m3	8.09	U	8.09	U	1.62	U	1.62	U
Methyl tert butyl ether	--	ug/m3	7.21	U	7.21	U	1.44	U	1.44	U
2-Butanone	--	ug/m3	43.1		139		71.4		161	
cis-1,2-Dichloroethene	--	ug/m3	7.93	U	7.93	U	1.59	U	1.59	U
Ethyl Acetate	--	ug/m3	18	U	18	U	5.87		25	
Chloroform	--	ug/m3	28.2		54.2		9.67		13.9	
Tetrahydrofuran	--	ug/m3	5.9	U	5.9	U	1.18	U	1.18	U
1,2-Dichloroethane	--	ug/m3	8.09	U	8.09	U	1.62	U	1.62	U
n-Hexane	--	ug/m3	7.05	U	7.05	U	1.81		6.52	
1,1,1-Trichloroethane	--	ug/m3	10.9	U	10.9	U	2.18	U	2.97	
Benzene	--	ug/m3	6.39	U	8.72		1.85		7.35	
Carbon tetrachloride	--	ug/m3	12.6	U	12.6	U	2.52	U	2.52	U
Cyclohexane	--	ug/m3	6.88	U	6.88	U	1.38	U	1.88	
1,2-Dichloropropane	--	ug/m3	9.24	U	9.24	U	1.85	U	1.85	U
Bromodichloromethane	--	ug/m3	13.4	U	13.4	U	2.68	U	2.68	U
1,4-Dioxane	--	ug/m3	7.21	U	7.21	U	1.44	U	1.44	U
Trichloroethene	5	ug/m3	5100		3600		801		1030	
2,2,4-Trimethylpentane	--	ug/m3	10.5		9.34	U	1.87	U	1.87	U
Heptane	--	ug/m3	8.2	U	10.5		2.65		11.1	
cis-1,3-Dichloropropene	--	ug/m3	9.08	U	9.08	U	1.82	U	1.82	U
4-Methyl-2-pentanone	--	ug/m3	8.2	U	8.2	U	56.6		204	
trans-1,3-Dichloropropene	--	ug/m3	9.08	U	9.08	U	1.82	U	1.82	U
1,1,2-Trichloroethane	--	ug/m3	10.9	U	10.9	U	2.18	U	2.18	U
Toluene	--	ug/m3	43.7		109		117		259	
2-Hexanone	--	ug/m3	11.8		26.9		2.91		24.6	
Dibromochloromethane	--	ug/m3	17	U	17	U	3.41	U	3.41	U
1,2-Dibromoethane	--	ug/m3	15.4	U	15.4	U	3.07	U	3.07	U
Tetrachloroethene	100	ug/m3	53.8		39.6		25.6		34.2	
Chlorobenzene	--	ug/m3	9.21	U	9.21	U	1.84	U	1.84	U
Ethylbenzene	--	ug/m3	8.69	U	8.69	U	7.04		8.21	
p/m-Xylene	--	ug/m3	17.4	U	17.4	U	20.8		23.8	
Bromoform	--	ug/m3	20.7	U	20.7	U	4.14	U	4.14	U
Styrene	--	ug/m3	8.52	U	8.52	U	1.7	U	1.7	U
1,1,2,2-Tetrachloroethane	--	ug/m3	13.7	U	13.7	U	2.75	U	2.75	U
o-Xylene	--	ug/m3	8.69	U	8.69	U	11		10.9	
4-Ethyltoluene	--	ug/m3	9.83	U	9.83	U	1.97	U	1.97	U
1,3,5-Trimethylbenzene	--	ug/m3	9.83	U	9.83	U	1.97	U	1.97	U
1,2,4-Trimethylbenzene	--	ug/m3	9.83	U	9.83	U	1.97	U	1.97	U
Benzyl chloride	--	ug/m3	10.4	U	10.4	U	2.07	U	2.07	U
1,3-Dichlorobenzene	--	ug/m3	12	U	12	U	2.4	U	2.4	U
1,4-Dichlorobenzene	--	ug/m3	12	U	12	U	2.4	U	2.4	U
1,2-Dichlorobenzene	--	ug/m3	12	U	12	U	2.4	U	2.4	U
1,2,4-Trichlorobenzene	--	ug/m3	14.8	U	14.8	U	2.97	U	2.97	U
Hexachlorobutadiene	--	ug/m3	21.3	U	21.3	U	4.27	U	4.27	U

Table Notes:
NYSDOH = New York State Department of Health
AGV = Air guideline values
U=analyte not detected at or above the level indicated
ug/m^3 = micrograms per cubic meter
U - Not detected at the reported detection limit for the sample
-- No guideline values
Yellow highlighted result exceeds NYSDOH AGV

Table 11.1 - Volatile Organic Compounds - Concrete Grabs Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, New York 11101

Sample ID		NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)	NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	CC-1	CC-2	CC-2RE	CC-3	CC-4	CC-5	CC-6	CC-6RE
Lab Sample Number				G1158-01	G1158-02	G1158-02RE	G1158-03	G1158-04	G1158-05	G1158-06	G1158-06RE
Sampling Date				1/22/2015	1/22/2015	1/22/2015	1/22/2015	1/22/2015	1/22/2015	1/22/2015	1/22/2015
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
COMPOUND	CAS #										
Dichlorodifluoromethane	75-71-8	490		0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Chloromethane	74-87-3	4		0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Vinyl Chloride	75-01-4	0.7	0.02	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Bromomethane	74-83-9	25		0.0010 U	0.0010 U	0.0010 U	0.100 U	0.0010 U	0.100 U	0.0010 U	0.0010 U
Chloroethane	75-00-3	220		0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Trichlorofluoromethane	75-69-4	23000		0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
1,1,2-Trichlorotrifluoroethane	76-13-1			0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
1,1-Dichloroethene	75-35-4	11	0.33	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Acetone	67-64-1	70000	0.05	0.0025 U	0.0025 U	0.0025 U	3.8	0.0025 U	6.2	0.0025 U	0.0025 U
Carbon Disulfide	75-15-0	7800		0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Methyl tert-butyl Ether	1634-04-4	110	0.93	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Methyl Acetate	79-20-9	78000		0.0010 U	0.0010 U	0.0010 U	0.62	0.0010 U	19.8 JD	0.0010 U	0.0010 U
Methylene Chloride	75-09-2	34	0.05	0.0017 J	0.0059	0.0056	0.0500 U	0.0068	0.0501 U	0.0021 J	0.0027 J
trans-1,2-Dichloroethene	156-60-5	300	0.19	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
1,1-Dichloroethane	75-34-3	8	0.27	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Cyclohexane	110-82-7			0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
2-Butanone	78-93-3	3100	0.12	0.0075 U	0.0075 U	0.0075 U	0.750 U	0.0075 U	0.750 U	0.0075 U	0.0075 U
Carbon Tetrachloride	56-23-5	0.6	0.76	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
cis-1,2-Dichloroethene	156-59-2	230	0.25	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Bromochloromethane	74-97-5			0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Chloroform	67-66-3	0.6	0.37	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
1,1,1-Trichloroethane	71-55-6	290	0.68	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Methylcyclohexane	108-87-2			0.0005 U	0.0005 U	0.0005 U	1.6	0.0005 U	11.9	0.0005 U	0.0005 U
Benzene	71-43-2	2	0.06	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
1,2-Dichloroethane	107-06-2	0.9	0.02	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Trichloroethene	79-01-6	7	0.47	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
1,2-Dichloropropane	78-87-5	2		0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Bromodichloromethane	75-27-4	1		0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
4-Methyl-2-Pentanone	108-10-1			0.0025 U	0.0337	0.0205 J	2.6	0.0064 J	62.5	0.0025 U	0.0025 U
Toluene	108-88-3	6300	0.7	0.0005 U	0.0309	0.0222	54.8 D	0.0059	160 D	0.0005 U	0.0005 U
t-1,3-Dichloropropene	10061-02-6	2		0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
cis-1,3-Dichloropropene	10061-01-5	2		0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
1,1,2-Trichloroethane	79-00-5	2		0.0010 U	0.0010 U	0.0010 U	0.100 U	0.0010 U	0.100 U	0.0010 U	0.0010 U
2-Hexanone	591-78-6			0.0025 U	0.0025 U	0.0025 U	0.250 U	0.0025 U	0.250 U	0.0025 U	0.0025 U
Dibromochloromethane	124-48-1	3		0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
1,2-Dibromoethane	106-93-4	0.008		0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Tetrachloroethene	127-18-4	2	1.3	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Chlorobenzene	108-90-7	510	1.1	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Ethyl Benzene	100-41-4	7800	1	0.0005 U	0.0074	0.0044 J	3.5	0.0005 U	8.3	0.0005 U	0.0005 U
m/p-Xylenes	179601-23-1			0.0010 U	0.0245	0.0163	12.5	0.0022 J	46.3 D	0.0010 U	0.0010 U
o-Xylene	95-47-6	12000	0.26	0.0005 U	0.012	0.0078	9.4	0.0010 J	22.7 D	0.0005 U	0.0005 U
Styrene	100-42-5	90		0.0005 U	0.0126	0.0077	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
Bromoform	75-25-2	81		0.0015 U	0.0015 U	0.0015 U	0.150 U	0.0015 U	0.150 U	0.0015 U	0.0015 U
Isopropylbenzene	98-82-8			0.0005 U	0.0005 U	0.0005 U	0.280 J	0.0005 U	1.3	0.0005 U	0.0005 U
1,1,2,2-Tetrachloroethane	79-34-5	1		0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
1,3-Dichlorobenzene	541-73-1	5300	2.4	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
1,4-Dichlorobenzene	106-46-7	5	1.8	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
1,2-Dichlorobenzene	95-50-1	5300	1.1	0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
1,2-Dibromo-3-Chloropropane	96-12-8	0.08		0.0050 U	0.0050 U	0.0050 U	0.500 U	0.0050 U	0.500 U	0.0050 U	0.0050 U
1,2,4-Trichlorobenzene	120-82-1	73		0.0005 U	0.0005 U	0.0005 U	0.0500 U	0.0005 U	0.0501 U	0.0005 U	0.0005 U
1,2,3-Trichlorobenzene	87-61-6			0.0010 U	0.0010 U	0.0010 U	0.100 U	0.0010 U	0.100 U	0.0010 U	0.0010 U
1,4-Dioxane	123-91-1		0.1	0.100 U	0.100 U	0.100 U	10.0 U	0.100 U	10.0 U	0.100 U	0.100 U

Qualifiers

Blue text indicate detected concentrations

Result highlighted in grey exceeds either the NJ Residential Direct Contact Soil or the NY Soil Cleanup Objective (SCOs) Unrestricted Use

mg/kg - milligram per kilogram

MDL - Method detection limit

U - The compound was not detected at the indicated concentration.

N (Organics) - Presumptive Evidence of a Compound

N (Inorganics) - The matrix spike recovery was outside control limits

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* (Organics) - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

* (Inorganics) - The sample/duplicate %RPD was above the control limit.

E (Organics) - Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.

E (Inorganics) - The reported value is estimated because of the presence of interference.

D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

Q - indicates LCS control criteria did not meet requirements.

NR - Not analyzed

Table 11.2 - Semivolatile Organic Compounds - Concrete Grabs Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, New York 11101

Sample ID		NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)	NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	CC-1	CC-2	CC-3	CC-4	CC-5	CC-5RE	CC-6	CC-6RE
Lab Sample Number				G1158-01	G1158-02	G1158-03	G1158-04	G1158-05	G1158-05RE	G1158-06	G1158-06RE
Sampling Date				1/22/2015	1/22/2015	1/22/2015	1/22/2015	1/22/2015	1/22/2015	1/22/2015	1/22/2015
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
COMPOUND	CAS #										
Benzaldehyde	100-52-7	6100		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Phenol	108-95-2	18000	0.33	0.100 J	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
bis(2-Chloroethyl)ether	111-44-4	0.4		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2-Chlorophenol	95-57-8	310		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2-Methylphenol	95-48-7	310	0.33	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2,2-oxybis(1-Chloropropane)	108-60-1	23		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Acetophenone	98-86-2	2		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
3+4-Methylphenols	65794-96-9			0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
n-Nitroso-di-n-propylamine	621-64-7	0.2		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Hexachloroethane	67-72-1	35		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Nitrobenzene	98-95-3	31		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Isophorone	78-59-1	510		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2-Nitrophenol	88-75-5			0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2,4-Dimethylphenol	105-67-9	1200		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
bis(2-Chloroethoxy)methane	111-91-1			0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2,4-Dichlorophenol	120-83-2	180		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Naphthalene	91-20-3	6	12	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.49	0.46	0.0332 U	0.0332 U
4-Chloroaniline	106-47-8			0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Hexachlorobutadiene	87-68-3	6		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Caprolactam	105-60-2	31000		0.0665 U	0.0666 U	3.30 U	0.0667 U	0.0665 U	0.0665 U	0.0664 U	0.0664 U
4-Chloro-3-methylphenol	59-50-7			0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2-Methylnaphthalene	91-57-6	230		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.220 J	0.200 J	0.0332 U	0.0332 U
Hexachlorocyclopentadiene	77-47-4	45		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2,4,6-Trichlorophenol	88-06-2	19		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2,4,5-Trichlorophenol	95-95-4	6100		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
1,1-Biphenyl	92-52-4	3100		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2-Chloronaphthalene	91-58-7			0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2-Nitroaniline	88-74-4	39		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Dimethylphthalate	131-11-3			0.120 J	0.190 J	1.70 U	0.0333 U	0.0838 J	0.0941 J	0.110 J	0.120 J
Acenaphthylene	208-96-8	NA	100	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2,6-Dinitrotoluene	606-20-2	0.7		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
3-Nitroaniline	99-09-2			0.0665 U	0.0666 U	3.30 U	0.0667 U	0.0665 U	0.0665 U	0.0664 U	0.0664 U
Acenaphthene	83-32-9	3400	20	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2,4-Dinitrophenol	51-28-5	120		0.270 U	0.270 U	13.3 U	0.270 U	0.270 U	0.270 U	0.270 U	0.270 U
4-Nitrophenol	100-02-7			0.170 U	0.170 U	8.30 U	0.170 U	0.170 U	0.170 U	0.170 U	0.170 U
Dibenzofuran	132-64-9		7	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2,4-Dinitrotoluene	121-14-2	0.7		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Diethylphthalate	84-66-2	49000		0.0332 U	0.130 J	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
4-Chlorophenyl-phenylether	7005-72-3			0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Fluorene	86-73-7	2300	30	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
4-Nitroaniline	100-01-6			0.0665 U	0.0666 U	3.30 U	0.0667 U	0.0665 U	0.0665 U	0.0664 U	0.0664 U
4,6-Dinitro-2-methylphenol	534-52-1	6		0.170 U	0.170 U	8.30 U	0.170 U	0.170 U	0.170 U	0.170 U	0.170 U
n-Nitrosodiphenylamine	86-30-6	99		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
4-Bromophenyl-phenylether	101-55-3			0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Hexachlorobenzene	118-74-1	0.3	0.33	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Atrazine	1912-24-9	210		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Pentachlorophenol	87-86-5	3	0.8	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Phenanthrene	85-01-8	NA	100	0.0332 U	0.230 J	1.70 U	0.180 J	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Anthracene	120-12-7	17000	100	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Carbazole	86-74-8	24		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Di-n-butylphthalate	84-74-2	6100		0.0332 U	1.2	7.30 J	0.0333 U	0.47	0.5	0.0332 U	0.0332 U
Fluoranthene	206-44-0	2300	100	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Pyrene	129-00-0	1700	100	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Butylbenzylphthalate	85-68-7	1200		0.0332 U	0.0333 U	118 D	0.0333 U	0.48	0.59	0.0332 U	0.0332 U
3,3-Dichlorobenzidine	91-94-1	1		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Benzo(a)anthracene	56-55-3	0.6	1	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Chrysene	218-01-9	62	1	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Bis(2-ethylhexyl)phthalate	117-81-7	35		0.0332 U	7.30 D	37.7	0.0333 U	0.34	0.39	0.0332 U	0.0332 U
Di-n-octyl phthalate	117-84-0	2400		0.0332 U	0.0333 U	1.70 U	0.0333 U	0.46	0.49	0.0332 U	0.0332 U
Benzo(b)fluoranthene	205-99-2	0.6	1	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Benzo(k)fluoranthene	207-08-9	6	0.8	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Benzo(a)pyrene	50-32-8	0.2	1	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.6	0.5	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Dibenzo(a,h)anthracene	53-70-3	0.2	0.33	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
Benzo(g,h,i)perylene	191-24-2	380000	100	0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
1,2,4,5-Tetrachlorobenzene	95-94-3			0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U
2,3,4,6-Tetrachlorophenol	58-90-2			0.0332 U	0.0333 U	1.70 U	0.0333 U	0.0333 U	0.0333 U	0.0332 U	0.0332 U

Qualifiers

Blue text indicate detected concentrations

Result highlighted in grey exceeds either the NJ Residential Direct Contact Soil or the NY Soil Cleanup Objective (SCOs) Unrestricted Use

mg/kg - milligram per kilogram

MDL - Method detection limit

U - The compound was not detected at the indicated concentration.

N (Organics) - Presumptive Evidence of a Compound

N (Inorganics) - The matrix spike recovery was outside control limits

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* (Organics) - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

* (Inorganics) - The sample/duplicate %RPD was above the control limit.

E (Organics) - Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.

E (Inorganics) - The reported value is estimated because of the presence of interference.

D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

Q - indicates LCS control criteria did not meet requirements.

NR - Not analyzed

Table 11.3 - Polychlorinated Biphenyl Compounds - Concrete Grabs Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, New York 11101

Sample ID		NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)	NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	CC-1	CC-2	CC-3	CC-4	CC-5	CC-6
Lab Sample Number				G1158-01	G1158-02	G1158-03	G1158-04	G1158-05	G1158-06
Sampling Date				1/22/2015	1/22/2015	1/22/2015	1/22/2015	1/22/2015	1/22/2015
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
COMPOUND	CAS #								
Aroclor-1016	12674-11-2	0.2	0.1	0.0033 U	0.0033 U	0.0033 U	0.0033 U	0.0033 U	0.0033 U
Aroclor-1221	11104-28-2	0.2	0.1	0.0033 U	0.0033 U	0.0033 U	0.0033 U	0.0033 U	0.0033 U
Aroclor-1232	11141-16-5	0.2	0.1	0.0033 U	0.0033 U	0.0033 U	0.0033 U	0.0033 U	0.0033 U
Aroclor-1242	53469-21-9	0.2	0.1	0.0033 U	0.0033 U	0.0033 U	0.0033 U	0.0033 U	0.0033 U
Aroclor-1248	12672-29-6	0.2	0.1	0.0033 U	0.0033 U	0.0033 U	0.0033 U	0.0033 U	0.0033 U
Aroclor-1254	11097-69-1	0.2	0.1	**0.0259 P**	**0.0525**	**0.11**	**0.0653**	0.0033 U	0.0033 U
Aroclor-1260	11096-82-5	0.2	0.1	0.0033 U	0.0033 U	0.0033 U	0.0033 U	0.0033 U	0.0033 U

Qualifiers

Blue text indicate detected concentrations

Result highlighted in grey exceeds either the NJ Residential Direct Contact Soil or the NY Soil Cleanup Objective (SCOs) Unrestricted Use

mg/kg - milligram per kilogram

MDL - Method detection limit

U - The compound was not detected at the indicated concentration.

N (Organics) - Presumptive Evidence of a Compound

N (Inorganics) - The matrix spike recovery was outside control limits

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* (Organics) - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

* (Inorganics) - The sample/duplicate %RPD was above the control limit.

E (Organics) - Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.

E (Inorganics) - The reported value is estimated because of the presence of interference.

D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

Q - indicates LCS control criteria did not meet requirements.

NR - Not analyzed

Table 11.4 - Metals and Total Petroleum Hydrocarbons- Concrete Grabs Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, New York 11101

Sample ID		NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)	NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	CC-1	CC-2	CC-3	CC-4	CC-5	CC-6
Lab Sample Number				G1158-01	G1158-02	G1158-03	G1158-04	G1158-05	G1158-06
Sampling Date				1/22/2015	1/22/2015	1/22/2015	1/22/2015	1/22/2015	1/22/2015
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Metals									
Aluminum	7429-90-5	78000		4600	5440	6510	5270	5310	5890
Antimony	7440-36-0	31		0.521 U	0.504 U	1.40 J	0.523 U	0.514 U	0.521 U
Arsenic	7440-38-2	19	13	1.56	1.63	8.66	0.478 J	3.18	3.01
Barium	7440-39-3	16000	350	32.6	69.1	1420	41.4	45.1	53
Beryllium	7440-41-7	16	7.2	0.208 J	0.245	0.27	0.238 J	0.391	0.435
Cadmium	7440-43-9	78	2.5	0.748	2.91	15.5	1.46	0.0620 U	4.51
Calcium	7440-70-2			49700	70000	61900	64400	75700	80800
Chromium	7440-47-3			9.15	9.61	156	535	30.6	40.8
Cobalt	7440-48-4	1600		15.5	9	29.5	18.2	5.88	19
Copper	7440-50-8	3100	50	18.2	165	79.7	25.8	14.7	53.5
Iron	7439-89-6			6100	7220	12600	6070	6420	7580
Lead	7439-92-1	400	63	11.6	24.6	817	50.8	12	38.6
Magnesium	7439-95-4			1820	2820	5890	3130	3220	3900
Manganese	7439-96-5	11000	1600	128	134	160	139	243	262
Mercury	7439-97-6	23	0.18	0.034	0.064	0.133	0.036	0.011	0.02
Nickel	7440-02-0	1600	30	7.86	7.39	49.3	16.9	13.9	36.7
Potassium	9/7/7440			1160	1140	2290	1960	853	1560
Selenium	7782-49-2	390	3.9	0.208 U	0.202 U	2.1	0.209 U	0.250 J	0.231 J
Silver	7440-22-4	390	2	0.104 U	0.101 U	0.105 U	0.105 U	0.103 U	0.104 U
Sodium	7440-23-5			916	932	4450	2710	407	658
Thallium	7440-28-0	5		0.417 U	0.403 U	0.418 U	0.418 U	0.412 U	0.417 U
Vanadium	7440-62-2	78		6.99	6.82	8.89	9.61	12	13.7
Zinc	7440-66-6	23000	109	62.2	236	941	89.8	89.5	136
Trivalent Chromium	16065-83-1			9	9.21	145	505	21.1	33
Hexavalent Chromium	18540-29-9			0.154 J	0.4	11.3	30.1	9.5	7.8
Hexavalent Chromium	18540-29-9		1	0.154 J	0.4	11.3	30.1	9.5	7.8
TPH									
Petroleum Hydrocarbons	Petroleum Hydrocarbons			31.9	4119	804	3488	73.3	452
Cyanide									
Cyanide	57-12-5	1600	27	0.133 J	0.0430 J	0.912	0.182 J	0.169 J	0.122 U

Qualifiers

Blue text indicate detected concentrations

Result highlighted in grey exceeds either the NJ Residential Direct Contact Soil or the NY Soil Cleanup Objective (SCOs) Unrestricted Use

mg/kg - milligram per kilogram

MDL - Method detection limit

U - The compound was not detected at the indicated concentration.

N (Organics) - Presumptive Evidence of a Compound

N (Inorganics) - The matrix spike recovery was outside control limits

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* (Organics) - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

* (Inorganics) - The sample/duplicate %RPD was above the control limit.

E (Organics) - Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.

E (Inorganics) - The reported value is estimated because of the presence of interference.

D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

Q - indicates LCS control criteria did not meet requirements.

NR - Not analyzed

Table 12.1 Volatile Organic Compounds - Concrete Composite Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, New York 11101

Sample ID		TCLP Maximum Contaminant Concentrations (40 CFR 261 6/96)	COMP-CC-2-CC-3-CC-4-CC-5-CC-6
Lab Sample Number			G1217-01
Sampling Date			1/22/2015
Matrix		TCLP	TCLP
Units		mg/L	mg/l
COMPOUND	CAS #		
Vinyl Chloride	75-01-4	0.2	0.0025 U
1,1-Dichloroethene	75-35-4	0.7	0.0025 U
2-Butanone	78-93-3	200	0.0125 U
Carbon Tetrachloride	56-23-5	0.5	0.0025 U
Chloroform	67-66-3	6	0.0025 U
Benzene	71-43-2	0.5	0.0025 U
1,2-Dichloroethane	107-06-2	0.5	0.0038 U
Trichloroethene	79-01-6	0.5	0.0025 U
Tetrachloroethene	127-18-4	0.7	0.0025 U
Chlorobenzene	108-90-7	100	0.0025 U

Qualifiers

U - The compound was not detected at the indicated concentration.

N (Organics) - Presumptive Evidence of a Compound

N (Inorganics) - The matrix spike recovery was outside control limits

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* (Organics) - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.
* (Inorganics) - The sample/duplicate %RPD was above the control limit.

E (Organics) - Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis.

E (Inorganics) - The reported value is estimated because of the presence of interference.

D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

Q - indicates LCS control criteria did not meet requirements.

NR - Not analyzed

Table 12.2 Semivolatile Organic Compounds - Concrete Composite Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, New York 11101

Sample ID		TCLP Maximum Contaminant Concentrations (40 CFR 261 6/96)	COMP-CC-2-CC-3-CC-4-CC-5-CC-6
Lab Sample Number			G1217-01
Sampling Date			1/22/2015
Matrix		TCLP	TCLP
Units		mg/L	mg/l
COMPOUND	CAS #		
Pyridine	110-86-1	5	0.0100 U
1,4-Dichlorobenzene	106-46-7	7.5	0.0100 U
2-Methylphenol	95-48-7	200	0.0100 U
3+4-Methylphenols	65794-96-9		0.0100 U
Hexachloroethane	67-72-1	3	0.0100 U
Nitrobenzene	98-95-3	2	0.0100 U
Hexachlorobutadiene	87-68-3	0.5	0.0100 U
2,4,6-Trichlorophenol	88-06-2	2	0.0100 U
2,4,5-Trichlorophenol	95-95-4	400	0.0100 U
2,4-Dinitrotoluene	121-14-2	0.13	0.0100 U
Hexachlorobenzene	118-74-1	0.13	0.0100 U
Pentachlorophenol	87-86-5	100	0.0100 U

Qualifiers

U - The compound was not detected at the indicated concentration.

N (Organics) - Presumptive Evidence of a Compound

N (Inorganics) - The matrix spike recovery was outside control limits

result is less than the quantitation limit but greater than MDL. The concentration given is an

possible laboratory contamination of the environmental sample.

concentrations on the two columns is greater than 40%.

reported due to coeluting interference.

* (Inorganics) - The sample/duplicate %RPD was above the control limit.

instrument for that specific analysis.

E (Inorganics) - The reported value is estimated because of the presence of interference.

analysis exceeded the calibration range.

Q - indicates LCS control criteria did not meet requirements.

NR - Not analyzed

Table 12.3 Pesticide and Herbicide Compounds - Concrete Composite Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, New York 11101

Sample ID		TCLP Maximum Contaminant Concentrations (40 CFR 261 6/96)	COMP-CC-2-CC-3-CC-4-CC-5-CC-6
Lab Sample Number			**G1217-01**
Sampling Date			**1/22/2015**
Matrix		**TCLP**	**TCLP**
Units		**mg/L**	**mg/l**
COMPOUND	CAS #		
gamma-BHC (Lindane)	58-89-9	0.4	0.0001 U
Heptachlor	76-44-8	0.008	0.0001 U
Heptachlor epoxide	1024-57-3	0.008	0.0001 U
Endrin	72-20-8	0.02	0.0001 U
Methoxychlor	72-43-5	10	0.0001 U
Toxaphene	8001-35-2	0.5	0.0010 U
Chlordane	57-74-9		0.0010 U
COMPOUND	CAS #		
2,4-D	94-75-7	10	0.0050 U
2,4,5-TP (Silvex)	93-72-1	1	0.0050 U

Qualifiers

U - The compound was not detected at the indicated concentration.

N (Organics) - Presumptive Evidence of a Compound

N (Inorganics) - The matrix spike recovery was outside control limits

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* (Organics) - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

* (Inorganics) - The sample/duplicate %RPD was above the control limit.

E (Organics) - Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.

E (Inorganics) - The reported value is estimated because of the presence of interference.

D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

Q - indicates LCS control criteria did not meet requirements.

NR - Not analyzed

Table 12.4 Ignitability, Corrosivity, Reactivity and Metals - Concrete Composite Analytical Results
Phase II Remedial Investigation Report
37-27 31st Street and 37-26 32nd Street
New York, New York 11101

Sample ID		**COMP-CC-2-CC-3-CC-4-CC-5-CC-6**	
Lab Sample Number		**G1217-01**	
Sampling Date		**1/22/2015**	
Matrix		**SOIL**	
Units		**mg/Kg**	
COMPOUND	CAS #		
Ignitability	IGNIT	NO	
Corrosivity		**11.4**	**(pH)**
Reactive Sulfide	RESU	10.0	U
Reactive Cyanide	RECY	10.0	U
Metals			
Molybdenum	7439-98-7	**2.81**	**J**
Arsenic	7440-38-2	0.0250	U
Barium	7440-39-3	**0.158**	**J**
Cadmium	7440-43-9	0.0075	U
Chromium	7440-47-3	**0.495**	
Lead	7439-92-1	**0.0173**	**J**
Mercury	7439-97-6	0.0010	U
Selenium	7782-49-2	0.0500	U
Silver	7440-22-4	0.0125	U

Qualifiers

Blue text are detected concetrations

U - The compound was not detected at the indicated concentration.

N (Organics) - Presumptive Evidence of a Compound

N (Inorganics) - The matrix spike recovery was outside control limits

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* (Organics) - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

* (Inorganics) - The sample/duplicate %RPD was above the control limit.

E (Organics) - Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.

E (Inorganics) - The reported value is estimated because of the presence of interference.

D - The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

Q - indicates LCS control criteria did not meet requirements.

NR - Not analyzed

APPENDIX A

LIMITATIONS

GEOHYDROLOGICAL LIMITATIONS

Use of Report

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

Standard of Care

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).

3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.

4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

Subsurface Conditions

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

6. Water level readings have been made, as described in this Report, in and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

Compliance with Codes and Regulations

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.

Screening and Analytical Testing

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.

9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.

10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

Interpretation of Data

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

Additional Information

12. In the event that the Client or others authorized to use this report obtain additional information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

Additional Services

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

APPENDIX B

GEOPHYSICAL SURVEY REPORT

GEOPHYSICAL ENGINEERING SURVEY REPORT

Commercial Properties

37-27 31st Street & 37-26 32nd Street
Long Island City, New York 11101

NOVA PROJECT NUMBER

14-0435

DATED

December 18, 2014

PREPARED FOR:

GZA GeoEnvironmental, Inc.
104 West 29th Street, 10th Floor
New York, NY 10001

PREPARED BY:

NOVA
GEOPHYSICAL
ENGINEERING
Subsurface Mapping Solutions

56-01 Marathon Parkway # 765
Douglaston, New York 11362
347-556-7787 (PHONE)
718-261-1527(FAX)
www.nova-gsi.com

NOVA GEOPHYSICAL SERVICES

SUBSURFACE MAPPING SOLUTIONS
56-01 Marathon Parkway, # 765, Douglaston, New York 11362
Ph. 347-556-7787 Fax. 718-261-1527
www.nova-gsi.com

December 18, 2014

James F. Colony
Geologist II
GZA Environmental, Inc.
104 W 29th Street
New York, New York 10001
Direct: 347.271.1326

Re: Geophysical Engineering Survey (GES) Report
Commercial Properties
37-27 31st Street & 37-26 32nd Street
Long Island City, New York 11101

Dear Mr. Colony:

Nova Geophysical Services (NOVA) is pleased to provide findings of the geophysical engineering survey (GES) at the above referenced project site: Commercial Properties, 37-27 31st Street & 37-26 32nd Street, Long Island City, New York (the "Site"). Please see attached Site Location and Geophysical Survey maps for more details.

INTRODUCTION TO GEOPHYSICAL ENGINEERING SURVEY (GES)

NOVA performed a Geophysical engineering surveys (GES) consisting of a Ground Penetrating Radar (GPR) survey at the site. The purpose of this survey is to locate and identify USTs, anomalies, utilities and other substructures and to clear and mark proposed environmental boring areas on December 16, 2014.

The equipment selected for this investigation was Noggin's 250 MHz ground penetrating radar (GPR) shielded antenna. Additionally, NOVA performed Comprehensive Subsurface Utility Locating (CSUL) / Subsurface Utility Engineering (SUE) Surveys utilizing Schonstedt's GA-72Cd and Ditch-Witch magnetometry in total field and gradiometer configurations to identify any current or former utilities or other embedded conduits that maybe located at the project area. Due to the excessive urban setting (building materials and general setting with metal content), Nova was unable to perform EM61 Electromagnetic or TW-6 Fisher Systems during this survey.

A GPR system consists of a radar control unit, control cable and a transducer (antenna). The control unit transmits a trigger pulse at a normal repetition rate of 250 MHz. The trigger pulse is sent to the transmitter electronics in the transducer via the control cable. The transmitter electronics amplify the trigger pulses into bipolar pulses that are radiated to the surface. The transformed pulses vary in shape and frequency according to the transducer used. In the subsurface, variations of the signal occur at boundaries where there is a dielectric contrast (void, steel, soil type, etc.). Signal reflections travel back to the control unit and are represented as color graphic images for interpolation.

GEOPHYSICAL METHODS

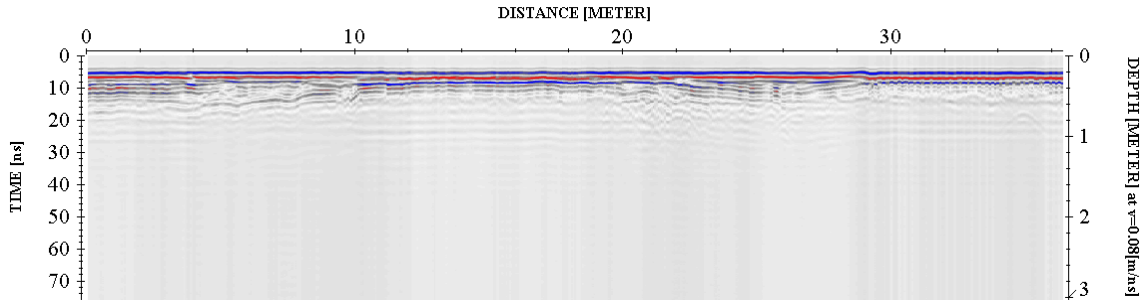
The project site was screened using the GPR by carrying the instrument over the project area at the site in 4' x 4' traverses. When evidence of anomalies was observed, they were clearly marked for further evaluation. A Ditch-witch(tm) and Schonstedt's GA-72Cd utility locators were then used to determine if the anomalies were utilities or other large sub-surface metal objects. Finally, GPR profiles were collected over each metal-detector anomaly and inspected for reflections, which could be indicative of major anomalies. Then, individual borehole locations were screened with a finer survey grid

GPR data profiles were collected for the areas of the Site specified by the client. The surveyed areas consisted of concrete and asphalt surfaces.

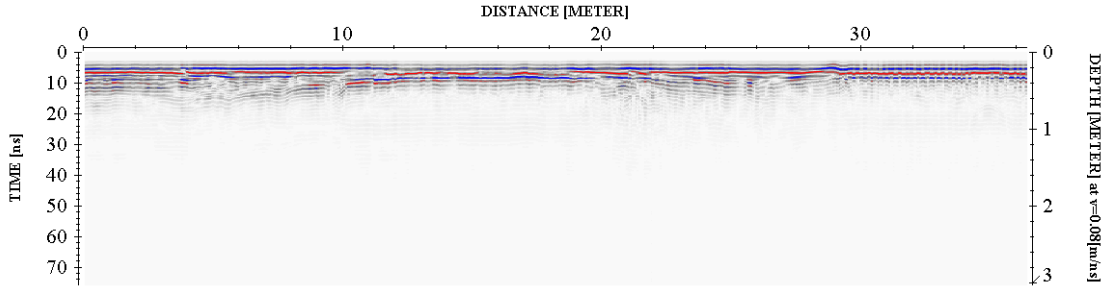
DATA PROCESSING

In order to improve the quality of the results and to better identify subsurface anomalies NOVA processed the collected data. The processes flow is briefly described at this section.

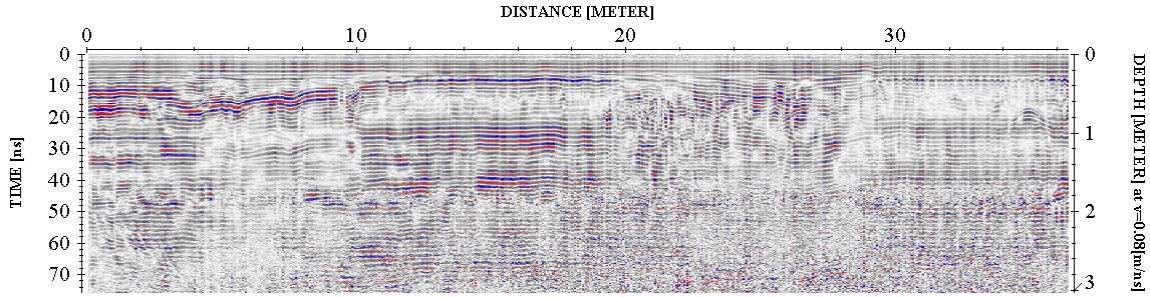
Step 1. Import raw RAMAC data to standard processing format



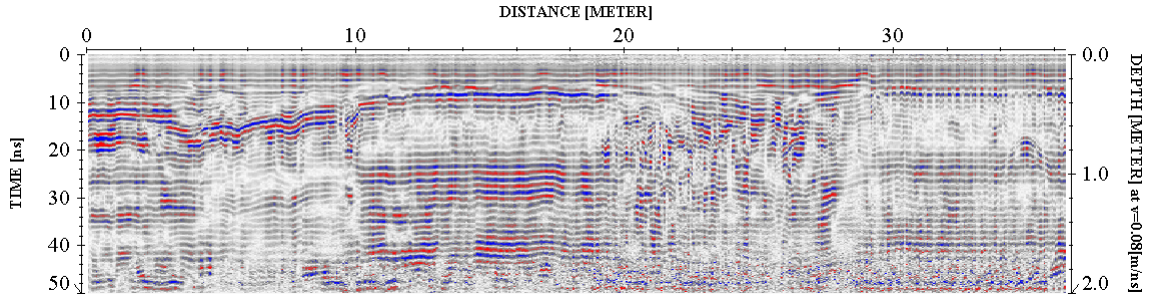
Step 2. Remove instrument noise *(dewow)*



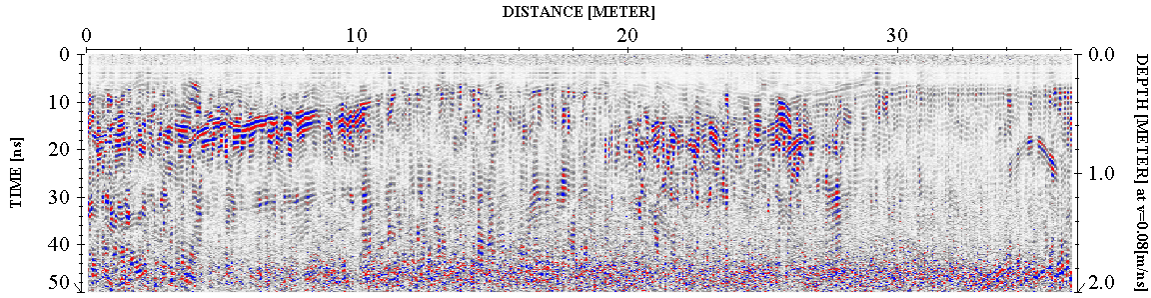
Step 3. Correct for attenuation losses *(energy decay function)*



Step 4. Remove static from bottom of profile *(time cut)*



Step 5. Mute horizontal ringing/noise *(subtracting average)*



The above example shows the significance of data processing. The last image (step 5) has higher resolution than the starting image (raw data – step 1) and describes the subsurface anomalies more accurately.

PHYSICAL SETTINGS

Nova observed following physical conditions at the time of the survey:

The weather: Overcast

Temp: 40 Degrees (F).

Surface: Paved (concrete-asphalt) surfaces

Geophysical Noise Level (GNL): Geophysical Noise Level (GNL) was medium to high at the site. Noise levels typical of an urban environment and an active work site were experienced during the time of the survey. Due to the excessive urban setting (building materials and general setting with metal content), Nova was unable to perform EM61 Electromagnetic or TW-6 Fisher Systems during this survey.

RESULTS

The results of the geophysical engineering survey (GES) identified following at the project Site:

- GES survey identified scattered anomalies located throughout the project site. Based on their rates and proximity, these anomalies were inconsistent with any USTs. These areas were indicated on the on-site markout.
- NOVA's Comprehensive Subsurface Utility Locating (CSUL) / Subsurface Utility Engineering (SUE) Surveys identified several utilities (sewer, gas, water and electric) were located on the site. These utilities were marked out both at the site and on the survey map. Due to exessive geophysical noise level, some of the floor drains could not be traced.
- A large anomaly, potentially consistent with a known UST, was located on site. This was marked out on the site and is indicated on the survey map.
- Nova cleared and marked all of the proposed boring locations at the time of the survey.
- Geophysical Survey Plan portrays the areas investigated during the geophysical survey.

If you have any questions please do not hesitate to contact the undersigned.
Sincerely,

NOVA Geophysical Services

Levent Eskicakit, P.G., E.P.
Project Engineer

Attachments:
Figure 1 Site Location Map
Geophysical Survey Plan
Geophysical Images

N

200 ft.

FIGURE 1
SITE LOCATION MAP

NOVA
Geophysical Services
Subsurface Mapping Solutions
56-01 Marathon Pkwy, # 765, Douglaston, NY11362
(347) 556-7787 Fax (718) 261-1528
www.nova-gsi.com

SITE: **Commercial Property**
37-27 31st Street & 37-26 32nd Street
Long Island City, New York 11101

SCALE: See Map

1- All anomalies were marked in the field.

NOVA
Geophysical Services
Subsurface Mapping Solutions
56-01 Marathon Parkway, PO Box 765
Douglaston, New York11362
Phone (347) 556-7787 * Fax (718) 261-1527
www.nova-gsi.com

GEOPHYSICAL SURVEY PLAN

SITE : **Commercial Property**
37-27 31st Street & 37-26 32nd Street
Long Island City, New York 11101

CLIENT: **GZA Environmental, Inc.**
DATE: December 16, 2014
Scale See Map

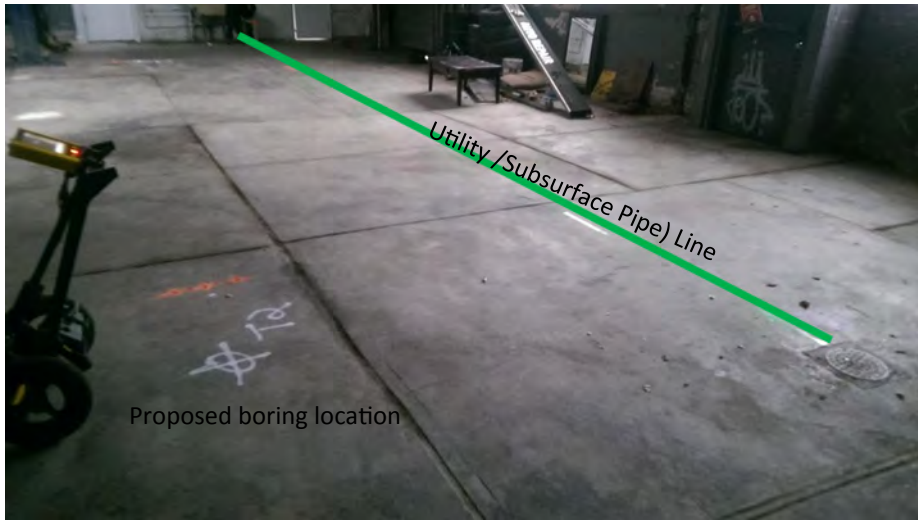
INFORMATION

- Survey Area
- Gas line
- Electrical line
- Sewer Line
- Water Line
- Potential UST

25 ft.

GEOPHYSICAL IMAGES

Commercial Property
37-27 31st Street & 37-26 32nd Street
Brooklyn, New York 11215
December 16th, 2014



GEOPHYSICAL IMAGES

Commercial Property
37-27 31st Street & 37-26 32nd Street
Brooklyn, New York 11215
December 16th, 2014

APPENDIX C

SOIL BORING LOGS

SOIL BORING LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

37-27 31st Street
37-26 32nd Street
Queens, NY

EXPLORATION NO.: T-01
SHEET: 1 of 1
PROJECT NO: 41.0162268.20
REVIEWED BY: C. Bell

Logged By: J. Colony
Drilling Co.: Aquifer Drilling and Testing, Inc.
Foreman: S. Miller

Geoprobe Location: See Plan
Ground Surface Elev. (ft.): 38
Final Geoprobe Depth (ft.): 15
Date Start - Finish: 12/17/2014 - 12/17/2014

H. Datum:
V. Datum: NAVD 88

Type of Rig: Geoprobe
Rig Model: 6620
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.0
Sampler Length (in.): 60
Rock Core Size:

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S-1	0-5	60	30		S-1: 0-8": Grey cement				
1						8"-23"; Dark brown/black, medium to coarse SAND, ash.		37.0	CEMENT	1
2					4.6	23"-30": Brown, medium SAND.		36.0	FILL	2
3										
4										
5							1			
	S-2	5-10	60	32		S-2: 0-14": Brown, medium SAND.				
6					4.8	14"-52": Light brown, medium SAND.				
7										
8					4.1					
9					7.2				MEDIUM SAND	
10										
	S-3	10-15	60	54	4.1	S-3: 0-54": Light brown, medium SAND.				
11										
12										
13					2.9					
14					4.5					
15							2	23.0		15
						End of Exploration at 15 feet bgs.				
16										
17										
18										
19										
20										

REMARKS

1 - 10:05 Collect sample T1 (2-5) PID 4.6 ppm
2 - 10:45 Collect sample T1 (13-15) PID 4.5 ppm

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

T-01

GZA TEMPLATE GEOPROBE; 1/9/2015; 12:17:35 PM

SOIL BORING LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

37-27 31st Street
37-26 32nd Street
Queens, NY

EXPLORATION NO.: T-02
SHEET: 1 of 1
PROJECT NO: 41.0162268.20
REVIEWED BY: C. Bell

Logged By: J. Colony
Drilling Co.: Aquifer Drilling and Testing, Inc.
Foreman: S. Miller

Geoprobe Location: See Plan
Ground Surface Elev. (ft.): 38
Final Geoprobe Depth (ft.): 15
Date Start - Finish: 12/17/2014 - 12/17/2014

H. Datum:
V. Datum: NAVD 88

Type of Rig: Geoprobe
Rig Model: 6620
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.0
Sampler Length (in.): 60
Rock Core Size:

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S-1	0-5	60	43		S-1: 0-8": Grey cement				
1					3.8	8"-32": Brown/black medium to coarse SAND, ash.		37.0	CEMENT	1
						32"-43": Light brown, fine to medium SAND.				
2									FILL	
3					6.1			35.0		3
4					4.4		1			
5	S-2	5-10	60	40		S-2: 0"- 40": Brown, fine to medium SAND, trace Silt.				
6										
7					4.3					
8					5.6					
9									FINE TO MEDIUM SAND	
10					3.3					
	S-3	10-15	60	36		S-3: 0"-10": brown, fine to medium SAND, trace Silt.				
11						10"-36": Gray/brown, medium SAND.				
12					3.9					
13					3.1					
14										
15					6.1			23.0		15
						End of Exploration at 15 feet bgs.	2			
16										
17										
18										
19										
20										

REMARKS

1 - 11:12 Collect sample T-2 (2-5) PID 6.1 ppm
2 - T-2 Collect sample (13-15) PID 6.1 ppm

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

T-02

GZA TEMPLATE GEOPROBE; 1/9/2015; 12:17:38 PM

SOIL BORING LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

37-27 31st Street
37-26 32nd Street
Queens, NY

EXPLORATION NO.: T-03
SHEET: 1 of 1
PROJECT NO: 41.0162268.20
REVIEWED BY: C. Bell

Logged By: J. Colony
Drilling Co.: Aquifer Drilling and Testing, Inc.
Foreman: S. Miller

Geoprobe Location: See Plan
Ground Surface Elev. (ft.): 38
Final Geoprobe Depth (ft.): 15
Date Start - Finish: 12/18/2014 - 12/18/2014

H. Datum:
V. Datum: NAVD 88

Type of Rig: Geoprobe
Rig Model: 6620
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.0
Sampler Length (in.): 60
Rock Core Size:

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S-1	0-5	60	31		S-1: 0-1": Grey cement		37.5	CEMENT	0.5
1					5.6	1'-11": red/black coarse SAND, ash, brick.		37.0	FILL	1
						11"-31": brown, medium SAND, trace Silt.				
2										
3										
4							1			
5										
	S-2	5-10	60	30		S-2: 0-12": Brown, fine to medium SAND.				
6						12-30": Brown, fine to medium SAND, trace Silt.				
7					7.2					
8									FINE TO MEDIUM SAND	
9										
10					10.8					
	S-3	10-15	60	38		S-3: 0-38": Brown, fine to medium SAND, trace Silt.				
11										
12					9.1					
13										
14					7.8					
15								23.0		15
						End of Exploration at 15 feet bgs.	2			
16										
17										
18										
19										
20										

REMARKS

1 - 9:08 Collect sample T-3 (3-5) PID 6.4 ppm
2 - T-3 Collect sample (13-15) PID 7.8 ppm

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

T-03

GZA TEMPLATE GEOPROBE; 1/9/2015; 12:17:39 PM

SOIL BORING LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

37-27 31st Street
37-26 32nd Street
Queens, NY

EXPLORATION NO.: T-04
SHEET: 1 of 1
PROJECT NO: 41.0162268.20
REVIEWED BY: C. Bell

Logged By: J. Colony
Drilling Co.: Aquifer Drilling and Testing, Inc.
Foreman: S. Miller

Geoprobe Location: See Plan
Ground Surface Elev. (ft.): 38
Final Geoprobe Depth (ft.): 15
Date Start - Finish: 12/17/2014 - 12/17/2014

H. Datum:
V. Datum: NAVD 88

Type of Rig: Geoprobe
Rig Model: 6620
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.0
Sampler Length (in.): 60
Rock Core Size:

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S-1	0-5	60	45		S-1: 0-5": Gray cement		37.5	CEMENT	0.5
1					6.5	5-25": Black/brown, medium to coarse SAND, brick, ash.				
						25-45": Brown, medium SAND, trace Silt.			FILL	
2					4.8			36.0		2
3							1			
4					12.2					
5	S-2	5-10	60	37		S-2: 0-22": Gray, fine to medium SAND, trace Silt.				
6						22"-37": Brown, fine SAND and SILT.				
7					5.8					
8					4.0					
9									FINE TO MEDIUM SAND	
10					5.4					
	S-3	10-15	60	40		S-3: 0-40": Brown, fine to medium SAND, trace of Silt.				
11					5.2					
12										
13					5.3					
14							2			
15					6.1			23.0		15
						End of Exploration at 15 feet bgs.	3			
16										
17										
18										
19										
20										

REMARKS

1 - 15:30 Collect sample T4 92-5) PID 12.2 ppm
2 - 15:50 Collect sample T4 (13-15) PID 6.1 ppm
3 - Install 1" PVC temporary well TW-1 to 30 feet bgs. Well constructed with 10' of 0.020" slot well screen and 10' of solid PVC riser.

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

T-04

GZA TEMPLATE GEOPROBE; 1/9/2015; 12:17:40 PM

SOIL BORING LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

37-27 31st Street
37-26 32nd Street
Queens, NY

EXPLORATION NO.: T-05
SHEET: 1 of 1
PROJECT NO: 41.0162268.20
REVIEWED BY: C. Bell

Logged By: J. Colony
Drilling Co.: Aquifer Drilling and Testing, Inc.
Foreman: S. Miller

Geoprobe Location: See Plan
Ground Surface Elev. (ft.): 38
Final Geoprobe Depth (ft.): 15
Date Start - Finish: 12/17/2014 - 12/17/2014

H. Datum:
V. Datum: NAVD 88

Type of Rig: Geoprobe
Rig Model: 6620
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.0
Sampler Length (in.): 60
Rock Core Size:

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S-1	0-5	60	40		S-1: 0-9": Gray cement				
1					8.0	9"-30": Black/brown, coarse SAND, ash, brick.		37.0	CEMENT	1
						30"-40": Gray/brown, fine to coarse SAND.				
2									FILL	
								35.5		2.5
3							1			
4					7.3					
5										
	S-2	5-10	60	39		S-2: 0-39": Brown/gray, fine to medium SAND, trace Silt.				
6										
7					2.8					
8					5.5					
9									FINE TO MEDIUM SAND	
10					3.8					
	S-3	10-15	60	37		S-3: 0-13": Gray, fine to medium SAND, trace Silt.				
11						13-37": Brown, fine to medium SAND, trace Silt.				
12					4.6					
13					4.8					
14					6.6					
							2			
15								23.0		15
						End of Exploration at 15 feet bgs.				
16										
17										
18										
19										
20										

REMARKS

1 - 14:12 Collect sample T-5 (2-5) PID 8.0 ppm
2 - 14:54 Collect sample T-5 (13-15) PID 6.6 ppm

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

T-05

GZA TEMPLATE GEOPROBE; 1/9/2015; 12:17:41 PM

SOIL BORING LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

37-27 31st Street
37-26 32nd Street
Queens, NY

EXPLORATION NO.: T-06
SHEET: 1 of 1
PROJECT NO: 41.0162268.20
REVIEWED BY: C. Bell

Logged By: J. Colony
Drilling Co.: Aquifer Drilling and Testing, Inc.
Foreman: S. Miller

Geoprobe Location: See Plan
Ground Surface Elev. (ft.): 38
Final Geoprobe Depth (ft.): 15
Date Start - Finish: 12/17/2014 - 12/17/2014

H. Datum:
V. Datum: NAVD 88

Type of Rig: Geoprobe
Rig Model: 6620
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.0
Sampler Length (in.): 60
Rock Core Size:

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S-1	0-5	60	40		S-1: 0-7": Gray cement		37.5	CEMENT	0.5
1						7"-21"; Brown/black, medium to coarse SAND, some SIlt, brick, ash.			FILL	
2					2.5	21"-40": Light brown, fine to medium SAND.		36.0		2
3										
4					1.3		1			
5										
	S-2	5-10	60	54		S-2: 0-54": Light brown SILT and SAND.				
6										
7					0.4					
8					2.5					
9					2.6				FINE TO MEDIUM SAND AND SILT	
10										
	S-3	10-15	60	48		S-3: 0-48": Light brown, fine to medium SAND and SILT.				
11										
12					0.4					
13					1.2					
14					1.6		2			
15								23.0		15
						End of Exploration at 15 feet bgs.				
16										
17										
18										
19										
20										

REMARKS

1 - 12:45 Collect sample T6 (2-5) PID 2.5 ppm
2 - 12:57 Collect sample T6 (13-15) PID 1.6 ppm

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

T-06

GZA TEMPLATE GEOPROBE; 1/9/2015; 12:17:42 PM

SOIL BORING LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

37-27 31st Street
37-26 32nd Street
Queens, NY

EXPLORATION NO.: T-07
SHEET: 1 of 1
PROJECT NO: 41.0162268.20
REVIEWED BY: C. Bell

Logged By: J. Colony
Drilling Co.: Aquifer Drilling and Testing, Inc.
Foreman: S. Miller

Geoprobe Location: See Plan
Ground Surface Elev. (ft.): 38
Final Geoprobe Depth (ft.): 15
Date Start - Finish: 12/18/2014 - 12/18/2014

H. Datum:
V. Datum: NAVD 88

Type of Rig: Geoprobe
Rig Model: 6620
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.0
Sampler Length (in.): 60
Rock Core Size:

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S-1	0-5	60	25		S-1: 0-8": Gray cement				
1					6.0	8"-18": Brown/black, coarse SAND, brick, ash.			CEMENT	
						18"-25": brown/gray, fine to coarse SAND.		36.5		1.5
2								36.0	FILL	2
3										
4					5.5		1			
5										
	S-2	5-10	60	33		S-2: 0-19": Brown, fine to medium SAND, trace Silt.				
6						19"-33": Brown/gray, coarse to medium SAND.				
7					4.5					
8										
									FINE TO MEDIUM SAND AND SILT	
9					4.9					
10										
	S-3	10-15	60	36		S-3: 0-28": Brown, fine to coarse SAND, trace Silt.				
11						28"-32": White/gray rock fragments.				
						32"-36": Brown, fine to medium SAND, trace Silt.				
12										
13					3.8					
14					3.0					
							2			
15								23.0		15
						End of Exploration at 15 feet bgs.				
16										
17										
18										
19										
20										

REMARKS

1 - 10:50 Collect sample T7 (3-5) PID 5.5 ppm
2 - 11:10 Collect sample T7 (13-15) PID 3.0 ppm

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

T-07

GZA TEMPLATE GEOPROBE; 1/9/2015; 12:17:43 PM

SOIL BORING LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

37-27 31st Street
37-26 32nd Street
Queens, NY

EXPLORATION NO.: T-08
SHEET: 1 of 1
PROJECT NO: 41.0162268.20
REVIEWED BY: C. Bell

Logged By: J. Colony
Drilling Co.: Aquifer Drilling and Testing, Inc.
Foreman: S. Miller

Geoprobe Location: See Plan
Ground Surface Elev. (ft.): 38
Final Geoprobe Depth (ft.): 15
Date Start - Finish: 12/18/2014 - 12/18/2014

H. Datum:
V. Datum: NAVD 88

Type of Rig: Geoprobe
Rig Model: 6620
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.0
Sampler Length (in.): 60
Rock Core Size:

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
No	Observ.	Made	

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	PID (ppm)	Sample Description Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	S-1	0-5	60	45		S-1: 0-5": Gray cement		37.5	CEMENT	0.5
1						5"-32": Brown/black SAND, ash, brick.				
					6.9	32"-45": Brown, fine to coarse SAND.			FILL	
2										
								35.5		2.5
3							1			
					37.1					
4										
5										
	S-2	5-10	60	42		S-2: 0-13"; Brown, fine to medium SAND.				
6						13"-42"; Brown, fine to medium SAND, trace Silt.				
7					10.9					
8										
					7.5					
9									FINE TO MEDIUM SAND	
10										
	S-3	10-15	60	45		S-3: 0-45": Brown, fine to medium SAND and SILT.				
11										
12					8.5					
13										
					9.5					
14										
							2			
15								23.0		15
						End of Exploration at 15 feet bgs.	3			
16										
17										
18										
19										
20										

REMARKS

1 - 10:00 Collect sample T8 (3-5) PID 37.1 ppm
2 - 10:08 Collect sample T8 913-15) PID 9.5 ppm
3 - Install 1" PVC temporary well TW-2 to 30 feet bgs. Well constructed with 10' of 0.020" slot well screen and 10' of solid PVC riser.

Field Screening performed with PID equipped with a 10.6 eV lamp calibrated to a 100 ppm isobutylene standard.See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

T-08

GZA TEMPLATE GEOPROBE; 1/9/2015; 12:17:43 PM

APPENDIX D

WELL PURGE LOGS

GZA GeoEnvironmental of New York
Well Purge Data Sheet

WELL ID: TW-1

CLIENT: 31/32 LIC, LLC
SITE: 37-27 31st St. /37-26 32nd St. , Long Island City, NY
WEATHER: Indoors

PROJECT NO: 41.0162268.20
DATE: 12/17/2014
SAMPLER(S): B. Maniquez / J. Colony

Depth to Bottom of Well : **30** feet (ft.)
Static Water Level : **23** ft.

COLUMN OF WATER IN WELL:
Water Column (T) = Depth to Bottom of Well (ft) - Static Water Level (ft)
Water Column (T) = **7** ft.

TOTAL VOLUME PURGED:
Design = **0.287** gal.
Actual = **2.610** gal.

PURGE RATE: **0.087** (gal / min)
PURGE METHOD: Peristaltic

GALLONS OF WATER PER WELL VOLUME:
Well Volume = Water Column (T) (ft) x Multiplier
Well Volume (V) = **0.287** gallons (gal.)

well diameter	multiplier
1	0.041
2	0.163
4	0.653
6	1.469

SCREENED INTERVAL: 20 (ft.) to 30 (ft.)

WATER QUALITY:

Time	Elapsed Time	Purged Volume (gal)	Depth to Water (ft)*	pH (SU)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temp (^{0}C)	ORP (mV)	Notes
14:30	0	0.087	23'	7.61	0.891	94.9	9.30	14.30	-25	light brown, no odor
14:40	10	0.870	-	7.60	0.893	86	8.46	14.09	6	light brown, no odor
14:45	15	1.305	-	7.59	0.889	21.7	7.84	14.04	17	light brown, no odor
14:50	20	1.740	-	7.79	0.880	14	7.36	14.10	24	light brown, no odor
15:00	30	2.610	-	7.54	0.886	-	6.10	14.15	31	light brown, no odor

NOTES AND OBSERVATIONS:

Temp = Temperature
SU = standard units
mS/cm = millisiemens per centinmeter
ORP = Oxidation Reduction Potential
NTU = nephelometric turbidity units
mg/L = milligrams per liter
° C = degrees celsius
mV = millivolts

* Because of the small well size (1-inch diamater) and limited access, depth to water measurement was limited to the initial collection to prevent interference to continous purging

GZA GeoEnvironmental of New York
Well Purge Data Sheet

WELL ID: **TW-2**

CLIENT: 31/32 LIC, LLC
SITE: 37-27 31st St. /37-26 32nd St. , Long Island City, NY
WEATHER: Indoors

PROJECT NO: 41.0162268.20
DATE: 12/18/2014
SAMPLER(S): J. Colony

Depth to Bottom of Well : **30** feet (ft.)
Static Water Level : **23** ft.

COLUMN OF WATER IN WELL:
Water Column (T) = Depth to Bottom of Well (ft) - Static Water Level (ft)
Water Column (T) = **7** ft.

TOTAL VOLUME PURGED:
Design = **0.287** gal.
Actual = **4.350** gal.

PURGE RATE: **0.087** (gal / min)
PURGE METHOD: Peristaltic

GALLONS OF WATER PER WELL VOLUME:
Well Volume = Water Column (T) (ft) x Multiplier
Well Volume (V) = **0.287** gallons (gal.)

well diameter	multiplier
1	0.041
2	0.163
4	0.653
6	1.469

SCREENED INTERVAL: 20 (ft.) to 30 (ft.)

WATER QUALITY:

Time	Elapsed Time	Purged Volume (gal)	Depth to Water (ft)*	pH (SU)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temp (^{0}C)	ORP (mV)	Notes
13:45	0	0.087	23'	-	-	-	-	-	-	
14:25	40	3.480	-	8.17	1.660	1.5	4.18	14.03	-141	light brown, no odor
14:30	45	3.915	-	8.18	1.640	0	4.31	14.87	-121	light brown, no odor
14:35	50	4.350	-	8.18	1.640	0	10.11	14.97	-116	light brown, no odor

NOTES AND OBSERVATIONS:

Temp = Temperature
SU = standard units
mS/cm = millisiemens per centinmeter

ORP = Oxidation Reduction Potential
NTU = nephelometric turbidity units
mg/L = milligrams per liter

° C = degrees celsius
mV = millivolts

* Because of the small well size (1-inch diamater) and limited access, depth to water measurement was limited to the initial collection to prevent interference to continous purging

GZA GeoEnvironmental of New York
Soil Vapor Sample Log

SOIL VAPOR SAMPLE FIELD LOG

GZA GeoEnvironmental of New York Engineers and Scientists	Project Name: 31/32 LIC, LLC	Date: 12/17/2014	
	Location: 37-27 31st St. /37-26 32nd St. ,	File No: 41.0162268.20	Page 1 of 1
	Long Island City, NY		
GZA Personnel: J. Colony	Contractor/Lab: Alpha Analytical (Lab) / ADT (Contractor)	Depth to Water: N/A	
Weather: Indoor	Analytic Method: TO-15 VOCs	Water Elevation: N/A	
	Operator: Shawn / ADT	Ground Elevation: not surveyed	
Barometric Pressure: N/A	OVA/OVM: 0 ppm		
Previous Weather: N/A	Calibration: Isobutylene Gas		

Sample ID	Sample Depth (feet below ground surface [ft bgs])	Vacuum Pressure (in. 11:4)	Purge Time			Flow Rate (l./min.) [min. - max.]	HOW Volume (c.rt.) (rate x time) [min-max]	Sample Time	OVM Reading (ppm)	Container Type	Surface Cover	Driving Effort	Canister No.	Flow Controller No.	Regulator Remark No.
			Purge Start	Purge Stop	Elapsed Time (hrs)										
SV-1S	5	-29.28	10:03	12:21	2:18	0.03 - 0.08	4.14 - 11.04	12:21	0	Summa Canister	Cncrt	E	651	581	-
SV-2D	15	-29.68	10:02	12:12	2:10	0.03 - 0.08	3.9- 10.4	12:12	0	Summa Canister	Cncrt	E	1168	375	-
SV-3S *	5	-66.82	13:35	15:50	2:15	0.03 - 0.08	4.05 - 10.8	15:50	0	Summa Canister	Cncrt	E	1786	435	-
SV-4D	15	-29.41	13:35	15:50	2:15	0.03 - 0.08	4.05 - 10.8	15:50	0	Summa Canister	Cncrt	E	965	575	-

REMARKS:

* Digital regulator display was not working properly.

ABBREVIATIONS

CONTAINER TYPE	SURFACE COVER	PROBE DRIVING EFFORT	SOIL MOISTURE CONTENT
TB -Tedlar Bag SC- Suma Canister ST- Sorbant Tube Other:	GIL - Grass/Loam Asph - Asphalt Cncrt - Concrete Other:	E - Easy M - Moderate D - Difficult R - Rellisal	D- Dry M- Moderate W - Wet S - Saturated

APPENDIX E

LABORATORY DATA DELIVERABLES

ANALYTICAL REPORT

Lab Number:	L1430448
Client:	GZA GeoEnvironmental, Inc. 104 West 29th Street, 10th Floor New York, NY 10001
ATTN:	Clifford Bell
Phone:	(212) 594-8140
Project Name:	31-32 LIC
Project Number:	41.0162268.2
Report Date:	12/30/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1430448-01	T-1 (2-5)'	SOIL	LONG ISLAND CITY, QUEENS NY	12/17/14 10:05	12/17/14
L1430448-02	T-1 (13-15)'	SOIL	LONG ISLAND CITY, QUEENS NY	12/17/14 10:45	12/17/14
L1430448-03	T-2 (2-5)'	SOIL	LONG ISLAND CITY, QUEENS NY	12/17/14 11:12	12/17/14
L1430448-04	T-2 (13-15)'	SOIL	LONG ISLAND CITY, QUEENS NY	12/17/14 11:30	12/17/14
L1430448-05	T-4 (2-5)'	SOIL	LONG ISLAND CITY, QUEENS NY	12/17/14 15:30	12/17/14
L1430448-06	T-4 (13-15)'	SOIL	LONG ISLAND CITY, QUEENS NY	12/17/14 15:50	12/17/14
L1430448-07	T-5 (2-5)'	SOIL	LONG ISLAND CITY, QUEENS NY	12/17/14 14:12	12/17/14
L1430448-08	T-5 (13-15)'	SOIL	LONG ISLAND CITY, QUEENS NY	12/17/14 14:54	12/17/14
L1430448-09	T-6 (2-5)'	SOIL	LONG ISLAND CITY, QUEENS NY	12/17/14 12:45	12/17/14
L1430448-10	T-6 (13-15)'	SOIL	LONG ISLAND CITY, QUEENS NY	12/17/14 12:57	12/17/14
L1430448-11	TW-1	WATER	LONG ISLAND CITY, QUEENS NY	12/17/14 15:10	12/17/14
L1430448-12	TW-1 FILTERED	WATER	LONG ISLAND CITY, QUEENS NY	12/17/14 15:10	12/17/14
L1430448-13	TW-11	WATER	LONG ISLAND CITY, QUEENS NY	12/17/14 16:11	12/17/14

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	31-32 LIC	**Lab Number:**	L1430448
Project Number:	41.0162268.2	**Report Date:**	12/30/14

Case Narrative (continued)

Report Submission

This report replaces the report issued December 29, 2014. At the client's request, the project number has been changed.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

At the client's request, sample TW-11 was not analyzed.

Total Metals

L1430448-01 through -10 have elevated detection limits for all elements, with the exception of mercury, due to the dilutions required by matrix interferences encountered during analysis.

The WG750154-4 MS recovery, performed on L1430448-01, is outside the acceptance criteria for mercury (144%). A post digestion spike was performed and was within acceptance criteria.

The WG751090-4 MS recoveries, performed on L1430448-01, are outside the acceptance criteria for barium (160%) and calcium (160%). A post digestion spike was performed and yielded unacceptable recoveries for barium (6.4%) and calcium (39%). This has been attributed to sample matrix.

The WG751090-4 MS recoveries for aluminum (614%), iron (1840%), lead (265%), and zinc (320%), performed on L1430448-01, do not apply because the sample concentrations are greater than four times the spike amount added.

The WG751090-3 Laboratory Duplicate RPDs, performed on L1430448-01, are outside the acceptance criteria for arsenic (32%), barium (45%), calcium (32%), chromium (29%), iron (26%), lead (78%), and nickel (32%). The elevated RPDs have been attributed to the non-homogeneous nature of the sample utilized for the laboratory duplicate.

Dissolved Metals

The WG751485-4 MS recovery for calcium (130%), performed on L1430448-12, does not apply because the

Project Name: 31-32 LIC **Lab Number:** L1430448
Project Number: 41.0162268.2 **Report Date:** 12/30/14

Case Narrative (continued)

sample concentration is greater than four times the spike amount added.

The WG751485-4 MS recovery, performed on L1430448-12, is outside the acceptance criteria for magnesium (0%). A post digestion spike was performed and was within acceptance criteria.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 12/30/14

ORGANICS

VOLATILES

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-01	Date Collected:	12/17/14 10:05
Client ID:	T-1 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/22/14 12:49		
Analyst:	BN		
Percent Solids:	97%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.2	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.41	1
Carbon tetrachloride	ND		ug/kg	1.1	0.24	1
1,2-Dichloropropane	ND		ug/kg	3.9	0.26	1
Dibromochloromethane	ND		ug/kg	1.1	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.34	1
Tetrachloroethene	ND		ug/kg	1.1	0.16	1
Chlorobenzene	ND		ug/kg	1.1	0.39	1
Trichlorofluoromethane	ND		ug/kg	5.6	0.43	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.12	1
Bromodichloromethane	ND		ug/kg	1.1	0.19	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	1.1	0.13	1
1,1-Dichloropropene	ND		ug/kg	5.6	0.16	1
Bromoform	ND		ug/kg	4.5	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.11	1
Benzene	ND		ug/kg	1.1	0.13	1
Toluene	ND		ug/kg	1.7	0.22	1
Ethylbenzene	ND		ug/kg	1.1	0.14	1
Chloromethane	ND		ug/kg	5.6	0.33	1
Bromomethane	ND		ug/kg	2.2	0.38	1
Vinyl chloride	ND		ug/kg	2.2	0.13	1
Chloroethane	ND		ug/kg	2.2	0.35	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.24	1
Trichloroethene	ND		ug/kg	1.1	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.6	0.17	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-01 Date Collected: 12/17/14 10:05

Client ID: T-1 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	5.6	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	5.6	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.09	1
p/m-Xylene	ND		ug/kg	2.2	0.22	1
o-Xylene	ND		ug/kg	2.2	0.19	1
Xylene (Total)	ND		ug/kg	2.2	0.19	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1
1,2-Dichloroethene (total)	ND		ug/kg	1.1	0.16	1
Dibromomethane	ND		ug/kg	11	0.18	1
Styrene	ND		ug/kg	2.2	0.45	1
Dichlorodifluoromethane	ND		ug/kg	11	0.21	1
Acetone	ND		ug/kg	11	1.2	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.30	1
Vinyl acetate	ND		ug/kg	11	0.15	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.27	1
1,2,3-Trichloropropane	ND		ug/kg	11	0.18	1
2-Hexanone	ND		ug/kg	11	0.75	1
Bromochloromethane	ND		ug/kg	5.6	0.31	1
2,2-Dichloropropane	ND		ug/kg	5.6	0.25	1
1,2-Dibromoethane	ND		ug/kg	4.5	0.20	1
1,3-Dichloropropane	ND		ug/kg	5.6	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.1	0.36	1
Bromobenzene	ND		ug/kg	5.6	0.23	1
n-Butylbenzene	ND		ug/kg	1.1	0.13	1
sec-Butylbenzene	ND		ug/kg	1.1	0.14	1
tert-Butylbenzene	ND		ug/kg	5.6	0.15	1
o-Chlorotoluene	ND		ug/kg	5.6	0.18	1
p-Chlorotoluene	ND		ug/kg	5.6	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.6	0.44	1
Hexachlorobutadiene	ND		ug/kg	5.6	0.26	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.14	1
Naphthalene	ND		ug/kg	5.6	0.16	1
Acrylonitrile	ND		ug/kg	11	0.58	1
n-Propylbenzene	ND		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.6	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.6	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.6	0.16	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-01 Date Collected: 12/17/14 10:05

Client ID: T-1 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	5.6	0.16	1
1,4-Dioxane	ND		ug/kg	110	16.	1
1,4-Diethylbenzene	ND		ug/kg	4.5	0.18	1
4-Ethyltoluene	ND		ug/kg	4.5	0.14	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.5	0.14	1
Ethyl ether	ND		ug/kg	5.6	0.29	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.6	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	109		70-130

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-02	Date Collected:	12/17/14 10:45
Client ID:	T-1 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/22/14 13:15		
Analyst:	BN		
Percent Solids:	98%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.43	1
Carbon tetrachloride	ND		ug/kg	1.2	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.1	0.26	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.35	1
Tetrachloroethene	ND		ug/kg	1.2	0.16	1
Chlorobenzene	ND		ug/kg	1.2	0.40	1
Trichlorofluoromethane	ND		ug/kg	5.8	0.45	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.14	1
1,1-Dichloropropene	ND		ug/kg	5.8	0.16	1
Bromoform	ND		ug/kg	4.7	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.7	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.15	1
Chloromethane	ND		ug/kg	5.8	0.34	1
Bromomethane	ND		ug/kg	2.3	0.39	1
Vinyl chloride	ND		ug/kg	2.3	0.14	1
Chloroethane	ND		ug/kg	2.3	0.37	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.25	1
Trichloroethene	ND		ug/kg	1.2	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.8	0.18	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-02 Date Collected: 12/17/14 10:45

Client ID: T-1 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	5.8	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	5.8	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	ND		ug/kg	2.3	0.23	1
o-Xylene	ND		ug/kg	2.3	0.20	1
Xylene (Total)	ND		ug/kg	2.3	0.20	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.17	1
1,2-Dichloroethene (total)	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	12	0.19	1
Styrene	ND		ug/kg	2.3	0.47	1
Dichlorodifluoromethane	ND		ug/kg	12	0.22	1
Acetone	ND		ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.32	1
Vinyl acetate	ND		ug/kg	12	0.15	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.28	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.19	1
2-Hexanone	ND		ug/kg	12	0.78	1
Bromochloromethane	ND		ug/kg	5.8	0.32	1
2,2-Dichloropropane	ND		ug/kg	5.8	0.26	1
1,2-Dibromoethane	ND		ug/kg	4.7	0.20	1
1,3-Dichloropropane	ND		ug/kg	5.8	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.37	1
Bromobenzene	ND		ug/kg	5.8	0.24	1
n-Butylbenzene	ND		ug/kg	1.2	0.13	1
sec-Butylbenzene	ND		ug/kg	1.2	0.14	1
tert-Butylbenzene	ND		ug/kg	5.8	0.16	1
o-Chlorotoluene	ND		ug/kg	5.8	0.19	1
p-Chlorotoluene	ND		ug/kg	5.8	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.8	0.46	1
Hexachlorobutadiene	ND		ug/kg	5.8	0.26	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	ND		ug/kg	5.8	0.16	1
Acrylonitrile	ND		ug/kg	12	0.60	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.8	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.8	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.8	0.17	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-02 Date Collected: 12/17/14 10:45

Client ID: T-1 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	5.8	0.16	1
1,4-Dioxane	ND		ug/kg	120	17.	1
1,4-Diethylbenzene	ND		ug/kg	4.7	0.19	1
4-Ethyltoluene	ND		ug/kg	4.7	0.14	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.7	0.15	1
Ethyl ether	ND		ug/kg	5.8	0.30	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.8	0.46	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	86		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	110		70-130

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-03	Date Collected:	12/17/14 11:12
Client ID:	T-2 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/22/14 13:41		
Analyst:	BN		
Percent Solids:	95%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.2	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.42	1
Carbon tetrachloride	ND		ug/kg	1.1	0.24	1
1,2-Dichloropropane	ND		ug/kg	3.9	0.26	1
Dibromochloromethane	ND		ug/kg	1.1	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.34	1
Tetrachloroethene	ND		ug/kg	1.1	0.16	1
Chlorobenzene	ND		ug/kg	1.1	0.39	1
Trichlorofluoromethane	ND		ug/kg	5.6	0.44	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.12	1
Bromodichloromethane	ND		ug/kg	1.1	0.19	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	1.1	0.13	1
1,1-Dichloropropene	ND		ug/kg	5.6	0.16	1
Bromoform	ND		ug/kg	4.5	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.11	1
Benzene	ND		ug/kg	1.1	0.13	1
Toluene	ND		ug/kg	1.7	0.22	1
Ethylbenzene	ND		ug/kg	1.1	0.14	1
Chloromethane	ND		ug/kg	5.6	0.33	1
Bromomethane	ND		ug/kg	2.2	0.38	1
Vinyl chloride	ND		ug/kg	2.2	0.13	1
Chloroethane	ND		ug/kg	2.2	0.35	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.24	1
Trichloroethene	1.9		ug/kg	1.1	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.6	0.17	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-03 Date Collected: 12/17/14 11:12

Client ID: T-2 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	5.6	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	5.6	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.10	1
p/m-Xylene	ND		ug/kg	2.2	0.22	1
o-Xylene	ND		ug/kg	2.2	0.19	1
Xylene (Total)	ND		ug/kg	2.2	0.19	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1
1,2-Dichloroethene (total)	ND		ug/kg	1.1	0.16	1
Dibromomethane	ND		ug/kg	11	0.18	1
Styrene	ND		ug/kg	2.2	0.45	1
Dichlorodifluoromethane	ND		ug/kg	11	0.21	1
Acetone	ND		ug/kg	11	1.2	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.30	1
Vinyl acetate	ND		ug/kg	11	0.15	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.27	1
1,2,3-Trichloropropane	ND		ug/kg	11	0.18	1
2-Hexanone	ND		ug/kg	11	0.75	1
Bromochloromethane	ND		ug/kg	5.6	0.31	1
2,2-Dichloropropane	ND		ug/kg	5.6	0.25	1
1,2-Dibromoethane	ND		ug/kg	4.5	0.20	1
1,3-Dichloropropane	ND		ug/kg	5.6	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.1	0.36	1
Bromobenzene	ND		ug/kg	5.6	0.23	1
n-Butylbenzene	ND		ug/kg	1.1	0.13	1
sec-Butylbenzene	ND		ug/kg	1.1	0.14	1
tert-Butylbenzene	ND		ug/kg	5.6	0.15	1
o-Chlorotoluene	ND		ug/kg	5.6	0.18	1
p-Chlorotoluene	ND		ug/kg	5.6	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.6	0.44	1
Hexachlorobutadiene	ND		ug/kg	5.6	0.26	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.14	1
Naphthalene	ND		ug/kg	5.6	0.16	1
Acrylonitrile	ND		ug/kg	11	0.58	1
n-Propylbenzene	ND		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.6	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.6	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.6	0.16	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-03 Date Collected: 12/17/14 11:12

Client ID: T-2 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	5.6	0.16	1
1,4-Dioxane	ND		ug/kg	110	16.	1
1,4-Diethylbenzene	ND		ug/kg	4.5	0.18	1
4-Ethyltoluene	ND		ug/kg	4.5	0.14	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.5	0.15	1
Ethyl ether	ND		ug/kg	5.6	0.29	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.6	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	86		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	111		70-130

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-04	Date Collected:	12/17/14 11:30
Client ID:	T-2 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/22/14 14:07		
Analyst:	BN		
Percent Solids:	98%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.10	1
Chloroform	ND		ug/kg	1.8	0.44	1
Carbon tetrachloride	ND		ug/kg	1.2	0.25	1
1,2-Dichloropropane	ND		ug/kg	4.2	0.27	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.36	1
Tetrachloroethene	ND		ug/kg	1.2	0.17	1
Chlorobenzene	ND		ug/kg	1.2	0.41	1
Trichlorofluoromethane	ND		ug/kg	5.9	0.46	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.14	1
1,1-Dichloropropene	ND		ug/kg	5.9	0.17	1
Bromoform	ND		ug/kg	4.7	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.8	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.15	1
Chloromethane	ND		ug/kg	5.9	0.35	1
Bromomethane	ND		ug/kg	2.4	0.40	1
Vinyl chloride	ND		ug/kg	2.4	0.14	1
Chloroethane	ND		ug/kg	2.4	0.37	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.25	1
Trichloroethene	ND		ug/kg	1.2	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	5.9	0.18	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-04 Date Collected: 12/17/14 11:30

Client ID: T-2 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	5.9	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	5.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.10	1
p/m-Xylene	ND		ug/kg	2.4	0.23	1
o-Xylene	ND		ug/kg	2.4	0.20	1
Xylene (Total)	ND		ug/kg	2.4	0.20	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.17	1
1,2-Dichloroethene (total)	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	12	0.19	1
Styrene	ND		ug/kg	2.4	0.48	1
Dichlorodifluoromethane	ND		ug/kg	12	0.23	1
Acetone	ND		ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.32	1
Vinyl acetate	ND		ug/kg	12	0.16	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.29	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.19	1
2-Hexanone	ND		ug/kg	12	0.79	1
Bromochloromethane	ND		ug/kg	5.9	0.33	1
2,2-Dichloropropane	ND		ug/kg	5.9	0.27	1
1,2-Dibromoethane	ND		ug/kg	4.7	0.21	1
1,3-Dichloropropane	ND		ug/kg	5.9	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.38	1
Bromobenzene	ND		ug/kg	5.9	0.25	1
n-Butylbenzene	ND		ug/kg	1.2	0.14	1
sec-Butylbenzene	ND		ug/kg	1.2	0.14	1
tert-Butylbenzene	ND		ug/kg	5.9	0.16	1
o-Chlorotoluene	ND		ug/kg	5.9	0.19	1
p-Chlorotoluene	ND		ug/kg	5.9	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.9	0.47	1
Hexachlorobutadiene	ND		ug/kg	5.9	0.27	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.15	1
Naphthalene	ND		ug/kg	5.9	0.16	1
Acrylonitrile	ND		ug/kg	12	0.61	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.9	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.9	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.9	0.17	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-04 Date Collected: 12/17/14 11:30

Client ID: T-2 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	5.9	0.17	1
1,4-Dioxane	ND		ug/kg	120	17.	1
1,4-Diethylbenzene	ND		ug/kg	4.7	0.19	1
4-Ethyltoluene	ND		ug/kg	4.7	0.15	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.7	0.15	1
Ethyl ether	ND		ug/kg	5.9	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.9	0.46	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	109		70-130

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-05	Date Collected:	12/17/14 15:30
Client ID:	T-4 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/22/14 14:34		
Analyst:	BN		
Percent Solids:	97%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.10	1
Chloroform	ND		ug/kg	1.8	0.44	1
Carbon tetrachloride	ND		ug/kg	1.2	0.25	1
1,2-Dichloropropane	ND		ug/kg	4.1	0.27	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.36	1
Tetrachloroethene	ND		ug/kg	1.2	0.16	1
Chlorobenzene	ND		ug/kg	1.2	0.41	1
Trichlorofluoromethane	ND		ug/kg	5.9	0.46	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.14	1
1,1-Dichloropropene	ND		ug/kg	5.9	0.17	1
Bromoform	ND		ug/kg	4.7	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.8	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.15	1
Chloromethane	ND		ug/kg	5.9	0.34	1
Bromomethane	ND		ug/kg	2.4	0.40	1
Vinyl chloride	ND		ug/kg	2.4	0.14	1
Chloroethane	ND		ug/kg	2.4	0.37	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.25	1
Trichloroethene	6.1		ug/kg	1.2	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	5.9	0.18	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-05 Date Collected: 12/17/14 15:30

Client ID: T-4 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	5.9	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	5.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.10	1
p/m-Xylene	ND		ug/kg	2.4	0.23	1
o-Xylene	ND		ug/kg	2.4	0.20	1
Xylene (Total)	ND		ug/kg	2.4	0.20	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.17	1
1,2-Dichloroethene (total)	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	12	0.19	1
Styrene	ND		ug/kg	2.4	0.47	1
Dichlorodifluoromethane	ND		ug/kg	12	0.22	1
Acetone	ND		ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.32	1
Vinyl acetate	ND		ug/kg	12	0.16	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.29	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.19	1
2-Hexanone	ND		ug/kg	12	0.78	1
Bromochloromethane	ND		ug/kg	5.9	0.32	1
2,2-Dichloropropane	ND		ug/kg	5.9	0.26	1
1,2-Dibromoethane	ND		ug/kg	4.7	0.20	1
1,3-Dichloropropane	ND		ug/kg	5.9	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.37	1
Bromobenzene	ND		ug/kg	5.9	0.24	1
n-Butylbenzene	ND		ug/kg	1.2	0.14	1
sec-Butylbenzene	ND		ug/kg	1.2	0.14	1
tert-Butylbenzene	ND		ug/kg	5.9	0.16	1
o-Chlorotoluene	ND		ug/kg	5.9	0.19	1
p-Chlorotoluene	ND		ug/kg	5.9	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.9	0.46	1
Hexachlorobutadiene	ND		ug/kg	5.9	0.27	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.15	1
Naphthalene	ND		ug/kg	5.9	0.16	1
Acrylonitrile	ND		ug/kg	12	0.60	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.9	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.9	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.9	0.17	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-05 Date Collected: 12/17/14 15:30

Client ID: T-4 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	5.9	0.17	1
1,4-Dioxane	ND		ug/kg	120	17.	1
1,4-Diethylbenzene	ND		ug/kg	4.7	0.19	1
4-Ethyltoluene	ND		ug/kg	4.7	0.14	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.7	0.15	1
Ethyl ether	ND		ug/kg	5.9	0.30	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.9	0.46	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	86		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	111		70-130

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-06	Date Collected:	12/17/14 15:50
Client ID:	T-4 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/22/14 15:00		
Analyst:	BN		
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	13	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.9	0.11	1
Chloroform	ND		ug/kg	1.9	0.47	1
Carbon tetrachloride	ND		ug/kg	1.3	0.27	1
1,2-Dichloropropane	ND		ug/kg	4.4	0.29	1
Dibromochloromethane	ND		ug/kg	1.3	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.9	0.38	1
Tetrachloroethene	ND		ug/kg	1.3	0.18	1
Chlorobenzene	ND		ug/kg	1.3	0.44	1
Trichlorofluoromethane	ND		ug/kg	6.3	0.49	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	1.3	0.14	1
Bromodichloromethane	ND		ug/kg	1.3	0.22	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.15	1
cis-1,3-Dichloropropene	ND		ug/kg	1.3	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	1.3	0.15	1
1,1-Dichloropropene	ND		ug/kg	6.3	0.18	1
Bromoform	ND		ug/kg	5.1	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.3	0.13	1
Benzene	ND		ug/kg	1.3	0.15	1
Toluene	ND		ug/kg	1.9	0.25	1
Ethylbenzene	ND		ug/kg	1.3	0.16	1
Chloromethane	ND		ug/kg	6.3	0.37	1
Bromomethane	ND		ug/kg	2.5	0.43	1
Vinyl chloride	ND		ug/kg	2.5	0.15	1
Chloroethane	ND		ug/kg	2.5	0.40	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.27	1
Trichloroethene	ND		ug/kg	1.3	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	6.3	0.19	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-06 Date Collected: 12/17/14 15:50

Client ID: T-4 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	6.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	6.3	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.11	1
p/m-Xylene	ND		ug/kg	2.5	0.25	1
o-Xylene	ND		ug/kg	2.5	0.22	1
Xylene (Total)	ND		ug/kg	2.5	0.22	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.18	1
1,2-Dichloroethene (total)	ND		ug/kg	1.3	0.18	1
Dibromomethane	ND		ug/kg	13	0.21	1
Styrene	ND		ug/kg	2.5	0.51	1
Dichlorodifluoromethane	ND		ug/kg	13	0.24	1
Acetone	ND		ug/kg	13	1.3	1
Carbon disulfide	ND		ug/kg	13	1.4	1
2-Butanone	ND		ug/kg	13	0.34	1
Vinyl acetate	ND		ug/kg	13	0.17	1
4-Methyl-2-pentanone	ND		ug/kg	13	0.31	1
1,2,3-Trichloropropane	ND		ug/kg	13	0.21	1
2-Hexanone	ND		ug/kg	13	0.84	1
Bromochloromethane	ND		ug/kg	6.3	0.35	1
2,2-Dichloropropane	ND		ug/kg	6.3	0.29	1
1,2-Dibromoethane	ND		ug/kg	5.1	0.22	1
1,3-Dichloropropane	ND		ug/kg	6.3	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.3	0.40	1
Bromobenzene	ND		ug/kg	6.3	0.26	1
n-Butylbenzene	ND		ug/kg	1.3	0.14	1
sec-Butylbenzene	ND		ug/kg	1.3	0.15	1
tert-Butylbenzene	ND		ug/kg	6.3	0.17	1
o-Chlorotoluene	ND		ug/kg	6.3	0.20	1
p-Chlorotoluene	ND		ug/kg	6.3	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.3	0.50	1
Hexachlorobutadiene	ND		ug/kg	6.3	0.29	1
Isopropylbenzene	ND		ug/kg	1.3	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.16	1
Naphthalene	ND		ug/kg	6.3	0.18	1
Acrylonitrile	ND		ug/kg	13	0.65	1
n-Propylbenzene	ND		ug/kg	1.3	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.3	0.19	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.3	0.23	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.3	0.18	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-06 Date Collected: 12/17/14 15:50

Client ID: T-4 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	6.3	0.18	1
1,4-Dioxane	ND		ug/kg	130	18.	1
1,4-Diethylbenzene	ND		ug/kg	5.1	0.20	1
4-Ethyltoluene	ND		ug/kg	5.1	0.16	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	5.1	0.16	1
Ethyl ether	ND		ug/kg	6.3	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.3	0.50	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	112		70-130

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-07	Date Collected:	12/17/14 14:12
Client ID:	T-5 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/22/14 15:26		
Analyst:	BN		
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.2	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.09	1
Chloroform	ND		ug/kg	1.6	0.40	1
Carbon tetrachloride	ND		ug/kg	1.1	0.23	1
1,2-Dichloropropane	ND		ug/kg	3.8	0.25	1
Dibromochloromethane	ND		ug/kg	1.1	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.33	1
Tetrachloroethene	ND		ug/kg	1.1	0.15	1
Chlorobenzene	ND		ug/kg	1.1	0.38	1
Trichlorofluoromethane	ND		ug/kg	5.4	0.42	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.12	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.12	1
Bromodichloromethane	ND		ug/kg	1.1	0.19	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	1.1	0.13	1
1,1-Dichloropropene	ND		ug/kg	5.4	0.15	1
Bromoform	ND		ug/kg	4.3	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.11	1
Benzene	ND		ug/kg	1.1	0.13	1
Toluene	ND		ug/kg	1.6	0.21	1
Ethylbenzene	ND		ug/kg	1.1	0.14	1
Chloromethane	ND		ug/kg	5.4	0.32	1
Bromomethane	ND		ug/kg	2.2	0.37	1
Vinyl chloride	ND		ug/kg	2.2	0.13	1
Chloroethane	ND		ug/kg	2.2	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.23	1
Trichloroethene	15		ug/kg	1.1	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.4	0.17	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-07 Date Collected: 12/17/14 14:12

Client ID: T-5 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	5.4	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	5.4	0.15	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.09	1
p/m-Xylene	ND		ug/kg	2.2	0.21	1
o-Xylene	ND		ug/kg	2.2	0.19	1
Xylene (Total)	ND		ug/kg	2.2	0.19	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.15	1
1,2-Dichloroethene (total)	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	11	0.18	1
Styrene	ND		ug/kg	2.2	0.44	1
Dichlorodifluoromethane	ND		ug/kg	11	0.21	1
Acetone	ND		ug/kg	11	1.1	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.30	1
Vinyl acetate	ND		ug/kg	11	0.14	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.26	1
1,2,3-Trichloropropane	ND		ug/kg	11	0.18	1
2-Hexanone	ND		ug/kg	11	0.72	1
Bromochloromethane	ND		ug/kg	5.4	0.30	1
2,2-Dichloropropane	ND		ug/kg	5.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	4.3	0.19	1
1,3-Dichloropropane	ND		ug/kg	5.4	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.1	0.34	1
Bromobenzene	ND		ug/kg	5.4	0.22	1
n-Butylbenzene	ND		ug/kg	1.1	0.12	1
sec-Butylbenzene	ND		ug/kg	1.1	0.13	1
tert-Butylbenzene	ND		ug/kg	5.4	0.15	1
o-Chlorotoluene	ND		ug/kg	5.4	0.17	1
p-Chlorotoluene	ND		ug/kg	5.4	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.4	0.43	1
Hexachlorobutadiene	ND		ug/kg	5.4	0.25	1
Isopropylbenzene	ND		ug/kg	1.1	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.14	1
Naphthalene	ND		ug/kg	5.4	0.15	1
Acrylonitrile	ND		ug/kg	11	0.56	1
n-Propylbenzene	ND		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.4	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.4	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.4	0.16	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-07 Date Collected: 12/17/14 14:12

Client ID: T-5 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	5.4	0.15	1
1,4-Dioxane	ND		ug/kg	110	16.	1
1,4-Diethylbenzene	ND		ug/kg	4.3	0.17	1
4-Ethyltoluene	ND		ug/kg	4.3	0.13	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.3	0.14	1
Ethyl ether	ND		ug/kg	5.4	0.28	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	0.42	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	86		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	112		70-130

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-08	Date Collected:	12/17/14 14:54
Client ID:	T-5 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/22/14 15:53		
Analyst:	BN		
Percent Solids:	93%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.10	1
Chloroform	ND		ug/kg	1.8	0.45	1
Carbon tetrachloride	ND		ug/kg	1.2	0.26	1
1,2-Dichloropropane	ND		ug/kg	4.3	0.28	1
Dibromochloromethane	ND		ug/kg	1.2	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.37	1
Tetrachloroethene	ND		ug/kg	1.2	0.17	1
Chlorobenzene	ND		ug/kg	1.2	0.43	1
Trichlorofluoromethane	ND		ug/kg	6.1	0.48	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.14	1
Bromodichloromethane	ND		ug/kg	1.2	0.21	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.15	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.14	1
1,1-Dichloropropene	ND		ug/kg	6.1	0.17	1
Bromoform	ND		ug/kg	4.9	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.8	0.24	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	6.1	0.36	1
Bromomethane	ND		ug/kg	2.4	0.41	1
Vinyl chloride	ND		ug/kg	2.4	0.14	1
Chloroethane	ND		ug/kg	2.4	0.39	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.26	1
Trichloroethene	ND		ug/kg	1.2	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	6.1	0.19	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-08 Date Collected: 12/17/14 14:54

Client ID: T-5 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	6.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	6.1	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.10	1
p/m-Xylene	ND		ug/kg	2.4	0.24	1
o-Xylene	ND		ug/kg	2.4	0.21	1
Xylene (Total)	ND		ug/kg	2.4	0.21	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.18	1
1,2-Dichloroethene (total)	ND		ug/kg	1.2	0.18	1
Dibromomethane	ND		ug/kg	12	0.20	1
Styrene	ND		ug/kg	2.4	0.49	1
Dichlorodifluoromethane	ND		ug/kg	12	0.23	1
Acetone	ND		ug/kg	12	1.3	1
Carbon disulfide	ND		ug/kg	12	1.4	1
2-Butanone	ND		ug/kg	12	0.33	1
Vinyl acetate	ND		ug/kg	12	0.16	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.30	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.20	1
2-Hexanone	ND		ug/kg	12	0.82	1
Bromochloromethane	ND		ug/kg	6.1	0.34	1
2,2-Dichloropropane	ND		ug/kg	6.1	0.28	1
1,2-Dibromoethane	ND		ug/kg	4.9	0.21	1
1,3-Dichloropropane	ND		ug/kg	6.1	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.39	1
Bromobenzene	ND		ug/kg	6.1	0.26	1
n-Butylbenzene	ND		ug/kg	1.2	0.14	1
sec-Butylbenzene	ND		ug/kg	1.2	0.15	1
tert-Butylbenzene	ND		ug/kg	6.1	0.17	1
o-Chlorotoluene	ND		ug/kg	6.1	0.20	1
p-Chlorotoluene	ND		ug/kg	6.1	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.1	0.48	1
Hexachlorobutadiene	ND		ug/kg	6.1	0.28	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.15	1
Naphthalene	ND		ug/kg	6.1	0.17	1
Acrylonitrile	ND		ug/kg	12	0.63	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.1	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.1	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.1	0.18	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-08 Date Collected: 12/17/14 14:54

Client ID: T-5 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	6.1	0.17	1
1,4-Dioxane	ND		ug/kg	120	18.	1
1,4-Diethylbenzene	ND		ug/kg	4.9	0.20	1
4-Ethyltoluene	ND		ug/kg	4.9	0.15	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.9	0.16	1
Ethyl ether	ND		ug/kg	6.1	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.1	0.48	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	111		70-130

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-09
Client ID: T-6 (2-5)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 12/22/14 16:19
Analyst: BN
Percent Solids: 96%

Date Collected: 12/17/14 12:45
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.2	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.42	1
Carbon tetrachloride	ND		ug/kg	1.1	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.0	0.26	1
Dibromochloromethane	ND		ug/kg	1.1	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.34	1
Tetrachloroethene	ND		ug/kg	1.1	0.16	1
Chlorobenzene	ND		ug/kg	1.1	0.39	1
Trichlorofluoromethane	ND		ug/kg	5.7	0.44	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.12	1
Bromodichloromethane	ND		ug/kg	1.1	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	1.1	0.13	1
1,1-Dichloropropene	ND		ug/kg	5.7	0.16	1
Bromoform	ND		ug/kg	4.5	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.11	1
Benzene	ND		ug/kg	1.1	0.13	1
Toluene	ND		ug/kg	1.7	0.22	1
Ethylbenzene	ND		ug/kg	1.1	0.14	1
Chloromethane	ND		ug/kg	5.7	0.33	1
Bromomethane	ND		ug/kg	2.3	0.38	1
Vinyl chloride	ND		ug/kg	2.3	0.13	1
Chloroethane	ND		ug/kg	2.3	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.24	1
Trichloroethene	ND		ug/kg	1.1	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.7	0.17	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-09 Date Collected: 12/17/14 12:45

Client ID: T-6 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	5.7	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	5.7	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	ND		ug/kg	2.3	0.22	1
o-Xylene	ND		ug/kg	2.3	0.19	1
Xylene (Total)	ND		ug/kg	2.3	0.19	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1
1,2-Dichloroethene (total)	ND		ug/kg	1.1	0.16	1
Dibromomethane	ND		ug/kg	11	0.18	1
Styrene	ND		ug/kg	2.3	0.46	1
Dichlorodifluoromethane	ND		ug/kg	11	0.22	1
Acetone	ND		ug/kg	11	1.2	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.31	1
Vinyl acetate	ND		ug/kg	11	0.15	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.28	1
1,2,3-Trichloropropane	ND		ug/kg	11	0.18	1
2-Hexanone	ND		ug/kg	11	0.75	1
Bromochloromethane	ND		ug/kg	5.7	0.31	1
2,2-Dichloropropane	ND		ug/kg	5.7	0.26	1
1,2-Dibromoethane	ND		ug/kg	4.5	0.20	1
1,3-Dichloropropane	ND		ug/kg	5.7	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.1	0.36	1
Bromobenzene	ND		ug/kg	5.7	0.24	1
n-Butylbenzene	ND		ug/kg	1.1	0.13	1
sec-Butylbenzene	ND		ug/kg	1.1	0.14	1
tert-Butylbenzene	ND		ug/kg	5.7	0.15	1
o-Chlorotoluene	ND		ug/kg	5.7	0.18	1
p-Chlorotoluene	ND		ug/kg	5.7	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.7	0.45	1
Hexachlorobutadiene	ND		ug/kg	5.7	0.26	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.14	1
Naphthalene	ND		ug/kg	5.7	0.16	1
Acrylonitrile	ND		ug/kg	11	0.58	1
n-Propylbenzene	ND		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.7	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.7	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.7	0.16	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-09 Date Collected: 12/17/14 12:45

Client ID: T-6 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	5.7	0.16	1
1,4-Dioxane	ND		ug/kg	110	16.	1
1,4-Diethylbenzene	ND		ug/kg	4.5	0.18	1
4-Ethyltoluene	ND		ug/kg	4.5	0.14	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.5	0.15	1
Ethyl ether	ND		ug/kg	5.7	0.29	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.7	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	86		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	111		70-130

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-10	Date Collected:	12/17/14 12:57
Client ID:	T-6 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/22/14 16:45		
Analyst:	BN		
Percent Solids:	94%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.10	1
Chloroform	ND		ug/kg	1.8	0.44	1
Carbon tetrachloride	ND		ug/kg	1.2	0.25	1
1,2-Dichloropropane	ND		ug/kg	4.1	0.27	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.36	1
Tetrachloroethene	ND		ug/kg	1.2	0.16	1
Chlorobenzene	ND		ug/kg	1.2	0.41	1
Trichlorofluoromethane	ND		ug/kg	5.9	0.46	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.14	1
1,1-Dichloropropene	ND		ug/kg	5.9	0.17	1
Bromoform	ND		ug/kg	4.7	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.8	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.15	1
Chloromethane	ND		ug/kg	5.9	0.35	1
Bromomethane	ND		ug/kg	2.4	0.40	1
Vinyl chloride	ND		ug/kg	2.4	0.14	1
Chloroethane	ND		ug/kg	2.4	0.37	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.25	1
Trichloroethene	ND		ug/kg	1.2	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	5.9	0.18	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-10 Date Collected: 12/17/14 12:57

Client ID: T-6 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	5.9	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	5.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.10	1
p/m-Xylene	ND		ug/kg	2.4	0.23	1
o-Xylene	ND		ug/kg	2.4	0.20	1
Xylene (Total)	ND		ug/kg	2.4	0.20	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.17	1
1,2-Dichloroethene (total)	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	12	0.19	1
Styrene	ND		ug/kg	2.4	0.48	1
Dichlorodifluoromethane	ND		ug/kg	12	0.22	1
Acetone	ND		ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.32	1
Vinyl acetate	ND		ug/kg	12	0.16	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.29	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.19	1
2-Hexanone	ND		ug/kg	12	0.79	1
Bromochloromethane	ND		ug/kg	5.9	0.33	1
2,2-Dichloropropane	ND		ug/kg	5.9	0.27	1
1,2-Dibromoethane	ND		ug/kg	4.7	0.21	1
1,3-Dichloropropane	ND		ug/kg	5.9	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.38	1
Bromobenzene	ND		ug/kg	5.9	0.25	1
n-Butylbenzene	ND		ug/kg	1.2	0.14	1
sec-Butylbenzene	ND		ug/kg	1.2	0.14	1
tert-Butylbenzene	ND		ug/kg	5.9	0.16	1
o-Chlorotoluene	ND		ug/kg	5.9	0.19	1
p-Chlorotoluene	ND		ug/kg	5.9	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.9	0.47	1
Hexachlorobutadiene	ND		ug/kg	5.9	0.27	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.15	1
Naphthalene	ND		ug/kg	5.9	0.16	1
Acrylonitrile	ND		ug/kg	12	0.61	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.9	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.9	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.9	0.17	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-10 Date Collected: 12/17/14 12:57

Client ID: T-6 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	5.9	0.17	1
1,4-Dioxane	ND		ug/kg	120	17.	1
1,4-Diethylbenzene	ND		ug/kg	4.7	0.19	1
4-Ethyltoluene	ND		ug/kg	4.7	0.15	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.7	0.15	1
Ethyl ether	ND		ug/kg	5.9	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.9	0.46	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	86		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	112		70-130

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-11
Client ID: TW-1
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/22/14 10:13
Analyst: PD

Date Collected: 12/17/14 15:10
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	4.4		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.64		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	1.9		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-11 Date Collected: 12/17/14 15:10

Client ID: TW-1 Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-11 Date Collected: 12/17/14 15:10

Client ID: TW-1 Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	41.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	78		70-130
Dibromofluoromethane	101		70-130

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/22/14 08:03
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG751171-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
2-Chloroethylvinyl ether	ND		ug/l	10	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.13
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.33
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.14
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/22/14 08:03
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG751171-3					
Trichloroethene	0.28	J	ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Diisopropyl Ether	ND		ug/l	2.0	0.65
Tert-Butyl Alcohol	ND		ug/l	10	0.90
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/22/14 08:03
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG751171-3					
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Ethyl Acetate	ND		ug/l	10	0.70
Cyclohexane	ND		ug/l	10	0.27
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.5	0.70
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	0.28
1,4-Dioxane	ND		ug/l	250	41.
Freon-113	ND		ug/l	2.5	0.70
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Tetrahydrofuran	ND		ug/l	5.0	1.5
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/22/14 08:03
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG751171-3					
No Tentatively Identified Compounds	ND		ug/l		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	77		70-130
Dibromofluoromethane	99		70-130

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/22/14 08:51
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-10 Batch: WG751257-3					
Methylene chloride	ND		ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
2-Chloroethylvinyl ether	ND		ug/kg	20	0.62
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12
1,1-Dichloropropene	ND		ug/kg	5.0	0.14
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	ND		ug/kg	5.0	0.29
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/22/14 08:51
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-10 Batch: WG751257-3					
Trichloroethene	ND		ug/kg	1.0	0.12
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.20
o-Xylene	ND		ug/kg	2.0	0.17
Xylene (Total)	ND		ug/kg	2.0	0.17
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
1,2-Dichloroethene (total)	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	10	0.16
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	ND		ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
Vinyl acetate	ND		ug/kg	10	0.13
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.16
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
2,2-Dichloropropane	ND		ug/kg	5.0	0.23
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
1,3-Dichloropropane	ND		ug/kg	5.0	0.14
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.21
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
tert-Butylbenzene	ND		ug/kg	5.0	0.14

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/22/14 08:51
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-10 Batch: WG751257-3					
o-Chlorotoluene	ND		ug/kg	5.0	0.16
p-Chlorotoluene	ND		ug/kg	5.0	0.13
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Hexachlorobutadiene	ND		ug/kg	5.0	0.23
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	ND		ug/kg	5.0	0.14
Acrylonitrile	ND		ug/kg	10	0.51
Isopropyl Ether	ND		ug/kg	4.0	0.14
tert-Butyl Alcohol	ND		ug/kg	60	2.9
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.14
Methyl Acetate	ND		ug/kg	20	0.27
Ethyl Acetate	ND		ug/kg	20	0.92
Acrolein	ND		ug/kg	25	8.1
Cyclohexane	ND		ug/kg	20	0.15
1,4-Dioxane	ND		ug/kg	100	14.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	20	0.27
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16
4-Ethyltoluene	ND		ug/kg	4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13
Tetrahydrofuran	ND		ug/kg	20	1.0
Ethyl ether	ND		ug/kg	5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.39
Methyl cyclohexane	ND		ug/kg	4.0	0.15
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	0.12

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/22/14 08:51
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-10 Batch: WG751257-3					
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	0.10

Tentatively Identified Compounds			
No Tentatively Identified Compounds	ND		ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	84		70-130
Toluene-d8	87		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG751171-1 WG751171-2								
Methylene chloride	107		85		70-130	**23**	Q	20
1,1-Dichloroethane	109		83		70-130	**27**	Q	20
Chloroform	118		89		70-130	**28**	Q	20
2-Chloroethylvinyl ether	96		70		70-130	**31**	Q	20
Carbon tetrachloride	114		85		63-132	**29**	Q	20
1,2-Dichloropropane	101		76		70-130	**28**	Q	20
Dibromochloromethane	122		89		63-130	**31**	Q	20
1,1,2-Trichloroethane	114		86		70-130	**28**	Q	20
Tetrachloroethene	118		89		70-130	**28**	Q	20
Chlorobenzene	121		91		75-130	**28**	Q	20
Trichlorofluoromethane	115		88		62-150	**27**	Q	20
1,2-Dichloroethane	113		86		70-130	**27**	Q	20
1,1,1-Trichloroethane	116		88		67-130	**27**	Q	20
Bromodichloromethane	111		82		67-130	**30**	Q	20
trans-1,3-Dichloropropene	120		87		70-130	**32**	Q	20
cis-1,3-Dichloropropene	103		77		70-130	**29**	Q	20
1,1-Dichloropropene	106		81		70-130	**27**	Q	20
Bromoform	108		79		54-136	**31**	Q	20
1,1,2,2-Tetrachloroethane	97		72		67-130	**30**	Q	20
Benzene	108		82		70-130	**27**	Q	20
Toluene	114		86		70-130	**28**	Q	20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG751171-1 WG751171-2								
Ethylbenzene	118		88		70-130	**29**	Q	20
Chloromethane	72		70		64-130	3		20
Bromomethane	81		66		39-139	20		20
Vinyl chloride	95		74		55-140	**25**	Q	20
Chloroethane	113		92		55-138	20		20
1,1-Dichloroethene	111		85		61-145	**27**	Q	20
trans-1,2-Dichloroethene	114		86		70-130	**28**	Q	20
Trichloroethene	111		84		70-130	**28**	Q	20
1,2-Dichlorobenzene	118		89		70-130	**28**	Q	20
1,3-Dichlorobenzene	122		92		70-130	**28**	Q	20
1,4-Dichlorobenzene	122		93		70-130	**27**	Q	20
Methyl tert butyl ether	111		84		63-130	**28**	Q	20
p/m-Xylene	**131**	Q	98		70-130	**29**	Q	20
o-Xylene	129		96		70-130	**29**	Q	20
cis-1,2-Dichloroethene	116		87		70-130	**29**	Q	20
Dibromomethane	105		78		70-130	**30**	Q	20
1,2,3-Trichloropropane	113		85		64-130	**28**	Q	20
Acrylonitrile	111		77		70-130	**36**	Q	20
Diisopropyl Ether	102		77		70-130	**28**	Q	20
Tert-Butyl Alcohol	124		86		70-130	**36**	Q	20
Styrene	128		97		70-130	**28**	Q	20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG751171-1 WG751171-2								
Dichlorodifluoromethane	91		67		36-147	**30**	Q	20
Acetone	84		60		58-148	**33**	Q	20
Carbon disulfide	86		66		51-130	**26**	Q	20
2-Butanone	90		**62**	Q	63-138	**37**	Q	20
Vinyl acetate	101		73		70-130	**32**	Q	20
4-Methyl-2-pentanone	95		67		59-130	**35**	Q	20
2-Hexanone	89		63		57-130	**34**	Q	20
Bromochloromethane	121		92		70-130	**27**	Q	20
2,2-Dichloropropane	113		84		63-133	**29**	Q	20
1,2-Dibromoethane	114		85		70-130	**29**	Q	20
1,3-Dichloropropane	111		83		70-130	**29**	Q	20
1,1,1,2-Tetrachloroethane	**134**	Q	100		64-130	**29**	Q	20
Bromobenzene	99		74		70-130	**29**	Q	20
n-Butylbenzene	120		89		53-136	**30**	Q	20
sec-Butylbenzene	112		84		70-130	**29**	Q	20
tert-Butylbenzene	108		80		70-130	**30**	Q	20
o-Chlorotoluene	111		82		70-130	**30**	Q	20
p-Chlorotoluene	111		83		70-130	**29**	Q	20
1,2-Dibromo-3-chloropropane	110		81		41-144	**30**	Q	20
Hexachlorobutadiene	106		82		63-130	**26**	Q	20
Isopropylbenzene	92		**68**	Q	70-130	**30**	Q	20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG751171-1 WG751171-2								
p-Isopropyltoluene	120		89		70-130	**30**	Q	20
Naphthalene	109		81		70-130	**29**	Q	20
n-Propylbenzene	99		74		69-130	**29**	Q	20
1,2,3-Trichlorobenzene	118		89		70-130	**28**	Q	20
1,2,4-Trichlorobenzene	121		91		70-130	**28**	Q	20
1,3,5-Trimethylbenzene	122		90		64-130	**30**	Q	20
1,2,4-Trimethylbenzene	119		88		70-130	**30**	Q	20
Methyl Acetate	111		78		70-130	**35**	Q	20
Ethyl Acetate	102		73		70-130	**33**	Q	20
Cyclohexane	96		73		70-130	**27**	Q	20
Ethyl-Tert-Butyl-Ether	108		82		70-130	**27**	Q	20
Tertiary-Amyl Methyl Ether	103		77		66-130	**29**	Q	20
1,4-Dioxane	140		92		56-162	**41**	Q	20
Freon-113	116		88		70-130	**27**	Q	20
p-Diethylbenzene	121		90		70-130	**29**	Q	20
p-Ethyltoluene	110		81		70-130	**30**	Q	20
1,2,4,5-Tetramethylbenzene	113		84		70-130	**29**	Q	20
Ethyl ether	111		85		59-134	**27**	Q	20
trans-1,4-Dichloro-2-butene	98		71		70-130	**32**	Q	20
Methyl cyclohexane	105		79		70-130	**28**	Q	20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG751171-1 WG751171-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		101		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	81		80		70-130
Dibromofluoromethane	106		106		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-10 Batch: WG751257-1 WG751257-2								
Methylene chloride	95		92		70-130	3		30
1,1-Dichloroethane	93		89		70-130	4		30
Chloroform	99		94		70-130	5		30
Carbon tetrachloride	114		105		70-130	8		30
1,2-Dichloropropane	103		96		70-130	7		30
Dibromochloromethane	100		96		70-130	4		30
2-Chloroethylvinyl ether	105		99		70-130	6		30
1,1,2-Trichloroethane	88		84		70-130	5		30
Tetrachloroethene	107		99		70-130	8		30
Chlorobenzene	95		90		70-130	5		30
Trichlorofluoromethane	114		104		70-139	9		30
1,2-Dichloroethane	94		90		70-130	4		30
1,1,1-Trichloroethane	106		100		70-130	6		30
Bromodichloromethane	103		99		70-130	4		30
trans-1,3-Dichloropropene	86		83		70-130	4		30
cis-1,3-Dichloropropene	106		101		70-130	5		30
1,1-Dichloropropene	101		94		70-130	7		30
Bromoform	83		80		70-130	4		30
1,1,2,2-Tetrachloroethane	77		74		70-130	4		30
Benzene	100		94		70-130	6		30
Toluene	88		83		70-130	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-10 Batch: WG751257-1 WG751257-2								
Ethylbenzene	88		84		70-130	5		30
Chloromethane	100		94		52-130	6		30
Bromomethane	111		107		57-147	4		30
Vinyl chloride	88		80		67-130	10		30
Chloroethane	116		106		50-151	9		30
1,1-Dichloroethene	102		93		65-135	9		30
trans-1,2-Dichloroethene	102		96		70-130	6		30
Trichloroethene	109		101		70-130	8		30
1,2-Dichlorobenzene	92		88		70-130	4		30
1,3-Dichlorobenzene	92		87		70-130	6		30
1,4-Dichlorobenzene	90		86		70-130	5		30
Methyl tert butyl ether	97		94		66-130	3		30
p/m-Xylene	97		92		70-130	5		30
o-Xylene	98		92		70-130	6		30
cis-1,2-Dichloroethene	107		101		70-130	6		30
Dibromomethane	109		104		70-130	5		30
Styrene	97		93		70-130	4		30
Dichlorodifluoromethane	137		124		30-146	10		30
Acetone	74		71		54-140	4		30
Carbon disulfide	93		85		59-130	9		30
2-Butanone	83		78		70-130	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-10 Batch: WG751257-1 WG751257-2								
Vinyl acetate	75		72		70-130	4		30
4-Methyl-2-pentanone	89		84		70-130	6		30
1,2,3-Trichloropropane	75		72		68-130	4		30
2-Hexanone	**69**	Q	**66**	Q	70-130	4		30
Bromochloromethane	117		113		70-130	3		30
2,2-Dichloropropane	103		95		70-130	8		30
1,2-Dibromoethane	94		92		70-130	2		30
1,3-Dichloropropane	86		84		69-130	2		30
1,1,1,2-Tetrachloroethane	100		94		70-130	6		30
Bromobenzene	86		84		70-130	2		30
n-Butylbenzene	82		76		70-130	8		30
sec-Butylbenzene	85		79		70-130	7		30
tert-Butylbenzene	89		83		70-130	7		30
o-Chlorotoluene	82		**58**	Q	70-130	**34**	Q	30
p-Chlorotoluene	80		76		70-130	5		30
1,2-Dibromo-3-chloropropane	96		90		68-130	6		30
Hexachlorobutadiene	97		90		67-130	7		30
Isopropylbenzene	81		76		70-130	6		30
p-Isopropyltoluene	90		84		70-130	7		30
Naphthalene	96		93		70-130	3		30
Acrylonitrile	87		82		70-130	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-10 Batch: WG751257-1 WG751257-2								
Isopropyl Ether	80		76		66-130	5		30
tert-Butyl Alcohol	97		90		70-130	7		30
n-Propylbenzene	77		72		70-130	7		30
1,2,3-Trichlorobenzene	101		98		70-130	3		30
1,2,4-Trichlorobenzene	100		96		70-130	4		30
1,3,5-Trimethylbenzene	84		79		70-130	6		30
1,2,4-Trimethylbenzene	86		81		70-130	6		30
Methyl Acetate	74		72		51-146	3		30
Ethyl Acetate	82		77		70-130	6		30
Acrolein	82		79		70-130	4		30
Cyclohexane	97		88		59-142	10		30
1,4-Dioxane	102		95		65-136	7		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	101		92		50-139	9		30
1,4-Diethylbenzene	91		84		70-130	8		30
4-Ethyltoluene	84		79		70-130	6		30
1,2,4,5-Tetramethylbenzene	92		88		70-130	4		30
Tetrahydrofuran	79		75		66-130	5		30
Ethyl ether	81		79		67-130	3		30
trans-1,4-Dichloro-2-butene	71		**66**	Q	70-130	7		30
Methyl cyclohexane	103		94		70-130	9		30
Ethyl-Tert-Butyl-Ether	93		90		70-130	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-10 Batch: WG751257-1 WG751257-2								
Tertiary-Amyl Methyl Ether	91		89		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	82		81		70-130
Toluene-d8	88		89		70-130
4-Bromofluorobenzene	92		93		70-130
Dibromofluoromethane	100		100		70-130

SEMIVOLATILES

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-01	Date Collected:	12/17/14 10:05
Client ID:	T-1 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/20/14 16:53
Analytical Date:	12/24/14 18:43		
Analyst:	JB		
Percent Solids:	97%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	130	35.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	55.	1
Hexachlorobenzene	ND		ug/kg	100	31.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	47.	1
2-Chloronaphthalene	ND		ug/kg	170	55.	1
1,2-Dichlorobenzene	ND		ug/kg	170	55.	1
1,3-Dichlorobenzene	ND		ug/kg	170	53.	1
1,4-Dichlorobenzene	ND		ug/kg	170	51.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	36.	1
2,6-Dinitrotoluene	ND		ug/kg	170	43.	1
Fluoranthene	85	J	ug/kg	100	31.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	51.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	39.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	59.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	51.	1
Hexachlorobutadiene	ND		ug/kg	170	47.	1
Hexachlorocyclopentadiene	ND		ug/kg	480	110	1
Hexachloroethane	ND		ug/kg	130	30.	1
Isophorone	ND		ug/kg	150	45.	1
Naphthalene	ND		ug/kg	170	56.	1
Nitrobenzene	ND		ug/kg	150	40.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	35.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	50.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	170	44.	1
Butyl benzyl phthalate	ND		ug/kg	170	33.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	41.	1
Diethyl phthalate	ND		ug/kg	170	36.	1
Dimethyl phthalate	ND		ug/kg	170	43.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-01 Date Collected: 12/17/14 10:05

Client ID: T-1 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	44	J	ug/kg	100	33.	1
Benzo(a)pyrene	ND		ug/kg	130	41.	1
Benzo(b)fluoranthene	54	J	ug/kg	100	34.	1
Benzo(k)fluoranthene	ND		ug/kg	100	32.	1
Chrysene	51	J	ug/kg	100	33.	1
Acenaphthylene	ND		ug/kg	130	31.	1
Anthracene	ND		ug/kg	100	28.	1
Benzo(ghi)perylene	ND		ug/kg	130	35.	1
Fluorene	ND		ug/kg	170	48.	1
Phenanthrene	44	J	ug/kg	100	33.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	32.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	37.	1
Pyrene	72	J	ug/kg	100	33.	1
Biphenyl	ND		ug/kg	380	55.	1
4-Chloroaniline	ND		ug/kg	170	44.	1
2-Nitroaniline	ND		ug/kg	170	47.	1
3-Nitroaniline	ND		ug/kg	170	46.	1
4-Nitroaniline	ND		ug/kg	170	45.	1
Dibenzofuran	ND		ug/kg	170	56.	1
2-Methylnaphthalene	ND		ug/kg	200	54.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	52.	1
Acetophenone	ND		ug/kg	170	52.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
P-Chloro-M-Cresol	ND		ug/kg	170	49.	1
2-Chlorophenol	ND		ug/kg	170	51.	1
2,4-Dichlorophenol	ND		ug/kg	150	54.	1
2,4-Dimethylphenol	ND		ug/kg	170	50.	1
2-Nitrophenol	ND		ug/kg	360	52.	1
4-Nitrophenol	ND		ug/kg	240	54.	1
2,4-Dinitrophenol	ND		ug/kg	810	230	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	62.	1
Pentachlorophenol	ND		ug/kg	130	36.	1
Phenol	ND		ug/kg	170	50.	1
2-Methylphenol	ND		ug/kg	170	54.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	55.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	54.	1
Benzoic Acid	ND		ug/kg	540	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	ND		ug/kg	170	36.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-01 Date Collected: 12/17/14 10:05

Client ID: T-1 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	88		30-120
2,4,6-Tribromophenol	90		0-136
4-Terphenyl-d14	86		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-02	Date Collected:	12/17/14 10:45
Client ID:	T-1 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/20/14 16:53
Analytical Date:	12/24/14 19:09		
Analyst:	JB		
Percent Solids:	98%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	35.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	56.	1
Hexachlorobenzene	ND		ug/kg	100	32.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	48.	1
2-Chloronaphthalene	ND		ug/kg	170	56.	1
1,2-Dichlorobenzene	ND		ug/kg	170	56.	1
1,3-Dichlorobenzene	ND		ug/kg	170	54.	1
1,4-Dichlorobenzene	ND		ug/kg	170	52.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	37.	1
2,6-Dinitrotoluene	ND		ug/kg	170	44.	1
Fluoranthene	ND		ug/kg	100	31.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	52.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	39.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	60.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	52.	1
Hexachlorobutadiene	ND		ug/kg	170	48.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	110	1
Hexachloroethane	ND		ug/kg	140	31.	1
Isophorone	ND		ug/kg	150	45.	1
Naphthalene	ND		ug/kg	170	56.	1
Nitrobenzene	ND		ug/kg	150	40.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	36.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	51.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	170	45.	1
Butyl benzyl phthalate	ND		ug/kg	170	33.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	42.	1
Diethyl phthalate	ND		ug/kg	170	36.	1
Dimethyl phthalate	ND		ug/kg	170	43.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-02 Date Collected: 12/17/14 10:45

Client ID: T-1 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	ND		ug/kg	100	33.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	34.	1
Benzo(k)fluoranthene	ND		ug/kg	100	32.	1
Chrysene	ND		ug/kg	100	33.	1
Acenaphthylene	ND		ug/kg	140	32.	1
Anthracene	ND		ug/kg	100	28.	1
Benzo(ghi)perylene	ND		ug/kg	140	35.	1
Fluorene	ND		ug/kg	170	49.	1
Phenanthrene	ND		ug/kg	100	33.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	33.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	140	38.	1
Pyrene	ND		ug/kg	100	33.	1
Biphenyl	ND		ug/kg	390	56.	1
4-Chloroaniline	ND		ug/kg	170	45.	1
2-Nitroaniline	ND		ug/kg	170	48.	1
3-Nitroaniline	ND		ug/kg	170	47.	1
4-Nitroaniline	ND		ug/kg	170	46.	1
Dibenzofuran	ND		ug/kg	170	57.	1
2-Methylnaphthalene	ND		ug/kg	200	54.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	53.	1
Acetophenone	ND		ug/kg	170	53.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
P-Chloro-M-Cresol	ND		ug/kg	170	49.	1
2-Chlorophenol	ND		ug/kg	170	51.	1
2,4-Dichlorophenol	ND		ug/kg	150	55.	1
2,4-Dimethylphenol	ND		ug/kg	170	51.	1
2-Nitrophenol	ND		ug/kg	370	53.	1
4-Nitrophenol	ND		ug/kg	240	55.	1
2,4-Dinitrophenol	ND		ug/kg	820	230	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	62.	1
Pentachlorophenol	ND		ug/kg	140	36.	1
Phenol	ND		ug/kg	170	50.	1
2-Methylphenol	ND		ug/kg	170	55.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	56.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	55.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	ND		ug/kg	170	37.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-02 Date Collected: 12/17/14 10:45

Client ID: T-1 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	85		0-136
4-Terphenyl-d14	80		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-03	Date Collected:	12/17/14 11:12
Client ID:	T-2 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/20/14 16:53
Analytical Date:	12/24/14 19:35		
Analyst:	JB		
Percent Solids:	95%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	36.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	57.	1
Hexachlorobenzene	ND		ug/kg	100	32.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	49.	1
2-Chloronaphthalene	ND		ug/kg	170	57.	1
1,2-Dichlorobenzene	ND		ug/kg	170	57.	1
1,3-Dichlorobenzene	ND		ug/kg	170	55.	1
1,4-Dichlorobenzene	ND		ug/kg	170	53.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	38.	1
2,6-Dinitrotoluene	ND		ug/kg	170	44.	1
Fluoranthene	130		ug/kg	100	32.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	53.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	40.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	61.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	53.	1
Hexachlorobutadiene	ND		ug/kg	170	49.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	110	1
Hexachloroethane	ND		ug/kg	140	32.	1
Isophorone	ND		ug/kg	160	46.	1
Naphthalene	ND		ug/kg	170	58.	1
Nitrobenzene	ND		ug/kg	160	41.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	36.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	52.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	170	46.	1
Butyl benzyl phthalate	ND		ug/kg	170	34.	1
Di-n-butylphthalate	ND		ug/kg	170	34.	1
Di-n-octylphthalate	ND		ug/kg	170	43.	1
Diethyl phthalate	ND		ug/kg	170	37.	1
Dimethyl phthalate	ND		ug/kg	170	44.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-03 Date Collected: 12/17/14 11:12

Client ID: T-2 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	68	J	ug/kg	100	34.	1
Benzo(a)pyrene	63	J	ug/kg	140	43.	1
Benzo(b)fluoranthene	75	J	ug/kg	100	35.	1
Benzo(k)fluoranthene	ND		ug/kg	100	33.	1
Chrysene	65	J	ug/kg	100	34.	1
Acenaphthylene	ND		ug/kg	140	32.	1
Anthracene	ND		ug/kg	100	29.	1
Benzo(ghi)perylene	41	J	ug/kg	140	36.	1
Fluorene	ND		ug/kg	170	50.	1
Phenanthrene	73	J	ug/kg	100	34.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	34.	1
Indeno(1,2,3-cd)Pyrene	44	J	ug/kg	140	39.	1
Pyrene	120		ug/kg	100	34.	1
Biphenyl	ND		ug/kg	400	57.	1
4-Chloroaniline	ND		ug/kg	170	46.	1
2-Nitroaniline	ND		ug/kg	170	49.	1
3-Nitroaniline	ND		ug/kg	170	48.	1
4-Nitroaniline	ND		ug/kg	170	47.	1
Dibenzofuran	ND		ug/kg	170	58.	1
2-Methylnaphthalene	ND		ug/kg	210	56.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	54.	1
Acetophenone	ND		ug/kg	170	54.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
P-Chloro-M-Cresol	ND		ug/kg	170	50.	1
2-Chlorophenol	ND		ug/kg	170	53.	1
2,4-Dichlorophenol	ND		ug/kg	160	56.	1
2,4-Dimethylphenol	ND		ug/kg	170	52.	1
2-Nitrophenol	ND		ug/kg	380	54.	1
4-Nitrophenol	ND		ug/kg	240	56.	1
2,4-Dinitrophenol	ND		ug/kg	840	240	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	64.	1
Pentachlorophenol	ND		ug/kg	140	37.	1
Phenol	ND		ug/kg	170	52.	1
2-Methylphenol	ND		ug/kg	170	56.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	57.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	56.	1
Benzoic Acid	ND		ug/kg	560	180	1
Benzyl Alcohol	ND		ug/kg	170	54.	1
Carbazole	ND		ug/kg	170	37.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-03 Date Collected: 12/17/14 11:12

Client ID: T-2 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		25-120
Phenol-d6	66		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	75		0-136
4-Terphenyl-d14	74		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-04	Date Collected:	12/17/14 11:30
Client ID:	T-2 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/20/14 16:53
Analytical Date:	12/24/14 20:00		
Analyst:	JB		
Percent Solids:	98%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	35.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	56.	1
Hexachlorobenzene	ND		ug/kg	100	32.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	48.	1
2-Chloronaphthalene	ND		ug/kg	170	55.	1
1,2-Dichlorobenzene	ND		ug/kg	170	56.	1
1,3-Dichlorobenzene	ND		ug/kg	170	53.	1
1,4-Dichlorobenzene	ND		ug/kg	170	52.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	37.	1
2,6-Dinitrotoluene	ND		ug/kg	170	43.	1
Fluoranthene	ND		ug/kg	100	31.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	52.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	39.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	60.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	51.	1
Hexachlorobutadiene	ND		ug/kg	170	48.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	110	1
Hexachloroethane	ND		ug/kg	140	31.	1
Isophorone	ND		ug/kg	150	45.	1
Naphthalene	ND		ug/kg	170	56.	1
Nitrobenzene	ND		ug/kg	150	40.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	36.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	50.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	170	44.	1
Butyl benzyl phthalate	ND		ug/kg	170	33.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	42.	1
Diethyl phthalate	ND		ug/kg	170	36.	1
Dimethyl phthalate	ND		ug/kg	170	43.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-04 Date Collected: 12/17/14 11:30

Client ID: T-2 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	ND		ug/kg	100	33.	1
Benzo(a)pyrene	ND		ug/kg	140	41.	1
Benzo(b)fluoranthene	ND		ug/kg	100	34.	1
Benzo(k)fluoranthene	ND		ug/kg	100	32.	1
Chrysene	ND		ug/kg	100	33.	1
Acenaphthylene	ND		ug/kg	140	32.	1
Anthracene	ND		ug/kg	100	28.	1
Benzo(ghi)perylene	ND		ug/kg	140	35.	1
Fluorene	ND		ug/kg	170	49.	1
Phenanthrene	ND		ug/kg	100	33.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	33.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	140	38.	1
Pyrene	ND		ug/kg	100	33.	1
Biphenyl	ND		ug/kg	390	56.	1
4-Chloroaniline	ND		ug/kg	170	45.	1
2-Nitroaniline	ND		ug/kg	170	48.	1
3-Nitroaniline	ND		ug/kg	170	47.	1
4-Nitroaniline	ND		ug/kg	170	46.	1
Dibenzofuran	ND		ug/kg	170	57.	1
2-Methylnaphthalene	ND		ug/kg	200	54.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	52.	1
Acetophenone	ND		ug/kg	170	52.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
P-Chloro-M-Cresol	ND		ug/kg	170	49.	1
2-Chlorophenol	ND		ug/kg	170	51.	1
2,4-Dichlorophenol	ND		ug/kg	150	55.	1
2,4-Dimethylphenol	ND		ug/kg	170	50.	1
2-Nitrophenol	ND		ug/kg	370	53.	1
4-Nitrophenol	ND		ug/kg	240	55.	1
2,4-Dinitrophenol	ND		ug/kg	810	230	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	62.	1
Pentachlorophenol	ND		ug/kg	140	36.	1
Phenol	ND		ug/kg	170	50.	1
2-Methylphenol	ND		ug/kg	170	55.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	56.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	55.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	ND		ug/kg	170	36.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-04 Date Collected: 12/17/14 11:30

Client ID: T-2 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	88		0-136
4-Terphenyl-d14	83		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-05	Date Collected:	12/17/14 15:30
Client ID:	T-4 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/20/14 16:53
Analytical Date:	12/24/14 20:26		
Analyst:	JB		
Percent Solids:	97%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	130	34.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	55.	1
Hexachlorobenzene	ND		ug/kg	100	31.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	47.	1
2-Chloronaphthalene	ND		ug/kg	170	54.	1
1,2-Dichlorobenzene	ND		ug/kg	170	55.	1
1,3-Dichlorobenzene	ND		ug/kg	170	53.	1
1,4-Dichlorobenzene	ND		ug/kg	170	51.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	44.	1
2,4-Dinitrotoluene	ND		ug/kg	170	36.	1
2,6-Dinitrotoluene	ND		ug/kg	170	43.	1
Fluoranthene	1100		ug/kg	100	31.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	51.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	38.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	59.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	51.	1
Hexachlorobutadiene	ND		ug/kg	170	47.	1
Hexachlorocyclopentadiene	ND		ug/kg	480	110	1
Hexachloroethane	ND		ug/kg	130	30.	1
Isophorone	ND		ug/kg	150	44.	1
Naphthalene	ND		ug/kg	170	56.	1
Nitrobenzene	ND		ug/kg	150	40.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	35.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	50.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	170	44.	1
Butyl benzyl phthalate	ND		ug/kg	170	33.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	41.	1
Diethyl phthalate	ND		ug/kg	170	35.	1
Dimethyl phthalate	ND		ug/kg	170	42.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-05 Date Collected: 12/17/14 15:30

Client ID: T-4 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	540		ug/kg	100	33.	1
Benzo(a)pyrene	470		ug/kg	130	41.	1
Benzo(b)fluoranthene	630		ug/kg	100	34.	1
Benzo(k)fluoranthene	210		ug/kg	100	32.	1
Chrysene	520		ug/kg	100	33.	1
Acenaphthylene	70	J	ug/kg	130	31.	1
Anthracene	150		ug/kg	100	28.	1
Benzo(ghi)perylene	280		ug/kg	130	35.	1
Fluorene	ND		ug/kg	170	48.	1
Phenanthrene	640		ug/kg	100	33.	1
Dibenzo(a,h)anthracene	79	J	ug/kg	100	32.	1
Indeno(1,2,3-cd)Pyrene	310		ug/kg	130	37.	1
Pyrene	860		ug/kg	100	32.	1
Biphenyl	ND		ug/kg	380	55.	1
4-Chloroaniline	ND		ug/kg	170	44.	1
2-Nitroaniline	ND		ug/kg	170	47.	1
3-Nitroaniline	ND		ug/kg	170	46.	1
4-Nitroaniline	ND		ug/kg	170	45.	1
Dibenzofuran	ND		ug/kg	170	56.	1
2-Methylnaphthalene	ND		ug/kg	200	53.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	52.	1
Acetophenone	ND		ug/kg	170	52.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
P-Chloro-M-Cresol	ND		ug/kg	170	48.	1
2-Chlorophenol	ND		ug/kg	170	50.	1
2,4-Dichlorophenol	ND		ug/kg	150	54.	1
2,4-Dimethylphenol	ND		ug/kg	170	50.	1
2-Nitrophenol	ND		ug/kg	360	52.	1
4-Nitrophenol	ND		ug/kg	230	54.	1
2,4-Dinitrophenol	ND		ug/kg	800	230	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	61.	1
Pentachlorophenol	ND		ug/kg	130	36.	1
Phenol	ND		ug/kg	170	50.	1
2-Methylphenol	ND		ug/kg	170	54.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	55.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	54.	1
Benzoic Acid	ND		ug/kg	540	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	74	J	ug/kg	170	36.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-05 Date Collected: 12/17/14 15:30

Client ID: T-4 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	67		30-120
2,4,6-Tribromophenol	69		0-136
4-Terphenyl-d14	56		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-06	Date Collected:	12/17/14 15:50
Client ID:	T-4 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/20/14 16:53
Analytical Date:	12/24/14 20:51		
Analyst:	JB		
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	35.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	55.	1
Hexachlorobenzene	ND		ug/kg	100	31.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	47.	1
2-Chloronaphthalene	ND		ug/kg	170	55.	1
1,2-Dichlorobenzene	ND		ug/kg	170	55.	1
1,3-Dichlorobenzene	ND		ug/kg	170	53.	1
1,4-Dichlorobenzene	ND		ug/kg	170	51.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	36.	1
2,6-Dinitrotoluene	ND		ug/kg	170	43.	1
Fluoranthene	ND		ug/kg	100	31.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	51.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	39.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	59.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	51.	1
Hexachlorobutadiene	ND		ug/kg	170	48.	1
Hexachlorocyclopentadiene	ND		ug/kg	480	110	1
Hexachloroethane	ND		ug/kg	140	31.	1
Isophorone	ND		ug/kg	150	45.	1
Naphthalene	ND		ug/kg	170	56.	1
Nitrobenzene	ND		ug/kg	150	40.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	35.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	50.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	170	44.	1
Butyl benzyl phthalate	ND		ug/kg	170	33.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	42.	1
Diethyl phthalate	ND		ug/kg	170	36.	1
Dimethyl phthalate	ND		ug/kg	170	43.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-06 Date Collected: 12/17/14 15:50

Client ID: T-4 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	ND		ug/kg	100	33.	1
Benzo(a)pyrene	ND		ug/kg	140	41.	1
Benzo(b)fluoranthene	ND		ug/kg	100	34.	1
Benzo(k)fluoranthene	ND		ug/kg	100	32.	1
Chrysene	ND		ug/kg	100	33.	1
Acenaphthylene	ND		ug/kg	140	32.	1
Anthracene	ND		ug/kg	100	28.	1
Benzo(ghi)perylene	ND		ug/kg	140	35.	1
Fluorene	ND		ug/kg	170	48.	1
Phenanthrene	ND		ug/kg	100	33.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	33.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	140	37.	1
Pyrene	ND		ug/kg	100	33.	1
Biphenyl	ND		ug/kg	380	56.	1
4-Chloroaniline	ND		ug/kg	170	44.	1
2-Nitroaniline	ND		ug/kg	170	48.	1
3-Nitroaniline	ND		ug/kg	170	46.	1
4-Nitroaniline	ND		ug/kg	170	46.	1
Dibenzofuran	ND		ug/kg	170	56.	1
2-Methylnaphthalene	ND		ug/kg	200	54.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	52.	1
Acetophenone	ND		ug/kg	170	52.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
P-Chloro-M-Cresol	ND		ug/kg	170	49.	1
2-Chlorophenol	ND		ug/kg	170	51.	1
2,4-Dichlorophenol	ND		ug/kg	150	55.	1
2,4-Dimethylphenol	ND		ug/kg	170	50.	1
2-Nitrophenol	ND		ug/kg	360	53.	1
4-Nitrophenol	ND		ug/kg	240	55.	1
2,4-Dinitrophenol	ND		ug/kg	810	230	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	62.	1
Pentachlorophenol	ND		ug/kg	140	36.	1
Phenol	ND		ug/kg	170	50.	1
2-Methylphenol	ND		ug/kg	170	54.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	55.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	55.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	ND		ug/kg	170	36.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-06 Date Collected: 12/17/14 15:50

Client ID: T-4 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	96		0-136
4-Terphenyl-d14	84		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-07	Date Collected:	12/17/14 14:12
Client ID:	T-5 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/20/14 16:53
Analytical Date:	12/24/14 21:17		
Analyst:	JB		
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	37	J	ug/kg	140	35.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	56.	1
Hexachlorobenzene	ND		ug/kg	100	32.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	48.	1
2-Chloronaphthalene	ND		ug/kg	170	56.	1
1,2-Dichlorobenzene	ND		ug/kg	170	56.	1
1,3-Dichlorobenzene	ND		ug/kg	170	54.	1
1,4-Dichlorobenzene	ND		ug/kg	170	52.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	37.	1
2,6-Dinitrotoluene	ND		ug/kg	170	44.	1
Fluoranthene	970		ug/kg	100	32.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	52.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	40.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	60.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	52.	1
Hexachlorobutadiene	ND		ug/kg	170	48.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	110	1
Hexachloroethane	ND		ug/kg	140	31.	1
Isophorone	ND		ug/kg	150	46.	1
Naphthalene	ND		ug/kg	170	57.	1
Nitrobenzene	ND		ug/kg	150	41.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	36.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	51.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	170	45.	1
Butyl benzyl phthalate	ND		ug/kg	170	34.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	42.	1
Diethyl phthalate	ND		ug/kg	170	36.	1
Dimethyl phthalate	ND		ug/kg	170	44.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-07 Date Collected: 12/17/14 14:12

Client ID: T-5 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	620		ug/kg	100	34.	1
Benzo(a)pyrene	650		ug/kg	140	42.	1
Benzo(b)fluoranthene	810		ug/kg	100	35.	1
Benzo(k)fluoranthene	290		ug/kg	100	33.	1
Chrysene	630		ug/kg	100	34.	1
Acenaphthylene	120	J	ug/kg	140	32.	1
Anthracene	130		ug/kg	100	28.	1
Benzo(ghi)perylene	390		ug/kg	140	36.	1
Fluorene	ND		ug/kg	170	49.	1
Phenanthrene	530		ug/kg	100	34.	1
Dibenzo(a,h)anthracene	100		ug/kg	100	33.	1
Indeno(1,2,3-cd)Pyrene	440		ug/kg	140	38.	1
Pyrene	1000		ug/kg	100	33.	1
Biphenyl	ND		ug/kg	390	57.	1
4-Chloroaniline	ND		ug/kg	170	45.	1
2-Nitroaniline	ND		ug/kg	170	48.	1
3-Nitroaniline	ND		ug/kg	170	47.	1
4-Nitroaniline	ND		ug/kg	170	46.	1
Dibenzofuran	ND		ug/kg	170	57.	1
2-Methylnaphthalene	ND		ug/kg	210	55.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	53.	1
Acetophenone	ND		ug/kg	170	53.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
P-Chloro-M-Cresol	ND		ug/kg	170	50.	1
2-Chlorophenol	ND		ug/kg	170	52.	1
2,4-Dichlorophenol	ND		ug/kg	150	56.	1
2,4-Dimethylphenol	ND		ug/kg	170	51.	1
2-Nitrophenol	ND		ug/kg	370	54.	1
4-Nitrophenol	ND		ug/kg	240	56.	1
2,4-Dinitrophenol	ND		ug/kg	820	240	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	63.	1
Pentachlorophenol	ND		ug/kg	140	37.	1
Phenol	ND		ug/kg	170	51.	1
2-Methylphenol	ND		ug/kg	170	55.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	56.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	56.	1
Benzoic Acid	ND		ug/kg	560	170	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	ND		ug/kg	170	37.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-07 Date Collected: 12/17/14 14:12

Client ID: T-5 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	81		0-136
4-Terphenyl-d14	70		18-120

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-08	Date Collected:	12/17/14 14:54
Client ID:	T-5 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/20/14 16:53
Analytical Date:	12/24/14 21:43		
Analyst:	JB		
Percent Solids:	93%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	36.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	58.	1
Hexachlorobenzene	ND		ug/kg	100	33.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	49.	1
2-Chloronaphthalene	ND		ug/kg	180	58.	1
1,2-Dichlorobenzene	ND		ug/kg	180	58.	1
1,3-Dichlorobenzene	ND		ug/kg	180	56.	1
1,4-Dichlorobenzene	ND		ug/kg	180	54.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	38.	1
2,6-Dinitrotoluene	ND		ug/kg	180	45.	1
Fluoranthene	ND		ug/kg	100	32.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	54.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	40.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	62.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	53.	1
Hexachlorobutadiene	ND		ug/kg	180	50.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	110	1
Hexachloroethane	ND		ug/kg	140	32.	1
Isophorone	ND		ug/kg	160	47.	1
Naphthalene	ND		ug/kg	180	59.	1
Nitrobenzene	ND		ug/kg	160	42.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	37.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	53.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	46.	1
Butyl benzyl phthalate	ND		ug/kg	180	34.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	43.	1
Diethyl phthalate	ND		ug/kg	180	37.	1
Dimethyl phthalate	ND		ug/kg	180	45.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-08 Date Collected: 12/17/14 14:54

Client ID: T-5 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	ND		ug/kg	100	34.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	ND		ug/kg	100	36.	1
Benzo(k)fluoranthene	ND		ug/kg	100	34.	1
Chrysene	ND		ug/kg	100	35.	1
Acenaphthylene	ND		ug/kg	140	33.	1
Anthracene	ND		ug/kg	100	29.	1
Benzo(ghi)perylene	ND		ug/kg	140	37.	1
Fluorene	ND		ug/kg	180	50.	1
Phenanthrene	ND		ug/kg	100	34.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	34.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	140	39.	1
Pyrene	ND		ug/kg	100	34.	1
Biphenyl	ND		ug/kg	400	58.	1
4-Chloroaniline	ND		ug/kg	180	46.	1
2-Nitroaniline	ND		ug/kg	180	50.	1
3-Nitroaniline	ND		ug/kg	180	49.	1
4-Nitroaniline	ND		ug/kg	180	48.	1
Dibenzofuran	ND		ug/kg	180	59.	1
2-Methylnaphthalene	ND		ug/kg	210	56.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	55.	1
Acetophenone	ND		ug/kg	180	55.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
P-Chloro-M-Cresol	ND		ug/kg	180	51.	1
2-Chlorophenol	ND		ug/kg	180	53.	1
2,4-Dichlorophenol	ND		ug/kg	160	57.	1
2,4-Dimethylphenol	ND		ug/kg	180	53.	1
2-Nitrophenol	ND		ug/kg	380	55.	1
4-Nitrophenol	ND		ug/kg	250	57.	1
2,4-Dinitrophenol	ND		ug/kg	850	240	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	65.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	180	52.	1
2-Methylphenol	ND		ug/kg	180	57.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	58.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	57.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	ND		ug/kg	180	38.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-08	Date Collected:	12/17/14 14:54
Client ID:	T-5 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		25-120
Phenol-d6	53		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	55		30-120
2,4,6-Tribromophenol	66		0-136
4-Terphenyl-d14	58		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-09	Date Collected:	12/17/14 12:45
Client ID:	T-6 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/20/14 16:53
Analytical Date:	12/24/14 22:08		
Analyst:	JB		
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	36.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	57.	1
Hexachlorobenzene	ND		ug/kg	100	32.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	48.	1
2-Chloronaphthalene	ND		ug/kg	170	56.	1
1,2-Dichlorobenzene	ND		ug/kg	170	57.	1
1,3-Dichlorobenzene	ND		ug/kg	170	54.	1
1,4-Dichlorobenzene	ND		ug/kg	170	53.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	37.	1
2,6-Dinitrotoluene	ND		ug/kg	170	44.	1
Fluoranthene	ND		ug/kg	100	32.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	53.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	40.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	61.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	52.	1
Hexachlorobutadiene	ND		ug/kg	170	49.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	110	1
Hexachloroethane	ND		ug/kg	140	31.	1
Isophorone	ND		ug/kg	160	46.	1
Naphthalene	ND		ug/kg	170	57.	1
Nitrobenzene	ND		ug/kg	160	41.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	36.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	52.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	170	45.	1
Butyl benzyl phthalate	ND		ug/kg	170	34.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	42.	1
Diethyl phthalate	ND		ug/kg	170	36.	1
Dimethyl phthalate	ND		ug/kg	170	44.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-09 Date Collected: 12/17/14 12:45

Client ID: T-6 (2-5)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	ND		ug/kg	100	34.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	35.	1
Benzo(k)fluoranthene	ND		ug/kg	100	33.	1
Chrysene	ND		ug/kg	100	34.	1
Acenaphthylene	ND		ug/kg	140	32.	1
Anthracene	ND		ug/kg	100	29.	1
Benzo(ghi)perylene	ND		ug/kg	140	36.	1
Fluorene	ND		ug/kg	170	50.	1
Phenanthrene	ND		ug/kg	100	34.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	34.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	140	38.	1
Pyrene	ND		ug/kg	100	34.	1
Biphenyl	ND		ug/kg	390	57.	1
4-Chloroaniline	ND		ug/kg	170	46.	1
2-Nitroaniline	ND		ug/kg	170	49.	1
3-Nitroaniline	ND		ug/kg	170	48.	1
4-Nitroaniline	ND		ug/kg	170	47.	1
Dibenzofuran	ND		ug/kg	170	58.	1
2-Methylnaphthalene	ND		ug/kg	210	55.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	54.	1
Acetophenone	ND		ug/kg	170	54.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
P-Chloro-M-Cresol	ND		ug/kg	170	50.	1
2-Chlorophenol	ND		ug/kg	170	52.	1
2,4-Dichlorophenol	ND		ug/kg	160	56.	1
2,4-Dimethylphenol	ND		ug/kg	170	52.	1
2-Nitrophenol	ND		ug/kg	370	54.	1
4-Nitrophenol	ND		ug/kg	240	56.	1
2,4-Dinitrophenol	ND		ug/kg	830	240	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	63.	1
Pentachlorophenol	ND		ug/kg	140	37.	1
Phenol	ND		ug/kg	170	51.	1
2-Methylphenol	ND		ug/kg	170	56.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	57.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	56.	1
Benzoic Acid	ND		ug/kg	560	180	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	ND		ug/kg	170	37.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-09	Date Collected:	12/17/14 12:45
Client ID:	T-6 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	81		30-120
2,4,6-Tribromophenol	90		0-136
4-Terphenyl-d14	83		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-10	Date Collected:	12/17/14 12:57
Client ID:	T-6 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/20/14 16:53
Analytical Date:	12/24/14 22:34		
Analyst:	JB		
Percent Solids:	94%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	36.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	58.	1
Hexachlorobenzene	ND		ug/kg	100	33.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	49.	1
2-Chloronaphthalene	ND		ug/kg	180	57.	1
1,2-Dichlorobenzene	ND		ug/kg	180	58.	1
1,3-Dichlorobenzene	ND		ug/kg	180	55.	1
1,4-Dichlorobenzene	ND		ug/kg	180	53.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	38.	1
2,6-Dinitrotoluene	ND		ug/kg	180	45.	1
Fluoranthene	ND		ug/kg	100	32.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	53.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	40.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	62.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	53.	1
Hexachlorobutadiene	ND		ug/kg	180	49.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	110	1
Hexachloroethane	ND		ug/kg	140	32.	1
Isophorone	ND		ug/kg	160	47.	1
Naphthalene	ND		ug/kg	180	58.	1
Nitrobenzene	ND		ug/kg	160	42.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	37.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	52.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	46.	1
Butyl benzyl phthalate	ND		ug/kg	180	34.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	43.	1
Diethyl phthalate	ND		ug/kg	180	37.	1
Dimethyl phthalate	ND		ug/kg	180	44.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-10 Date Collected: 12/17/14 12:57

Client ID: T-6 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	ND		ug/kg	100	34.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	ND		ug/kg	100	35.	1
Benzo(k)fluoranthene	ND		ug/kg	100	33.	1
Chrysene	ND		ug/kg	100	34.	1
Acenaphthylene	ND		ug/kg	140	33.	1
Anthracene	ND		ug/kg	100	29.	1
Benzo(ghi)perylene	ND		ug/kg	140	36.	1
Fluorene	ND		ug/kg	180	50.	1
Phenanthrene	ND		ug/kg	100	34.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	34.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	140	39.	1
Pyrene	ND		ug/kg	100	34.	1
Biphenyl	ND		ug/kg	400	58.	1
4-Chloroaniline	ND		ug/kg	180	46.	1
2-Nitroaniline	ND		ug/kg	180	49.	1
3-Nitroaniline	ND		ug/kg	180	48.	1
4-Nitroaniline	ND		ug/kg	180	47.	1
Dibenzofuran	ND		ug/kg	180	58.	1
2-Methylnaphthalene	ND		ug/kg	210	56.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	54.	1
Acetophenone	ND		ug/kg	180	54.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
P-Chloro-M-Cresol	ND		ug/kg	180	51.	1
2-Chlorophenol	ND		ug/kg	180	53.	1
2,4-Dichlorophenol	ND		ug/kg	160	57.	1
2,4-Dimethylphenol	ND		ug/kg	180	52.	1
2-Nitrophenol	ND		ug/kg	380	55.	1
4-Nitrophenol	ND		ug/kg	240	57.	1
2,4-Dinitrophenol	ND		ug/kg	840	240	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	64.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	180	52.	1
2-Methylphenol	ND		ug/kg	180	56.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	58.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	57.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	ND		ug/kg	180	38.	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-10 Date Collected: 12/17/14 12:57

Client ID: T-6 (13-15)' Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	84		0-136
4-Terphenyl-d14	73		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-11	Date Collected:	12/17/14 15:10
Client ID:	TW-1	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	12/20/14 17:22
Analytical Date:	12/24/14 16:55		
Analyst:	HL		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.58	1
Isophorone	ND		ug/l	5.0	0.79	1
Nitrobenzene	ND		ug/l	2.0	0.40	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	0.93	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.1	1
Di-n-butylphthalate	ND		ug/l	5.0	0.77	1
Di-n-octylphthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate	ND		ug/l	5.0	0.33	1
Biphenyl	ND		ug/l	2.0	0.24	1
4-Chloroaniline	ND		ug/l	5.0	0.84	1
2-Nitroaniline	ND		ug/l	5.0	0.96	1
3-Nitroaniline	ND		ug/l	5.0	0.67	1
4-Nitroaniline	ND		ug/l	5.0	0.83	1
Dibenzofuran	ND		ug/l	2.0	0.22	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-11 Date Collected: 12/17/14 15:10

Client ID: TW-1 Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acetophenone	ND		ug/l	5.0	0.43	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54	1
2-Chlorophenol	ND		ug/l	2.0	0.58	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.56	1
2,4-Dimethylphenol	ND		ug/l	5.0	0.58	1
2-Nitrophenol	ND		ug/l	10	1.0	1
4-Nitrophenol	ND		ug/l	10	1.1	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4	1
Phenol	ND		ug/l	5.0	0.27	1
2-Methylphenol	ND		ug/l	5.0	0.70	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.68	1
Carbazole	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	36		21-120
Phenol-d6	24		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	83		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-11	Date Collected:	12/17/14 15:10
Client ID:	TW-1	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	12/20/14 17:25
Analytical Date:	12/22/14 18:58		
Analyst:	MW		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	0.07	J	ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	ND		ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	ND		ug/l	0.20	0.06	1
Phenanthrene	ND		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	ND		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-11	Date Collected:	12/17/14 15:10
Client ID:	TW-1	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	108		10-120
4-Terphenyl-d14	101		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-12	Date Collected:	12/17/14 15:10
Client ID:	TW-1 FILTERED	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	12/23/14 11:06
Analytical Date:	12/25/14 00:59		
Analyst:	PS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.58	1
Isophorone	ND		ug/l	5.0	0.79	1
Nitrobenzene	ND		ug/l	2.0	0.40	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	0.93	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.1	1
Di-n-butylphthalate	ND		ug/l	5.0	0.77	1
Di-n-octylphthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate	ND		ug/l	5.0	0.33	1
Biphenyl	ND		ug/l	2.0	0.24	1
4-Chloroaniline	ND		ug/l	5.0	0.84	1
2-Nitroaniline	ND		ug/l	5.0	0.96	1
3-Nitroaniline	ND		ug/l	5.0	0.67	1
4-Nitroaniline	ND		ug/l	5.0	0.83	1
Dibenzofuran	ND		ug/l	2.0	0.22	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-12 Date Collected: 12/17/14 15:10

Client ID: TW-1 FILTERED Date Received: 12/17/14

Sample Location: LONG ISLAND CITY, QUEENS NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acetophenone	ND		ug/l	5.0	0.43	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54	1
2-Chlorophenol	ND		ug/l	2.0	0.58	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.56	1
2,4-Dimethylphenol	ND		ug/l	5.0	0.58	1
2-Nitrophenol	ND		ug/l	10	1.0	1
4-Nitrophenol	ND		ug/l	10	1.1	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4	1
Phenol	ND		ug/l	5.0	0.27	1
2-Methylphenol	ND		ug/l	5.0	0.70	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.68	1
Carbazole	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	31		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	46		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	64		10-120
4-Terphenyl-d14	69		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-12	Date Collected:	12/17/14 15:10
Client ID:	TW-1 FILTERED	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	12/23/14 11:09
Analytical Date:	12/23/14 18:45		
Analyst:	KV		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	0.23		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	0.10	J	ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	ND		ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	0.06	J	ug/l	0.20	0.06	1
Phenanthrene	0.26		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	0.22		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-12	Date Collected:	12/17/14 15:10
Client ID:	TW-1 FILTERED	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	29		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	52		23-120
2-Fluorobiphenyl	56		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	61		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/24/14 17:00
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 12/20/14 16:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-10 Batch: WG750689-1					
Acenaphthene	ND		ug/kg	130	34.
1,2,4-Trichlorobenzene	ND		ug/kg	160	54.
Hexachlorobenzene	ND		ug/kg	99	31.
Bis(2-chloroethyl)ether	ND		ug/kg	150	46.
2-Chloronaphthalene	ND		ug/kg	160	54.
1,2-Dichlorobenzene	ND		ug/kg	160	54.
1,3-Dichlorobenzene	ND		ug/kg	160	52.
1,4-Dichlorobenzene	ND		ug/kg	160	50.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	36.
2,6-Dinitrotoluene	ND		ug/kg	160	42.
Fluoranthene	ND		ug/kg	99	30.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	50.
4-Bromophenyl phenyl ether	ND		ug/kg	160	38.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	58.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	50.
Hexachlorobutadiene	ND		ug/kg	160	46.
Hexachlorocyclopentadiene	ND		ug/kg	470	100
Hexachloroethane	ND		ug/kg	130	30.
Isophorone	ND		ug/kg	150	44.
Naphthalene	ND		ug/kg	160	55.
Nitrobenzene	ND		ug/kg	150	39.
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	35.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	49.
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	160	43.
Butyl benzyl phthalate	ND		ug/kg	160	32.
Di-n-butylphthalate	ND		ug/kg	160	32.
Di-n-octylphthalate	ND		ug/kg	160	40.
Diethyl phthalate	ND		ug/kg	160	35.

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/24/14 17:00
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 12/20/14 16:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-10 Batch: WG750689-1					
Dimethyl phthalate	ND		ug/kg	160	42.
Benzo(a)anthracene	ND		ug/kg	99	32.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	33.
Benzo(k)fluoranthene	ND		ug/kg	99	31.
Chrysene	ND		ug/kg	99	32.
Acenaphthylene	ND		ug/kg	130	31.
Anthracene	ND		ug/kg	99	27.
Benzo(ghi)perylene	ND		ug/kg	130	34.
Fluorene	ND		ug/kg	160	47.
Phenanthrene	ND		ug/kg	99	32.
Dibenzo(a,h)anthracene	ND		ug/kg	99	32.
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	37.
Pyrene	ND		ug/kg	99	32.
Biphenyl	ND		ug/kg	380	54.
4-Chloroaniline	ND		ug/kg	160	44.
2-Nitroaniline	ND		ug/kg	160	46.
3-Nitroaniline	ND		ug/kg	160	46.
4-Nitroaniline	ND		ug/kg	160	44.
Dibenzofuran	ND		ug/kg	160	55.
2-Methylnaphthalene	ND		ug/kg	200	53.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	51.
Acetophenone	ND		ug/kg	160	51.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
P-Chloro-M-Cresol	ND		ug/kg	160	48.
2-Chlorophenol	ND		ug/kg	160	50.
2,4-Dichlorophenol	ND		ug/kg	150	53.
2,4-Dimethylphenol	ND		ug/kg	160	49.
2-Nitrophenol	ND		ug/kg	360	51.

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/24/14 17:00
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 12/20/14 16:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-10 Batch: WG750689-1					
4-Nitrophenol	ND		ug/kg	230	53.
2,4-Dinitrophenol	ND		ug/kg	790	220
4,6-Dinitro-o-cresol	ND		ug/kg	430	60.
Pentachlorophenol	ND		ug/kg	130	35.
Phenol	ND		ug/kg	160	49.
2-Methylphenol	ND		ug/kg	160	53.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	54.
2,4,5-Trichlorophenol	ND		ug/kg	160	53.
Benzoic Acid	ND		ug/kg	530	170
Benzyl Alcohol	ND		ug/kg	160	51.
Carbazole	ND		ug/kg	160	35.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	94		0-136
4-Terphenyl-d14	87		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/22/14 05:11
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 12/20/14 17:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG750698-1					
Acenaphthene	ND		ug/l	2.0	0.28
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21
Benzidine	ND		ug/l	20	5.2
n-Nitrosodimethylamine	ND		ug/l	2.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.40
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41
2-Chloronaphthalene	ND		ug/l	2.0	0.46
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89
Azobenzene	ND		ug/l	2.0	0.54
Fluoranthene	ND		ug/l	2.0	0.40
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60
Hexachlorobutadiene	ND		ug/l	2.0	0.42
Hexachlorocyclopentadiene	ND		ug/l	20	0.58
Hexachloroethane	ND		ug/l	2.0	0.30
Isophorone	ND		ug/l	5.0	0.79
Naphthalene	ND		ug/l	2.0	0.33
Nitrobenzene	ND		ug/l	2.0	0.40
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-Ethylhexyl)phthalate	2.8	J	ug/l	3.0	0.93
Butyl benzyl phthalate	ND		ug/l	5.0	1.1

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/22/14 05:11
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 12/20/14 17:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG750698-1					
Di-n-butylphthalate	ND		ug/l	5.0	0.77
Di-n-octylphthalate	ND		ug/l	5.0	1.2
Diethyl phthalate	ND		ug/l	5.0	0.39
Dimethyl phthalate	ND		ug/l	5.0	0.33
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.66
Benzo(b)fluoranthene	ND		ug/l	2.0	0.37
Benzo(k)fluoranthene	ND		ug/l	2.0	0.30
Chrysene	ND		ug/l	2.0	0.30
Acenaphthylene	ND		ug/l	2.0	0.37
Anthracene	ND		ug/l	2.0	0.20
Benzo(ghi)perylene	ND		ug/l	2.0	0.57
Fluorene	ND		ug/l	2.0	0.32
Phenanthrene	ND		ug/l	2.0	0.23
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.44
Indeno(1,2,3-cd)Pyrene	ND		ug/l	2.0	0.43
Pyrene	ND		ug/l	2.0	0.52
Biphenyl	ND		ug/l	2.0	0.24
Aniline	ND		ug/l	2.0	0.55
4-Chloroaniline	ND		ug/l	5.0	0.84
2-Nitroaniline	ND		ug/l	5.0	0.96
3-Nitroaniline	ND		ug/l	5.0	0.67
4-Nitroaniline	ND		ug/l	5.0	0.83
Dibenzofuran	ND		ug/l	2.0	0.22
2-Methylnaphthalene	ND		ug/l	2.0	0.36
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36
Acetophenone	ND		ug/l	5.0	0.43
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/22/14 05:11
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 12/20/14 17:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG750698-1					
2-Chlorophenol	ND		ug/l	2.0	0.58
2,4-Dichlorophenol	ND		ug/l	5.0	0.56
2,4-Dimethylphenol	ND		ug/l	5.0	0.58
2-Nitrophenol	ND		ug/l	10	1.0
4-Nitrophenol	ND		ug/l	10	1.1
2,4-Dinitrophenol	ND		ug/l	20	1.4
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4
Pentachlorophenol	ND		ug/l	10	3.2
Phenol	ND		ug/l	5.0	0.27
2-Methylphenol	ND		ug/l	5.0	0.70
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75
Benzoic Acid	ND		ug/l	50	1.0
Benzyl Alcohol	ND		ug/l	2.0	0.68
Carbazole	ND		ug/l	2.0	0.37
Pyridine	ND		ug/l	5.0	0.31
Benzaldehyde	ND		ug/l	5.0	0.99
Caprolactam	ND		ug/l	10	0.39
Atrazine	ND		ug/l	10	0.79
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.59

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/22/14 05:11
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 12/20/14 17:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG750698-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	26		21-120
Phenol-d6	19		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	88		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/22/14 11:24
Analyst: MW

Extraction Method: EPA 3510C
Extraction Date: 12/20/14 17:44

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 11 Batch: WG750699-1					
Acenaphthene	ND		ug/l	0.20	0.06
2-Chloronaphthalene	ND		ug/l	0.20	0.07
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.20	0.06
Benzo(a)anthracene	ND		ug/l	0.20	0.06
Benzo(a)pyrene	ND		ug/l	0.20	0.07
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07
Chrysene	ND		ug/l	0.20	0.05
Acenaphthylene	ND		ug/l	0.20	0.05
Anthracene	ND		ug/l	0.20	0.06
Benzo(ghi)perylene	ND		ug/l	0.20	0.07
Fluorene	ND		ug/l	0.20	0.06
Phenanthrene	ND		ug/l	0.20	0.06
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08
Pyrene	ND		ug/l	0.20	0.06
2-Methylnaphthalene	ND		ug/l	0.20	0.06
Pentachlorophenol	ND		ug/l	0.80	0.19
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.07

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/22/14 11:24
Analyst: MW

Extraction Method: EPA 3510C
Extraction Date: 12/20/14 17:44

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 11 Batch: WG750699-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	27		21-120
Phenol-d6	20		10-120
Nitrobenzene-d5	49		23-120
2-Fluorobiphenyl	53		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	81		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/26/14 12:58
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 12/23/14 11:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG751362-1					
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60
Hexachlorocyclopentadiene	ND		ug/l	20	0.58
Isophorone	ND		ug/l	5.0	0.79
Nitrobenzene	ND		ug/l	2.0	0.40
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	0.93
Butyl benzyl phthalate	ND		ug/l	5.0	1.1
Di-n-butylphthalate	ND		ug/l	5.0	0.77
Di-n-octylphthalate	ND		ug/l	5.0	1.2
Diethyl phthalate	ND		ug/l	5.0	0.39
Dimethyl phthalate	ND		ug/l	5.0	0.33
Biphenyl	ND		ug/l	2.0	0.24
4-Chloroaniline	ND		ug/l	5.0	0.84
2-Nitroaniline	ND		ug/l	5.0	0.96
3-Nitroaniline	ND		ug/l	5.0	0.67
4-Nitroaniline	ND		ug/l	5.0	0.83
Dibenzofuran	ND		ug/l	2.0	0.22

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/26/14 12:58
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 12/23/14 11:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG751362-1					
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36
Acetophenone	ND		ug/l	5.0	0.43
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54
2-Chlorophenol	ND		ug/l	2.0	0.58
2,4-Dichlorophenol	ND		ug/l	5.0	0.56
2,4-Dimethylphenol	ND		ug/l	5.0	0.58
2-Nitrophenol	ND		ug/l	10	1.0
4-Nitrophenol	ND		ug/l	10	1.1
2,4-Dinitrophenol	ND		ug/l	20	1.4
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4
Phenol	ND		ug/l	5.0	0.27
2-Methylphenol	ND		ug/l	5.0	0.70
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75
Benzoic Acid	ND		ug/l	50	1.0
Benzyl Alcohol	ND		ug/l	2.0	0.68
Carbazole	ND		ug/l	2.0	0.37

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	68		10-120
4-Terphenyl-d14	85		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/23/14 17:04
Analyst: KV

Extraction Method: EPA 3510C
Extraction Date: 12/23/14 11:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 12 Batch: WG751365-1					
Acenaphthene	ND		ug/l	0.20	0.06
2-Chloronaphthalene	ND		ug/l	0.20	0.07
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.20	0.06
Benzo(a)anthracene	ND		ug/l	0.20	0.06
Benzo(a)pyrene	ND		ug/l	0.20	0.07
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07
Chrysene	ND		ug/l	0.20	0.05
Acenaphthylene	ND		ug/l	0.20	0.05
Anthracene	ND		ug/l	0.20	0.06
Benzo(ghi)perylene	ND		ug/l	0.20	0.07
Fluorene	ND		ug/l	0.20	0.06
Phenanthrene	ND		ug/l	0.20	0.06
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08
Pyrene	ND		ug/l	0.20	0.06
2-Methylnaphthalene	ND		ug/l	0.20	0.06
Pentachlorophenol	ND		ug/l	0.80	0.19
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.07

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/23/14 17:04
Analyst: KV

Extraction Method: EPA 3510C
Extraction Date: 12/23/14 11:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 12 Batch: WG751365-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	76		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-10 Batch: WG750689-2 WG750689-3								
Acenaphthene	82		70		31-137	16		50
1,2,4-Trichlorobenzene	88		78		38-107	12		50
Hexachlorobenzene	87		75		40-140	15		50
Bis(2-chloroethyl)ether	74		65		40-140	13		50
2-Chloronaphthalene	90		78		40-140	14		50
1,2-Dichlorobenzene	82		72		40-140	13		50
1,3-Dichlorobenzene	82		72		40-140	13		50
1,4-Dichlorobenzene	81		73		28-104	10		50
3,3'-Dichlorobenzidine	60		51		40-140	16		50
2,4-Dinitrotoluene	**107**	Q	**90**	Q	28-89	17		50
2,6-Dinitrotoluene	104		91		40-140	13		50
Fluoranthene	93		78		40-140	18		50
4-Chlorophenyl phenyl ether	88		75		40-140	16		50
4-Bromophenyl phenyl ether	88		74		40-140	17		50
Bis(2-chloroisopropyl)ether	74		66		40-140	11		50
Bis(2-chloroethoxy)methane	81		69		40-117	16		50
Hexachlorobutadiene	86		78		40-140	10		50
Hexachlorocyclopentadiene	73		64		40-140	13		50
Hexachloroethane	81		72		40-140	12		50
Isophorone	82		71		40-140	14		50
Naphthalene	80		70		40-140	13		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-10 Batch: WG750689-2 WG750689-3								
Nitrobenzene	91		80		40-140	13		50
NitrosoDiPhenylAmine(NDPA)/DPA	94		79			17		50
n-Nitrosodi-n-propylamine	86		74		32-121	15		50
Bis(2-Ethylhexyl)phthalate	92		81		40-140	13		50
Butyl benzyl phthalate	92		78		40-140	16		50
Di-n-butylphthalate	89		76		40-140	16		50
Di-n-octylphthalate	97		83		40-140	16		50
Diethyl phthalate	89		75		40-140	17		50
Dimethyl phthalate	88		73		40-140	19		50
Benzo(a)anthracene	88		76		40-140	15		50
Benzo(a)pyrene	90		77		40-140	16		50
Benzo(b)fluoranthene	87		76		40-140	13		50
Benzo(k)fluoranthene	87		73		40-140	18		50
Chrysene	86		74		40-140	15		50
Acenaphthylene	93		79		40-140	16		50
Anthracene	84		72		40-140	15		50
Benzo(ghi)perylene	86		75		40-140	14		50
Fluorene	88		75		40-140	16		50
Phenanthrene	85		72		40-140	17		50
Dibenzo(a,h)anthracene	87		75		40-140	15		50
Indeno(1,2,3-cd)Pyrene	90		78		40-140	14		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-10 Batch: WG750689-2 WG750689-3								
Pyrene	89		76		35-142	16		50
Biphenyl	85		74			14		50
4-Chloroaniline	103		97		40-140	6		50
2-Nitroaniline	110		93		47-134	17		50
3-Nitroaniline	70		63		26-129	11		50
4-Nitroaniline	98		79		41-125	21		50
Dibenzofuran	90		76		40-140	17		50
2-Methylnaphthalene	91		78		40-140	15		50
1,2,4,5-Tetrachlorobenzene	88		76		40-117	15		50
Acetophenone	92		82		14-144	11		50
2,4,6-Trichlorophenol	110		94		30-130	16		50
P-Chloro-M-Cresol	**108**	Q	93		26-103	15		50
2-Chlorophenol	96		83		25-102	15		50
2,4-Dichlorophenol	105		91		30-130	14		50
2,4-Dimethylphenol	98		85		30-130	14		50
2-Nitrophenol	111		95		30-130	16		50
4-Nitrophenol	**123**	Q	102		11-114	19		50
2,4-Dinitrophenol	123		98		4-130	23		50
4,6-Dinitro-o-cresol	128		108		10-130	17		50
Pentachlorophenol	95		80		17-109	17		50
Phenol	89		78		26-90	13		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-10 Batch: WG750689-2 WG750689-3								
2-Methylphenol	93		81		30-130.	14		50
3-Methylphenol/4-Methylphenol	94		80		30-130	16		50
2,4,5-Trichlorophenol	109		94		30-130	15		50
Benzoic Acid	49		37			28		50
Benzyl Alcohol	93		81		40-140	14		50
Carbazole	92		78		54-128	16		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	94		82		25-120
Phenol-d6	96		82		10-120
Nitrobenzene-d5	105		89		23-120
2-Fluorobiphenyl	97		83		30-120
2,4,6-Tribromophenol	100		88		0-136
4-Terphenyl-d14	98		80		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
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Lab Number: L1430448
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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG750698-2 WG750698-3								
Acenaphthene	63		51		37-111	21		30
1,2,4-Trichlorobenzene	59		45		39-98	27		30
Benzidine	16		26			**48**	Q	30
n-Nitrosodimethylamine	38		24			**45**	Q	30
Hexachlorobenzene	79		67		40-140	16		30
Bis(2-chloroethyl)ether	61		48		40-140	24		30
2-Chloronaphthalene	64		53		40-140	19		30
1,2-Dichlorobenzene	55		**39**	Q	40-140	**34**	Q	30
1,3-Dichlorobenzene	52		**36**	Q	40-140	**36**	Q	30
1,4-Dichlorobenzene	52		37		36-97	**34**	Q	30
3,3'-Dichlorobenzidine	87		82		40-140	6		30
2,4-Dinitrotoluene	95		82		24-96	15		30
2,6-Dinitrotoluene	92		80		40-140	14		30
Azobenzene	78		66		40-140	17		30
Fluoranthene	85		76		40-140	11		30
4-Chlorophenyl phenyl ether	71		60		40-140	17		30
4-Bromophenyl phenyl ether	77		66		40-140	15		30
Bis(2-chloroisopropyl)ether	58		46		40-140	23		30
Bis(2-chloroethoxy)methane	65		56		40-140	15		30
Hexachlorobutadiene	54		40		40-140	30		30
Hexachlorocyclopentadiene	**36**	Q	**30**	Q	40-140	18		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
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Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG750698-2 WG750698-3								
Hexachloroethane	48		**33**	Q	40-140	**37**	Q	30
Isophorone	68		59		40-140	14		30
Naphthalene	58		47		40-140	21		30
Nitrobenzene	78		62		40-140	23		30
NitrosoDiPhenylAmine(NDPA)/DPA	83		70		40-140	17		30
n-Nitrosodi-n-propylamine	69		59		29-132	16		30
Bis(2-Ethylhexyl)phthalate	85		75		40-140	13		30
Butyl benzyl phthalate	82		75		40-140	9		30
Di-n-butylphthalate	82		73		40-140	12		30
Di-n-octylphthalate	86		76		40-140	12		30
Diethyl phthalate	81		71		40-140	13		30
Dimethyl phthalate	81		68		40-140	17		30
Benzo(a)anthracene	83		74		40-140	11		30
Benzo(a)pyrene	82		71		40-140	14		30
Benzo(b)fluoranthene	83		72		40-140	14		30
Benzo(k)fluoranthene	82		72		40-140	13		30
Chrysene	82		72		40-140	13		30
Acenaphthylene	70		60		45-123	15		30
Anthracene	78		66		40-140	17		30
Benzo(ghi)perylene	82		73		40-140	12		30
Fluorene	73		60		40-140	20		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
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Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG750698-2 WG750698-3								
Phenanthrene	77		66		40-140	15		30
Dibenzo(a,h)anthracene	83		71		40-140	16		30
Indeno(1,2,3-cd)Pyrene	83		73		40-140	13		30
Pyrene	83		72		26-127	14		30
Biphenyl	65		52			22		30
Aniline	**37**	Q	**31**	Q	40-140	18		30
4-Chloroaniline	69		56		40-140	21		30
2-Nitroaniline	96		82		52-143	16		30
3-Nitroaniline	72		61		25-145	17		30
4-Nitroaniline	83		71		51-143	16		30
Dibenzofuran	72		60		40-140	18		30
2-Methylnaphthalene	64		52		40-140	21		30
1,2,4,5-Tetrachlorobenzene	60		48		2-134	22		30
Acetophenone	77		64		39-129	18		30
2,4,6-Trichlorophenol	92		78		30-130	16		30
P-Chloro-M-Cresol	89		75		23-97	17		30
2-Chlorophenol	72		57		27-123	23		30
2,4-Dichlorophenol	87		71		30-130	20		30
2,4-Dimethylphenol	72		58		30-130	22		30
2-Nitrophenol	90		75		30-130	18		30
4-Nitrophenol	55		50		10-80	10		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG750698-2 WG750698-3								
2,4-Dinitrophenol	110		96		20-130	14		30
4,6-Dinitro-o-cresol	111		103		20-164	7		30
Pentachlorophenol	84		73		9-103	14		30
Phenol	33		27		12-110	20		30
2-Methylphenol	63		52		30-130	19		30
3-Methylphenol/4-Methylphenol	59		50		30-130	17		30
2,4,5-Trichlorophenol	96		81		30-130	17		30
Benzoic Acid	21		12			**55**	Q	30
Benzyl Alcohol	62		51			19		30
Carbazole	85		74		55-144	14		30
Pyridine	20		12		10-66	**50**	Q	30
Benzaldehyde	84		61		40-140	**32**	Q	30
Caprolactam	25		20		10-130	22		30
Atrazine	101		87		40-140	15		30
2,3,4,6-Tetrachlorophenol	88		78		54-145	12		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG750698-2 WG750698-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	45		34		21-120
Phenol-d6	31		26		10-120
Nitrobenzene-d5	83		68		23-120
2-Fluorobiphenyl	78		64		15-120
2,4,6-Tribromophenol	92		79		10-120
4-Terphenyl-d14	89		78		41-149

Lab Control Sample Analysis
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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 11 Batch: WG750699-2 WG750699-3								
Acenaphthene	72		69		37-111	4		40
2-Chloronaphthalene	70		67		40-140	4		40
Fluoranthene	92		86		40-140	7		40
Hexachlorobutadiene	57		54		40-140	5		40
Naphthalene	64		61		40-140	5		40
Benzo(a)anthracene	88		83		40-140	6		40
Benzo(a)pyrene	88		82		40-140	7		40
Benzo(b)fluoranthene	93		86		40-140	8		40
Benzo(k)fluoranthene	87		82		40-140	6		40
Chrysene	87		80		40-140	8		40
Acenaphthylene	74		70		40-140	6		40
Anthracene	81		77		40-140	5		40
Benzo(ghi)perylene	86		79		40-140	8		40
Fluorene	84		80		40-140	5		40
Phenanthrene	83		78		40-140	6		40
Dibenzo(a,h)anthracene	88		81		40-140	8		40
Indeno(1,2,3-cd)Pyrene	86		80		40-140	7		40
Pyrene	91		86		26-127	6		40
2-Methylnaphthalene	72		69		40-140	4		40
Pentachlorophenol	76		74		9-103	3		40
Hexachlorobenzene	75		70		40-140	7		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 11 Batch: WG750699-2 WG750699-3								
Hexachloroethane	52		48		40-140	8		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	37		37		21-120
Phenol-d6	29		30		10-120
Nitrobenzene-d5	69		64		23-120
2-Fluorobiphenyl	71		66		15-120
2,4,6-Tribromophenol	89		88		10-120
4-Terphenyl-d14	86		78		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG751362-2 WG751362-3								
1,2,4-Trichlorobenzene	52		72		39-98	**32**	Q	30
Bis(2-chloroethyl)ether	48		67		40-140	**33**	Q	30
1,2-Dichlorobenzene	46		64		40-140	**33**	Q	30
1,3-Dichlorobenzene	45		63		40-140	**33**	Q	30
1,4-Dichlorobenzene	45		64		36-97	**35**	Q	30
3,3'-Dichlorobenzidine	55		72		40-140	27		30
2,4-Dinitrotoluene	55		80		24-96	**37**	Q	30
2,6-Dinitrotoluene	52		77		40-140	**39**	Q	30
4-Chlorophenyl phenyl ether	58		81		40-140	**33**	Q	30
4-Bromophenyl phenyl ether	56		81		40-140	**36**	Q	30
Bis(2-chloroisopropyl)ether	47		66		40-140	**34**	Q	30
Bis(2-chloroethoxy)methane	51		72		40-140	**34**	Q	30
Hexachlorocyclopentadiene	61		80		40-140	27		30
Isophorone	52		75		40-140	**36**	Q	30
Nitrobenzene	56		77		40-140	**32**	Q	30
NitrosoDiPhenylAmine(NDPA)/DPA	63		91		40-140	**36**	Q	30
n-Nitrosodi-n-propylamine	56		79		29-132	**34**	Q	30
Bis(2-Ethylhexyl)phthalate	66		95		40-140	**36**	Q	30
Butyl benzyl phthalate	63		94		40-140	**39**	Q	30
Di-n-butylphthalate	64		94		40-140	**38**	Q	30
Di-n-octylphthalate	64		96		40-140	**40**	Q	30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG751362-2 WG751362-3								
Diethyl phthalate	61		88		40-140	**36**	Q	30
Dimethyl phthalate	60		85		40-140	**34**	Q	30
Biphenyl	53		73			**32**	Q	30
4-Chloroaniline	56		63		40-140	12		30
2-Nitroaniline	58		79		52-143	**31**	Q	30
3-Nitroaniline	45		60		25-145	29		30
4-Nitroaniline	56		81		51-143	**36**	Q	30
Dibenzofuran	62		86		40-140	**32**	Q	30
1,2,4,5-Tetrachlorobenzene	52		70		2-134	30		30
Acetophenone	51		72		39-129	**34**	Q	30
2,4,6-Trichlorophenol	58		83		30-130	**35**	Q	30
P-Chloro-M-Cresol	61		88		23-97	**36**	Q	30
2-Chlorophenol	53		76		27-123	**36**	Q	30
2,4-Dichlorophenol	65		90		30-130	**32**	Q	30
2,4-Dimethylphenol	60		86		30-130	**36**	Q	30
2-Nitrophenol	52		76		30-130	**38**	Q	30
4-Nitrophenol	43		61		10-80	**35**	Q	30
2,4-Dinitrophenol	65		91		20-130	**33**	Q	30
4,6-Dinitro-o-cresol	63		90		20-164	**35**	Q	30
Phenol	27		39		12-110	**36**	Q	30
2-Methylphenol	51		74		30-130	**37**	Q	30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG751362-2 WG751362-3								
3-Methylphenol/4-Methylphenol	49		70		30-130	**35**	Q	30
2,4,5-Trichlorophenol	60		90		30-130	**40**	Q	30
Benzoic Acid	41		48			16		30
Benzyl Alcohol	45		65			**36**	Q	30
Carbazole	68		98		55-144	**36**	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	34		48		21-120
Phenol-d6	25		35		10-120
Nitrobenzene-d5	51		73		23-120
2-Fluorobiphenyl	56		76		15-120
2,4,6-Tribromophenol	56		77		10-120
4-Terphenyl-d14	58		84		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 12 Batch: WG751365-2 WG751365-3								
Acenaphthene	84		79		37-111	6		40
2-Chloronaphthalene	84		79		40-140	6		40
Fluoranthene	96		89		40-140	8		40
Hexachlorobutadiene	78		72		40-140	8		40
Naphthalene	77		73		40-140	5		40
Benzo(a)anthracene	90		85		40-140	6		40
Benzo(a)pyrene	92		86		40-140	7		40
Benzo(b)fluoranthene	91		86		40-140	6		40
Benzo(k)fluoranthene	86		80		40-140	7		40
Chrysene	88		82		40-140	7		40
Acenaphthylene	87		82		40-140	6		40
Anthracene	91		86		40-140	6		40
Benzo(ghi)perylene	86		80		40-140	7		40
Fluorene	95		90		40-140	5		40
Phenanthrene	90		84		40-140	7		40
Dibenzo(a,h)anthracene	87		81		40-140	7		40
Indeno(1,2,3-cd)Pyrene	87		81		40-140	7		40
Pyrene	95		88		26-127	8		40
2-Methylnaphthalene	85		80		40-140	6		40
Pentachlorophenol	85		78		9-103	9		40
Hexachlorobenzene	87		81		40-140	7		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 12 Batch: WG751365-2 WG751365-3								
Hexachloroethane	76		69		40-140	10		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	48		42		21-120
Phenol-d6	35		31		10-120
Nitrobenzene-d5	78		73		23-120
2-Fluorobiphenyl	78		75		15-120
2,4,6-Tribromophenol	96		93		10-120
4-Terphenyl-d14	82		76		41-149

PCBS

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-01	Date Collected:	12/17/14 10:05
Client ID:	T-1 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/20/14 23:09
Analytical Date:	12/22/14 18:00	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/22/14
Percent Solids:	97%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.4	2.64	1	A
Aroclor 1221	ND		ug/kg	33.4	3.08	1	A
Aroclor 1232	ND		ug/kg	33.4	3.91	1	A
Aroclor 1242	ND		ug/kg	33.4	4.09	1	A
Aroclor 1248	ND		ug/kg	33.4	2.82	1	A
Aroclor 1254	ND		ug/kg	33.4	2.74	1	A
Aroclor 1260	ND		ug/kg	33.4	2.54	1	A
Aroclor 1262	ND		ug/kg	33.4	1.66	1	A
Aroclor 1268	ND		ug/kg	33.4	4.84	1	A
PCBs, Total	ND		ug/kg	33.4	1.66	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-02	Date Collected:	12/17/14 10:45
Client ID:	T-1 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/20/14 23:09
Analytical Date:	12/22/14 18:14	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/22/14
Percent Solids:	98%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.0	2.68	1	A
Aroclor 1221	ND		ug/kg	34.0	3.13	1	A
Aroclor 1232	ND		ug/kg	34.0	3.98	1	A
Aroclor 1242	ND		ug/kg	34.0	4.16	1	A
Aroclor 1248	ND		ug/kg	34.0	2.87	1	A
Aroclor 1254	ND		ug/kg	34.0	2.79	1	A
Aroclor 1260	ND		ug/kg	34.0	2.59	1	A
Aroclor 1262	ND		ug/kg	34.0	1.68	1	A
Aroclor 1268	ND		ug/kg	34.0	4.93	1	A
PCBs, Total	ND		ug/kg	34.0	1.68	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	92		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	103		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-03	Date Collected:	12/17/14 11:12
Client ID:	T-2 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/20/14 23:09
Analytical Date:	12/22/14 18:28	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/22/14
Percent Solids:	95%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.2	2.70	1	A
Aroclor 1221	ND		ug/kg	34.2	3.15	1	A
Aroclor 1232	ND		ug/kg	34.2	4.01	1	A
Aroclor 1242	ND		ug/kg	34.2	4.18	1	A
Aroclor 1248	ND		ug/kg	34.2	2.88	1	A
Aroclor 1254	ND		ug/kg	34.2	2.81	1	A
Aroclor 1260	ND		ug/kg	34.2	2.60	1	A
Aroclor 1262	ND		ug/kg	34.2	1.70	1	A
Aroclor 1268	ND		ug/kg	34.2	4.96	1	A
PCBs, Total	ND		ug/kg	34.2	1.70	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	A
Decachlorobiphenyl	97		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	105		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-04	Date Collected:	12/17/14 11:30
Client ID:	T-2 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/20/14 23:09
Analytical Date:	12/22/14 18:41	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/22/14
Percent Solids:	98%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.4	2.64	1	A
Aroclor 1221	ND		ug/kg	33.4	3.08	1	A
Aroclor 1232	ND		ug/kg	33.4	3.92	1	A
Aroclor 1242	ND		ug/kg	33.4	4.09	1	A
Aroclor 1248	ND		ug/kg	33.4	2.82	1	A
Aroclor 1254	ND		ug/kg	33.4	2.75	1	A
Aroclor 1260	ND		ug/kg	33.4	2.55	1	A
Aroclor 1262	ND		ug/kg	33.4	1.66	1	A
Aroclor 1268	ND		ug/kg	33.4	4.84	1	A
PCBs, Total	ND		ug/kg	33.4	1.66	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	102		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-05	Date Collected:	12/17/14 15:30
Client ID:	T-4 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/20/14 23:09
Analytical Date:	12/22/14 18:55	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/22/14
Percent Solids:	97%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.2	2.62	1	A
Aroclor 1221	ND		ug/kg	33.2	3.06	1	A
Aroclor 1232	ND		ug/kg	33.2	3.89	1	A
Aroclor 1242	ND		ug/kg	33.2	4.06	1	A
Aroclor 1248	ND		ug/kg	33.2	2.80	1	A
Aroclor 1254	ND		ug/kg	33.2	2.73	1	A
Aroclor 1260	ND		ug/kg	33.2	2.53	1	A
Aroclor 1262	ND		ug/kg	33.2	1.64	1	A
Aroclor 1268	ND		ug/kg	33.2	4.81	1	A
PCBs, Total	ND		ug/kg	33.2	1.64	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	100		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-06	Date Collected:	12/17/14 15:50
Client ID:	T-4 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/20/14 23:09
Analytical Date:	12/22/14 19:09	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/22/14
Percent Solids:	96%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.4	2.64	1	A
Aroclor 1221	ND		ug/kg	33.4	3.08	1	A
Aroclor 1232	ND		ug/kg	33.4	3.91	1	A
Aroclor 1242	ND		ug/kg	33.4	4.08	1	A
Aroclor 1248	ND		ug/kg	33.4	2.82	1	A
Aroclor 1254	ND		ug/kg	33.4	2.74	1	A
Aroclor 1260	ND		ug/kg	33.4	2.54	1	A
Aroclor 1262	ND		ug/kg	33.4	1.66	1	A
Aroclor 1268	ND		ug/kg	33.4	4.84	1	A
PCBs, Total	ND		ug/kg	33.4	1.66	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	88		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-07	Date Collected:	12/17/14 14:12
Client ID:	T-5 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/20/14 23:09
Analytical Date:	12/22/14 19:22	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/22/14
Percent Solids:	96%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	32.6	2.58	1	A
Aroclor 1221	ND		ug/kg	32.6	3.01	1	A
Aroclor 1232	ND		ug/kg	32.6	3.82	1	A
Aroclor 1242	ND		ug/kg	32.6	3.99	1	A
Aroclor 1248	ND		ug/kg	32.6	2.75	1	A
Aroclor 1254	ND		ug/kg	32.6	2.68	1	A
Aroclor 1260	ND		ug/kg	32.6	2.48	1	A
Aroclor 1262	ND		ug/kg	32.6	1.62	1	A
Aroclor 1268	ND		ug/kg	32.6	4.73	1	A
PCBs, Total	ND		ug/kg	32.6	1.62	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	93		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-08	Date Collected:	12/17/14 14:54
Client ID:	T-5 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/20/14 23:10
Analytical Date:	12/22/14 19:36	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/22/14
Percent Solids:	93%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.1	2.77	1	A
Aroclor 1221	ND		ug/kg	35.1	3.24	1	A
Aroclor 1232	ND		ug/kg	35.1	4.11	1	A
Aroclor 1242	ND		ug/kg	35.1	4.30	1	A
Aroclor 1248	ND		ug/kg	35.1	2.96	1	A
Aroclor 1254	ND		ug/kg	35.1	2.88	1	A
Aroclor 1260	ND		ug/kg	35.1	2.68	1	A
Aroclor 1262	ND		ug/kg	35.1	1.74	1	A
Aroclor 1268	ND		ug/kg	35.1	5.09	1	A
PCBs, Total	ND		ug/kg	35.1	1.74	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	91		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-09	Date Collected:	12/17/14 12:45
Client ID:	T-6 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/22/14 11:51
Analytical Date:	12/23/14 06:23	Cleanup Method:	EPA 3665A
Analyst:	JT	Cleanup Date:	12/22/14
Percent Solids:	96%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.2	2.62	1	A
Aroclor 1221	ND		ug/kg	33.2	3.06	1	A
Aroclor 1232	ND		ug/kg	33.2	3.89	1	A
Aroclor 1242	ND		ug/kg	33.2	4.06	1	A
Aroclor 1248	ND		ug/kg	33.2	2.80	1	A
Aroclor 1254	ND		ug/kg	33.2	2.73	1	A
Aroclor 1260	ND		ug/kg	33.2	2.53	1	A
Aroclor 1262	ND		ug/kg	33.2	1.65	1	A
Aroclor 1268	ND		ug/kg	33.2	4.81	1	A
PCBs, Total	ND		ug/kg	33.2	1.65	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	54		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	54		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-10	Date Collected:	12/17/14 12:57
Client ID:	T-6 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/20/14 23:10
Analytical Date:	12/22/14 19:50	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/22/14
Percent Solids:	94%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.9	2.76	1	A
Aroclor 1221	ND		ug/kg	34.9	3.22	1	A
Aroclor 1232	ND		ug/kg	34.9	4.09	1	A
Aroclor 1242	ND		ug/kg	34.9	4.27	1	A
Aroclor 1248	ND		ug/kg	34.9	2.94	1	A
Aroclor 1254	ND		ug/kg	34.9	2.87	1	A
Aroclor 1260	ND		ug/kg	34.9	2.66	1	A
Aroclor 1262	ND		ug/kg	34.9	1.73	1	A
Aroclor 1268	ND		ug/kg	34.9	5.06	1	A
PCBs, Total	ND		ug/kg	34.9	1.73	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	94		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-11	Date Collected:	12/17/14 15:10
Client ID:	TW-1	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8082A	Extraction Date:	12/21/14 13:09
Analytical Date:	12/23/14 06:38	Cleanup Method:	EPA 3665A
Analyst:	JT	Cleanup Date:	12/22/14
		Cleanup Method:	EPA 3660B
		Cleanup Date:	12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.055	1	A
Aroclor 1221	ND		ug/l	0.083	0.053	1	A
Aroclor 1232	ND		ug/l	0.083	0.031	1	A
Aroclor 1242	ND		ug/l	0.083	0.060	1	A
Aroclor 1248	ND		ug/l	0.083	0.051	1	A
Aroclor 1254	ND		ug/l	0.083	0.034	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.029	1	A
Aroclor 1268	ND		ug/l	0.083	0.038	1	A
PCBs, Total	ND		ug/l	0.083	0.029	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	47		30-150	B
2,4,5,6-Tetrachloro-m-xylene	54		30-150	A
Decachlorobiphenyl	60		30-150	A

Project Name: 31-32 LIC

Project Number: 41.0162268.2

Lab Number: L1430448

Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 12/22/14 15:56
Analyst: JW

Extraction Method: EPA 3546
Extraction Date: 12/20/14 23:09
Cleanup Method: EPA 3665A
Cleanup Date: 12/22/14
Cleanup Method: EPA 3660B
Cleanup Date: 12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-08,10 Batch: WG750720-1						
Aroclor 1016	ND		ug/kg	32.0	2.53	A
Aroclor 1221	ND		ug/kg	32.0	2.95	A
Aroclor 1232	ND		ug/kg	32.0	3.75	A
Aroclor 1242	ND		ug/kg	32.0	3.92	A
Aroclor 1248	ND		ug/kg	32.0	2.70	A
Aroclor 1254	ND		ug/kg	32.0	2.63	A
Aroclor 1260	ND		ug/kg	32.0	2.44	A
Aroclor 1262	ND		ug/kg	32.0	1.59	A
Aroclor 1268	ND		ug/kg	32.0	4.64	A
PCBs, Total	ND		ug/kg	32.0	1.59	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	103		30-150	B

Project Name: 31-32 LIC

Project Number: 41.0162268.2

Lab Number: L1430448

Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 12/23/14 04:59
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 12/21/14 13:09
Cleanup Method: EPA 3665A
Cleanup Date: 12/22/14
Cleanup Method: EPA 3660B
Cleanup Date: 12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 11 Batch: WG750783-1						
Aroclor 1016	ND		ug/l	0.083	0.055	A
Aroclor 1221	ND		ug/l	0.083	0.053	A
Aroclor 1232	ND		ug/l	0.083	0.031	A
Aroclor 1242	ND		ug/l	0.083	0.060	A
Aroclor 1248	ND		ug/l	0.083	0.051	A
Aroclor 1254	ND		ug/l	0.083	0.034	A
Aroclor 1260	ND		ug/l	0.083	0.032	A
Aroclor 1262	ND		ug/l	0.083	0.029	A
Aroclor 1268	ND		ug/l	0.083	0.038	A
PCBs, Total	ND		ug/l	0.083	0.029	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	35		30-150	B
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	34		30-150	A

Project Name: 31-32 LIC

Project Number: 41.0162268.2

Lab Number: L1430448

Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 12/23/14 05:42
Analyst: JT

Extraction Method: EPA 3546
Extraction Date: 12/22/14 11:51
Cleanup Method: EPA 3665A
Cleanup Date: 12/22/14
Cleanup Method: EPA 3660B
Cleanup Date: 12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 09 Batch: WG750979-1						
Aroclor 1016	ND		ug/kg	31.9	2.52	A
Aroclor 1221	ND		ug/kg	31.9	2.94	A
Aroclor 1232	ND		ug/kg	31.9	3.73	A
Aroclor 1242	ND		ug/kg	31.9	3.90	A
Aroclor 1248	ND		ug/kg	31.9	2.69	A
Aroclor 1254	ND		ug/kg	31.9	2.62	A
Aroclor 1260	ND		ug/kg	31.9	2.43	A
Aroclor 1262	ND		ug/kg	31.9	1.58	A
Aroclor 1268	ND		ug/kg	31.9	4.62	A
PCBs, Total	ND		ug/kg	31.9	1.58	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	98		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-08,10 Batch: WG750720-2 WG750720-3									
Aroclor 1016	89		91		40-140	2		50	A
Aroclor 1260	83		85		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		81		30-150	A
Decachlorobiphenyl	93		96		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		80		30-150	B
Decachlorobiphenyl	102		103		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 11 Batch: WG750783-2 WG750783-3									
Aroclor 1016	57		60		40-140	6		50	A
Aroclor 1260	55		60		40-140	7		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		68		30-150	B
Decachlorobiphenyl	**27**	Q	35		30-150	B
2,4,5,6-Tetrachloro-m-xylene	53		59		30-150	A
Decachlorobiphenyl	30		39		30-150	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 09 Batch: WG750979-2 WG750979-3									
Aroclor 1016	71		75		40-140	5		50	A
Aroclor 1260	71		74		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		89		30-150	A
Decachlorobiphenyl	113		108		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		88		30-150	B
Decachlorobiphenyl	118		117		30-150	B

PESTICIDES

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-01	Date Collected:	12/17/14 10:05
Client ID:	T-1 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/20/14 12:45
Analytical Date:	12/22/14 21:00	Cleanup Method:	EPA 3620B
Analyst:	GP	Cleanup Date:	12/22/14
Percent Solids:	97%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.59	0.311	1	A
Lindane	ND		ug/kg	0.662	0.296	1	A
Alpha-BHC	ND		ug/kg	0.662	0.188	1	A
Beta-BHC	ND		ug/kg	1.59	0.602	1	A
Heptachlor	ND		ug/kg	0.794	0.356	1	A
Aldrin	ND		ug/kg	1.59	0.559	1	A
Heptachlor epoxide	ND		ug/kg	2.98	0.893	1	A
Endrin	ND		ug/kg	0.662	0.271	1	A
Endrin ketone	ND		ug/kg	1.59	0.409	1	A
Dieldrin	ND		ug/kg	0.992	0.496	1	A
4,4'-DDE	ND		ug/kg	1.59	0.367	1	A
4,4'-DDD	ND		ug/kg	1.59	0.566	1	A
4,4'-DDT	ND		ug/kg	2.98	1.28	1	A
Endosulfan I	ND		ug/kg	1.59	0.375	1	A
Endosulfan II	ND		ug/kg	1.59	0.531	1	A
Endosulfan sulfate	ND		ug/kg	0.662	0.315	1	A
Methoxychlor	ND		ug/kg	2.98	0.926	1	A
Toxaphene	ND		ug/kg	29.8	8.34	1	A
cis-Chlordane	ND		ug/kg	1.98	0.553	1	A
trans-Chlordane	ND		ug/kg	1.98	0.524	1	A
Chlordane	7.08	J	ug/kg	12.9	5.26	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	54		30-150	B
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	61		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-01	Date Collected:	12/17/14 10:05
Client ID:	T-1 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/21/14 03:40
Analytical Date:	12/23/14 06:47		
Analyst:	SS		
Percent Solids:	97%		
Methylation Date:	12/22/14 16:42		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	170	20.7	1	A
2,4,5-T	ND		ug/kg	170	10.6	1	A
2,4,5-TP (Silvex)	ND		ug/kg	170	9.41	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	83		30-150	A
DCAA	76		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-02	Date Collected:	12/17/14 10:45
Client ID:	T-1 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/20/14 12:45
Analytical Date:	12/22/14 21:16	Cleanup Method:	EPA 3620B
Analyst:	GP	Cleanup Date:	12/22/14
Percent Solids:	98%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.57	0.308	1	A
Lindane	ND		ug/kg	0.656	0.293	1	A
Alpha-BHC	ND		ug/kg	0.656	0.186	1	A
Beta-BHC	ND		ug/kg	1.57	0.597	1	A
Heptachlor	ND		ug/kg	0.787	0.353	1	A
Aldrin	ND		ug/kg	1.57	0.554	1	A
Heptachlor epoxide	ND		ug/kg	2.95	0.886	1	A
Endrin	ND		ug/kg	0.656	0.269	1	A
Endrin ketone	ND		ug/kg	1.57	0.406	1	A
Dieldrin	ND		ug/kg	0.984	0.492	1	A
4,4'-DDE	ND		ug/kg	1.57	0.364	1	A
4,4'-DDD	ND		ug/kg	1.57	0.562	1	A
4,4'-DDT	ND		ug/kg	2.95	1.27	1	A
Endosulfan I	ND		ug/kg	1.57	0.372	1	A
Endosulfan II	ND		ug/kg	1.57	0.526	1	A
Endosulfan sulfate	ND		ug/kg	0.656	0.312	1	A
Methoxychlor	ND		ug/kg	2.95	0.919	1	A
Toxaphene	ND		ug/kg	29.5	8.27	1	A
cis-Chlordane	ND		ug/kg	1.97	0.548	1	A
trans-Chlordane	ND		ug/kg	1.97	0.520	1	A
Chlordane	ND		ug/kg	12.8	5.22	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	68		30-150	B
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	66		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-02	Date Collected:	12/17/14 10:45
Client ID:	T-1 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/21/14 03:40
Analytical Date:	12/23/14 07:07		
Analyst:	SS		
Percent Solids:	98%		
Methylation Date:	12/22/14 16:42		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	170	20.7	1	A
2,4,5-T	ND		ug/kg	170	10.6	1	A
2,4,5-TP (Silvex)	ND		ug/kg	170	9.39	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	86		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-03	Date Collected:	12/17/14 11:12
Client ID:	T-2 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/20/14 12:45
Analytical Date:	12/22/14 21:32	Cleanup Method:	EPA 3620B
Analyst:	GP	Cleanup Date:	12/22/14
Percent Solids:	95%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.59	0.311	1	A
Lindane	ND		ug/kg	0.662	0.296	1	A
Alpha-BHC	ND		ug/kg	0.662	0.188	1	A
Beta-BHC	ND		ug/kg	1.59	0.602	1	A
Heptachlor	ND		ug/kg	0.794	0.356	1	A
Aldrin	ND		ug/kg	1.59	0.559	1	A
Heptachlor epoxide	ND		ug/kg	2.98	0.893	1	A
Endrin	ND		ug/kg	0.662	0.271	1	A
Endrin ketone	ND		ug/kg	1.59	0.409	1	A
Dieldrin	ND		ug/kg	0.993	0.496	1	A
4,4'-DDE	ND		ug/kg	1.59	0.367	1	A
4,4'-DDD	ND		ug/kg	1.59	0.566	1	A
4,4'-DDT	ND		ug/kg	2.98	1.28	1	A
Endosulfan I	ND		ug/kg	1.59	0.375	1	A
Endosulfan II	ND		ug/kg	1.59	0.531	1	A
Endosulfan sulfate	ND		ug/kg	0.662	0.315	1	A
Methoxychlor	ND		ug/kg	2.98	0.926	1	A
Toxaphene	ND		ug/kg	29.8	8.34	1	A
cis-Chlordane	ND		ug/kg	1.98	0.553	1	A
trans-Chlordane	ND		ug/kg	1.98	0.524	1	A
Chlordane	ND		ug/kg	12.9	5.26	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	71		30-150	B
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	71		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-03	Date Collected:	12/17/14 11:12
Client ID:	T-2 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/21/14 03:40
Analytical Date:	12/23/14 07:26		
Analyst:	SS		
Percent Solids:	95%		
Methylation Date:	12/22/14 16:42		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	175	21.3	1	A
2,4,5-T	ND		ug/kg	175	10.9	1	A
2,4,5-TP (Silvex)	ND		ug/kg	175	9.67	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	89		30-150	A
DCAA	81		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-04	Date Collected:	12/17/14 11:30
Client ID:	T-2 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/20/14 12:45
Analytical Date:	12/22/14 21:49	Cleanup Method:	EPA 3620B
Analyst:	GP	Cleanup Date:	12/22/14
Percent Solids:	98%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.57	0.308	1	A
Lindane	ND		ug/kg	0.655	0.293	1	A
Alpha-BHC	ND		ug/kg	0.655	0.186	1	A
Beta-BHC	ND		ug/kg	1.57	0.596	1	A
Heptachlor	ND		ug/kg	0.786	0.352	1	A
Aldrin	ND		ug/kg	1.57	0.554	1	A
Heptachlor epoxide	ND		ug/kg	2.95	0.885	1	A
Endrin	ND		ug/kg	0.655	0.269	1	A
Endrin ketone	ND		ug/kg	1.57	0.405	1	A
Dieldrin	ND		ug/kg	0.983	0.492	1	A
4,4'-DDE	ND		ug/kg	1.57	0.364	1	A
4,4'-DDD	ND		ug/kg	1.57	0.561	1	A
4,4'-DDT	ND		ug/kg	2.95	1.26	1	A
Endosulfan I	ND		ug/kg	1.57	0.372	1	A
Endosulfan II	ND		ug/kg	1.57	0.526	1	A
Endosulfan sulfate	ND		ug/kg	0.655	0.312	1	A
Methoxychlor	ND		ug/kg	2.95	0.918	1	A
Toxaphene	ND		ug/kg	29.5	8.26	1	A
cis-Chlordane	ND		ug/kg	1.97	0.548	1	A
trans-Chlordane	ND		ug/kg	1.97	0.519	1	A
Chlordane	ND		ug/kg	12.8	5.21	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	73		30-150	B
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	75		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-04	Date Collected:	12/17/14 11:30
Client ID:	T-2 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/21/14 03:40
Analytical Date:	12/23/14 07:46		
Analyst:	SS		
Percent Solids:	98%		
Methylation Date:	12/22/14 16:42		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	170	20.6	1	A
2,4,5-T	ND		ug/kg	170	10.6	1	A
2,4,5-TP (Silvex)	ND		ug/kg	170	9.36	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	92		30-150	A
DCAA	95		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-05	Date Collected:	12/17/14 15:30
Client ID:	T-4 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/20/14 12:45
Analytical Date:	12/22/14 22:05	Cleanup Method:	EPA 3620B
Analyst:	GP	Cleanup Date:	12/22/14
Percent Solids:	97%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.64	0.320	1	A
Lindane	ND		ug/kg	0.681	0.305	1	A
Alpha-BHC	ND		ug/kg	0.681	0.194	1	A
Beta-BHC	ND		ug/kg	1.64	0.620	1	A
Heptachlor	ND		ug/kg	0.818	0.367	1	A
Aldrin	ND		ug/kg	1.64	0.576	1	A
Heptachlor epoxide	ND		ug/kg	3.07	0.920	1	A
Endrin	ND		ug/kg	0.681	0.279	1	A
Endrin ketone	ND		ug/kg	1.64	0.421	1	A
Dieldrin	ND		ug/kg	1.02	0.511	1	A
4,4'-DDE	ND		ug/kg	1.64	0.378	1	A
4,4'-DDD	ND		ug/kg	1.64	0.583	1	A
4,4'-DDT	ND		ug/kg	3.07	1.32	1	A
Endosulfan I	ND		ug/kg	1.64	0.386	1	A
Endosulfan II	ND		ug/kg	1.64	0.546	1	A
Endosulfan sulfate	ND		ug/kg	0.681	0.324	1	A
Methoxychlor	ND		ug/kg	3.07	0.954	1	A
Toxaphene	ND		ug/kg	30.7	8.59	1	A
cis-Chlordane	ND		ug/kg	2.04	0.570	1	A
trans-Chlordane	ND		ug/kg	2.04	0.540	1	A
Chlordane	ND		ug/kg	13.3	5.42	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	66		30-150	B
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	45		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-05	Date Collected:	12/17/14 15:30
Client ID:	T-4 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/21/14 03:40
Analytical Date:	12/23/14 08:05		
Analyst:	SS		
Percent Solids:	97%		
Methylation Date:	12/22/14 16:42		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	169	20.5	1	A
2,4,5-T	ND		ug/kg	169	10.5	1	A
2,4,5-TP (Silvex)	ND		ug/kg	169	9.32	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	82		30-150	A
DCAA	66		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-06	Date Collected:	12/17/14 15:50
Client ID:	T-4 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/20/14 12:45
Analytical Date:	12/23/14 09:21	Cleanup Method:	EPA 3620B
Analyst:	GP	Cleanup Date:	12/23/14
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.58	0.310	1	A
Lindane	ND		ug/kg	0.661	0.295	1	A
Alpha-BHC	ND		ug/kg	0.661	0.188	1	A
Beta-BHC	ND		ug/kg	1.58	0.601	1	A
Heptachlor	ND		ug/kg	0.793	0.355	1	A
Aldrin	ND		ug/kg	1.58	0.558	1	A
Heptachlor epoxide	ND		ug/kg	2.97	0.892	1	A
Endrin	ND		ug/kg	0.661	0.271	1	A
Endrin ketone	ND		ug/kg	1.58	0.408	1	A
Dieldrin	ND		ug/kg	0.991	0.496	1	A
4,4'-DDE	ND		ug/kg	1.58	0.367	1	A
4,4'-DDD	ND		ug/kg	1.58	0.566	1	A
4,4'-DDT	ND		ug/kg	2.97	1.28	1	A
Endosulfan I	ND		ug/kg	1.58	0.375	1	A
Endosulfan II	ND		ug/kg	1.58	0.530	1	A
Endosulfan sulfate	ND		ug/kg	0.661	0.314	1	A
Methoxychlor	ND		ug/kg	2.97	0.925	1	A
Toxaphene	ND		ug/kg	29.7	8.32	1	A
cis-Chlordane	ND		ug/kg	1.98	0.552	1	A
trans-Chlordane	ND		ug/kg	1.98	0.523	1	A
Chlordane	ND		ug/kg	12.9	5.25	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	47		30-150	B
Decachlorobiphenyl	43		30-150	B
2,4,5,6-Tetrachloro-m-xylene	49		30-150	A
Decachlorobiphenyl	42		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-06	Date Collected:	12/17/14 15:50
Client ID:	T-4 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/21/14 03:40
Analytical Date:	12/23/14 08:25		
Analyst:	SS		
Percent Solids:	96%		
Methylation Date:	12/22/14 16:42		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	169	20.6	1	A
2,4,5-T	ND		ug/kg	169	10.5	1	A
2,4,5-TP (Silvex)	ND		ug/kg	169	9.33	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	85		30-150	A
DCAA	85		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-07	Date Collected:	12/17/14 14:12
Client ID:	T-5 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/20/14 12:45
Analytical Date:	12/23/14 09:36	Cleanup Method:	EPA 3620B
Analyst:	GP	Cleanup Date:	12/23/14
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.66	0.325	1	A
Lindane	ND		ug/kg	0.691	0.309	1	A
Alpha-BHC	ND		ug/kg	0.691	0.196	1	A
Beta-BHC	ND		ug/kg	1.66	0.628	1	A
Heptachlor	ND		ug/kg	0.829	0.372	1	A
Aldrin	ND		ug/kg	1.66	0.584	1	A
Heptachlor epoxide	ND		ug/kg	3.11	0.932	1	A
Endrin	ND		ug/kg	0.691	0.283	1	A
Endrin ketone	ND		ug/kg	1.66	0.427	1	A
Dieldrin	ND		ug/kg	1.04	0.518	1	A
4,4'-DDE	ND		ug/kg	1.66	0.383	1	A
4,4'-DDD	ND		ug/kg	1.66	0.591	1	A
4,4'-DDT	ND		ug/kg	3.11	1.33	1	A
Endosulfan I	ND		ug/kg	1.66	0.392	1	A
Endosulfan II	ND		ug/kg	1.66	0.554	1	A
Endosulfan sulfate	ND		ug/kg	0.691	0.329	1	A
Methoxychlor	ND		ug/kg	3.11	0.967	1	A
Toxaphene	ND		ug/kg	31.1	8.70	1	A
cis-Chlordane	ND		ug/kg	2.07	0.577	1	A
trans-Chlordane	ND		ug/kg	2.07	0.547	1	A
Chlordane	ND		ug/kg	13.5	5.49	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	59		30-150	B
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	80		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-07	Date Collected:	12/17/14 14:12
Client ID:	T-5 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/21/14 03:40
Analytical Date:	12/23/14 08:44		
Analyst:	SS		
Percent Solids:	96%		
Methylation Date:	12/22/14 16:42		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	171	20.8	1	A
2,4,5-T	ND		ug/kg	171	10.6	1	A
2,4,5-TP (Silvex)	ND		ug/kg	171	9.42	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	84		30-150	A
DCAA	85		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-08	Date Collected:	12/17/14 14:54
Client ID:	T-5 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/20/14 12:45
Analytical Date:	12/23/14 09:52	Cleanup Method:	EPA 3620B
Analyst:	GP	Cleanup Date:	12/23/14
Percent Solids:	93%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.69	0.330	1	A
Lindane	ND		ug/kg	0.703	0.314	1	A
Alpha-BHC	ND		ug/kg	0.703	0.200	1	A
Beta-BHC	ND		ug/kg	1.69	0.639	1	A
Heptachlor	ND		ug/kg	0.843	0.378	1	A
Aldrin	ND		ug/kg	1.69	0.594	1	A
Heptachlor epoxide	ND		ug/kg	3.16	0.948	1	A
Endrin	ND		ug/kg	0.703	0.288	1	A
Endrin ketone	ND		ug/kg	1.69	0.434	1	A
Dieldrin	ND		ug/kg	1.05	0.527	1	A
4,4'-DDE	ND		ug/kg	1.69	0.390	1	A
4,4'-DDD	ND		ug/kg	1.69	0.601	1	A
4,4'-DDT	ND		ug/kg	3.16	1.36	1	A
Endosulfan I	ND		ug/kg	1.69	0.398	1	A
Endosulfan II	ND		ug/kg	1.69	0.563	1	A
Endosulfan sulfate	ND		ug/kg	0.703	0.334	1	A
Methoxychlor	ND		ug/kg	3.16	0.984	1	A
Toxaphene	ND		ug/kg	31.6	8.85	1	A
cis-Chlordane	ND		ug/kg	2.11	0.587	1	A
trans-Chlordane	ND		ug/kg	2.11	0.556	1	A
Chlordane	ND		ug/kg	13.7	5.58	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	64		30-150	B
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	58		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-08	Date Collected:	12/17/14 14:54
Client ID:	T-5 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/21/14 03:40
Analytical Date:	12/23/14 09:24		
Analyst:	SS		
Percent Solids:	93%		
Methylation Date:	12/22/14 16:42		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	179	21.7	1	A
2,4,5-T	ND		ug/kg	179	11.2	1	A
2,4,5-TP (Silvex)	ND		ug/kg	179	9.87	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	88		30-150	A
DCAA	83		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-09	Date Collected:	12/17/14 12:45
Client ID:	T-6 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/20/14 12:45
Analytical Date:	12/23/14 10:07	Cleanup Method:	EPA 3620B
Analyst:	GP	Cleanup Date:	12/23/14
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.61	0.314	1	A
Lindane	ND		ug/kg	0.669	0.299	1	A
Alpha-BHC	ND		ug/kg	0.669	0.190	1	A
Beta-BHC	ND		ug/kg	1.61	0.609	1	A
Heptachlor	ND		ug/kg	0.803	0.360	1	A
Aldrin	ND		ug/kg	1.61	0.566	1	A
Heptachlor epoxide	ND		ug/kg	3.01	0.904	1	A
Endrin	ND		ug/kg	0.669	0.274	1	A
Endrin ketone	ND		ug/kg	1.61	0.414	1	A
Dieldrin	ND		ug/kg	1.00	0.502	1	A
4,4'-DDE	ND		ug/kg	1.61	0.371	1	A
4,4'-DDD	ND		ug/kg	1.61	0.573	1	A
4,4'-DDT	ND		ug/kg	3.01	1.29	1	A
Endosulfan I	ND		ug/kg	1.61	0.379	1	A
Endosulfan II	ND		ug/kg	1.61	0.537	1	A
Endosulfan sulfate	ND		ug/kg	0.669	0.318	1	A
Methoxychlor	ND		ug/kg	3.01	0.937	1	A
Toxaphene	ND		ug/kg	30.1	8.43	1	A
cis-Chlordane	ND		ug/kg	2.01	0.560	1	A
trans-Chlordane	ND		ug/kg	2.01	0.530	1	A
Chlordane	ND		ug/kg	13.0	5.32	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	66		30-150	B
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	62		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-09	Date Collected:	12/17/14 12:45
Client ID:	T-6 (2-5)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/21/14 03:40
Analytical Date:	12/23/14 13:11		
Analyst:	SS		
Percent Solids:	96%		
Methylation Date:	12/22/14 16:42		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	171	20.8	1	A
2,4,5-T	ND		ug/kg	171	10.7	1	A
2,4,5-TP (Silvex)	ND		ug/kg	171	9.46	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	67		30-150	A
DCAA	66		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-10	Date Collected:	12/17/14 12:57
Client ID:	T-6 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/20/14 12:45
Analytical Date:	12/23/14 10:22	Cleanup Method:	EPA 3620B
Analyst:	GP	Cleanup Date:	12/23/14
Percent Solids:	94%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.62	0.316	1	A
Lindane	ND		ug/kg	0.674	0.301	1	A
Alpha-BHC	ND		ug/kg	0.674	0.191	1	A
Beta-BHC	ND		ug/kg	1.62	0.613	1	A
Heptachlor	ND		ug/kg	0.808	0.362	1	A
Aldrin	ND		ug/kg	1.62	0.569	1	A
Heptachlor epoxide	ND		ug/kg	3.03	0.909	1	A
Endrin	ND		ug/kg	0.674	0.276	1	A
Endrin ketone	ND		ug/kg	1.62	0.416	1	A
Dieldrin	ND		ug/kg	1.01	0.505	1	A
4,4'-DDE	ND		ug/kg	1.62	0.374	1	A
4,4'-DDD	ND		ug/kg	1.62	0.577	1	A
4,4'-DDT	ND		ug/kg	3.03	1.30	1	A
Endosulfan I	ND		ug/kg	1.62	0.382	1	A
Endosulfan II	ND		ug/kg	1.62	0.540	1	A
Endosulfan sulfate	ND		ug/kg	0.674	0.321	1	A
Methoxychlor	ND		ug/kg	3.03	0.943	1	A
Toxaphene	ND		ug/kg	30.3	8.49	1	A
cis-Chlordane	ND		ug/kg	2.02	0.563	1	A
trans-Chlordane	ND		ug/kg	2.02	0.533	1	A
Chlordane	ND		ug/kg	13.1	5.36	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	70		30-150	B
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	63		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-10	Date Collected:	12/17/14 12:57
Client ID:	T-6 (13-15)'	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/21/14 03:40
Analytical Date:	12/23/14 10:14		
Analyst:	SS		
Percent Solids:	94%		
Methylation Date:	12/22/14 16:42		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	176	21.4	1	A
2,4,5-T	ND		ug/kg	176	11.0	1	A
2,4,5-TP (Silvex)	ND		ug/kg	176	9.71	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	84		30-150	A
DCAA	79		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430448-11	Date Collected:	12/17/14 15:10
Client ID:	TW-1	Date Received:	12/17/14
Sample Location:	LONG ISLAND CITY, QUEENS NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8081B	Extraction Date:	12/22/14 12:04
Analytical Date:	12/23/14 11:16	Cleanup Method:	EPA 3620B
Analyst:	GP	Cleanup Date:	12/23/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.020	0.005	1	A
Lindane	ND		ug/l	0.020	0.004	1	A
Alpha-BHC	ND		ug/l	0.020	0.004	1	A
Beta-BHC	ND		ug/l	0.020	0.006	1	A
Heptachlor	ND		ug/l	0.020	0.003	1	A
Aldrin	ND		ug/l	0.020	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.020	0.004	1	A
Endrin	ND		ug/l	0.040	0.004	1	A
Endrin ketone	ND		ug/l	0.040	0.005	1	A
Dieldrin	ND		ug/l	0.040	0.004	1	A
4,4'-DDE	ND		ug/l	0.040	0.004	1	A
4,4'-DDD	ND		ug/l	0.040	0.005	1	A
4,4'-DDT	ND		ug/l	0.040	0.004	1	A
Endosulfan I	ND		ug/l	0.020	0.003	1	A
Endosulfan II	ND		ug/l	0.040	0.005	1	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	1	A
Methoxychlor	ND		ug/l	0.200	0.007	1	A
Toxaphene	ND		ug/l	0.200	0.063	1	A
cis-Chlordane	ND		ug/l	0.020	0.007	1	A
trans-Chlordane	ND		ug/l	0.020	0.006	1	A
Chlordane	ND		ug/l	0.200	0.046	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/22/14 17:30
Analyst: GP

Extraction Method: EPA 3546
Extraction Date: 12/20/14 12:45
Cleanup Method: EPA 3620B
Cleanup Date: 12/22/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-10 Batch: WG750656-1						
Delta-BHC	ND		ug/kg	1.56	0.306	A
Lindane	ND		ug/kg	0.651	0.291	A
Alpha-BHC	ND		ug/kg	0.651	0.185	A
Beta-BHC	ND		ug/kg	1.56	0.593	A
Heptachlor	ND		ug/kg	0.782	0.350	A
Aldrin	ND		ug/kg	1.56	0.550	A
Heptachlor epoxide	ND		ug/kg	2.93	0.879	A
Endrin	ND		ug/kg	0.651	0.267	A
Endrin ketone	ND		ug/kg	1.56	0.403	A
Dieldrin	ND		ug/kg	0.977	0.488	A
4,4'-DDE	ND		ug/kg	1.56	0.362	A
4,4'-DDD	ND		ug/kg	1.56	0.558	A
4,4'-DDT	ND		ug/kg	2.93	1.26	A
Endosulfan I	ND		ug/kg	1.56	0.369	A
Endosulfan II	ND		ug/kg	1.56	0.522	A
Endosulfan sulfate	ND		ug/kg	0.651	0.310	A
Methoxychlor	ND		ug/kg	2.93	0.912	A
Toxaphene	ND		ug/kg	29.3	8.21	A
cis-Chlordane	ND		ug/kg	1.95	0.545	A
trans-Chlordane	ND		ug/kg	1.95	0.516	A
Chlordane	ND		ug/kg	12.7	5.18	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	79		30-150	B
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	75		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 12/23/14 05:49
Analyst: SS

Extraction Method: EPA 8151A
Extraction Date: 12/21/14 03:40

Methylation Date: 12/22/14 16:42

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-10 Batch: WG750735-1						
2,4-D	ND		ug/kg	162	19.6	A
2,4,5-T	ND		ug/kg	162	10.1	A
2,4,5-TP (Silvex)	ND		ug/kg	162	8.92	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	92		30-150	A
DCAA	93		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/23/14 09:19
Analyst: GP

Extraction Method: EPA 3510C
Extraction Date: 12/22/14 12:04
Cleanup Method: EPA 3620B
Cleanup Date: 12/23/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 11 Batch: WG750984-1						
Delta-BHC	ND		ug/l	0.020	0.005	A
Lindane	ND		ug/l	0.020	0.004	A
Alpha-BHC	ND		ug/l	0.020	0.004	A
Beta-BHC	ND		ug/l	0.020	0.006	A
Heptachlor	ND		ug/l	0.020	0.003	A
Aldrin	ND		ug/l	0.020	0.002	A
Heptachlor epoxide	ND		ug/l	0.020	0.004	A
Endrin	ND		ug/l	0.040	0.004	A
Endrin aldehyde	ND		ug/l	0.040	0.008	A
Endrin ketone	ND		ug/l	0.040	0.005	A
Dieldrin	ND		ug/l	0.040	0.004	A
4,4'-DDE	ND		ug/l	0.040	0.004	A
4,4'-DDD	ND		ug/l	0.040	0.005	A
4,4'-DDT	ND		ug/l	0.040	0.004	A
Endosulfan I	ND		ug/l	0.020	0.003	A
Endosulfan II	ND		ug/l	0.040	0.005	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	A
Methoxychlor	ND		ug/l	0.200	0.007	A
Toxaphene	ND		ug/l	0.200	0.063	A
cis-Chlordane	ND		ug/l	0.020	0.007	A
trans-Chlordane	ND		ug/l	0.020	0.006	A
Chlordane	ND		ug/l	0.200	0.046	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/23/14 09:19
Analyst: GP

Extraction Method: EPA 3510C
Extraction Date: 12/22/14 12:04
Cleanup Method: EPA 3620B
Cleanup Date: 12/23/14

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 11 Batch: WG750984-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	71		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-10 Batch: WG750656-2 WG750656-3									
Delta-BHC	73		72		30-150	1		30	A
Lindane	87		84		30-150	4		30	A
Alpha-BHC	98		95		30-150	3		30	A
Beta-BHC	97		92		30-150	5		30	A
Heptachlor	87		84		30-150	4		30	A
Aldrin	92		88		30-150	4		30	A
Heptachlor epoxide	88		84		30-150	5		30	A
Endrin	96		93		30-150	3		30	A
Endrin ketone	86		85		30-150	1		30	A
Dieldrin	95		92		30-150	3		30	A
4,4'-DDE	92		88		30-150	4		30	A
4,4'-DDD	90		88		30-150	2		30	A
4,4'-DDT	90		90		30-150	0		30	A
Endosulfan I	89		87		30-150	2		30	A
Endosulfan II	84		81		30-150	4		30	A
Endosulfan sulfate	85		84		30-150	1		30	A
Methoxychlor	104		102		30-150	2		30	A
cis-Chlordane	88		85		30-150	3		30	A
trans-Chlordane	91		88		30-150	3		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 31-32 LIC

Project Number: 41.0162268.2

Lab Number: L1430448

Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-10 Batch: WG750656-2 WG750656-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		78		30-150	B
Decachlorobiphenyl	84		81		30-150	B
2,4,5,6-Tetrachloro-m-xylene	77		74		30-150	A
Decachlorobiphenyl	80		78		30-150	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-10 Batch: WG750735-2 WG750735-3									
2,4-D	96		91		30-150	5		30	A
2,4,5-T	95		98		30-150	3		30	A
2,4,5-TP (Silvex)	91		99		30-150	8		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	88		94		30-150	A
DCAA	90		86		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 11 Batch: WG750984-2 WG750984-3									
Delta-BHC	65		77		30-150	17		20	A
Lindane	90		106		30-150	17		20	A
Alpha-BHC	81		94		30-150	16		20	A
Beta-BHC	87		105		30-150	19		20	A
Heptachlor	79		94		30-150	17		20	A
Aldrin	74		89		30-150	18		20	A
Heptachlor epoxide	81		96		30-150	17		20	A
Endrin	84		100		30-150	17		20	A
Endrin aldehyde	62		70		30-150	11		20	A
Endrin ketone	65		79		30-150	19		20	A
Dieldrin	82		98		30-150	17		20	A
4,4'-DDE	74		89		30-150	19		20	A
4,4'-DDD	77		91		30-150	17		20	A
4,4'-DDT	76		89		30-150	17		20	A
Endosulfan I	79		94		30-150	17		20	A
Endosulfan II	68		80		30-150	17		20	A
Endosulfan sulfate	69		82		30-150	17		20	A
Methoxychlor	70		85		30-150	19		20	A
cis-Chlordane	74		89		30-150	18		20	A
trans-Chlordane	79		92		30-150	15		20	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 11 Batch: WG750984-2 WG750984-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		76		30-150	A
Decachlorobiphenyl	63		71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		80		30-150	B
Decachlorobiphenyl	86		76		30-150	B

METALS

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-01
Client ID: T-1 (2-5)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil
Percent Solids: 97%

Date Collected: 12/17/14 10:05
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	4000		mg/kg	7.8	1.6	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	3.9	0.62	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Arsenic, Total	2.6		mg/kg	0.78	0.16	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Barium, Total	240		mg/kg	0.78	0.23	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Beryllium, Total	0.19	J	mg/kg	0.39	0.08	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Cadmium, Total	0.23	J	mg/kg	0.78	0.05	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Calcium, Total	800		mg/kg	7.8	2.3	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Chromium, Total	18		mg/kg	0.78	0.16	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Cobalt, Total	3.4		mg/kg	1.6	0.39	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Copper, Total	20		mg/kg	0.78	0.16	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Iron, Total	8500		mg/kg	3.9	1.6	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Lead, Total	210		mg/kg	3.9	0.16	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Magnesium, Total	1900		mg/kg	7.8	0.78	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Manganese, Total	210		mg/kg	0.78	0.16	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Mercury, Total	0.05	J	mg/kg	0.07	0.01	1	12/19/14 10:31	12/19/14 13:03	EPA 7471B	1,7471B	MC
Nickel, Total	13		mg/kg	1.9	0.31	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Potassium, Total	450		mg/kg	190	31.	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.6	0.23	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.78	0.16	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Sodium, Total	130	J	mg/kg	160	23.	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.6	0.31	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Vanadium, Total	11		mg/kg	0.78	0.08	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG
Zinc, Total	310		mg/kg	3.9	0.54	2	12/22/14 16:19	12/23/14 10:43	EPA 3050B	1,6010C	MG

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-02
Client ID: T-1 (13-15)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil
Percent Solids: 98%

Date Collected: 12/17/14 10:45
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	3500		mg/kg	7.8	1.6	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Antimony, Total	4.5		mg/kg	3.9	0.63	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Arsenic, Total	1.0		mg/kg	0.78	0.16	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Barium, Total	23		mg/kg	0.78	0.24	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Beryllium, Total	0.14	J	mg/kg	0.39	0.08	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Cadmium, Total	ND		mg/kg	0.78	0.06	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Calcium, Total	1300		mg/kg	7.8	2.4	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Chromium, Total	21		mg/kg	0.78	0.16	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Cobalt, Total	4.8		mg/kg	1.6	0.39	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Copper, Total	11		mg/kg	0.78	0.16	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Iron, Total	8600		mg/kg	3.9	1.6	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Lead, Total	1.6	J	mg/kg	3.9	0.16	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Magnesium, Total	2400		mg/kg	7.8	0.78	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Manganese, Total	200		mg/kg	0.78	0.16	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.07	0.01	1	12/19/14 10:31	12/19/14 13:10	EPA 7471B	1,7471B	MC
Nickel, Total	9.9		mg/kg	2.0	0.31	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Potassium, Total	660		mg/kg	200	31.	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.6	0.24	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.78	0.16	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Sodium, Total	100	J	mg/kg	160	24.	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.6	0.31	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Vanadium, Total	13		mg/kg	0.78	0.08	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG
Zinc, Total	28		mg/kg	3.9	0.55	2	12/22/14 16:19	12/23/14 10:58	EPA 3050B	1,6010C	MG

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-03
Client ID: T-2 (2-5)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil
Percent Solids: 95%

Date Collected: 12/17/14 11:12
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	5900		mg/kg	8.3	1.7	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.2	0.67	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Arsenic, Total	2.1		mg/kg	0.83	0.17	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Barium, Total	120		mg/kg	0.83	0.25	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Beryllium, Total	0.23	J	mg/kg	0.42	0.08	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Cadmium, Total	ND		mg/kg	0.83	0.06	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Calcium, Total	1300		mg/kg	8.3	2.5	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Chromium, Total	18		mg/kg	0.83	0.17	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Cobalt, Total	5.0		mg/kg	1.7	0.42	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Copper, Total	20		mg/kg	0.83	0.17	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Iron, Total	11000		mg/kg	4.2	1.7	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Lead, Total	710		mg/kg	4.2	0.17	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Magnesium, Total	2600		mg/kg	8.3	0.83	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Manganese, Total	280		mg/kg	0.83	0.17	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Mercury, Total	0.11		mg/kg	0.07	0.01	1	12/19/14 10:31	12/19/14 13:16	EPA 7471B	1,7471B	MC
Nickel, Total	11		mg/kg	2.1	0.33	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Potassium, Total	900		mg/kg	210	33.	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.7	0.25	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.83	0.17	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Sodium, Total	160	J	mg/kg	170	25.	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.7	0.33	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Vanadium, Total	19		mg/kg	0.83	0.08	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG
Zinc, Total	73		mg/kg	4.2	0.58	2	12/22/14 16:19	12/23/14 13:57	EPA 3050B	1,6010C	MG

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-04
Client ID: T-2 (13-15)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil
Percent Solids: 98%

Date Collected: 12/17/14 11:30
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	3300		mg/kg	7.9	1.6	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.0	0.64	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Arsenic, Total	1.3		mg/kg	0.79	0.16	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Barium, Total	18		mg/kg	0.79	0.24	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Beryllium, Total	0.13	J	mg/kg	0.40	0.08	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Cadmium, Total	ND		mg/kg	0.79	0.06	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Calcium, Total	6400		mg/kg	7.9	2.4	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Chromium, Total	8.2		mg/kg	0.79	0.16	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Cobalt, Total	4.6		mg/kg	1.6	0.40	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Copper, Total	11		mg/kg	0.79	0.16	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Iron, Total	8100		mg/kg	4.0	1.6	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Lead, Total	2.6	J	mg/kg	4.0	0.16	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Magnesium, Total	5300		mg/kg	7.9	0.79	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Manganese, Total	170		mg/kg	0.79	0.16	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.07	0.01	1	12/19/14 10:31	12/19/14 13:18	EPA 7471B	1,7471B	MC
Nickel, Total	8.6		mg/kg	2.0	0.32	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Potassium, Total	760		mg/kg	200	32.	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.6	0.24	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.79	0.16	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Sodium, Total	83	J	mg/kg	160	24.	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.6	0.32	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Vanadium, Total	12		mg/kg	0.79	0.08	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG
Zinc, Total	27		mg/kg	4.0	0.56	2	12/22/14 16:19	12/23/14 14:00	EPA 3050B	1,6010C	MG

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-05
Client ID: T-4 (2-5)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil
Percent Solids: 97%

Date Collected: 12/17/14 15:30
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	4500		mg/kg	8.0	1.6	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.0	0.64	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Arsenic, Total	3.4		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Barium, Total	48		mg/kg	0.80	0.24	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Beryllium, Total	0.22	J	mg/kg	0.40	0.08	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Cadmium, Total	0.19	J	mg/kg	0.80	0.06	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Calcium, Total	2200		mg/kg	8.0	2.4	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Chromium, Total	8.3		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Cobalt, Total	3.6		mg/kg	1.6	0.40	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Copper, Total	22		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Iron, Total	9500		mg/kg	4.0	1.6	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Lead, Total	72		mg/kg	4.0	0.16	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Magnesium, Total	1900		mg/kg	8.0	0.80	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Manganese, Total	240		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Mercury, Total	0.18		mg/kg	0.07	0.01	1	12/19/14 10:31	12/19/14 13:20	EPA 7471B	1,7471B	MC
Nickel, Total	8.2		mg/kg	2.0	0.32	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Potassium, Total	520		mg/kg	200	32.	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Selenium, Total	0.54	J	mg/kg	1.6	0.24	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Sodium, Total	160		mg/kg	160	24.	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.6	0.32	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Vanadium, Total	12		mg/kg	0.80	0.08	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG
Zinc, Total	130		mg/kg	4.0	0.56	2	12/22/14 16:19	12/23/14 14:04	EPA 3050B	1,6010C	MG

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-06
Client ID: T-4 (13-15)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil
Percent Solids: 96%

Date Collected: 12/17/14 15:50
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	4400		mg/kg	8.1	1.6	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.0	0.65	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Arsenic, Total	1.2		mg/kg	0.81	0.16	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Barium, Total	26		mg/kg	0.81	0.24	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Beryllium, Total	0.14	J	mg/kg	0.40	0.08	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Cadmium, Total	ND		mg/kg	0.81	0.06	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Calcium, Total	1200		mg/kg	8.1	2.4	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Chromium, Total	11		mg/kg	0.81	0.16	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Cobalt, Total	4.5		mg/kg	1.6	0.40	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Copper, Total	10		mg/kg	0.81	0.16	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Iron, Total	8900		mg/kg	4.0	1.6	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Lead, Total	1.4	J	mg/kg	4.0	0.16	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Magnesium, Total	2600		mg/kg	8.1	0.81	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Manganese, Total	230		mg/kg	0.81	0.16	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.08	0.02	1	12/19/14 10:31	12/19/14 13:22	EPA 7471B	1,7471B	MC
Nickel, Total	9.8		mg/kg	2.0	0.32	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Potassium, Total	900		mg/kg	200	32.	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.6	0.24	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.81	0.16	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Sodium, Total	80	J	mg/kg	160	24.	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.6	0.32	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Vanadium, Total	15		mg/kg	0.81	0.08	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG
Zinc, Total	23		mg/kg	4.0	0.57	2	12/22/14 16:19	12/23/14 14:08	EPA 3050B	1,6010C	MG

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-07
Client ID: T-5 (2-5)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil
Percent Solids: 96%

Date Collected: 12/17/14 14:12
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	4100		mg/kg	8.0	1.6	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.0	0.64	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Arsenic, Total	2.2		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Barium, Total	62		mg/kg	0.80	0.24	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Beryllium, Total	0.17	J	mg/kg	0.40	0.08	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Cadmium, Total	0.10	J	mg/kg	0.80	0.06	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Calcium, Total	1300		mg/kg	8.0	2.4	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Chromium, Total	11		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Cobalt, Total	4.4		mg/kg	1.6	0.40	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Copper, Total	31		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Iron, Total	9900		mg/kg	4.0	1.6	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Lead, Total	170		mg/kg	4.0	0.16	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Magnesium, Total	2300		mg/kg	8.0	0.80	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Manganese, Total	200		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Mercury, Total	0.13		mg/kg	0.07	0.02	1	12/19/14 10:31	12/19/14 13:23	EPA 7471B	1,7471B	MC
Nickel, Total	10		mg/kg	2.0	0.32	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Potassium, Total	870		mg/kg	200	32.	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.6	0.24	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Sodium, Total	110	J	mg/kg	160	24.	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.6	0.32	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Vanadium, Total	19		mg/kg	0.80	0.08	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG
Zinc, Total	140		mg/kg	4.0	0.56	2	12/22/14 16:19	12/23/14 14:12	EPA 3050B	1,6010C	MG

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-08
Client ID: T-5 (13-15)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil
Percent Solids: 93%

Date Collected: 12/17/14 14:54
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	5000		mg/kg	8.4	1.7	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.2	0.67	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Arsenic, Total	1.8		mg/kg	0.84	0.17	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Barium, Total	27		mg/kg	0.84	0.25	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Beryllium, Total	0.17	J	mg/kg	0.42	0.08	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Cadmium, Total	ND		mg/kg	0.84	0.06	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Calcium, Total	2000		mg/kg	8.4	2.5	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Chromium, Total	13		mg/kg	0.84	0.17	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Cobalt, Total	5.4		mg/kg	1.7	0.42	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Copper, Total	15		mg/kg	0.84	0.17	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Iron, Total	12000		mg/kg	4.2	1.7	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Lead, Total	2.1	J	mg/kg	4.2	0.17	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Magnesium, Total	2700		mg/kg	8.4	0.84	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Manganese, Total	280		mg/kg	0.84	0.17	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.07	0.02	1	12/19/14 10:31	12/19/14 13:25	EPA 7471B	1,7471B	MC
Nickel, Total	12		mg/kg	2.1	0.34	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Potassium, Total	920		mg/kg	210	34.	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.7	0.25	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.84	0.17	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Sodium, Total	140	J	mg/kg	170	25.	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.7	0.34	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Vanadium, Total	20		mg/kg	0.84	0.08	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG
Zinc, Total	27		mg/kg	4.2	0.59	2	12/22/14 16:19	12/23/14 14:16	EPA 3050B	1,6010C	MG

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-09
Client ID: T-6 (2-5)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil
Percent Solids: 96%

Date Collected: 12/17/14 12:45
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	3000		mg/kg	8.0	1.6	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.0	0.64	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Arsenic, Total	0.50	J	mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Barium, Total	18		mg/kg	0.80	0.24	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Beryllium, Total	0.12	J	mg/kg	0.40	0.08	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Cadmium, Total	ND		mg/kg	0.80	0.06	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Calcium, Total	960		mg/kg	8.0	2.4	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Chromium, Total	7.1		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Cobalt, Total	2.7		mg/kg	1.6	0.40	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Copper, Total	7.1		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Iron, Total	5400		mg/kg	4.0	1.6	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Lead, Total	1.3	J	mg/kg	4.0	0.16	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Magnesium, Total	1500		mg/kg	8.0	0.80	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Manganese, Total	140		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.07	0.01	1	12/19/14 10:31	12/19/14 13:27	EPA 7471B	1,7471B	MC
Nickel, Total	5.6		mg/kg	2.0	0.32	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Potassium, Total	650		mg/kg	200	32.	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.6	0.24	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.80	0.16	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Sodium, Total	66	J	mg/kg	160	24.	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.6	0.32	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Vanadium, Total	8.3		mg/kg	0.80	0.08	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG
Zinc, Total	22		mg/kg	4.0	0.56	2	12/22/14 16:19	12/23/14 14:19	EPA 3050B	1,6010C	MG

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-10
Client ID: T-6 (13-15)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil
Percent Solids: 94%

Date Collected: 12/17/14 12:57
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	5700		mg/kg	8.4	1.7	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Antimony, Total	ND		mg/kg	4.2	0.67	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Arsenic, Total	1.4		mg/kg	0.84	0.17	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Barium, Total	58		mg/kg	0.84	0.25	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Beryllium, Total	0.18	J	mg/kg	0.42	0.08	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Cadmium, Total	ND		mg/kg	0.84	0.06	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Calcium, Total	18000		mg/kg	8.4	2.5	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Chromium, Total	14		mg/kg	0.84	0.17	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Cobalt, Total	5.4		mg/kg	1.7	0.42	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Copper, Total	14		mg/kg	0.84	0.17	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Iron, Total	12000		mg/kg	4.2	1.7	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Lead, Total	1.4	J	mg/kg	4.2	0.17	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Magnesium, Total	11000		mg/kg	8.4	0.84	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Manganese, Total	230		mg/kg	0.84	0.17	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.08	0.02	1	12/19/14 10:31	12/19/14 13:29	EPA 7471B	1,7471B	MC
Nickel, Total	11		mg/kg	2.1	0.34	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Potassium, Total	2200		mg/kg	210	34.	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Selenium, Total	ND		mg/kg	1.7	0.25	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.84	0.17	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Sodium, Total	110	J	mg/kg	170	25.	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Thallium, Total	ND		mg/kg	1.7	0.34	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Vanadium, Total	20		mg/kg	0.84	0.08	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG
Zinc, Total	34		mg/kg	4.2	0.59	2	12/22/14 16:19	12/23/14 14:23	EPA 3050B	1,6010C	MG

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-11
Client ID: TW-1
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Water

Date Collected: 12/17/14 15:10
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	0.276		mg/l	0.200	0.0338	20	12/23/14 12:01	12/23/14 21:51	EPA 3005A	1,6020A	AK
Antimony, Total	0.09097		mg/l	0.00200	0.00006	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Arsenic, Total	0.00033	J	mg/l	0.00050	0.00012	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Barium, Total	0.09330		mg/l	0.00050	0.00006	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Beryllium, Total	ND		mg/l	0.00050	0.00015	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Calcium, Total	65.3		mg/l	2.00	0.640	20	12/23/14 12:01	12/23/14 21:51	EPA 3005A	1,6020A	AK
Chromium, Total	0.00519		mg/l	0.00100	0.00025	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Cobalt, Total	0.00116		mg/l	0.00020	0.00006	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Copper, Total	0.00305		mg/l	0.00100	0.00026	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Iron, Total	0.682		mg/l	0.0500	0.0120	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Lead, Total	0.08740		mg/l	0.00100	0.00012	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Magnesium, Total	21.2		mg/l	0.0700	0.0223	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Manganese, Total	0.1031		mg/l	0.00050	0.00030	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Mercury, Total	ND		mg/l	0.00020	0.00006	1	12/18/14 14:16	12/18/14 20:54	EPA 7470A	1,7470A	AK
Nickel, Total	0.00388		mg/l	0.00050	0.00008	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Potassium, Total	2.70		mg/l	0.100	0.0193	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Selenium, Total	ND		mg/l	0.00500	0.00100	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.00040	0.00007	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Sodium, Total	65.4		mg/l	2.00	0.322	20	12/23/14 12:01	12/23/14 21:51	EPA 3005A	1,6020A	AK
Thallium, Total	0.00832		mg/l	0.00050	0.00005	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Vanadium, Total	0.00169	J	mg/l	0.00500	0.00055	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK
Zinc, Total	0.02887		mg/l	0.01000	0.00256	1	12/23/14 12:01	12/23/14 21:47	EPA 3005A	1,6020A	AK

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-12
Client ID: TW-1 FILTERED
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Water

Date Collected: 12/17/14 15:10
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Westborough Lab											
Aluminum, Dissolved	0.00746	J	mg/l	0.0100	0.00169	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Antimony, Dissolved	0.00263		mg/l	0.00200	0.00006	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Arsenic, Dissolved	0.00014	J	mg/l	0.00050	0.00012	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Barium, Dissolved	0.06517		mg/l	0.00050	0.00006	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Beryllium, Dissolved	ND		mg/l	0.00050	0.00015	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Calcium, Dissolved	59.3		mg/l	1.00	0.320	10	12/18/14 04:30	12/29/14 15:48	NA	1,6020A	BM
Chromium, Dissolved	0.00244		mg/l	0.00100	0.00025	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Cobalt, Dissolved	0.00079		mg/l	0.00020	0.00006	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Copper, Dissolved	0.00133		mg/l	0.00100	0.00026	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Iron, Dissolved	0.0124	J	mg/l	0.0500	0.0120	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Lead, Dissolved	ND		mg/l	0.00100	0.00012	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Magnesium, Dissolved	21.1		mg/l	0.0700	0.0223	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Manganese, Dissolved	0.06388		mg/l	0.00100	0.00030	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	12/19/14 15:42	12/22/14 21:08	EPA 7470A	1,7470A	AK
Nickel, Dissolved	0.00248		mg/l	0.00050	0.00008	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Potassium, Dissolved	1.56		mg/l	0.100	0.0193	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Selenium, Dissolved	ND		mg/l	0.00500	0.00100	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Silver, Dissolved	ND		mg/l	0.00025	0.00007	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Sodium, Dissolved	65.5		mg/l	2.00	0.161	10	12/18/14 04:30	12/29/14 15:48	NA	1,6020A	BM
Thallium, Dissolved	ND		mg/l	0.00020	0.00005	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Vanadium, Dissolved	ND		mg/l	0.00500	0.00055	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL
Zinc, Dissolved	0.00265	J	mg/l	0.01000	0.00256	1	12/18/14 04:30	12/24/14 15:08	NA	1,6020A	KL

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430448
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 11 Batch: WG749908-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	12/18/14 14:16	12/18/14 20:47	1,7470A	AK

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-10 Batch: WG750154-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	12/19/14 10:31	12/19/14 12:59	1,7471B	MC

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 12 Batch: WG750424-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	12/19/14 15:42	12/22/14 21:04	1,7470A	AK

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-10 Batch: WG751090-1										
Aluminum, Total	1.0	J	mg/kg	4.0	0.80	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Antimony, Total	ND		mg/kg	2.0	0.32	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Arsenic, Total	ND		mg/kg	0.40	0.08	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Barium, Total	ND		mg/kg	0.40	0.12	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Beryllium, Total	ND		mg/kg	0.20	0.04	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Cadmium, Total	ND		mg/kg	0.40	0.03	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Calcium, Total	ND		mg/kg	4.0	1.2	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Chromium, Total	ND		mg/kg	0.40	0.08	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Cobalt, Total	ND		mg/kg	0.80	0.20	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Copper, Total	ND		mg/kg	0.40	0.08	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Iron, Total	ND		mg/kg	2.0	0.80	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Lead, Total	ND		mg/kg	2.0	0.08	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Magnesium, Total	ND		mg/kg	4.0	0.40	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Manganese, Total	ND		mg/kg	0.40	0.08	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Nickel, Total	ND		mg/kg	1.0	0.16	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Potassium, Total	ND		mg/kg	100	16.	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Selenium, Total	ND		mg/kg	0.80	0.12	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Silver, Total	ND		mg/kg	0.40	0.08	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Sodium, Total	ND		mg/kg	80	12.	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Thallium, Total	ND		mg/kg	0.80	0.16	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Vanadium, Total	ND		mg/kg	0.40	0.04	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG
Zinc, Total	ND		mg/kg	2.0	0.28	1	12/22/14 16:19	12/23/14 10:36	1,6010C	MG

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 11 Batch: WG751373-1										
Aluminum, Total	ND		mg/l	0.0100	0.00169	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Antimony, Total	0.00019	J	mg/l	0.00200	0.00006	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Arsenic, Total	ND		mg/l	0.00050	0.00012	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Barium, Total	ND		mg/l	0.00050	0.00006	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Beryllium, Total	ND		mg/l	0.00050	0.00015	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Calcium, Total	ND		mg/l	0.100	0.0320	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Chromium, Total	0.00026	J	mg/l	0.00100	0.00025	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Cobalt, Total	ND		mg/l	0.00020	0.00006	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Copper, Total	ND		mg/l	0.00100	0.00026	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Iron, Total	ND		mg/l	0.0500	0.0120	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Lead, Total	ND		mg/l	0.00050	0.00012	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Magnesium, Total	ND		mg/l	0.0700	0.0223	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Manganese, Total	ND		mg/l	0.00050	0.00030	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Nickel, Total	ND		mg/l	0.00050	0.00008	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Potassium, Total	0.0284	J	mg/l	0.100	0.0193	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Selenium, Total	ND		mg/l	0.00500	0.00100	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Silver, Total	ND		mg/l	0.00040	0.00007	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Sodium, Total	0.0187	J	mg/l	0.100	0.0161	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Thallium, Total	ND		mg/l	0.00050	0.00005	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Vanadium, Total	ND		mg/l	0.00500	0.00055	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK
Zinc, Total	ND		mg/l	0.01000	0.00256	1	12/23/14 12:01	12/23/14 18:39	1,6020A	AK

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 12 Batch: WG751485-1										
Aluminum, Dissolved	0.00324	J	mg/l	0.0100	0.00169	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Antimony, Dissolved	0.00088	J	mg/l	0.00200	0.00006	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Arsenic, Dissolved	ND		mg/l	0.00050	0.00012	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Barium, Dissolved	0.00018	J	mg/l	0.00050	0.00006	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Beryllium, Dissolved	ND		mg/l	0.00050	0.00015	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Calcium, Dissolved	ND		mg/l	0.100	0.0320	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Chromium, Dissolved	0.00082	J	mg/l	0.00100	0.00025	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Cobalt, Dissolved	ND		mg/l	0.00020	0.00006	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Copper, Dissolved	0.00041	J	mg/l	0.00100	0.00026	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Iron, Dissolved	0.0488	J	mg/l	0.0500	0.0120	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Lead, Dissolved	ND		mg/l	0.00100	0.00012	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Magnesium, Dissolved	ND		mg/l	0.0700	0.0223	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Manganese, Dissolved	0.00058	J	mg/l	0.00100	0.00030	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Nickel, Dissolved	0.00018	J	mg/l	0.00050	0.00008	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Potassium, Dissolved	0.0292	J	mg/l	0.100	0.0193	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Selenium, Dissolved	ND		mg/l	0.00500	0.00100	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Silver, Dissolved	ND		mg/l	0.00025	0.00007	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Sodium, Dissolved	0.103	J	mg/l	0.200	0.0161	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Thallium, Dissolved	ND		mg/l	0.00020	0.00005	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Vanadium, Dissolved	ND	mg/l	0.00500	0.00055	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL
Zinc, Dissolved	ND	mg/l	0.01000	0.00256	1	12/18/14 04:30	12/24/14 14:53	1,6020A	KL

Prep Information

Digestion Method: NA

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 11 Batch: WG749908-2								
Mercury, Total	111		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01-10 Batch: WG750154-2 SRM Lot Number: D083-540								
Mercury, Total	110		-		75-126	-		
Dissolved Metals - Westborough Lab Associated sample(s): 12 Batch: WG750424-2								
Mercury, Dissolved	89		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-10 Batch: WG751090-2 SRM Lot Number: D083-540					
Aluminum, Total	72	-	51-148	-	
Antimony, Total	164	-	1-210	-	
Arsenic, Total	98	-	78-122	-	
Barium, Total	96	-	82-117	-	
Beryllium, Total	98	-	82-118	-	
Cadmium, Total	94	-	82-118	-	
Calcium, Total	88	-	82-118	-	
Chromium, Total	95	-	79-121	-	
Cobalt, Total	94	-	83-117	-	
Copper, Total	96	-	80-120	-	
Iron, Total	93	-	47-153	-	
Lead, Total	90	-	81-119	-	
Magnesium, Total	83	-	75-124	-	
Manganese, Total	100	-	81-119	-	
Nickel, Total	92	-	82-118	-	
Potassium, Total	84	-	70-130	-	
Selenium, Total	102	-	78-123	-	
Silver, Total	94	-	74-125	-	
Sodium, Total	89	-	70-130	-	
Thallium, Total	95	-	78-122	-	
Vanadium, Total	97	-	65-135	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-10 Batch: WG751090-2 SRM Lot Number: D083-540					
Zinc, Total	92	-	80-121	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 11 Batch: WG751373-2					
Aluminum, Total	94	-	80-120	-	
Antimony, Total	98	-	80-120	-	
Arsenic, Total	92	-	80-120	-	
Barium, Total	93	-	80-120	-	
Beryllium, Total	97	-	80-120	-	
Cadmium, Total	100	-	80-120	-	
Calcium, Total	97	-	80-120	-	
Chromium, Total	89	-	80-120	-	
Cobalt, Total	95	-	80-120	-	
Copper, Total	95	-	80-120	-	
Iron, Total	98	-	80-120	-	
Lead, Total	93	-	80-120	-	
Magnesium, Total	88	-	80-120	-	
Manganese, Total	92	-	80-120	-	
Nickel, Total	90	-	80-120	-	
Potassium, Total	102	-	80-120	-	
Selenium, Total	101	-	80-120	-	
Silver, Total	89	-	80-120	-	
Sodium, Total	95	-	80-120	-	
Thallium, Total	90	-	80-120	-	
Vanadium, Total	92	-	80-120	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 11 Batch: WG751373-2					
Zinc, Total	97	-	80-120	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 12 Batch: WG751485-2					
Aluminum, Dissolved	96	-	80-120	-	
Antimony, Dissolved	99	-	80-120	-	
Arsenic, Dissolved	86	-	80-120	-	
Barium, Dissolved	97	-	80-120	-	
Beryllium, Dissolved	99	-	80-120	-	
Cadmium, Dissolved	106	-	80-120	-	
Calcium, Dissolved	97	-	80-120	-	
Chromium, Dissolved	97	-	80-120	-	
Cobalt, Dissolved	98	-	80-120	-	
Copper, Dissolved	100	-	80-120	-	
Iron, Dissolved	101	-	80-120	-	
Lead, Dissolved	96	-	80-120	-	
Magnesium, Dissolved	112	-	80-120	-	
Manganese, Dissolved	93	-	80-120	-	
Nickel, Dissolved	95	-	80-120	-	
Potassium, Dissolved	106	-	80-120	-	
Selenium, Dissolved	95	-	80-120	-	
Silver, Dissolved	93	-	80-120	-	
Sodium, Dissolved	92	-	80-120	-	
Thallium, Dissolved	92	-	80-120	-	
Vanadium, Dissolved	97	-	80-120	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 12 Batch: WG751485-2					
Zinc, Dissolved	99	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 11 QC Batch ID: WG749908-4 QC Sample: L1430394-22 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00534	107		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG750154-4 QC Sample: L1430448-01 Client ID: T-1 (2-5)'												
Mercury, Total	0.05J	0.132	0.19	**144**	Q	-	-		80-120	-		20
Dissolved Metals - Westborough Lab Associated sample(s): 12 QC Batch ID: WG750424-4 QC Sample: L1430448-12 Client ID: TW-1 FILTERED												
Mercury, Dissolved	ND	0.005	0.00424	85		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG751090-4 QC Sample: L1430448-01 Client ID: T-1 (2-5)'										
Aluminum, Total	4000	163	5000	**614**	Q	-	-	75-125	-	20
Antimony, Total	ND	40.7	41	101		-	-	75-125	-	20
Arsenic, Total	2.6	9.76	13	106		-	-	75-125	-	20
Barium, Total	240	163	500	**160**	Q	-	-	75-125	-	20
Beryllium, Total	0.19J	4.07	4.4	108		-	-	75-125	-	20
Cadmium, Total	0.23J	4.15	4.7	113		-	-	75-125	-	20
Calcium, Total	800	814	2100	**160**	Q	-	-	75-125	-	20
Chromium, Total	18.	16.3	38	123		-	-	75-125	-	20
Cobalt, Total	3.4	40.7	44	100		-	-	75-125	-	20
Copper, Total	20.	20.3	44	118		-	-	75-125	-	20
Iron, Total	8500	81.4	10000	**1840**	Q	-	-	75-125	-	20
Lead, Total	210	41.5	320	**265**	Q	-	-	75-125	-	20
Magnesium, Total	1900	814	2900	123		-	-	75-125	-	20
Manganese, Total	210	40.7	260	123		-	-	75-125	-	20
Nickel, Total	13.	40.7	58	111		-	-	75-125	-	20
Potassium, Total	450	814	1400	117		-	-	75-125	-	20
Selenium, Total	ND	9.76	9.9	101		-	-	75-125	-	20
Silver, Total	ND	24.4	25	102		-	-	75-125	-	20
Sodium, Total	130J	814	980	120		-	-	75-125	-	20
Thallium, Total	ND	9.76	9.1	93		-	-	75-125	-	20
Vanadium, Total	11.	40.7	55	108		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG751090-4 QC Sample: L1430448-01 Client ID: T-1 (2-5)'										
Zinc, Total	310	40.7	440	**320**	Q	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 11 QC Batch ID: WG751373-4 QC Sample: L1430393-01 Client ID: MS Sample										
Aluminum, Total	ND	2	1.76	88		-	-	75-125	-	20
Antimony, Total	0.0035	0.5	0.4619	92		-	-	75-125	-	20
Arsenic, Total	0.0005	0.12	0.1027	85		-	-	75-125	-	20
Barium, Total	0.1281	2	1.875	87		-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.04584	92		-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.04531	89		-	-	75-125	-	20
Calcium, Total	17.8	10	38.5	**207**	Q	-	-	75-125	-	20
Chromium, Total	0.0003J	0.2	0.1773	89		-	-	75-125	-	20
Cobalt, Total	0.0015	0.5	0.4489	89		-	-	75-125	-	20
Copper, Total	0.0004J	0.25	0.2202	88		-	-	75-125	-	20
Iron, Total	0.111	1	0.935	82		-	-	75-125	-	20
Lead, Total	ND	0.51	0.4497	88		-	-	75-125	-	20
Magnesium, Total	17.8	10	23.0	**52**	Q	-	-	75-125	-	20
Manganese, Total	1.287	0.5	1.899	122		-	-	75-125	-	20
Nickel, Total	0.0031	0.5	0.4300	85		-	-	75-125	-	20
Potassium, Total	10.8	10	9.32	**0**	Q	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.109	91		-	-	75-125	-	20
Silver, Total	ND	0.05	0.04245	85		-	-	75-125	-	20
Sodium, Total	27.7	10	32.8	**51**	Q	-	-	75-125	-	20
Thallium, Total	0.0002J	0.12	0.1019	85		-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.4619	92		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 11 QC Batch ID: WG751373-4 QC Sample: L1430393-01 Client ID: MS Sample									
Zinc, Total	ND	0.5	0.4422	88	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 12 QC Batch ID: WG751485-4 QC Sample: L1430448-12 Client ID: TW-1 FILTERED										
Aluminum, Dissolved	0.00746J	2	1.87	94		-	-	75-125	-	20
Antimony, Dissolved	0.00263	0.5	0.4765	95		-	-	75-125	-	20
Arsenic, Dissolved	0.00014J	0.12	0.1203	100		-	-	75-125	-	20
Barium, Dissolved	0.06517	2	2.111	102		-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.04914	98		-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05697	112		-	-	75-125	-	20
Calcium, Dissolved	59.3	10	72.3	**130**	Q	-	-	75-125	-	20
Chromium, Dissolved	0.00244	0.2	0.1987	98		-	-	75-125	-	20
Cobalt, Dissolved	0.00079	0.5	0.5192	104		-	-	75-125	-	20
Copper, Dissolved	0.00133	0.25	0.2497	99		-	-	75-125	-	20
Iron, Dissolved	0.0124J	1	0.921	92		-	-	75-125	-	20
Lead, Dissolved	ND	0.51	0.5227	102		-	-	75-125	-	20
Magnesium, Dissolved	21.1	10	14.2	**0**	Q	-	-	75-125	-	20
Manganese, Dissolved	0.06388	0.5	0.5630	100		-	-	75-125	-	20
Nickel, Dissolved	0.00248	0.5	0.4921	98		-	-	75-125	-	20
Potassium, Dissolved	1.56	10	11.2	96		-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.128	107		-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.04972	99		-	-	75-125	-	20
Sodium, Dissolved	65.5	10	76.4	109		-	-	75-125	-	20
Thallium, Dissolved	ND	0.12	0.1180	98		-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.5139	103		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 12 QC Batch ID: WG751485-4 QC Sample: L1430448-12 Client ID: TW-1 FILTERED									
Zinc, Dissolved	0.00265J	0.5	0.5253	105	-	-	75-125	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 11 QC Batch ID: WG749908-3 QC Sample: L1430394-22 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG750154-3 QC Sample: L1430448-01 Client ID: T-1 (2-5)'						
Mercury, Total	0.05J	0.06J	mg/kg	NC		20
Dissolved Metals - Westborough Lab Associated sample(s): 12 QC Batch ID: WG750424-3 QC Sample: L1430448-12 Client ID: TW-1 FILTERED						
Mercury, Dissolved	ND	ND	mg/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG751090-3 QC Sample: L1430448-01 Client ID: T-1 (2-5)'						
Aluminum, Total	4000	4200	mg/kg	5		20
Antimony, Total	ND	0.67J	mg/kg	NC		20
Arsenic, Total	2.6	3.6	mg/kg	**32**	Q	20
Barium, Total	240	380	mg/kg	**45**	Q	20
Beryllium, Total	0.19J	0.18J	mg/kg	NC		20
Cadmium, Total	0.23J	0.38J	mg/kg	NC		20
Calcium, Total	800	1100	mg/kg	**32**	Q	20
Chromium, Total	18.	24	mg/kg	**29**	Q	20
Cobalt, Total	3.4	3.6	mg/kg	6		20
Copper, Total	20.	23	mg/kg	14		20
Iron, Total	8500	11000	mg/kg	**26**	Q	20
Lead, Total	210	480	mg/kg	**78**	Q	20
Magnesium, Total	1900	1800	mg/kg	5		20
Manganese, Total	210	240	mg/kg	13		20
Nickel, Total	13.	18	mg/kg	**32**	Q	20
Potassium, Total	450	540	mg/kg	18		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Sodium, Total	130J	120J	mg/kg	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG751090-3 QC Sample: L1430448-01 Client ID: T-1 (2-5)'					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	11.	13	mg/kg	17	20
Zinc, Total	310	350	mg/kg	12	20
Total Metals - Westborough Lab Associated sample(s): 11 QC Batch ID: WG751373-3 QC Sample: L1430393-01 Client ID: DUP Sample					
Cadmium, Total	ND	ND	mg/l	NC	20
Iron, Total	0.111	0.100	mg/l	10	20
Lead, Total	ND	ND	mg/l	NC	20
Potassium, Total	10.8	10.3	mg/l	5	20
Sodium, Total	27.7	26.6	mg/l	4	20
Total Metals - Westborough Lab Associated sample(s): 11 QC Batch ID: WG751373-3 QC Sample: L1430393-01 Client ID: DUP Sample					
Manganese, Total	1.287	1.233	mg/l	4	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 12 QC Batch ID: WG751485-3 QC Sample: L1430448-12 Client ID: TW-1 FILTERED					
Aluminum, Dissolved	0.00746J	0.00584J	mg/l	NC	20
Antimony, Dissolved	0.00263	0.00143J	mg/l	NC	20
Arsenic, Dissolved	0.00014J	ND	mg/l	NC	20
Barium, Dissolved	0.06517	0.06249	mg/l	4	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Chromium, Dissolved	0.00244	0.00253	mg/l	4	20
Cobalt, Dissolved	0.00079	0.00072	mg/l	9	20
Copper, Dissolved	0.00133	0.00131	mg/l	2	20
Iron, Dissolved	0.0124J	ND	mg/l	NC	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Magnesium, Dissolved	21.1	21.0	mg/l	0	20
Manganese, Dissolved	0.06388	0.06716	mg/l	5	20
Nickel, Dissolved	0.00248	0.00272	mg/l	9	20
Potassium, Dissolved	1.56	1.61	mg/l	3	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Thallium, Dissolved	ND	ND	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 12 QC Batch ID: WG751485-3 QC Sample: L1430448-12 Client ID: TW-1 FILTERED					
Zinc, Dissolved	0.00265J	0.00313J	mg/l	NC	20
Dissolved Metals - Westborough Lab Associated sample(s): 12 QC Batch ID: WG751485-3 QC Sample: L1430448-12 Client ID: TW-1 FILTERED					
Calcium, Dissolved	59.3	54.3	mg/l	9	20
Sodium, Dissolved	65.5	61.8	mg/l	6	20

Lab Serial Dilution Analysis

Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 11 QC Batch ID: WG751373-6 QC Sample: L1430393-01 Client ID: DUP Sample						
Manganese, Total	1.287	1.306	mg/l	1		10

INORGANICS
&
MISCELLANEOUS

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-01
Client ID: T-1 (2-5)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil

Date Collected: 12/17/14 10:05
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	15		mg/kg	0.82	0.82	1	-	12/24/14 11:05	107,-	JO
Solids, Total	97.0		%	0.100	NA	1	-	12/18/14 04:00	30,2540G	RT
Cyanide, Total	ND		mg/kg	0.99	0.23	1	12/20/14 03:30	12/20/14 11:41	1,9010C/9012B	ML
Chromium, Hexavalent	3.0		mg/kg	0.82	0.16	1	12/22/14 10:50	12/23/14 12:08	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-02
Client ID: T-1 (13-15)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil

Date Collected: 12/17/14 10:45
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	18		mg/kg	0.82	0.82	1	-	12/24/14 11:05	107,-	JO
Solids, Total	97.5		%	0.100	NA	1	-	12/18/14 04:00	30,2540G	RT
Cyanide, Total	ND		mg/kg	0.97	0.23	1	12/20/14 03:30	12/20/14 11:43	1,9010C/9012B	ML
Chromium, Hexavalent	2.8		mg/kg	0.82	0.16	1	12/22/14 10:50	12/23/14 12:09	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-03
Client ID: T-2 (2-5)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil

Date Collected: 12/17/14 11:12
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	18		mg/kg	0.84	0.84	1	-	12/24/14 11:05	107,-	JO
Solids, Total	94.8		%	0.100	NA	1	-	12/18/14 04:00	30,2540G	RT
Cyanide, Total	ND		mg/kg	1.0	0.24	1	12/20/14 03:30	12/20/14 11:44	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	0.84	0.17	1	12/22/14 10:50	12/23/14 12:10	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-04
Client ID: T-2 (13-15)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil

Date Collected: 12/17/14 11:30
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	8.2		mg/kg	0.82	0.82	1	-	12/24/14 11:05	107,-	JO
Solids, Total	98.0		%	0.100	NA	1	-	12/18/14 04:00	30,2540G	RT
Cyanide, Total	ND		mg/kg	1.0	0.23	1	12/20/14 03:30	12/20/14 12:02	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	0.82	0.16	1	12/22/14 10:50	12/23/14 12:10	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-05
Client ID: T-4 (2-5)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil

Date Collected: 12/17/14 15:30
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	8.3		mg/kg	0.83	0.83	1	-	12/24/14 11:05	107,-	JO
Solids, Total	96.6		%	0.100	NA	1	-	12/18/14 04:00	30,2540G	RT
Cyanide, Total	ND		mg/kg	0.98	0.23	1	12/20/14 03:30	12/20/14 12:02	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	0.83	0.16	1	12/22/14 10:50	12/23/14 12:11	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-06
Client ID: T-4 (13-15)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil

Date Collected: 12/17/14 15:50
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	11		mg/kg	0.83	0.83	1	-	12/24/14 11:05	107,-	JO
Solids, Total	96.1		%	0.100	NA	1	-	12/18/14 04:00	30,2540G	RT
Cyanide, Total	0.39	J	mg/kg	0.99	0.23	1	12/20/14 03:30	12/20/14 12:03	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	0.83	0.17	1	12/22/14 10:50	12/23/14 12:12	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-07
Client ID: T-5 (2-5)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil

Date Collected: 12/17/14 14:12
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	11		mg/kg	0.83	0.83	1	-	12/24/14 11:05	107,-	JO
Solids, Total	96.0		%	0.100	NA	1	-	12/18/14 04:00	30,2540G	RT
Cyanide, Total	ND		mg/kg	0.99	0.23	1	12/20/14 03:30	12/20/14 12:04	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	0.83	0.17	1	12/22/14 10:50	12/23/14 12:13	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-08
Client ID: T-5 (13-15)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil

Date Collected: 12/17/14 14:54
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	13		mg/kg	0.86	0.86	1	-	12/24/14 11:05	107,-	JO
Solids, Total	92.6		%	0.100	NA	1	-	12/18/14 04:00	30,2540G	RT
Cyanide, Total	ND		mg/kg	1.0	0.24	1	12/20/14 03:30	12/20/14 12:05	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	0.86	0.17	1	12/22/14 10:50	12/23/14 12:13	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-09
Client ID: T-6 (2-5)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil

Date Collected: 12/17/14 12:45
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	7.1		mg/kg	0.83	0.83	1	-	12/24/14 11:05	107,-	JO
Solids, Total	95.9		%	0.100	NA	1	-	12/18/14 04:00	30,2540G	RT
Cyanide, Total	0.56	J	mg/kg	1.0	0.24	1	12/20/14 03:30	12/20/14 12:06	1,9010C/9012B	ML
Chromium, Hexavalent	0.19	J	mg/kg	0.83	0.17	1	12/22/14 10:50	12/23/14 12:14	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430448-10
Client ID: T-6 (13-15)'
Sample Location: LONG ISLAND CITY, QUEENS NY
Matrix: Soil

Date Collected: 12/17/14 12:57
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	14		mg/kg	0.85	0.85	1	-	12/24/14 11:05	107,-	JO
Solids, Total	93.9		%	0.100	NA	1	-	12/18/14 04:00	30,2540G	RT
Cyanide, Total	ND		mg/kg	0.99	0.23	1	12/20/14 03:30	12/20/14 12:06	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	0.85	0.17	1	12/22/14 10:50	12/23/14 12:14	1,7196A	MD

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-10 Batch: WG750537-1										
Cyanide, Total	ND		mg/kg	0.97	0.23	1	12/20/14 03:30	12/20/14 11:30	1,9010C/9012B	ML
General Chemistry - Westborough Lab for sample(s): 01-10 Batch: WG751078-1										
Chromium, Hexavalent	ND		mg/kg	0.80	0.16	1	12/22/14 10:50	12/23/14 12:07	1,7196A	MD

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG750537-2 WG750537-3								
Cyanide, Total	98		94		80-120	4		35
General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG751078-2								
Chromium, Hexavalent	97		-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG750537-4 WG750537-5 QC Sample: L1430448-01 Client ID: T-1 (2-5)'												
Cyanide, Total	ND	9.8	10	100		10	100		65-135	0		35
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG751078-5 WG751078-6 QC Sample: L1430448-04 Client ID: T-2 (13-15)'												
Chromium, Hexavalent	ND	1240	1300	100		1400	100		75-125	7		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG749738-1 QC Sample: L1430338-01 Client ID: DUP Sample						
Solids, Total	85.0	83.0	%	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG751078-4 QC Sample: L1430448-04 Client ID: T-2 (13-15)'						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 12/18/2014 02:56

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430448-01A	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-01B	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-01C	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-01D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1430448-01E	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-01F	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-01X	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-01Y	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-01Z	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-02A	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)

*Values in parentheses indicate holding time in days

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430448-02B	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-02C	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-02D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1430448-02E	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-02F	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-02X	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-02Y	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-02Z	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-03A	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-03B	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-03C	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-03D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430448-03E	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-03F	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-03X	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-03Y	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-03Z	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-04A	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-04B	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-04C	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-04D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1430448-04E	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)

*Values in parentheses indicate holding time in days

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430448
Report Date: 12/30/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430448-04F	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-04X	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-04Y	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-04Z	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-05A	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-05B	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-05C	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-05D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1430448-05E	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-05F	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-05X	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-05Y	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)

*Values in parentheses indicate holding time in days

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Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430448-05Z	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-06A	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-06B	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-06C	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-06D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1430448-06E	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-06F	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-06X	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-06Y	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-06Z	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-07A	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-07B	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-07C	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-07D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

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Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430448-07E	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-07F	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-07X	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-07Y	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-07Z	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-08A	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-08B	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-08C	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-08D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1430448-08E	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)

*Values in parentheses indicate holding time in days

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Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430448-08F	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-08X	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-08Y	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-08Z	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-09A	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-09B	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-09C	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-09D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1430448-09E	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-09F	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-09X	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-09Y	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)

*Values in parentheses indicate holding time in days

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Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430448-09Z	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-10A	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-10B	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-10C	5 gram Encore Sampler	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(2)
L1430448-10D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1430448-10E	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-10F	Glass 250ml/8oz unpreserved	A	N/A	3.3	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430448-10X	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-10Y	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-10Z	Vial Water preserved split	A	N/A	3.3	Y	Absent	NYTCL-8260HLW(14)
L1430448-11A	Vial HCl preserved	B	N/A	2.9	Y	Absent	NYTCL-8260(14)
L1430448-11B	Vial HCl preserved	B	N/A	2.9	Y	Absent	NYTCL-8260(14)
L1430448-11C	Vial HCl preserved	B	N/A	2.9	Y	Absent	NYTCL-8260(14)
L1430448-11D	Plastic 250ml HNO3 preserved	B	<2	2.9	Y	Absent	BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),MG-6020T(180),CO-6020T(180)

*Values in parentheses indicate holding time in days

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Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430448-11E	Amber 500ml unpreserved	B	7	2.9	Y	Absent	NYTCL-8081(7)
L1430448-11F	Amber 500ml unpreserved	B	7	2.9	Y	Absent	NYTCL-8081(7)
L1430448-11G	Amber 1000ml unpreserved	B	7	2.9	Y	Absent	-
L1430448-11H	Amber 1000ml unpreserved	B	7	2.9	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1430448-11I	Amber 1000ml unpreserved	B	7	2.9	Y	Absent	NYTCL-8082-1200ML(7)
L1430448-11J	Amber 1000ml unpreserved	B	7	2.9	Y	Absent	NYTCL-8082-1200ML(7)
L1430448-12A	Plastic 250ml unpreserved	B	7	2.9	Y	Absent	FILTER-MET(1)
L1430448-12B	Amber 1000ml unpreserved	B	7	2.9	Y	Absent	FILTER-EXT(1)
L1430448-12C	Amber 1000ml unpreserved	B	7	2.9	Y	Absent	FILTER-EXT(1)
L1430448-12G	Amber 1000ml unpreserved	B	7	2.9	Y	Absent	FILTER-EXT(1)
L1430448-12W	Amber 1000ml unpreserved split	B	N/A	2.9	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1430448-12X	Plastic 120ml HNO3 preserved spl	B	<2	2.9	Y	Absent	CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1430448-12Y	Amber 1000ml unpreserved split	B	N/A	2.9	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1430448-12Z	Amber 1000ml unpreserved split	B	N/A	2.9	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1430448-13A	Vial HCl preserved	B	N/A	2.9	Y	Absent	HOLD(14)
L1430448-13B	Vial HCl preserved	B	N/A	2.9	Y	Absent	HOLD(14)
L1430448-13D	Plastic 250ml HNO3 preserved	B	<2	2.9	Y	Absent	HOLD(14)
L1430448-13E	Amber 500ml unpreserved	B	7	2.9	Y	Absent	HOLD(14)
L1430448-13F	Amber 500ml unpreserved	B	7	2.9	Y	Absent	HOLD(14)
L1430448-13G	Amber 1000ml unpreserved	B	7	2.9	Y	Absent	HOLD(14)
L1430448-13H	Amber 1000ml unpreserved	B	7	2.9	Y	Absent	HOLD(14)
L1430448-13I	Amber 1000ml unpreserved	B	7	2.9	Y	Absent	HOLD(14)
L1430448-13J	Amber 1000ml unpreserved	B	7	2.9	Y	Absent	HOLD(14)

Container Comments

L1430448-11E

L1430448-12Y

*Values in parentheses indicate holding time in days

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Project Number: 41.0162268.2

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Report Date: 12/30/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)

Container Comments

L1430448-12Z

*Values in parentheses indicate holding time in days

Project Name:	31-32 LIC	**Lab Number:**	L1430448
Project Number:	41.0162268.2	**Report Date:**	12/30/14

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

Report Format: DU Report with 'J' Qualifiers

Project Name: 31-32 LIC **Lab Number:** L1430448

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Data Qualifiers

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name: 31-32 LIC **Lab Number:** L1430448
Project Number: 41.0162268.2 **Report Date:** 12/30/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

107 Alpha Analytical - In-house calculation method.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised December 16, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

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of

Date Rec'd in Lab: 12/18/14

ALPHA Job #: L1436448

Client Information
Client: GZA
Address: 104 W 29th St
NY, NY 10001
Phone: 2125948170
Fax:
Email: James.Colon@gza.com

Project Information
Project Name: 31-32 LIC
Project Location:
Project #: 41.0016226 8.70
(Use Project name as Project #) ☐
Project Manager: Cliff Bell
ALPHAQuote #:

Turn-Around Time
Standard ☑ Due Date: 12/24/14
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information
☐ Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs 8260	TCL SVOCs 8270	TAL Metals	Pesticides	PCBs				Sample Specific Comments	Total Bottle
2448-01	T-1 (2-5)'	12/17/14	10:05	SO	JFC	X	X	X	X	X					
-02	T-1 (13-15)'	12/	10:45												
-03	T-2 (2-5)'		11:12												
-04	T-2 (13-15)'		11:30												
-05	T-4 (2-5)'		15:30												
-06	T-4 (13-15)'		15:50												
-07	T-5 (2-5)'		14:12												
-08	T-5 (13-15)'		14:54												
-09	T-6 (2-5)'		12:45												
-10	T-6 (13-15)	X	12:57	X	X										

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type									
Preservative									

Relinquished By:	Date/Time	Received By:	Date/Time
	12/17/12 15:53		12/17/14 15:53
	12/17/14 1855		12-17-14 1855
	12-18-14 00:05		12/18/14 00:05

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page ___ of ___

Date Rec'd in Lab: 12/18/14

ALPHA Job #: L1430448

Client Information
Client: GZA
Address: 100 W 26th St. NY NY 10001
Phone: 212 594 9140
Fax:
Email: James.Coloby@gza.com

Project Information
Project Name: 31-32 LIC
Project Location:
Project #: 04.0016232.0.20
(Use Project name as Project #) ☐
Project Manager: Cliff Bell
ALPHAQuote #:

Turn-Around Time
Standard ☑ Due Date: 12/24/14
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☑ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☑ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs	TCL SVOCs	TAL Metals	Pesticides	PCBs	SVOCs Lab Filtered	Metals Lab Filtered	Total Bottle	Sample Specific Comments
30448-11	TW-1	12/17/14	15:10	GW	JFC	X	X	X	X	X	X	X		
-12	TW-11	12/17/14	16:11	GW	JFC	X	X	X	X	X				

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type									
Preservative									

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	12/17/15 15:53	[illegible]	12/17/14 15:55
[illegible]	12/17/14 1855	[illegible]	12-17-14 1855
[illegible]	12-18-14 00:05	[illegible]	12/18/14 0005

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1430475
Client:	GZA GeoEnvironmental, Inc. 104 West 29th Street, 10th Floor New York, NY 10001
ATTN:	Clifford Bell
Phone:	(212) 594-8140
Project Name:	31-32 LIC
Project Number:	41.0162268.2
Report Date:	12/30/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1430475-01	SV-1S	SOIL_VAPOR	LONG ISLAND CITY	12/17/14 12:21	12/17/14
L1430475-02	SV-2B	SOIL_VAPOR	LONG ISLAND CITY	12/17/14 12:12	12/17/14
L1430475-03	SV-3S	SOIL_VAPOR	LONG ISLAND CITY	12/17/14 15:50	12/17/14
L1430475-04	SV-4B	SOIL_VAPOR	LONG ISLAND CITY	12/17/14 15:50	12/17/14

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	31-32 LIC	**Lab Number:**	L1430475
Project Number:	41.0162268.2	**Report Date:**	12/30/14

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on December 17, 2014. The canister certification results are provided as an addendum.

L1430475-01 through -04 and WG752321-5 Duplicate have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cynthia McQueen

Title: Technical Director/Representative

Date: 12/30/14

AIR

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430475-01 D
Client ID: SV-1S
Sample Location: LONG ISLAND CITY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/29/14 22:53
Analyst: MB

Date Collected: 12/17/14 12:21
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	3.32	2.00	--	16.4	9.89	--		10
Chloromethane	ND	2.00	--	ND	4.13	--		10
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.00	--	ND	14.0	--		10
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
1,3-Butadiene	ND	2.00	--	ND	4.42	--		10
Bromomethane	ND	2.00	--	ND	7.77	--		10
Chloroethane	ND	2.00	--	ND	5.28	--		10
Ethyl Alcohol	ND	25.0	--	ND	47.1	--		10
Vinyl bromide	ND	2.00	--	ND	8.74	--		10
Acetone	29.5	10.0	--	70.1	23.8	--		10
Trichlorofluoromethane	ND	2.00	--	ND	11.2	--		10
iso-Propyl Alcohol	ND	5.00	--	ND	12.3	--		10
1,1-Dichloroethene	ND	2.00	--	ND	7.93	--		10
tert-Butyl Alcohol	5.88	5.00	--	17.8	15.2	--		10
Methylene chloride	ND	5.00	--	ND	17.4	--		10
3-Chloropropene	ND	2.00	--	ND	6.26	--		10
Carbon disulfide	ND	2.00	--	ND	6.23	--		10
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2.00	--	ND	15.3	--		10
trans-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
1,1-Dichloroethane	ND	2.00	--	ND	8.09	--		10
Methyl tert butyl ether	ND	2.00	--	ND	7.21	--		10
2-Butanone	14.6	2.00	--	43.1	5.90	--		10
cis-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Ethyl Acetate	ND	5.00	--	ND	18.0	--		10

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430475
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430475-01 D
Client ID: SV-1S
Sample Location: LONG ISLAND CITY
Date Collected: 12/17/14 12:21
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	5.78	2.00	--	28.2	9.77	--		10
Tetrahydrofuran	ND	2.00	--	ND	5.90	--		10
1,2-Dichloroethane	ND	2.00	--	ND	8.09	--		10
n-Hexane	ND	2.00	--	ND	7.05	--		10
1,1,1-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Benzene	ND	2.00	--	ND	6.39	--		10
Carbon tetrachloride	ND	2.00	--	ND	12.6	--		10
Cyclohexane	ND	2.00	--	ND	6.88	--		10
1,2-Dichloropropane	ND	2.00	--	ND	9.24	--		10
Bromodichloromethane	ND	2.00	--	ND	13.4	--		10
1,4-Dioxane	ND	2.00	--	ND	7.21	--		10
Trichloroethene	949	2.00	--	5100	10.7	--		10
2,2,4-Trimethylpentane	2.24	2.00	--	10.5	9.34	--		10
Heptane	ND	2.00	--	ND	8.20	--		10
cis-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
4-Methyl-2-pentanone	ND	2.00	--	ND	8.20	--		10
trans-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
1,1,2-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Toluene	11.6	2.00	--	43.7	7.54	--		10
2-Hexanone	2.87	2.00	--	11.8	8.20	--		10
Dibromochloromethane	ND	2.00	--	ND	17.0	--		10
1,2-Dibromoethane	ND	2.00	--	ND	15.4	--		10
Tetrachloroethene	7.93	2.00	--	53.8	13.6	--		10
Chlorobenzene	ND	2.00	--	ND	9.21	--		10
Ethylbenzene	ND	2.00	--	ND	8.69	--		10
p/m-Xylene	ND	4.00	--	ND	17.4	--		10
Bromoform	ND	2.00	--	ND	20.7	--		10
Styrene	ND	2.00	--	ND	8.52	--		10

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430475-01 D
Client ID: SV-1S
Sample Location: LONG ISLAND CITY

Date Collected: 12/17/14 12:21
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	2.00	--	ND	13.7	--		10
o-Xylene	ND	2.00	--	ND	8.69	--		10
4-Ethyltoluene	ND	2.00	--	ND	9.83	--		10
1,3,5-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
1,2,4-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
Benzyl chloride	ND	2.00	--	ND	10.4	--		10
1,3-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,4-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2,4-Trichlorobenzene	ND	2.00	--	ND	14.8	--		10
Hexachlorobutadiene	ND	2.00	--	ND	21.3	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	67		60-140
Bromochloromethane	77		60-140
chlorobenzene-d5	82		60-140

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430475-02 D
Client ID: SV-2B
Sample Location: LONG ISLAND CITY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/29/14 23:55
Analyst: MB

Date Collected: 12/17/14 12:12
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	3.87	2.00	--	19.1	9.89	--		10
Chloromethane	ND	2.00	--	ND	4.13	--		10
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.00	--	ND	14.0	--		10
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
1,3-Butadiene	2.74	2.00	--	6.06	4.42	--		10
Bromomethane	ND	2.00	--	ND	7.77	--		10
Chloroethane	ND	2.00	--	ND	5.28	--		10
Ethyl Alcohol	ND	25.0	--	ND	47.1	--		10
Vinyl bromide	ND	2.00	--	ND	8.74	--		10
Acetone	115	10.0	--	273	23.8	--		10
Trichlorofluoromethane	ND	2.00	--	ND	11.2	--		10
iso-Propyl Alcohol	ND	5.00	--	ND	12.3	--		10
1,1-Dichloroethene	ND	2.00	--	ND	7.93	--		10
tert-Butyl Alcohol	18.0	5.00	--	54.6	15.2	--		10
Methylene chloride	ND	5.00	--	ND	17.4	--		10
3-Chloropropene	ND	2.00	--	ND	6.26	--		10
Carbon disulfide	2.02	2.00	--	6.29	6.23	--		10
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2.00	--	ND	15.3	--		10
trans-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
1,1-Dichloroethane	ND	2.00	--	ND	8.09	--		10
Methyl tert butyl ether	ND	2.00	--	ND	7.21	--		10
2-Butanone	47.0	2.00	--	139	5.90	--		10
cis-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Ethyl Acetate	ND	5.00	--	ND	18.0	--		10

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430475
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430475-02 D
Client ID: SV-2B
Sample Location: LONG ISLAND CITY
Date Collected: 12/17/14 12:12
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	11.1	2.00	--	54.2	9.77	--		10
Tetrahydrofuran	ND	2.00	--	ND	5.90	--		10
1,2-Dichloroethane	ND	2.00	--	ND	8.09	--		10
n-Hexane	ND	2.00	--	ND	7.05	--		10
1,1,1-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Benzene	2.73	2.00	--	8.72	6.39	--		10
Carbon tetrachloride	ND	2.00	--	ND	12.6	--		10
Cyclohexane	ND	2.00	--	ND	6.88	--		10
1,2-Dichloropropane	ND	2.00	--	ND	9.24	--		10
Bromodichloromethane	ND	2.00	--	ND	13.4	--		10
1,4-Dioxane	ND	2.00	--	ND	7.21	--		10
Trichloroethene	670	2.00	--	3600	10.7	--		10
2,2,4-Trimethylpentane	ND	2.00	--	ND	9.34	--		10
Heptane	2.55	2.00	--	10.5	8.20	--		10
cis-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
4-Methyl-2-pentanone	ND	2.00	--	ND	8.20	--		10
trans-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
1,1,2-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Toluene	28.9	2.00	--	109	7.54	--		10
2-Hexanone	6.57	2.00	--	26.9	8.20	--		10
Dibromochloromethane	ND	2.00	--	ND	17.0	--		10
1,2-Dibromoethane	ND	2.00	--	ND	15.4	--		10
Tetrachloroethene	5.84	2.00	--	39.6	13.6	--		10
Chlorobenzene	ND	2.00	--	ND	9.21	--		10
Ethylbenzene	ND	2.00	--	ND	8.69	--		10
p/m-Xylene	ND	4.00	--	ND	17.4	--		10
Bromoform	ND	2.00	--	ND	20.7	--		10
Styrene	ND	2.00	--	ND	8.52	--		10

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430475
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430475-02 D
Client ID: SV-2B
Sample Location: LONG ISLAND CITY
Date Collected: 12/17/14 12:12
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	2.00	--	ND	13.7	--		10
o-Xylene	ND	2.00	--	ND	8.69	--		10
4-Ethyltoluene	ND	2.00	--	ND	9.83	--		10
1,3,5-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
1,2,4-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
Benzyl chloride	ND	2.00	--	ND	10.4	--		10
1,3-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,4-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2,4-Trichlorobenzene	ND	2.00	--	ND	14.8	--		10
Hexachlorobutadiene	ND	2.00	--	ND	21.3	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	68		60-140
Bromochloromethane	78		60-140
chlorobenzene-d5	82		60-140

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430475-03 D
Client ID: SV-3S
Sample Location: LONG ISLAND CITY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/30/14 00:27
Analyst: MB

Date Collected: 12/17/14 15:50
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	2.14	0.400	--	10.6	1.98	--		2
Chloromethane	ND	0.400	--	ND	0.826	--		2
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.400	--	ND	2.80	--		2
Vinyl chloride	ND	0.400	--	ND	1.02	--		2
1,3-Butadiene	0.406	0.400	--	0.898	0.885	--		2
Bromomethane	ND	0.400	--	ND	1.55	--		2
Chloroethane	ND	0.400	--	ND	1.06	--		2
Ethyl Alcohol	8.18	5.00	--	15.4	9.42	--		2
Vinyl bromide	ND	0.400	--	ND	1.75	--		2
Acetone	104	2.00	--	247	4.75	--		2
Trichlorofluoromethane	1.31	0.400	--	7.36	2.25	--		2
iso-Propyl Alcohol	1.84	1.00	--	4.52	2.46	--		2
1,1-Dichloroethene	ND	0.400	--	ND	1.59	--		2
tert-Butyl Alcohol	14.1	1.00	--	42.7	3.03	--		2
Methylene chloride	ND	1.00	--	ND	3.47	--		2
3-Chloropropene	ND	0.400	--	ND	1.25	--		2
Carbon disulfide	0.510	0.400	--	1.59	1.25	--		2
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.400	--	ND	3.07	--		2
trans-1,2-Dichloroethene	0.532	0.400	--	2.11	1.59	--		2
1,1-Dichloroethane	ND	0.400	--	ND	1.62	--		2
Methyl tert butyl ether	ND	0.400	--	ND	1.44	--		2
2-Butanone	24.2	0.400	--	71.4	1.18	--		2
cis-1,2-Dichloroethene	ND	0.400	--	ND	1.59	--		2
Ethyl Acetate	1.63	1.00	--	5.87	3.60	--		2

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430475
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430475-03 D
Client ID: SV-3S
Sample Location: LONG ISLAND CITY
Date Collected: 12/17/14 15:50
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	1.98	0.400	--	9.67	1.95	--		2
Tetrahydrofuran	ND	0.400	--	ND	1.18	--		2
1,2-Dichloroethane	ND	0.400	--	ND	1.62	--		2
n-Hexane	0.514	0.400	--	1.81	1.41	--		2
1,1,1-Trichloroethane	ND	0.400	--	ND	2.18	--		2
Benzene	0.578	0.400	--	1.85	1.28	--		2
Carbon tetrachloride	ND	0.400	--	ND	2.52	--		2
Cyclohexane	ND	0.400	--	ND	1.38	--		2
1,2-Dichloropropane	ND	0.400	--	ND	1.85	--		2
Bromodichloromethane	ND	0.400	--	ND	2.68	--		2
1,4-Dioxane	ND	0.400	--	ND	1.44	--		2
Trichloroethene	149	0.400	--	801	2.15	--		2
2,2,4-Trimethylpentane	ND	0.400	--	ND	1.87	--		2
Heptane	0.646	0.400	--	2.65	1.64	--		2
cis-1,3-Dichloropropene	ND	0.400	--	ND	1.82	--		2
4-Methyl-2-pentanone	13.8	0.400	--	56.6	1.64	--		2
trans-1,3-Dichloropropene	ND	0.400	--	ND	1.82	--		2
1,1,2-Trichloroethane	ND	0.400	--	ND	2.18	--		2
Toluene	31.1	0.400	--	117	1.51	--		2
2-Hexanone	0.710	0.400	--	2.91	1.64	--		2
Dibromochloromethane	ND	0.400	--	ND	3.41	--		2
1,2-Dibromoethane	ND	0.400	--	ND	3.07	--		2
Tetrachloroethene	3.77	0.400	--	25.6	2.71	--		2
Chlorobenzene	ND	0.400	--	ND	1.84	--		2
Ethylbenzene	1.62	0.400	--	7.04	1.74	--		2
p/m-Xylene	4.80	0.800	--	20.8	3.47	--		2
Bromoform	ND	0.400	--	ND	4.14	--		2
Styrene	ND	0.400	--	ND	1.70	--		2

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430475
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430475-03 D
Client ID: SV-3S
Sample Location: LONG ISLAND CITY
Date Collected: 12/17/14 15:50
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	0.400	--	ND	2.75	--		2
o-Xylene	2.53	0.400	--	11.0	1.74	--		2
4-Ethyltoluene	ND	0.400	--	ND	1.97	--		2
1,3,5-Trimethylbenzene	ND	0.400	--	ND	1.97	--		2
1,2,4-Trimethylbenzene	ND	0.400	--	ND	1.97	--		2
Benzyl chloride	ND	0.400	--	ND	2.07	--		2
1,3-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,4-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,2-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,2,4-Trichlorobenzene	ND	0.400	--	ND	2.97	--		2
Hexachlorobutadiene	ND	0.400	--	ND	4.27	--		2

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	73		60-140
Bromochloromethane	80		60-140
chlorobenzene-d5	86		60-140

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430475
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430475-04 D
Client ID: SV-4B
Sample Location: LONG ISLAND CITY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/30/14 00:58
Analyst: MB

Date Collected: 12/17/14 15:50
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	3.93	0.400	--	19.4	1.98	--		2
Chloromethane	ND	0.400	--	ND	0.826	--		2
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.400	--	ND	2.80	--		2
Vinyl chloride	ND	0.400	--	ND	1.02	--		2
1,3-Butadiene	0.542	0.400	--	1.20	0.885	--		2
Bromomethane	ND	0.400	--	ND	1.55	--		2
Chloroethane	ND	0.400	--	ND	1.06	--		2
Ethyl Alcohol	11.3	5.00	--	21.3	9.42	--		2
Vinyl bromide	ND	0.400	--	ND	1.75	--		2
Acetone	170	2.00	--	404	4.75	--		2
Trichlorofluoromethane	1.59	0.400	--	8.94	2.25	--		2
iso-Propyl Alcohol	3.35	1.00	--	8.23	2.46	--		2
1,1-Dichloroethene	ND	0.400	--	ND	1.59	--		2
tert-Butyl Alcohol	24.5	1.00	--	74.3	3.03	--		2
Methylene chloride	1.15	1.00	--	4.00	3.47	--		2
3-Chloropropene	ND	0.400	--	ND	1.25	--		2
Carbon disulfide	0.892	0.400	--	2.78	1.25	--		2
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.400	--	ND	3.07	--		2
trans-1,2-Dichloroethene	0.700	0.400	--	2.78	1.59	--		2
1,1-Dichloroethane	ND	0.400	--	ND	1.62	--		2
Methyl tert butyl ether	ND	0.400	--	ND	1.44	--		2
2-Butanone	54.5	0.400	--	161	1.18	--		2
cis-1,2-Dichloroethene	ND	0.400	--	ND	1.59	--		2
Ethyl Acetate	6.94	1.00	--	25.0	3.60	--		2

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430475-04 D
Client ID: SV-4B
Sample Location: LONG ISLAND CITY

Date Collected: 12/17/14 15:50
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	2.84	0.400	--	13.9	1.95	--		2
Tetrahydrofuran	ND	0.400	--	ND	1.18	--		2
1,2-Dichloroethane	ND	0.400	--	ND	1.62	--		2
n-Hexane	1.85	0.400	--	6.52	1.41	--		2
1,1,1-Trichloroethane	0.544	0.400	--	2.97	2.18	--		2
Benzene	2.30	0.400	--	7.35	1.28	--		2
Carbon tetrachloride	ND	0.400	--	ND	2.52	--		2
Cyclohexane	0.546	0.400	--	1.88	1.38	--		2
1,2-Dichloropropane	ND	0.400	--	ND	1.85	--		2
Bromodichloromethane	ND	0.400	--	ND	2.68	--		2
1,4-Dioxane	ND	0.400	--	ND	1.44	--		2
Trichloroethene	192	0.400	--	1030	2.15	--		2
2,2,4-Trimethylpentane	ND	0.400	--	ND	1.87	--		2
Heptane	2.71	0.400	--	11.1	1.64	--		2
cis-1,3-Dichloropropene	ND	0.400	--	ND	1.82	--		2
4-Methyl-2-pentanone	49.8	0.400	--	204	1.64	--		2
trans-1,3-Dichloropropene	ND	0.400	--	ND	1.82	--		2
1,1,2-Trichloroethane	ND	0.400	--	ND	2.18	--		2
Toluene	68.7	0.400	--	259	1.51	--		2
2-Hexanone	6.01	0.400	--	24.6	1.64	--		2
Dibromochloromethane	ND	0.400	--	ND	3.41	--		2
1,2-Dibromoethane	ND	0.400	--	ND	3.07	--		2
Tetrachloroethene	5.04	0.400	--	34.2	2.71	--		2
Chlorobenzene	ND	0.400	--	ND	1.84	--		2
Ethylbenzene	1.89	0.400	--	8.21	1.74	--		2
p/m-Xylene	5.49	0.800	--	23.8	3.47	--		2
Bromoform	ND	0.400	--	ND	4.14	--		2
Styrene	ND	0.400	--	ND	1.70	--		2

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430475
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430475-04 D
Client ID: SV-4B
Sample Location: LONG ISLAND CITY
Date Collected: 12/17/14 15:50
Date Received: 12/17/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	0.400	--	ND	2.75	--		2
o-Xylene	2.51	0.400	--	10.9	1.74	--		2
4-Ethyltoluene	ND	0.400	--	ND	1.97	--		2
1,3,5-Trimethylbenzene	ND	0.400	--	ND	1.97	--		2
1,2,4-Trimethylbenzene	ND	0.400	--	ND	1.97	--		2
Benzyl chloride	ND	0.400	--	ND	2.07	--		2
1,3-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,4-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,2-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,2,4-Trichlorobenzene	ND	0.400	--	ND	2.97	--		2
Hexachlorobutadiene	ND	0.400	--	ND	4.27	--		2

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	71		60-140
Bromochloromethane	77		60-140
chlorobenzene-d5	86		60-140

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Lab Number: L1430475
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Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/29/14 12:45

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG752321-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.200	--	ND	0.434	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: 31-32 LIC
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Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
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Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG752321-4								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1

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Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/29/14 12:45

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG752321-4								
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1

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Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
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Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG752321-4								
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1

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Method Blank Analysis
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Analytical Method: 48,TO-15
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Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG752321-4								
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG752321-3								
Chlorodifluoromethane	83		-		70-130	-		
Propylene	90		-		70-130	-		
Propane	70		-		70-130	-		
Dichlorodifluoromethane	73		-		70-130	-		
Chloromethane	87		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	96		-		70-130	-		
Methanol	82		-		70-130	-		
Vinyl chloride	93		-		70-130	-		
1,3-Butadiene	90		-		70-130	-		
Butane	77		-		70-130	-		
Bromomethane	91		-		70-130	-		
Chloroethane	90		-		70-130	-		
Ethyl Alcohol	87		-		70-130	-		
Dichlorofluoromethane	84		-		70-130	-		
Vinyl bromide	87		-		70-130	-		
Acrolein	79		-		70-130	-		
Acetone	88		-		70-130	-		
Acetonitrile	84		-		70-130	-		
Trichlorofluoromethane	95		-		70-130	-		
iso-Propyl Alcohol	90		-		70-130	-		
Acrylonitrile	81		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG752321-3								
Pentane	74		-		70-130	-		
Ethyl ether	75		-		70-130	-		
1,1-Dichloroethene	90		-		70-130	-		
tert-Butyl Alcohol	81		-		70-130	-		
Methylene chloride	92		-		70-130	-		
3-Chloropropene	82		-		70-130	-		
Carbon disulfide	87		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	95		-		70-130	-		
trans-1,2-Dichloroethene	83		-		70-130	-		
1,1-Dichloroethane	90		-		70-130	-		
Methyl tert butyl ether	86		-		70-130	-		
Vinyl acetate	96		-		70-130	-		
2-Butanone	83		-		70-130	-		
cis-1,2-Dichloroethene	101		-		70-130	-		
Ethyl Acetate	90		-		70-130	-		
Chloroform	95		-		70-130	-		
Tetrahydrofuran	80		-		70-130	-		
2,2-Dichloropropane	80		-		70-130	-		
1,2-Dichloroethane	90		-		70-130	-		
n-Hexane	92		-		70-130	-		
Isopropyl Ether	85		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG752321-3								
Ethyl-Tert-Butyl-Ether	82		-		70-130	-		
1,1,1-Trichloroethane	96		-		70-130	-		
1,1-Dichloropropene	87		-		70-130	-		
Benzene	94		-		70-130	-		
Carbon tetrachloride	96		-		70-130	-		
Cyclohexane	90		-		70-130	-		
Tertiary-Amyl Methyl Ether	80		-		70-130	-		
Dibromomethane	89		-		70-130	-		
1,2-Dichloropropane	97		-		70-130	-		
Bromodichloromethane	97		-		70-130	-		
1,4-Dioxane	95		-		70-130	-		
Trichloroethene	94		-		70-130	-		
2,2,4-Trimethylpentane	92		-		70-130	-		
Methyl methacrylate	87		-		70-130	-		
Heptane	86		-		70-130	-		
cis-1,3-Dichloropropene	97		-		70-130	-		
4-Methyl-2-pentanone	92		-		70-130	-		
trans-1,3-Dichloropropene	84		-		70-130	-		
1,1,2-Trichloroethane	101		-		70-130	-		
Toluene	92		-		70-130	-		
1,3-Dichloropropane	87		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG752321-3								
2-Hexanone	95		-		70-130	-		
Dibromochloromethane	92		-		70-130	-		
1,2-Dibromoethane	97		-		70-130	-		
Butyl Acetate	94		-		70-130	-		
Octane	84		-		70-130	-		
Tetrachloroethene	95		-		70-130	-		
1,1,1,2-Tetrachloroethane	88		-		70-130	-		
Chlorobenzene	95		-		70-130	-		
Ethylbenzene	92		-		70-130	-		
p/m-Xylene	94		-		70-130	-		
Bromoform	95		-		70-130	-		
Styrene	94		-		70-130	-		
1,1,2,2-Tetrachloroethane	104		-		70-130	-		
o-Xylene	98		-		70-130	-		
1,2,3-Trichloropropane	90		-		70-130	-		
Nonane (C9)	85		-		70-130	-		
Isopropylbenzene	91		-		70-130	-		
Bromobenzene	89		-		70-130	-		
o-Chlorotoluene	90		-		70-130	-		
n-Propylbenzene	90		-		70-130	-		
p-Chlorotoluene	89		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG752321-3								
4-Ethyltoluene	92		-		70-130	-		
1,3,5-Trimethylbenzene	97		-		70-130	-		
tert-Butylbenzene	93		-		70-130	-		
1,2,4-Trimethylbenzene	101		-		70-130	-		
Decane (C10)	90		-		70-130	-		
Benzyl chloride	95		-		70-130	-		
1,3-Dichlorobenzene	103		-		70-130	-		
1,4-Dichlorobenzene	104		-		70-130	-		
sec-Butylbenzene	93		-		70-130	-		
p-Isopropyltoluene	85		-		70-130	-		
1,2-Dichlorobenzene	101		-		70-130	-		
n-Butylbenzene	98		-		70-130	-		
1,2-Dibromo-3-chloropropane	94		-		70-130	-		
Undecane	98		-		70-130	-		
Dodecane (C12)	118		-		70-130	-		
1,2,4-Trichlorobenzene	124		-		70-130	-		
Naphthalene	104		-		70-130	-		
1,2,3-Trichlorobenzene	119		-		70-130	-		
Hexachlorobutadiene	114		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG752321-5 QC Sample: L1430475-01 Client ID: SV-1S						
Dichlorodifluoromethane	3.32	3.16	ppbV	5		25
Chloromethane	ND	ND	ppbV	NC		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	ND	ND	ppbV	NC		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	29.5	28.1	ppbV	5		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
iso-Propyl Alcohol	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
tert-Butyl Alcohol	5.88	6.25	ppbV	6		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG752321-5 QC Sample: L1430475-01 Client ID: SV-1S					
1,1-Dichloroethane	ND	ND	ppbV	NC	25
Methyl tert butyl ether	ND	ND	ppbV	NC	25
2-Butanone	14.6	14.1	ppbV	3	25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC	25
Ethyl Acetate	ND	ND	ppbV	NC	25
Chloroform	5.78	6.32	ppbV	9	25
Tetrahydrofuran	ND	ND	ppbV	NC	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
n-Hexane	ND	ND	ppbV	NC	25
1,1,1-Trichloroethane	ND	ND	ppbV	NC	25
Benzene	ND	ND	ppbV	NC	25
Carbon tetrachloride	ND	ND	ppbV	NC	25
Cyclohexane	ND	ND	ppbV	NC	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
1,4-Dioxane	ND	ND	ppbV	NC	25
Trichloroethene	949	902	ppbV	5	25
2,2,4-Trimethylpentane	2.24	ND	ppbV	NC	25
Heptane	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG752321-5 QC Sample: L1430475-01 Client ID: SV-1S					
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
4-Methyl-2-pentanone	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	11.6	11.8	ppbV	2	25
2-Hexanone	2.87	2.50	ppbV	14	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	7.93	8.36	ppbV	5	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	ND	ND	ppbV	NC	25
p/m-Xylene	ND	ND	ppbV	NC	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	ND	ND	ppbV	NC	25
4-Ethyltoluene	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG752321-5 QC Sample: L1430475-01 Client ID: SV-1S					
Benzyl chloride	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

Project Name: 31-32 LIC

Lab Number: L1430475

Project Number: 41.0162268.2

Report Date: 12/30/14

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1430475-01	SV-1S	0581	#30 SV	12/17/14	112885		-	-	-	Pass	35.2	33.1	6
L1430475-01	SV-1S	651	6.0L Can	12/17/14	112885	L1430079-02	Pass	-29.7	-4.8	-	-	-	-
L1430475-02	SV-2B	0375	#30 SV	12/17/14	112885		-	-	-	Pass	37.8	36.9	2
L1430475-02	SV-2B	1668	6.0L Can	12/17/14	112885	L1430079-02	Pass	-29.6	-5.0	-	-	-	-
L1430475-03	SV-3S	0435	#30 SV	12/17/14	112885		-	-	-	Pass	34.0	38.0	11
L1430475-03	SV-3S	1786	6.0L Can	12/17/14	112885	L1430079-02	Pass	-29.5	-1.9	-	-	-	-
L1430475-04	SV-4B	0575	#30 SV	12/17/14	112885		-	-	-	Pass	35.3	35.0	1
L1430475-04	SV-4B	955	6.0L Can	12/17/14	112885	L1430079-02	Pass	-29.6	-5.2	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1430079

Project Number: CANISTER QC BAT **Report Date:** 12/30/14

Air Canister Certification Results

Lab ID:	L1430079-02	Date Collected:	12/12/14 19:17
Client ID:	CAN 1983 SHELF 41	Date Received:	12/15/14
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	12/15/14 23:27		
Analyst:	MB		

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.200	--	ND	0.434	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1430079
Report Date: 12/30/14

Air Canister Certification Results

Lab ID: L1430079-02
Client ID: CAN 1983 SHELF 41
Sample Location:

Date Collected: 12/12/14 19:17
Date Received: 12/15/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1430079
Report Date: 12/30/14

Air Canister Certification Results

Lab ID: L1430079-02
Client ID: CAN 1983 SHELF 41
Sample Location:

Date Collected: 12/12/14 19:17
Date Received: 12/15/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1430079

Project Number: CANISTER QC BAT **Report Date:** 12/30/14

Air Canister Certification Results

Lab ID: L1430079-02 Date Collected: 12/12/14 19:17

Client ID: CAN 1983 SHELF 41 Date Received: 12/15/14

Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1430079

Project Number: CANISTER QC BAT **Report Date:** 12/30/14

Air Canister Certification Results

Lab ID: L1430079-02 Date Collected: 12/12/14 19:17

Client ID: CAN 1983 SHELF 41 Date Received: 12/15/14

Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	82		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1430079
Report Date: 12/30/14

Air Canister Certification Results

Lab ID:	L1430079-02	Date Collected:	12/12/14 19:17
Client ID:	CAN 1983 SHELF 41	Date Received:	12/15/14
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	12/15/14 23:27		
Analyst:	MB		

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--		1
Chloromethane	ND	0.500	--	ND	1.03	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	2.00	--	ND	4.75	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1430079
Report Date: 12/30/14

Air Canister Certification Results

Lab ID: L1430079-02
Client ID: CAN 1983 SHELF 41
Sample Location:

Date Collected: 12/12/14 19:17
Date Received: 12/15/14
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.500	--	ND	2.46	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.500	--	ND	2.74	--		1
p-Isopropyltoluene	ND	0.500	--	ND	2.74	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1430079

Project Number: CANISTER QC BAT **Report Date:** 12/30/14

Air Canister Certification Results

Lab ID: L1430079-02 Date Collected: 12/12/14 19:17

Client ID: CAN 1983 SHELF 41 Date Received: 12/15/14

Sample Location: Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
n-Butylbenzene	ND	0.500	--	ND	2.74	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	83		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	86		60-140

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430475
Report Date: 12/30/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
N/A	Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430475-01A	Canister - 6 Liter	N/A	NA		Y	Present/Intact	TO15-LL(30)
L1430475-02A	Canister - 6 Liter	N/A	NA		Y	Present/Intact	TO15-LL(30)
L1430475-03A	Canister - 6 Liter	N/A	NA		Y	Present/Intact	TO15-LL(30)
L1430475-04A	Canister - 6 Liter	N/A	NA		Y	Present/Intact	TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	31-32 LIC	**Lab Number:**	L1430475
Project Number:	41.0162268.2	**Report Date:**	12/30/14

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

Report Format: Data Usability Report

Project Name: 31-32 LIC **Lab Number:** L1430475

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Data Qualifiers

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430475
Report Date: 12/30/14

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised December 16, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

PAGE_____ OF _____

CHAIN OF CUSTODY

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab:

ALPHA Job #: L1430475

Client Information

Client: GZA GeoEnvironmental
Address: 104 W 29th St
New York, NY 10001
Phone: (212) 594 8140
Fax:
Email: ~~[illegible]~~ James.Cadoy@gza.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 31-32 LIC
Project Location: Long Island City
Project #: 41.0016226 8.2
Project Manager: Cliff Bell
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)
Other Formats: _____
☑ EMAIL (standard pdf report)
☐ Additional Deliverables:

Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:

All Columns Below Must Be Filled Out

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
-01	SV-1S	12/17/14	0:02	12:21	-29.28	5.86	SV	BM	6L	651	0581	✓							
-02	SV-2D	↓	10:02	12:12	-29.68	6.00	SV	BM	6L	1668	0375	✓							
-03	SV-3S	↓	13:35	15:50	-29.83	3.53	SV	BM	6L	1786	0435	✓							
-04	SV-4D	✓	13:35	15:50	-29.41	6.27	SV	BM	6L	955	0575	✓							

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
[illegible] AAL	12/17/14 1600	[illegible] AAL	12/17/14 15:55
Tom Tober	12/17/14 1900	Tom Tober	12/17/14 1900
	12/18/14 0140	[illegible]	12/18/14 0140

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No: 101-02 (19-Jun-09)

ANALYTICAL REPORT

Lab Number:	L1430558
Client:	GZA GeoEnvironmental, Inc. 104 West 29th Street, 10th Floor New York, NY 10001
ATTN:	Clifford Bell
Phone:	(212) 594-8140
Project Name:	31-32 LIC
Project Number:	41.0162268.2
Report Date:	12/30/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1430558-01	T3 (3-5)	SOIL	LONG ISLAND CITY, QUEENS	12/18/14 09:08	12/18/14
L1430558-02	T3 (13-15)	SOIL	LONG ISLAND CITY, QUEENS	12/18/14 09:30	12/18/14
L1430558-03	T7 (3-5)	SOIL	LONG ISLAND CITY, QUEENS	12/18/14 10:50	12/18/14
L1430558-04	T7 (13-15)	SOIL	LONG ISLAND CITY, QUEENS	12/18/14 11:10	12/18/14
L1430558-05	T8 (3-5)	SOIL	LONG ISLAND CITY, QUEENS	12/18/14 10:00	12/18/14
L1430558-06	T8 (13-15)	SOIL	LONG ISLAND CITY, QUEENS	12/18/14 10:08	12/18/14

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 31-32 LIC **Lab Number:** L1430558
Project Number: 41.0162268.2 **Report Date:** 12/30/14

Case Narrative (continued)

Report Submission

The project number was specified by the client.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Metals

L1430558-01 through -06 have elevated detection limits for all elements, with the exception of mercury, due to the dilutions required by matrix interferences encountered during analysis.

The WG750884-4 MS recovery, performed on L1430558-01, is outside the acceptance criteria for mercury (146%). A post digestion spike was performed and was within acceptance criteria.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Bryan Vangel

Title: Technical Director/Representative Date: 12/30/14

ORGANICS

VOLATILES

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-01	Date Collected:	12/18/14 09:08
Client ID:	T3 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/28/14 11:59		
Analyst:	BN		
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	10	1.2	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.09	1
Chloroform	ND		ug/kg	1.6	0.39	1
Carbon tetrachloride	ND		ug/kg	1.0	0.22	1
1,2-Dichloropropane	ND		ug/kg	3.6	0.24	1
Dibromochloromethane	ND		ug/kg	1.0	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.32	1
Tetrachloroethene	ND		ug/kg	1.0	0.15	1
Chlorobenzene	ND		ug/kg	1.0	0.36	1
Trichlorofluoromethane	ND		ug/kg	5.2	0.40	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.12	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.12	1
Bromodichloromethane	ND		ug/kg	1.0	0.18	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.13	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12	1
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12	1
1,1-Dichloropropene	ND		ug/kg	5.2	0.15	1
Bromoform	ND		ug/kg	4.2	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10	1
Benzene	ND		ug/kg	1.0	0.12	1
Toluene	ND		ug/kg	1.6	0.20	1
Ethylbenzene	ND		ug/kg	1.0	0.13	1
Chloromethane	ND		ug/kg	5.2	0.31	1
Bromomethane	ND		ug/kg	2.1	0.35	1
Vinyl chloride	ND		ug/kg	2.1	0.12	1
Chloroethane	ND		ug/kg	2.1	0.33	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.22	1
Trichloroethene	0.92	J	ug/kg	1.0	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	5.2	0.16	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-01 Date Collected: 12/18/14 09:08

Client ID: T3 (3-5) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	5.2	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	5.2	0.14	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.09	1
p/m-Xylene	ND		ug/kg	2.1	0.21	1
o-Xylene	ND		ug/kg	2.1	0.18	1
Xylene (Total)	ND		ug/kg	2.1	0.18	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15	1
1,2-Dichloroethene (total)	ND		ug/kg	1.0	0.15	1
Dibromomethane	ND		ug/kg	10	0.17	1
Styrene	ND		ug/kg	2.1	0.42	1
Dichlorodifluoromethane	ND		ug/kg	10	0.20	1
Acetone	4.7	J	ug/kg	10	1.1	1
Carbon disulfide	ND		ug/kg	10	1.2	1
2-Butanone	ND		ug/kg	10	0.28	1
Vinyl acetate	ND		ug/kg	10	0.14	1
4-Methyl-2-pentanone	ND		ug/kg	10	0.25	1
1,2,3-Trichloropropane	ND		ug/kg	10	0.17	1
2-Hexanone	ND		ug/kg	10	0.70	1
Bromochloromethane	ND		ug/kg	5.2	0.29	1
2,2-Dichloropropane	ND		ug/kg	5.2	0.24	1
1,2-Dibromoethane	ND		ug/kg	4.2	0.18	1
1,3-Dichloropropane	ND		ug/kg	5.2	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.33	1
Bromobenzene	ND		ug/kg	5.2	0.22	1
n-Butylbenzene	ND		ug/kg	1.0	0.12	1
sec-Butylbenzene	ND		ug/kg	1.0	0.13	1
tert-Butylbenzene	ND		ug/kg	5.2	0.14	1
o-Chlorotoluene	ND		ug/kg	5.2	0.17	1
p-Chlorotoluene	ND		ug/kg	5.2	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.2	0.41	1
Hexachlorobutadiene	ND		ug/kg	5.2	0.24	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.13	1
Naphthalene	ND		ug/kg	5.2	0.14	1
Acrylonitrile	ND		ug/kg	10	0.54	1
n-Propylbenzene	ND		ug/kg	1.0	0.11	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.2	0.15	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.2	0.19	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.2	0.15	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-01 Date Collected: 12/18/14 09:08

Client ID: T3 (3-5) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	5.2	0.15	1
1,4-Dioxane	ND		ug/kg	100	15.	1
1,4-Diethylbenzene	ND		ug/kg	4.2	0.17	1
4-Ethyltoluene	ND		ug/kg	4.2	0.13	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.2	0.14	1
Ethyl ether	ND		ug/kg	5.2	0.27	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.2	0.41	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	89		70-130

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-02	Date Collected:	12/18/14 09:30
Client ID:	T3 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/28/14 12:25		
Analyst:	BN		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	14	1.5	1
1,1-Dichloroethane	ND		ug/kg	2.0	0.12	1
Chloroform	ND		ug/kg	2.0	0.50	1
Carbon tetrachloride	ND		ug/kg	1.4	0.28	1
1,2-Dichloropropane	ND		ug/kg	4.7	0.31	1
Dibromochloromethane	ND		ug/kg	1.4	0.21	1
1,1,2-Trichloroethane	ND		ug/kg	2.0	0.41	1
Tetrachloroethene	ND		ug/kg	1.4	0.19	1
Chlorobenzene	ND		ug/kg	1.4	0.47	1
Trichlorofluoromethane	ND		ug/kg	6.8	0.53	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.15	1
1,1,1-Trichloroethane	ND		ug/kg	1.4	0.15	1
Bromodichloromethane	ND		ug/kg	1.4	0.23	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.16	1
cis-1,3-Dichloropropene	ND		ug/kg	1.4	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	1.4	0.16	1
1,1-Dichloropropene	ND		ug/kg	6.8	0.19	1
Bromoform	ND		ug/kg	5.4	0.32	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.4	0.14	1
Benzene	ND		ug/kg	1.4	0.16	1
Toluene	ND		ug/kg	2.0	0.26	1
Ethylbenzene	ND		ug/kg	1.4	0.17	1
Chloromethane	ND		ug/kg	6.8	0.40	1
Bromomethane	ND		ug/kg	2.7	0.46	1
Vinyl chloride	ND		ug/kg	2.7	0.16	1
Chloroethane	ND		ug/kg	2.7	0.43	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.36	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.29	1
Trichloroethene	1.5		ug/kg	1.4	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	6.8	0.21	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-02 Date Collected: 12/18/14 09:30

Client ID: T3 (13-15) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	6.8	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	6.8	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.11	1
p/m-Xylene	ND		ug/kg	2.7	0.27	1
o-Xylene	ND		ug/kg	2.7	0.23	1
Xylene (Total)	ND		ug/kg	2.7	0.23	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.19	1
1,2-Dichloroethene (total)	ND		ug/kg	1.4	0.19	1
Dibromomethane	ND		ug/kg	14	0.22	1
Styrene	ND		ug/kg	2.7	0.54	1
Dichlorodifluoromethane	ND		ug/kg	14	0.26	1
Acetone	5.9	J	ug/kg	14	1.4	1
Carbon disulfide	ND		ug/kg	14	1.5	1
2-Butanone	ND		ug/kg	14	0.37	1
Vinyl acetate	ND		ug/kg	14	0.18	1
4-Methyl-2-pentanone	ND		ug/kg	14	0.33	1
1,2,3-Trichloropropane	ND		ug/kg	14	0.22	1
2-Hexanone	ND		ug/kg	14	0.90	1
Bromochloromethane	ND		ug/kg	6.8	0.37	1
2,2-Dichloropropane	ND		ug/kg	6.8	0.31	1
1,2-Dibromoethane	ND		ug/kg	5.4	0.24	1
1,3-Dichloropropane	ND		ug/kg	6.8	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.4	0.43	1
Bromobenzene	ND		ug/kg	6.8	0.28	1
n-Butylbenzene	ND		ug/kg	1.4	0.16	1
sec-Butylbenzene	ND		ug/kg	1.4	0.16	1
tert-Butylbenzene	ND		ug/kg	6.8	0.18	1
o-Chlorotoluene	ND		ug/kg	6.8	0.22	1
p-Chlorotoluene	ND		ug/kg	6.8	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.8	0.54	1
Hexachlorobutadiene	ND		ug/kg	6.8	0.31	1
Isopropylbenzene	ND		ug/kg	1.4	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.17	1
Naphthalene	ND		ug/kg	6.8	0.19	1
Acrylonitrile	ND		ug/kg	14	0.70	1
n-Propylbenzene	ND		ug/kg	1.4	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.8	0.20	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.8	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.8	0.19	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-02 Date Collected: 12/18/14 09:30

Client ID: T3 (13-15) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	6.8	0.19	1
1,4-Dioxane	ND		ug/kg	140	20.	1
1,4-Diethylbenzene	ND		ug/kg	5.4	0.22	1
4-Ethyltoluene	ND		ug/kg	5.4	0.17	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	5.4	0.18	1
Ethyl ether	ND		ug/kg	6.8	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.8	0.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	90		70-130

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-03	Date Collected:	12/18/14 10:50
Client ID:	T7 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/29/14 17:57		
Analyst:	BN		
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	510	56.	1
1,1-Dichloroethane	ND		ug/kg	76	4.3	1
Chloroform	ND		ug/kg	76	19.	1
Carbon tetrachloride	ND		ug/kg	51	11.	1
1,2-Dichloropropane	ND		ug/kg	180	12.	1
Dibromochloromethane	ND		ug/kg	51	7.8	1
1,1,2-Trichloroethane	ND		ug/kg	76	15.	1
Tetrachloroethene	90		ug/kg	51	7.1	1
Chlorobenzene	ND		ug/kg	51	18.	1
Trichlorofluoromethane	ND		ug/kg	250	20.	1
1,2-Dichloroethane	ND		ug/kg	51	5.8	1
1,1,1-Trichloroethane	ND		ug/kg	51	5.6	1
Bromodichloromethane	ND		ug/kg	51	8.8	1
trans-1,3-Dichloropropene	ND		ug/kg	51	6.1	1
cis-1,3-Dichloropropene	ND		ug/kg	51	6.0	1
1,3-Dichloropropene, Total	ND		ug/kg	51	6.0	1
1,1-Dichloropropene	ND		ug/kg	250	7.2	1
Bromoform	ND		ug/kg	200	12.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	51	5.1	1
Benzene	ND		ug/kg	51	6.0	1
Toluene	10	J	ug/kg	76	9.9	1
Ethylbenzene	ND		ug/kg	51	6.5	1
Chloromethane	ND		ug/kg	250	15.	1
Bromomethane	ND		ug/kg	100	17.	1
Vinyl chloride	ND		ug/kg	100	6.0	1
Chloroethane	ND		ug/kg	100	16.	1
1,1-Dichloroethene	ND		ug/kg	51	13.	1
trans-1,2-Dichloroethene	ND		ug/kg	76	11.	1
Trichloroethene	2000		ug/kg	51	6.3	1
1,2-Dichlorobenzene	ND		ug/kg	250	7.8	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-03 Date Collected: 12/18/14 10:50

Client ID: T7 (3-5) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	250	6.8	1
1,4-Dichlorobenzene	ND		ug/kg	250	7.0	1
Methyl tert butyl ether	ND		ug/kg	100	4.3	1
p/m-Xylene	12	J	ug/kg	100	10.	1
o-Xylene	ND		ug/kg	100	8.7	1
Xylene (Total)	12	J	ug/kg	100	8.7	1
cis-1,2-Dichloroethene	ND		ug/kg	51	7.2	1
1,2-Dichloroethene (total)	ND		ug/kg	51	7.2	1
Dibromomethane	ND		ug/kg	510	8.3	1
Styrene	ND		ug/kg	100	20.	1
Dichlorodifluoromethane	ND		ug/kg	510	9.7	1
Acetone	ND		ug/kg	510	53.	1
Carbon disulfide	ND		ug/kg	510	56.	1
2-Butanone	ND		ug/kg	510	14.	1
Vinyl acetate	ND		ug/kg	510	6.7	1
4-Methyl-2-pentanone	ND		ug/kg	510	12.	1
1,2,3-Trichloropropane	ND		ug/kg	510	8.2	1
2-Hexanone	ND		ug/kg	510	34.	1
Bromochloromethane	ND		ug/kg	250	14.	1
2,2-Dichloropropane	ND		ug/kg	250	11.	1
1,2-Dibromoethane	ND		ug/kg	200	8.8	1
1,3-Dichloropropane	ND		ug/kg	250	7.4	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	51	16.	1
Bromobenzene	ND		ug/kg	250	10.	1
n-Butylbenzene	ND		ug/kg	51	5.8	1
sec-Butylbenzene	ND		ug/kg	51	6.2	1
tert-Butylbenzene	ND		ug/kg	250	6.9	1
o-Chlorotoluene	ND		ug/kg	250	8.1	1
p-Chlorotoluene	ND		ug/kg	250	6.7	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	250	20.	1
Hexachlorobutadiene	ND		ug/kg	250	12.	1
Isopropylbenzene	ND		ug/kg	51	5.3	1
p-Isopropyltoluene	ND		ug/kg	51	6.3	1
Naphthalene	49	J	ug/kg	250	7.0	1
Acrylonitrile	ND		ug/kg	510	26.	1
n-Propylbenzene	ND		ug/kg	51	5.5	1
1,2,3-Trichlorobenzene	ND		ug/kg	250	7.5	1
1,2,4-Trichlorobenzene	ND		ug/kg	250	9.2	1
1,3,5-Trimethylbenzene	ND		ug/kg	250	7.3	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-03 Date Collected: 12/18/14 10:50

Client ID: T7 (3-5) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	14	J	ug/kg	250	7.2	1
1,4-Dioxane	ND		ug/kg	5100	730	1
1,4-Diethylbenzene	ND		ug/kg	200	8.1	1
4-Ethyltoluene	ND		ug/kg	200	6.3	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	200	6.6	1
Ethyl ether	ND		ug/kg	250	13.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	20.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	103		70-130

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-04	Date Collected:	12/18/14 11:10
Client ID:	T7 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/28/14 12:52		
Analyst:	BN		
Percent Solids:	98%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.10	1
Chloroform	ND		ug/kg	1.8	0.44	1
Carbon tetrachloride	ND		ug/kg	1.2	0.25	1
1,2-Dichloropropane	ND		ug/kg	4.2	0.27	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.36	1
Tetrachloroethene	ND		ug/kg	1.2	0.17	1
Chlorobenzene	ND		ug/kg	1.2	0.41	1
Trichlorofluoromethane	ND		ug/kg	6.0	0.46	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.21	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.14	1
1,1-Dichloropropene	ND		ug/kg	6.0	0.17	1
Bromoform	ND		ug/kg	4.8	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.8	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.15	1
Chloromethane	ND		ug/kg	6.0	0.35	1
Bromomethane	ND		ug/kg	2.4	0.40	1
Vinyl chloride	ND		ug/kg	2.4	0.14	1
Chloroethane	ND		ug/kg	2.4	0.38	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.25	1
Trichloroethene	ND		ug/kg	1.2	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	6.0	0.18	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-04 Date Collected: 12/18/14 11:10

Client ID: T7 (13-15) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	6.0	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	6.0	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.10	1
p/m-Xylene	ND		ug/kg	2.4	0.24	1
o-Xylene	ND		ug/kg	2.4	0.20	1
Xylene (Total)	ND		ug/kg	2.4	0.20	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.17	1
1,2-Dichloroethene (total)	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	12	0.19	1
Styrene	ND		ug/kg	2.4	0.48	1
Dichlorodifluoromethane	ND		ug/kg	12	0.23	1
Acetone	4.9	J	ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.32	1
Vinyl acetate	ND		ug/kg	12	0.16	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.29	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.19	1
2-Hexanone	ND		ug/kg	12	0.79	1
Bromochloromethane	ND		ug/kg	6.0	0.33	1
2,2-Dichloropropane	ND		ug/kg	6.0	0.27	1
1,2-Dibromoethane	ND		ug/kg	4.8	0.21	1
1,3-Dichloropropane	ND		ug/kg	6.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.38	1
Bromobenzene	ND		ug/kg	6.0	0.25	1
n-Butylbenzene	ND		ug/kg	1.2	0.14	1
sec-Butylbenzene	ND		ug/kg	1.2	0.14	1
tert-Butylbenzene	ND		ug/kg	6.0	0.16	1
o-Chlorotoluene	ND		ug/kg	6.0	0.19	1
p-Chlorotoluene	ND		ug/kg	6.0	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.0	0.47	1
Hexachlorobutadiene	ND		ug/kg	6.0	0.27	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.15	1
Naphthalene	ND		ug/kg	6.0	0.16	1
Acrylonitrile	ND		ug/kg	12	0.61	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.0	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.0	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.0	0.17	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-04 Date Collected: 12/18/14 11:10

Client ID: T7 (13-15) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	6.0	0.17	1
1,4-Dioxane	ND		ug/kg	120	17.	1
1,4-Diethylbenzene	ND		ug/kg	4.8	0.19	1
4-Ethyltoluene	ND		ug/kg	4.8	0.15	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.8	0.16	1
Ethyl ether	ND		ug/kg	6.0	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.0	0.47	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	90		70-130

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-05	Date Collected:	12/18/14 10:00
Client ID:	T8 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/29/14 16:54		
Analyst:	BN		
Percent Solids:	94%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	16	1.8	1
1,1-Dichloroethane	ND		ug/kg	2.5	0.14	1
Chloroform	ND		ug/kg	2.5	0.61	1
Carbon tetrachloride	ND		ug/kg	1.6	0.35	1
1,2-Dichloropropane	ND		ug/kg	5.8	0.38	1
Dibromochloromethane	ND		ug/kg	1.6	0.25	1
1,1,2-Trichloroethane	ND		ug/kg	2.5	0.50	1
Tetrachloroethene	ND		ug/kg	1.6	0.23	1
Chlorobenzene	ND		ug/kg	1.6	0.58	1
Trichlorofluoromethane	ND		ug/kg	8.3	0.64	1
1,2-Dichloroethane	ND		ug/kg	1.6	0.19	1
1,1,1-Trichloroethane	ND		ug/kg	1.6	0.18	1
Bromodichloromethane	ND		ug/kg	1.6	0.29	1
trans-1,3-Dichloropropene	ND		ug/kg	1.6	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	1.6	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	1.6	0.19	1
1,1-Dichloropropene	ND		ug/kg	8.3	0.23	1
Bromoform	ND		ug/kg	6.6	0.39	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.6	0.17	1
Benzene	ND		ug/kg	1.6	0.20	1
Toluene	ND		ug/kg	2.5	0.32	1
Ethylbenzene	ND		ug/kg	1.6	0.21	1
Chloromethane	ND		ug/kg	8.3	0.49	1
Bromomethane	ND		ug/kg	3.3	0.56	1
Vinyl chloride	ND		ug/kg	3.3	0.19	1
Chloroethane	ND		ug/kg	3.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.6	0.43	1
trans-1,2-Dichloroethene	ND		ug/kg	2.5	0.35	1
Trichloroethene	ND		ug/kg	1.6	0.21	1
1,2-Dichlorobenzene	ND		ug/kg	8.3	0.25	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-05 Date Collected: 12/18/14 10:00

Client ID: T8 (3-5) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	8.3	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	8.3	0.23	1
Methyl tert butyl ether	ND		ug/kg	3.3	0.14	1
p/m-Xylene	ND		ug/kg	3.3	0.33	1
o-Xylene	ND		ug/kg	3.3	0.28	1
Xylene (Total)	ND		ug/kg	3.3	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	1.6	0.24	1
1,2-Dichloroethene (total)	ND		ug/kg	1.6	0.24	1
Dibromomethane	ND		ug/kg	16	0.27	1
Styrene	ND		ug/kg	3.3	0.66	1
Dichlorodifluoromethane	ND		ug/kg	16	0.32	1
Acetone	ND		ug/kg	16	1.7	1
Carbon disulfide	ND		ug/kg	16	1.8	1
2-Butanone	ND		ug/kg	16	0.45	1
Vinyl acetate	ND		ug/kg	16	0.22	1
4-Methyl-2-pentanone	ND		ug/kg	16	0.40	1
1,2,3-Trichloropropane	ND		ug/kg	16	0.27	1
2-Hexanone	ND		ug/kg	16	1.1	1
Bromochloromethane	ND		ug/kg	8.3	0.46	1
2,2-Dichloropropane	ND		ug/kg	8.3	0.37	1
1,2-Dibromoethane	ND		ug/kg	6.6	0.29	1
1,3-Dichloropropane	ND		ug/kg	8.3	0.24	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.6	0.53	1
Bromobenzene	ND		ug/kg	8.3	0.34	1
n-Butylbenzene	ND		ug/kg	1.6	0.19	1
sec-Butylbenzene	ND		ug/kg	1.6	0.20	1
tert-Butylbenzene	ND		ug/kg	8.3	0.22	1
o-Chlorotoluene	ND		ug/kg	8.3	0.26	1
p-Chlorotoluene	ND		ug/kg	8.3	0.22	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	8.3	0.66	1
Hexachlorobutadiene	ND		ug/kg	8.3	0.38	1
Isopropylbenzene	ND		ug/kg	1.6	0.17	1
p-Isopropyltoluene	ND		ug/kg	1.6	0.21	1
Naphthalene	ND		ug/kg	8.3	0.23	1
Acrylonitrile	ND		ug/kg	16	0.85	1
n-Propylbenzene	ND		ug/kg	1.6	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	8.3	0.24	1
1,2,4-Trichlorobenzene	ND		ug/kg	8.3	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	8.3	0.24	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-05 Date Collected: 12/18/14 10:00

Client ID: T8 (3-5) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	8.3	0.23	1
1,4-Dioxane	ND		ug/kg	160	24.	1
1,4-Diethylbenzene	ND		ug/kg	6.6	0.26	1
4-Ethyltoluene	ND		ug/kg	6.6	0.20	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	6.6	0.22	1
Ethyl ether	ND		ug/kg	8.3	0.43	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	8.3	0.65	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	109		70-130

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-06	Date Collected:	12/18/14 10:08
Client ID:	T8 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/28/14 13:45		
Analyst:	BN		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.9	0.11	1
Chloroform	ND		ug/kg	1.9	0.46	1
Carbon tetrachloride	ND		ug/kg	1.2	0.26	1
1,2-Dichloropropane	ND		ug/kg	4.4	0.28	1
Dibromochloromethane	ND		ug/kg	1.2	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.9	0.38	1
Tetrachloroethene	ND		ug/kg	1.2	0.17	1
Chlorobenzene	ND		ug/kg	1.2	0.43	1
Trichlorofluoromethane	ND		ug/kg	6.2	0.48	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.14	1
Bromodichloromethane	ND		ug/kg	1.2	0.22	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.15	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.15	1
1,1-Dichloropropene	ND		ug/kg	6.2	0.18	1
Bromoform	ND		ug/kg	5.0	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.15	1
Toluene	ND		ug/kg	1.9	0.24	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	6.2	0.37	1
Bromomethane	ND		ug/kg	2.5	0.42	1
Vinyl chloride	ND		ug/kg	2.5	0.15	1
Chloroethane	ND		ug/kg	2.5	0.39	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.26	1
Trichloroethene	ND		ug/kg	1.2	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	6.2	0.19	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-06 Date Collected: 12/18/14 10:08

Client ID: T8 (13-15) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	6.2	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	6.2	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.10	1
p/m-Xylene	ND		ug/kg	2.5	0.25	1
o-Xylene	ND		ug/kg	2.5	0.21	1
Xylene (Total)	ND		ug/kg	2.5	0.21	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.18	1
1,2-Dichloroethene (total)	ND		ug/kg	1.2	0.18	1
Dibromomethane	ND		ug/kg	12	0.20	1
Styrene	ND		ug/kg	2.5	0.50	1
Dichlorodifluoromethane	ND		ug/kg	12	0.24	1
Acetone	7.1	J	ug/kg	12	1.3	1
Carbon disulfide	ND		ug/kg	12	1.4	1
2-Butanone	ND		ug/kg	12	0.34	1
Vinyl acetate	ND		ug/kg	12	0.16	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.30	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.20	1
2-Hexanone	ND		ug/kg	12	0.83	1
Bromochloromethane	ND		ug/kg	6.2	0.34	1
2,2-Dichloropropane	ND		ug/kg	6.2	0.28	1
1,2-Dibromoethane	ND		ug/kg	5.0	0.22	1
1,3-Dichloropropane	ND		ug/kg	6.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.40	1
Bromobenzene	ND		ug/kg	6.2	0.26	1
n-Butylbenzene	ND		ug/kg	1.2	0.14	1
sec-Butylbenzene	ND		ug/kg	1.2	0.15	1
tert-Butylbenzene	ND		ug/kg	6.2	0.17	1
o-Chlorotoluene	ND		ug/kg	6.2	0.20	1
p-Chlorotoluene	ND		ug/kg	6.2	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.2	0.49	1
Hexachlorobutadiene	ND		ug/kg	6.2	0.28	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.16	1
Naphthalene	ND		ug/kg	6.2	0.17	1
Acrylonitrile	ND		ug/kg	12	0.64	1
n-Propylbenzene	ND		ug/kg	1.2	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.2	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.2	0.23	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.2	0.18	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-06 Date Collected: 12/18/14 10:08

Client ID: T8 (13-15) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	6.2	0.18	1
1,4-Dioxane	ND		ug/kg	120	18.	1
1,4-Diethylbenzene	ND		ug/kg	5.0	0.20	1
4-Ethyltoluene	ND		ug/kg	5.0	0.15	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	5.0	0.16	1
Ethyl ether	ND		ug/kg	6.2	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	90		70-130

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/28/14 11:32
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-02,04,06 Batch: WG752141-3					
Methylene chloride	ND		ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
2-Chloroethylvinyl ether	ND		ug/kg	20	0.62
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12
1,1-Dichloropropene	ND		ug/kg	5.0	0.14
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	0.31	J	ug/kg	5.0	0.29
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/28/14 11:32
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-02,04,06 Batch: WG752141-3					
Trichloroethene	ND		ug/kg	1.0	0.12
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.20
o-Xylene	ND		ug/kg	2.0	0.17
Xylene (Total)	ND		ug/kg	2.0	0.17
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
1,2-Dichloroethene (total)	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	10	0.16
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	2.4	J	ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
Vinyl acetate	ND		ug/kg	10	0.13
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.16
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
2,2-Dichloropropane	ND		ug/kg	5.0	0.23
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
1,3-Dichloropropane	ND		ug/kg	5.0	0.14
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.21
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
tert-Butylbenzene	ND		ug/kg	5.0	0.14

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/28/14 11:32
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-02,04,06 Batch: WG752141-3					
o-Chlorotoluene	ND		ug/kg	5.0	0.16
p-Chlorotoluene	ND		ug/kg	5.0	0.13
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Hexachlorobutadiene	ND		ug/kg	5.0	0.23
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	ND		ug/kg	5.0	0.14
Acrylonitrile	ND		ug/kg	10	0.51
Isopropyl Ether	ND		ug/kg	4.0	0.14
tert-Butyl Alcohol	ND		ug/kg	60	2.9
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.14
Methyl Acetate	ND		ug/kg	20	0.27
Ethyl Acetate	ND		ug/kg	20	0.92
Acrolein	ND		ug/kg	25	8.1
Cyclohexane	ND		ug/kg	20	0.15
1,4-Dioxane	ND		ug/kg	100	14.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	20	0.27
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16
4-Ethyltoluene	ND		ug/kg	4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13
Tetrahydrofuran	ND		ug/kg	20	1.0
Ethyl ether	ND		ug/kg	5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.39
Methyl cyclohexane	ND		ug/kg	4.0	0.15
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	0.12

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/28/14 11:32
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-02,04,06 Batch: WG752141-3					
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	0.10

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	82		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	87		70-130

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/29/14 09:32
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 03 Batch: WG752466-3					
Methylene chloride	ND		ug/kg	500	55.
1,1-Dichloroethane	ND		ug/kg	75	4.3
Chloroform	ND		ug/kg	75	18.
Carbon tetrachloride	ND		ug/kg	50	10.
1,2-Dichloropropane	ND		ug/kg	180	11.
Dibromochloromethane	ND		ug/kg	50	7.7
2-Chloroethylvinyl ether	ND		ug/kg	1000	31.
1,1,2-Trichloroethane	ND		ug/kg	75	15.
Tetrachloroethene	ND		ug/kg	50	7.0
Chlorobenzene	ND		ug/kg	50	17.
Trichlorofluoromethane	ND		ug/kg	250	19.
1,2-Dichloroethane	ND		ug/kg	50	5.7
1,1,1-Trichloroethane	ND		ug/kg	50	5.5
Bromodichloromethane	ND		ug/kg	50	8.7
trans-1,3-Dichloropropene	ND		ug/kg	50	6.0
cis-1,3-Dichloropropene	ND		ug/kg	50	5.9
1,3-Dichloropropene, Total	ND		ug/kg	50	5.9
1,1-Dichloropropene	ND		ug/kg	250	7.1
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	50	5.0
Benzene	ND		ug/kg	50	5.9
Toluene	ND		ug/kg	75	9.7
Ethylbenzene	ND		ug/kg	50	6.4
Chloromethane	ND		ug/kg	250	15.
Bromomethane	ND		ug/kg	100	17.
Vinyl chloride	ND		ug/kg	100	5.9
Chloroethane	ND		ug/kg	100	16.
1,1-Dichloroethene	ND		ug/kg	50	13.
trans-1,2-Dichloroethene	ND		ug/kg	75	11.

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/29/14 09:32
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 03 Batch: WG752466-3					
Trichloroethene	ND		ug/kg	50	6.2
1,2-Dichlorobenzene	ND		ug/kg	250	7.7
1,3-Dichlorobenzene	ND		ug/kg	250	6.8
1,4-Dichlorobenzene	ND		ug/kg	250	6.9
Methyl tert butyl ether	ND		ug/kg	100	4.2
p/m-Xylene	ND		ug/kg	100	9.9
o-Xylene	ND		ug/kg	100	8.6
Xylene (Total)	ND		ug/kg	100	8.6
cis-1,2-Dichloroethene	ND		ug/kg	50	7.1
1,2-Dichloroethene (total)	ND		ug/kg	50	7.1
Dibromomethane	ND		ug/kg	500	8.2
Styrene	ND		ug/kg	100	20.
Dichlorodifluoromethane	ND		ug/kg	500	9.5
Acetone	ND		ug/kg	500	52.
Carbon disulfide	ND		ug/kg	500	55.
2-Butanone	ND		ug/kg	500	14.
Vinyl acetate	ND		ug/kg	500	6.6
4-Methyl-2-pentanone	ND		ug/kg	500	12.
1,2,3-Trichloropropane	ND		ug/kg	500	8.1
2-Hexanone	ND		ug/kg	500	33.
Bromochloromethane	ND		ug/kg	250	14.
2,2-Dichloropropane	ND		ug/kg	250	11.
1,2-Dibromoethane	ND		ug/kg	200	8.7
1,3-Dichloropropane	ND		ug/kg	250	7.3
1,1,1,2-Tetrachloroethane	ND		ug/kg	50	16.
Bromobenzene	ND		ug/kg	250	10.
n-Butylbenzene	ND		ug/kg	50	5.7
sec-Butylbenzene	ND		ug/kg	50	6.1
tert-Butylbenzene	ND		ug/kg	250	6.8

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/29/14 09:32
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 03 Batch: WG752466-3					
o-Chlorotoluene	ND		ug/kg	250	8.0
p-Chlorotoluene	ND		ug/kg	250	6.6
1,2-Dibromo-3-chloropropane	ND		ug/kg	250	20.
Hexachlorobutadiene	ND		ug/kg	250	11.
Isopropylbenzene	ND		ug/kg	50	5.2
p-Isopropyltoluene	ND		ug/kg	50	6.2
Naphthalene	ND		ug/kg	250	6.9
Acrylonitrile	ND		ug/kg	500	26.
Isopropyl Ether	ND		ug/kg	200	7.0
tert-Butyl Alcohol	ND		ug/kg	3000	150
n-Propylbenzene	ND		ug/kg	50	5.5
1,2,3-Trichlorobenzene	ND		ug/kg	250	7.4
1,2,4-Trichlorobenzene	ND		ug/kg	250	9.1
1,3,5-Trimethylbenzene	ND		ug/kg	250	7.2
1,2,4-Trimethylbenzene	ND		ug/kg	250	7.1
Methyl Acetate	ND		ug/kg	1000	14.
Ethyl Acetate	ND		ug/kg	1000	46.
Acrolein	ND		ug/kg	1200	400
Cyclohexane	ND		ug/kg	1000	7.3
1,4-Dioxane	ND		ug/kg	5000	720
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	1000	14.
1,4-Diethylbenzene	ND		ug/kg	200	8.0
4-Ethyltoluene	ND		ug/kg	200	6.2
1,2,4,5-Tetramethylbenzene	ND		ug/kg	200	6.5
Tetrahydrofuran	ND		ug/kg	1000	50.
Ethyl ether	ND		ug/kg	250	13.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	20.
Methyl cyclohexane	ND		ug/kg	200	7.7
Ethyl-Tert-Butyl-Ether	ND		ug/kg	200	5.8

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/29/14 09:32
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 03 Batch: WG752466-3					
Tertiary-Amyl Methyl Ether	ND		ug/kg	200	4.8

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	107		70-130

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/29/14 09:30
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 05 Batch: WG752472-3					
Methylene chloride	ND		ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
2-Chloroethylvinyl ether	ND		ug/kg	20	0.62
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12
1,1-Dichloropropene	ND		ug/kg	5.0	0.14
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	ND		ug/kg	5.0	0.29
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/29/14 09:30
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 05 Batch: WG752472-3					
Trichloroethene	ND		ug/kg	1.0	0.12
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.20
o-Xylene	ND		ug/kg	2.0	0.17
Xylene (Total)	ND		ug/kg	2.0	0.17
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
1,2-Dichloroethene (total)	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	10	0.16
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	ND		ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
Vinyl acetate	ND		ug/kg	10	0.13
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.16
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
2,2-Dichloropropane	ND		ug/kg	5.0	0.23
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
1,3-Dichloropropane	ND		ug/kg	5.0	0.14
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.21
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
tert-Butylbenzene	ND		ug/kg	5.0	0.14

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/29/14 09:30
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 05 Batch: WG752472-3					
o-Chlorotoluene	ND		ug/kg	5.0	0.16
p-Chlorotoluene	ND		ug/kg	5.0	0.13
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Hexachlorobutadiene	ND		ug/kg	5.0	0.23
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	ND		ug/kg	5.0	0.14
Acrylonitrile	ND		ug/kg	10	0.51
Isopropyl Ether	ND		ug/kg	4.0	0.14
tert-Butyl Alcohol	ND		ug/kg	60	2.9
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.14
Methyl Acetate	ND		ug/kg	20	0.27
Ethyl Acetate	ND		ug/kg	20	0.92
Acrolein	ND		ug/kg	25	8.1
Cyclohexane	ND		ug/kg	20	0.15
1,4-Dioxane	ND		ug/kg	100	14.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	20	0.27
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16
4-Ethyltoluene	ND		ug/kg	4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13
Tetrahydrofuran	ND		ug/kg	20	1.0
Ethyl ether	ND		ug/kg	5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.39
Methyl cyclohexane	ND		ug/kg	4.0	0.15
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	0.12

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/29/14 09:30
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 05 Batch: WG752472-3					
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	0.10

Tentatively Identified Compounds			
No Tentatively Identified Compounds	ND		ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-02,04,06 Batch: WG752141-1 WG752141-2								
Methylene chloride	92		95		70-130	3		30
1,1-Dichloroethane	102		96		70-130	6		30
Chloroform	81		78		70-130	4		30
Carbon tetrachloride	81		71		70-130	13		30
1,2-Dichloropropane	111		108		70-130	3		30
Dibromochloromethane	86		86		70-130	0		30
2-Chloroethylvinyl ether	110		108		70-130	2		30
1,1,2-Trichloroethane	85		85		70-130	0		30
Tetrachloroethene	89		83		70-130	7		30
Chlorobenzene	85		84		70-130	1		30
Trichlorofluoromethane	**61**	Q	**52**	Q	70-139	16		30
1,2-Dichloroethane	83		82		70-130	1		30
1,1,1-Trichloroethane	77		70		70-130	10		30
Bromodichloromethane	81		80		70-130	1		30
trans-1,3-Dichloropropene	86		84		70-130	2		30
cis-1,3-Dichloropropene	97		95		70-130	2		30
1,1-Dichloropropene	91		82		70-130	10		30
Bromoform	82		80		70-130	2		30
1,1,2,2-Tetrachloroethane	82		82		70-130	0		30
Benzene	96		91		70-130	5		30
Toluene	83		80		70-130	4		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-02,04,06 Batch: WG752141-1 WG752141-2								
Ethylbenzene	84		80		70-130	5		30
Chloromethane	115		106		52-130	8		30
Bromomethane	83		72		57-147	14		30
Vinyl chloride	101		88		67-130	14		30
Chloroethane	80		67		50-151	18		30
1,1-Dichloroethene	92		82		65-135	11		30
trans-1,2-Dichloroethene	95		88		70-130	8		30
Trichloroethene	89		82		70-130	8		30
1,2-Dichlorobenzene	88		87		70-130	1		30
1,3-Dichlorobenzene	89		86		70-130	3		30
1,4-Dichlorobenzene	88		85		70-130	3		30
Methyl tert butyl ether	98		97		66-130	1		30
p/m-Xylene	88		84		70-130	5		30
o-Xylene	90		87		70-130	3		30
cis-1,2-Dichloroethene	96		91		70-130	5		30
Dibromomethane	83		83		70-130	0		30
Styrene	88		87		70-130	1		30
Dichlorodifluoromethane	64		54		30-146	17		30
Acetone	103		104		54-140	1		30
Carbon disulfide	80		72		59-130	11		30
2-Butanone	123		123		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-02,04,06 Batch: WG752141-1 WG752141-2								
Vinyl acetate	118		115		70-130	3		30
4-Methyl-2-pentanone	122		120		70-130	2		30
1,2,3-Trichloropropane	83		82		68-130	1		30
2-Hexanone	110		110		70-130	0		30
Bromochloromethane	101		101		70-130	0		30
2,2-Dichloropropane	82		75		70-130	9		30
1,2-Dibromoethane	86		86		70-130	0		30
1,3-Dichloropropane	88		87		69-130	1		30
1,1,1,2-Tetrachloroethane	86		84		70-130	2		30
Bromobenzene	90		87		70-130	3		30
n-Butylbenzene	78		72		70-130	8		30
sec-Butylbenzene	81		74		70-130	9		30
tert-Butylbenzene	85		79		70-130	7		30
o-Chlorotoluene	83		78		70-130	6		30
p-Chlorotoluene	82		79		70-130	4		30
1,2-Dibromo-3-chloropropane	81		84		68-130	4		30
Hexachlorobutadiene	82		76		67-130	8		30
Isopropylbenzene	82		76		70-130	8		30
p-Isopropyltoluene	86		80		70-130	7		30
Naphthalene	94		95		70-130	1		30
Acrylonitrile	**138**	Q	130		70-130	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-02,04,06 Batch: WG752141-1 WG752141-2								
Isopropyl Ether	**138**	Q	**134**	Q	66-130	3		30
tert-Butyl Alcohol	99		101		70-130	2		30
n-Propylbenzene	81		75		70-130	8		30
1,2,3-Trichlorobenzene	92		91		70-130	1		30
1,2,4-Trichlorobenzene	92		92		70-130	0		30
1,3,5-Trimethylbenzene	82		77		70-130	6		30
1,2,4-Trimethylbenzene	82		78		70-130	5		30
Methyl Acetate	127		126		51-146	1		30
Ethyl Acetate	125		125		70-130	0		30
Acrolein	128		123		70-130	4		30
Cyclohexane	120		104		59-142	14		30
1,4-Dioxane	100		106		65-136	6		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	86		73		50-139	16		30
1,4-Diethylbenzene	86		80		70-130	7		30
4-Ethyltoluene	82		76		70-130	8		30
1,2,4,5-Tetramethylbenzene	88		86		70-130	2		30
Tetrahydrofuran	**135**	Q	**136**	Q	66-130	1		30
Ethyl ether	100		102		67-130	2		30
trans-1,4-Dichloro-2-butene	86		88		70-130	2		30
Methyl cyclohexane	92		79		70-130	15		30
Ethyl-Tert-Butyl-Ether	114		111		70-130	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-02,04,06 Batch: WG752141-1 WG752141-2								
Tertiary-Amyl Methyl Ether	100		99		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	82		80		70-130
Toluene-d8	92		92		70-130
4-Bromofluorobenzene	97		95		70-130
Dibromofluoromethane	92		91		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03 Batch: WG752466-1 WG752466-2								
Methylene chloride	106		106		70-130	0		30
1,1-Dichloroethane	104		101		70-130	3		30
Chloroform	104		105		70-130	1		30
Carbon tetrachloride	115		111		70-130	4		30
1,2-Dichloropropane	99		99		70-130	0		30
Dibromochloromethane	90		94		70-130	4		30
2-Chloroethylvinyl ether	**210**	Q	**210**	Q	70-130	0		30
1,1,2-Trichloroethane	91		94		70-130	3		30
Tetrachloroethene	103		100		70-130	3		30
Chlorobenzene	95		97		70-130	2		30
Trichlorofluoromethane	114		107		70-139	6		30
1,2-Dichloroethane	104		104		70-130	0		30
1,1,1-Trichloroethane	111		108		70-130	3		30
Bromodichloromethane	100		104		70-130	4		30
trans-1,3-Dichloropropene	91		94		70-130	3		30
cis-1,3-Dichloropropene	97		99		70-130	2		30
1,1-Dichloropropene	110		106		70-130	4		30
Bromoform	90		92		70-130	2		30
1,1,2,2-Tetrachloroethane	89		91		70-130	2		30
Benzene	102		102		70-130	0		30
Toluene	94		94		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03 Batch: WG752466-1 WG752466-2								
Ethylbenzene	98		98		70-130	0		30
Chloromethane	86		99		52-130	14		30
Bromomethane	74		80		57-147	8		30
Vinyl chloride	109		107		67-130	2		30
Chloroethane	108		105		50-151	3		30
1,1-Dichloroethene	84		84		65-135	0		30
trans-1,2-Dichloroethene	103		103		70-130	0		30
Trichloroethene	108		106		70-130	2		30
1,2-Dichlorobenzene	95		96		70-130	1		30
1,3-Dichlorobenzene	98		99		70-130	1		30
1,4-Dichlorobenzene	95		97		70-130	2		30
Methyl tert butyl ether	94		96		66-130	2		30
p/m-Xylene	99		100		70-130	1		30
o-Xylene	98		99		70-130	1		30
cis-1,2-Dichloroethene	101		101		70-130	0		30
Dibromomethane	96		99		70-130	3		30
Styrene	96		97		70-130	1		30
Dichlorodifluoromethane	91		85		30-146	7		30
Acetone	85		84		54-140	1		30
Carbon disulfide	80		87		59-130	8		30
2-Butanone	83		91		70-130	9		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03 Batch: WG752466-1 WG752466-2								
Vinyl acetate	104		104		70-130	0		30
4-Methyl-2-pentanone	89		91		70-130	2		30
1,2,3-Trichloropropane	91		93		68-130	2		30
2-Hexanone	81		84		70-130	4		30
Bromochloromethane	99		101		70-130	2		30
2,2-Dichloropropane	110		107		70-130	3		30
1,2-Dibromoethane	90		93		70-130	3		30
1,3-Dichloropropane	91		94		69-130	3		30
1,1,1,2-Tetrachloroethane	95		98		70-130	3		30
Bromobenzene	94		94		70-130	0		30
n-Butylbenzene	113		111		70-130	2		30
sec-Butylbenzene	103		101		70-130	2		30
tert-Butylbenzene	100		98		70-130	2		30
o-Chlorotoluene	98		97		70-130	1		30
p-Chlorotoluene	100		100		70-130	0		30
1,2-Dibromo-3-chloropropane	82		84		68-130	2		30
Hexachlorobutadiene	103		100		67-130	3		30
Isopropylbenzene	100		100		70-130	0		30
p-Isopropyltoluene	104		103		70-130	1		30
Naphthalene	82		84		70-130	2		30
Acrylonitrile	90		90		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03 Batch: WG752466-1 WG752466-2								
Isopropyl Ether	100		101		66-130	1		30
tert-Butyl Alcohol	79		81		70-130	3		30
n-Propylbenzene	104		103		70-130	1		30
1,2,3-Trichlorobenzene	92		96		70-130	4		30
1,2,4-Trichlorobenzene	99		101		70-130	2		30
1,3,5-Trimethylbenzene	101		100		70-130	1		30
1,2,4-Trimethylbenzene	100		100		70-130	0		30
Methyl Acetate	89		91		51-146	2		30
Ethyl Acetate	94		95		70-130	1		30
Acrolein	92		95		70-130	3		30
Cyclohexane	113		105		59-142	7		30
1,4-Dioxane	94		95		65-136	1		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	102		104		50-139	2		30
1,4-Diethylbenzene	113		112		70-130	1		30
4-Ethyltoluene	109		108		70-130	1		30
1,2,4,5-Tetramethylbenzene	104		106		70-130	2		30
Tetrahydrofuran	82		96		66-130	16		30
Ethyl ether	88		92		67-130	4		30
trans-1,4-Dichloro-2-butene	94		93		70-130	1		30
Methyl cyclohexane	112		105		70-130	6		30
Ethyl-Tert-Butyl-Ether	96		96		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03 Batch: WG752466-1 WG752466-2								
Tertiary-Amyl Methyl Ether	94		96		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		105		70-130
Toluene-d8	96		98		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	105		106		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 05 Batch: WG752472-1 WG752472-2								
Methylene chloride	103		99		70-130	4		30
1,1-Dichloroethane	103		98		70-130	5		30
Chloroform	101		98		70-130	3		30
Carbon tetrachloride	110		98		70-130	12		30
1,2-Dichloropropane	102		98		70-130	4		30
Dibromochloromethane	94		92		70-130	2		30
2-Chloroethylvinyl ether	87		85		70-130	2		30
1,1,2-Trichloroethane	95		93		70-130	2		30
Tetrachloroethene	105		94		70-130	11		30
Chlorobenzene	97		93		70-130	4		30
Trichlorofluoromethane	108		97		70-139	11		30
1,2-Dichloroethane	98		96		70-130	2		30
1,1,1-Trichloroethane	108		98		70-130	10		30
Bromodichloromethane	99		97		70-130	2		30
trans-1,3-Dichloropropene	94		93		70-130	1		30
cis-1,3-Dichloropropene	102		101		70-130	1		30
1,1-Dichloropropene	109		97		70-130	12		30
Bromoform	81		76		70-130	6		30
1,1,2,2-Tetrachloroethane	90		89		70-130	1		30
Benzene	105		99		70-130	6		30
Toluene	96		90		70-130	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 05 Batch: WG752472-1 WG752472-2								
Ethylbenzene	99		93		70-130	6		30
Chloromethane	97		89		52-130	9		30
Bromomethane	108		100		57-147	8		30
Vinyl chloride	105		96		67-130	9		30
Chloroethane	132		113		50-151	16		30
1,1-Dichloroethene	109		97		65-135	12		30
trans-1,2-Dichloroethene	105		97		70-130	8		30
Trichloroethene	106		98		70-130	8		30
1,2-Dichlorobenzene	95		92		70-130	3		30
1,3-Dichlorobenzene	98		93		70-130	5		30
1,4-Dichlorobenzene	96		92		70-130	4		30
Methyl tert butyl ether	97		96		66-130	1		30
p/m-Xylene	101		94		70-130	7		30
o-Xylene	99		94		70-130	5		30
cis-1,2-Dichloroethene	104		100		70-130	4		30
Dibromomethane	100		98		70-130	2		30
Styrene	100		95		70-130	5		30
Dichlorodifluoromethane	92		79		30-146	15		30
Acetone	94		93		54-140	1		30
Carbon disulfide	101		91		59-130	10		30
2-Butanone	98		98		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 05 Batch: WG752472-1 WG752472-2								
Vinyl acetate	94		94		70-130	0		30
4-Methyl-2-pentanone	78		77		70-130	1		30
1,2,3-Trichloropropane	89		87		68-130	2		30
2-Hexanone	71		70		70-130	1		30
Bromochloromethane	105		104		70-130	1		30
2,2-Dichloropropane	108		98		70-130	10		30
1,2-Dibromoethane	95		93		70-130	2		30
1,3-Dichloropropane	93		92		69-130	1		30
1,1,1,2-Tetrachloroethane	98		94		70-130	4		30
Bromobenzene	92		89		70-130	3		30
n-Butylbenzene	104		93		70-130	11		30
sec-Butylbenzene	101		91		70-130	10		30
tert-Butylbenzene	99		90		70-130	10		30
o-Chlorotoluene	96		91		70-130	5		30
p-Chlorotoluene	97		91		70-130	6		30
1,2-Dibromo-3-chloropropane	79		80		68-130	1		30
Hexachlorobutadiene	101		92		67-130	9		30
Isopropylbenzene	98		89		70-130	10		30
p-Isopropyltoluene	101		92		70-130	9		30
Naphthalene	92		90		70-130	2		30
Acrylonitrile	92		92		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 05 Batch: WG752472-1 WG752472-2								
Isopropyl Ether	99		96		66-130	3		30
tert-Butyl Alcohol	93		94		70-130	1		30
n-Propylbenzene	98		90		70-130	9		30
1,2,3-Trichlorobenzene	97		94		70-130	3		30
1,2,4-Trichlorobenzene	100		95		70-130	5		30
1,3,5-Trimethylbenzene	99		92		70-130	7		30
1,2,4-Trimethylbenzene	98		92		70-130	6		30
Methyl Acetate	93		93		51-146	0		30
Ethyl Acetate	92		92		70-130	0		30
Acrolein	93		90		70-130	3		30
Cyclohexane	112		98		59-142	13		30
1,4-Dioxane	109		111		65-136	2		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	114		99		50-139	14		30
1,4-Diethylbenzene	101		92		70-130	9		30
4-Ethyltoluene	100		91		70-130	9		30
1,2,4,5-Tetramethylbenzene	86		81		70-130	6		30
Tetrahydrofuran	87		89		66-130	2		30
Ethyl ether	98		97		67-130	1		30
trans-1,4-Dichloro-2-butene	80		81		70-130	1		30
Methyl cyclohexane	114		97		70-130	16		30
Ethyl-Tert-Butyl-Ether	99		98		70-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 05 Batch: WG752472-1 WG752472-2								
Tertiary-Amyl Methyl Ether	99		98		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		95		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	98		98		70-130
Dibromofluoromethane	104		103		70-130

SEMIVOLATILES

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-01	Date Collected:	12/18/14 09:08
Client ID:	T3 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/23/14 10:05
Analytical Date:	12/29/14 13:20		
Analyst:	PS		
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	36.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	56.	1
Hexachlorobenzene	ND		ug/kg	100	32.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	48.	1
2-Chloronaphthalene	ND		ug/kg	170	56.	1
1,2-Dichlorobenzene	ND		ug/kg	170	57.	1
1,3-Dichlorobenzene	ND		ug/kg	170	54.	1
1,4-Dichlorobenzene	ND		ug/kg	170	52.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	37.	1
2,6-Dinitrotoluene	ND		ug/kg	170	44.	1
Fluoranthene	290		ug/kg	100	32.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	52.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	40.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	61.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	52.	1
Hexachlorobutadiene	ND		ug/kg	170	49.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	110	1
Hexachloroethane	ND		ug/kg	140	31.	1
Isophorone	ND		ug/kg	160	46.	1
Naphthalene	ND		ug/kg	170	57.	1
Nitrobenzene	ND		ug/kg	160	41.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	36.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	51.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	170	45.	1
Butyl benzyl phthalate	ND		ug/kg	170	34.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	42.	1
Diethyl phthalate	ND		ug/kg	170	36.	1
Dimethyl phthalate	ND		ug/kg	170	44.	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-01 Date Collected: 12/18/14 09:08

Client ID: T3 (3-5) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	140		ug/kg	100	34.	1
Benzo(a)pyrene	120	J	ug/kg	140	42.	1
Benzo(b)fluoranthene	160		ug/kg	100	35.	1
Benzo(k)fluoranthene	60	J	ug/kg	100	33.	1
Chrysene	130		ug/kg	100	34.	1
Acenaphthylene	ND		ug/kg	140	32.	1
Anthracene	38	J	ug/kg	100	29.	1
Benzo(ghi)perylene	73	J	ug/kg	140	36.	1
Fluorene	ND		ug/kg	170	49.	1
Phenanthrene	160		ug/kg	100	34.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	33.	1
Indeno(1,2,3-cd)Pyrene	82	J	ug/kg	140	38.	1
Pyrene	230		ug/kg	100	34.	1
Biphenyl	ND		ug/kg	390	57.	1
4-Chloroaniline	ND		ug/kg	170	46.	1
2-Nitroaniline	ND		ug/kg	170	49.	1
3-Nitroaniline	ND		ug/kg	170	48.	1
4-Nitroaniline	ND		ug/kg	170	46.	1
Dibenzofuran	ND		ug/kg	170	58.	1
2-Methylnaphthalene	ND		ug/kg	210	55.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	53.	1
Acetophenone	ND		ug/kg	170	53.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
P-Chloro-M-Cresol	ND		ug/kg	170	50.	1
2-Chlorophenol	ND		ug/kg	170	52.	1
2,4-Dichlorophenol	ND		ug/kg	160	56.	1
2,4-Dimethylphenol	ND		ug/kg	170	51.	1
2-Nitrophenol	ND		ug/kg	370	54.	1
4-Nitrophenol	ND		ug/kg	240	56.	1
2,4-Dinitrophenol	ND		ug/kg	830	240	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	63.	1
Pentachlorophenol	ND		ug/kg	140	37.	1
Phenol	ND		ug/kg	170	51.	1
2-Methylphenol	ND		ug/kg	170	56.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	56.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	56.	1
Benzoic Acid	ND		ug/kg	560	170	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	ND		ug/kg	170	37.	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-01	Date Collected:	12/18/14 09:08
Client ID:	T3 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	72		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	90		0-136
4-Terphenyl-d14	74		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-02	Date Collected:	12/18/14 09:30
Client ID:	T3 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/23/14 10:05
Analytical Date:	12/29/14 15:03		
Analyst:	PS		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	61.	1
Hexachlorobenzene	ND		ug/kg	110	35.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	52.	1
2-Chloronaphthalene	ND		ug/kg	190	61.	1
1,2-Dichlorobenzene	ND		ug/kg	190	61.	1
1,3-Dichlorobenzene	ND		ug/kg	190	59.	1
1,4-Dichlorobenzene	ND		ug/kg	190	57.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	40.	1
2,6-Dinitrotoluene	ND		ug/kg	190	48.	1
Fluoranthene	ND		ug/kg	110	34.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	57.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	43.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	66.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	57.	1
Hexachlorobutadiene	ND		ug/kg	190	53.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	120	1
Hexachloroethane	ND		ug/kg	150	34.	1
Isophorone	ND		ug/kg	170	50.	1
Naphthalene	ND		ug/kg	190	62.	1
Nitrobenzene	ND		ug/kg	170	44.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	39.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	56.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	190	49.	1
Butyl benzyl phthalate	ND		ug/kg	190	36.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	46.	1
Diethyl phthalate	ND		ug/kg	190	40.	1
Dimethyl phthalate	ND		ug/kg	190	48.	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-02 Date Collected: 12/18/14 09:30

Client ID: T3 (13-15) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	ND		ug/kg	110	37.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	38.	1
Benzo(k)fluoranthene	ND		ug/kg	110	36.	1
Chrysene	ND		ug/kg	110	37.	1
Acenaphthylene	ND		ug/kg	150	35.	1
Anthracene	ND		ug/kg	110	31.	1
Benzo(ghi)perylene	ND		ug/kg	150	39.	1
Fluorene	ND		ug/kg	190	54.	1
Phenanthrene	ND		ug/kg	110	36.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	42.	1
Pyrene	ND		ug/kg	110	36.	1
Biphenyl	ND		ug/kg	430	62.	1
4-Chloroaniline	ND		ug/kg	190	49.	1
2-Nitroaniline	ND		ug/kg	190	53.	1
3-Nitroaniline	ND		ug/kg	190	52.	1
4-Nitroaniline	ND		ug/kg	190	50.	1
Dibenzofuran	ND		ug/kg	190	62.	1
2-Methylnaphthalene	ND		ug/kg	220	60.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	58.	1
Acetophenone	ND		ug/kg	190	58.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
P-Chloro-M-Cresol	ND		ug/kg	190	54.	1
2-Chlorophenol	ND		ug/kg	190	56.	1
2,4-Dichlorophenol	ND		ug/kg	170	61.	1
2,4-Dimethylphenol	ND		ug/kg	190	56.	1
2-Nitrophenol	ND		ug/kg	400	58.	1
4-Nitrophenol	ND		ug/kg	260	61.	1
2,4-Dinitrophenol	ND		ug/kg	900	260	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	68.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	190	55.	1
2-Methylphenol	ND		ug/kg	190	60.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	61.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	61.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	40.	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-02	Date Collected:	12/18/14 09:30
Client ID:	T3 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	83		0-136
4-Terphenyl-d14	70		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-03	Date Collected:	12/18/14 10:50
Client ID:	T7 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/23/14 10:05
Analytical Date:	12/29/14 15:29		
Analyst:	PS		
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	45	J	ug/kg	140	35.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	56.	1
Hexachlorobenzene	ND		ug/kg	100	32.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	48.	1
2-Chloronaphthalene	ND		ug/kg	170	56.	1
1,2-Dichlorobenzene	ND		ug/kg	170	56.	1
1,3-Dichlorobenzene	ND		ug/kg	170	54.	1
1,4-Dichlorobenzene	ND		ug/kg	170	52.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	37.	1
2,6-Dinitrotoluene	ND		ug/kg	170	44.	1
Fluoranthene	710		ug/kg	100	32.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	52.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	40.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	60.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	52.	1
Hexachlorobutadiene	ND		ug/kg	170	48.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	110	1
Hexachloroethane	ND		ug/kg	140	31.	1
Isophorone	ND		ug/kg	150	46.	1
Naphthalene	ND		ug/kg	170	57.	1
Nitrobenzene	ND		ug/kg	150	41.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	36.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	51.	1
Bis(2-Ethylhexyl)phthalate	160	J	ug/kg	170	45.	1
Butyl benzyl phthalate	ND		ug/kg	170	34.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	42.	1
Diethyl phthalate	ND		ug/kg	170	36.	1
Dimethyl phthalate	ND		ug/kg	170	44.	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-03 Date Collected: 12/18/14 10:50

Client ID: T7 (3-5) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	350		ug/kg	100	34.	1
Benzo(a)pyrene	290		ug/kg	140	42.	1
Benzo(b)fluoranthene	370		ug/kg	100	35.	1
Benzo(k)fluoranthene	150		ug/kg	100	33.	1
Chrysene	340		ug/kg	100	34.	1
Acenaphthylene	ND		ug/kg	140	32.	1
Anthracene	88	J	ug/kg	100	29.	1
Benzo(ghi)perylene	180		ug/kg	140	36.	1
Fluorene	ND		ug/kg	170	49.	1
Phenanthrene	520		ug/kg	100	34.	1
Dibenzo(a,h)anthracene	41	J	ug/kg	100	33.	1
Indeno(1,2,3-cd)Pyrene	190		ug/kg	140	38.	1
Pyrene	670		ug/kg	100	33.	1
Biphenyl	ND		ug/kg	390	57.	1
4-Chloroaniline	ND		ug/kg	170	45.	1
2-Nitroaniline	ND		ug/kg	170	48.	1
3-Nitroaniline	ND		ug/kg	170	47.	1
4-Nitroaniline	ND		ug/kg	170	46.	1
Dibenzofuran	ND		ug/kg	170	57.	1
2-Methylnaphthalene	ND		ug/kg	210	55.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	53.	1
Acetophenone	ND		ug/kg	170	53.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
P-Chloro-M-Cresol	ND		ug/kg	170	50.	1
2-Chlorophenol	ND		ug/kg	170	52.	1
2,4-Dichlorophenol	ND		ug/kg	150	56.	1
2,4-Dimethylphenol	ND		ug/kg	170	51.	1
2-Nitrophenol	ND		ug/kg	370	54.	1
4-Nitrophenol	ND		ug/kg	240	56.	1
2,4-Dinitrophenol	ND		ug/kg	820	240	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	63.	1
Pentachlorophenol	ND		ug/kg	140	37.	1
Phenol	ND		ug/kg	170	51.	1
2-Methylphenol	ND		ug/kg	170	55.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	56.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	56.	1
Benzoic Acid	ND		ug/kg	560	170	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	ND		ug/kg	170	37.	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-03	Date Collected:	12/18/14 10:50
Client ID:	T7 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	66		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	77		0-136
4-Terphenyl-d14	62		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-04	Date Collected:	12/18/14 11:10
Client ID:	T7 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/23/14 10:05
Analytical Date:	12/29/14 15:55		
Analyst:	PS		
Percent Solids:	98%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	35.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	56.	1
Hexachlorobenzene	ND		ug/kg	100	32.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	48.	1
2-Chloronaphthalene	ND		ug/kg	170	56.	1
1,2-Dichlorobenzene	ND		ug/kg	170	56.	1
1,3-Dichlorobenzene	ND		ug/kg	170	54.	1
1,4-Dichlorobenzene	ND		ug/kg	170	52.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	37.	1
2,6-Dinitrotoluene	ND		ug/kg	170	44.	1
Fluoranthene	ND		ug/kg	100	31.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	52.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	39.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	60.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	52.	1
Hexachlorobutadiene	ND		ug/kg	170	48.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	110	1
Hexachloroethane	ND		ug/kg	140	31.	1
Isophorone	ND		ug/kg	150	45.	1
Naphthalene	ND		ug/kg	170	56.	1
Nitrobenzene	ND		ug/kg	150	40.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	36.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	51.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	170	45.	1
Butyl benzyl phthalate	ND		ug/kg	170	33.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	42.	1
Diethyl phthalate	ND		ug/kg	170	36.	1
Dimethyl phthalate	ND		ug/kg	170	43.	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-04 Date Collected: 12/18/14 11:10

Client ID: T7 (13-15) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	ND		ug/kg	100	33.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	34.	1
Benzo(k)fluoranthene	ND		ug/kg	100	32.	1
Chrysene	ND		ug/kg	100	33.	1
Acenaphthylene	ND		ug/kg	140	32.	1
Anthracene	ND		ug/kg	100	28.	1
Benzo(ghi)perylene	ND		ug/kg	140	35.	1
Fluorene	ND		ug/kg	170	49.	1
Phenanthrene	ND		ug/kg	100	33.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	33.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	140	38.	1
Pyrene	ND		ug/kg	100	33.	1
Biphenyl	ND		ug/kg	390	56.	1
4-Chloroaniline	ND		ug/kg	170	45.	1
2-Nitroaniline	ND		ug/kg	170	48.	1
3-Nitroaniline	ND		ug/kg	170	47.	1
4-Nitroaniline	ND		ug/kg	170	46.	1
Dibenzofuran	ND		ug/kg	170	57.	1
2-Methylnaphthalene	ND		ug/kg	200	54.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	53.	1
Acetophenone	ND		ug/kg	170	53.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
P-Chloro-M-Cresol	ND		ug/kg	170	49.	1
2-Chlorophenol	ND		ug/kg	170	51.	1
2,4-Dichlorophenol	ND		ug/kg	150	55.	1
2,4-Dimethylphenol	ND		ug/kg	170	51.	1
2-Nitrophenol	ND		ug/kg	370	53.	1
4-Nitrophenol	ND		ug/kg	240	55.	1
2,4-Dinitrophenol	ND		ug/kg	820	230	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	62.	1
Pentachlorophenol	ND		ug/kg	140	36.	1
Phenol	ND		ug/kg	170	50.	1
2-Methylphenol	ND		ug/kg	170	55.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	56.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	55.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	ND		ug/kg	170	37.	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-04	Date Collected:	12/18/14 11:10
Client ID:	T7 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		25-120
Phenol-d6	54		10-120
Nitrobenzene-d5	57		23-120
2-Fluorobiphenyl	57		30-120
2,4,6-Tribromophenol	82		0-136
4-Terphenyl-d14	66		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-05	Date Collected:	12/18/14 10:00
Client ID:	T8 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/23/14 10:19
Analytical Date:	12/29/14 16:21		
Analyst:	PS		
Percent Solids:	94%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	1000		ug/kg	140	35.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	56.	1
Hexachlorobenzene	ND		ug/kg	100	32.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	48.	1
2-Chloronaphthalene	ND		ug/kg	170	56.	1
1,2-Dichlorobenzene	ND		ug/kg	170	56.	1
1,3-Dichlorobenzene	ND		ug/kg	170	54.	1
1,4-Dichlorobenzene	ND		ug/kg	170	52.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	37.	1
2,6-Dinitrotoluene	ND		ug/kg	170	44.	1
Fluoranthene	8900	E	ug/kg	100	32.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	52.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	39.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	60.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	52.	1
Hexachlorobutadiene	ND		ug/kg	170	48.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	110	1
Hexachloroethane	ND		ug/kg	140	31.	1
Isophorone	ND		ug/kg	150	46.	1
Naphthalene	92	J	ug/kg	170	57.	1
Nitrobenzene	ND		ug/kg	150	41.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	36.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	51.	1
Bis(2-Ethylhexyl)phthalate	280		ug/kg	170	45.	1
Butyl benzyl phthalate	ND		ug/kg	170	34.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	42.	1
Diethyl phthalate	ND		ug/kg	170	36.	1
Dimethyl phthalate	ND		ug/kg	170	44.	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-05 Date Collected: 12/18/14 10:00

Client ID: T8 (3-5) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	4000		ug/kg	100	34.	1
Benzo(a)pyrene	3400		ug/kg	140	42.	1
Benzo(b)fluoranthene	4300		ug/kg	100	35.	1
Benzo(k)fluoranthene	1400		ug/kg	100	33.	1
Chrysene	3800		ug/kg	100	34.	1
Acenaphthylene	110	J	ug/kg	140	32.	1
Anthracene	2200		ug/kg	100	28.	1
Benzo(ghi)perylene	1900		ug/kg	140	36.	1
Fluorene	800		ug/kg	170	49.	1
Phenanthrene	8400	E	ug/kg	100	34.	1
Dibenzo(a,h)anthracene	420		ug/kg	100	33.	1
Indeno(1,2,3-cd)Pyrene	2100		ug/kg	140	38.	1
Pyrene	8300	E	ug/kg	100	33.	1
Biphenyl	64	J	ug/kg	390	57.	1
4-Chloroaniline	ND		ug/kg	170	45.	1
2-Nitroaniline	ND		ug/kg	170	48.	1
3-Nitroaniline	ND		ug/kg	170	47.	1
4-Nitroaniline	ND		ug/kg	170	46.	1
Dibenzofuran	340		ug/kg	170	57.	1
2-Methylnaphthalene	170	J	ug/kg	210	55.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	53.	1
Acetophenone	ND		ug/kg	170	53.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
P-Chloro-M-Cresol	ND		ug/kg	170	50.	1
2-Chlorophenol	ND		ug/kg	170	52.	1
2,4-Dichlorophenol	ND		ug/kg	150	56.	1
2,4-Dimethylphenol	ND		ug/kg	170	51.	1
2-Nitrophenol	ND		ug/kg	370	54.	1
4-Nitrophenol	ND		ug/kg	240	56.	1
2,4-Dinitrophenol	ND		ug/kg	820	230	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	63.	1
Pentachlorophenol	ND		ug/kg	140	37.	1
Phenol	ND		ug/kg	170	51.	1
2-Methylphenol	ND		ug/kg	170	55.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	56.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	56.	1
Benzoic Acid	ND		ug/kg	560	170	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	250		ug/kg	170	37.	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-05	Date Collected:	12/18/14 10:00
Client ID:	T8 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	88		0-136
4-Terphenyl-d14	74		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-05 D	Date Collected:	12/18/14 10:00
Client ID:	T8 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/23/14 10:19
Analytical Date:	12/30/14 10:06		
Analyst:	PS		
Percent Solids:	94%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	9300		ug/kg	210	63.	2
Phenanthrene	8800		ug/kg	210	67.	2
Pyrene	8600		ug/kg	210	67.	2

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-06	Date Collected:	12/18/14 10:08
Client ID:	T8 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/23/14 10:19
Analytical Date:	12/29/14 16:47		
Analyst:	PS		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	61.	1
Hexachlorobenzene	ND		ug/kg	110	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	52.	1
2-Chloronaphthalene	ND		ug/kg	180	60.	1
1,2-Dichlorobenzene	ND		ug/kg	180	61.	1
1,3-Dichlorobenzene	ND		ug/kg	180	58.	1
1,4-Dichlorobenzene	ND		ug/kg	180	56.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	40.	1
2,6-Dinitrotoluene	ND		ug/kg	180	47.	1
Fluoranthene	ND		ug/kg	110	34.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	56.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	65.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	56.	1
Hexachlorobutadiene	ND		ug/kg	180	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	120	1
Hexachloroethane	ND		ug/kg	150	34.	1
Isophorone	ND		ug/kg	170	49.	1
Naphthalene	ND		ug/kg	180	61.	1
Nitrobenzene	ND		ug/kg	170	44.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	39.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	55.	1
Bis(2-Ethylhexyl)phthalate	51	J	ug/kg	180	48.	1
Butyl benzyl phthalate	ND		ug/kg	180	36.	1
Di-n-butylphthalate	ND		ug/kg	180	36.	1
Di-n-octylphthalate	ND		ug/kg	180	46.	1
Diethyl phthalate	ND		ug/kg	180	39.	1
Dimethyl phthalate	ND		ug/kg	180	47.	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-06 Date Collected: 12/18/14 10:08

Client ID: T8 (13-15) Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	ND		ug/kg	110	36.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	37.	1
Benzo(k)fluoranthene	ND		ug/kg	110	35.	1
Chrysene	ND		ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	150	34.	1
Anthracene	ND		ug/kg	110	31.	1
Benzo(ghi)perylene	ND		ug/kg	150	38.	1
Fluorene	ND		ug/kg	180	53.	1
Phenanthrene	ND		ug/kg	110	36.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	41.	1
Pyrene	ND		ug/kg	110	36.	1
Biphenyl	ND		ug/kg	420	61.	1
4-Chloroaniline	ND		ug/kg	180	49.	1
2-Nitroaniline	ND		ug/kg	180	52.	1
3-Nitroaniline	ND		ug/kg	180	51.	1
4-Nitroaniline	ND		ug/kg	180	50.	1
Dibenzofuran	ND		ug/kg	180	62.	1
2-Methylnaphthalene	ND		ug/kg	220	59.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	57.	1
Acetophenone	ND		ug/kg	180	57.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
P-Chloro-M-Cresol	ND		ug/kg	180	54.	1
2-Chlorophenol	ND		ug/kg	180	56.	1
2,4-Dichlorophenol	ND		ug/kg	170	60.	1
2,4-Dimethylphenol	ND		ug/kg	180	55.	1
2-Nitrophenol	ND		ug/kg	400	58.	1
4-Nitrophenol	ND		ug/kg	260	60.	1
2,4-Dinitrophenol	ND		ug/kg	890	250	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	68.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	55.	1
2-Methylphenol	ND		ug/kg	180	60.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	61.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	60.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	ND		ug/kg	180	40.	1

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-06	Date Collected:	12/18/14 10:08
Client ID:	T8 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	91		0-136
4-Terphenyl-d14	77		18-120

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/27/14 11:05
Analyst: PS

Extraction Method: EPA 3546
Extraction Date: 12/23/14 10:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG751338-1					
Acenaphthene	ND		ug/kg	130	34.
1,2,4-Trichlorobenzene	ND		ug/kg	160	53.
Hexachlorobenzene	ND		ug/kg	98	30.
Bis(2-chloroethyl)ether	ND		ug/kg	150	46.
2-Chloronaphthalene	ND		ug/kg	160	53.
1,2-Dichlorobenzene	ND		ug/kg	160	53.
1,3-Dichlorobenzene	ND		ug/kg	160	51.
1,4-Dichlorobenzene	ND		ug/kg	160	49.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	35.
2,6-Dinitrotoluene	ND		ug/kg	160	42.
Fluoranthene	ND		ug/kg	98	30.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	50.
4-Bromophenyl phenyl ether	ND		ug/kg	160	37.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	57.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	49.
Hexachlorobutadiene	ND		ug/kg	160	46.
Hexachlorocyclopentadiene	ND		ug/kg	470	100
Hexachloroethane	ND		ug/kg	130	30.
Isophorone	ND		ug/kg	150	43.
Naphthalene	ND		ug/kg	160	54.
Nitrobenzene	ND		ug/kg	150	39.
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	34.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	48.
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	160	43.
Butyl benzyl phthalate	ND		ug/kg	160	32.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	40.
Diethyl phthalate	ND		ug/kg	160	34.

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/27/14 11:05
Analyst: PS

Extraction Method: EPA 3546
Extraction Date: 12/23/14 10:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG751338-1					
Dimethyl phthalate	ND		ug/kg	160	41.
Benzo(a)anthracene	ND		ug/kg	98	32.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	33.
Benzo(k)fluoranthene	ND		ug/kg	98	31.
Chrysene	ND		ug/kg	98	32.
Acenaphthylene	ND		ug/kg	130	30.
Anthracene	ND		ug/kg	98	27.
Benzo(ghi)perylene	ND		ug/kg	130	34.
Fluorene	ND		ug/kg	160	47.
Phenanthrene	ND		ug/kg	98	32.
Dibenzo(a,h)anthracene	ND		ug/kg	98	32.
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	36.
Pyrene	ND		ug/kg	98	32.
Biphenyl	ND		ug/kg	370	54.
4-Chloroaniline	ND		ug/kg	160	43.
2-Nitroaniline	ND		ug/kg	160	46.
3-Nitroaniline	ND		ug/kg	160	45.
4-Nitroaniline	ND		ug/kg	160	44.
Dibenzofuran	ND		ug/kg	160	54.
2-Methylnaphthalene	ND		ug/kg	200	52.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	50.
Acetophenone	ND		ug/kg	160	50.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
P-Chloro-M-Cresol	ND		ug/kg	160	47.
2-Chlorophenol	ND		ug/kg	160	49.
2,4-Dichlorophenol	ND		ug/kg	150	53.
2,4-Dimethylphenol	ND		ug/kg	160	48.
2-Nitrophenol	ND		ug/kg	350	51.

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/27/14 11:05
Analyst: PS

Extraction Method: EPA 3546
Extraction Date: 12/23/14 10:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG751338-1					
4-Nitrophenol	ND		ug/kg	230	53.
2,4-Dinitrophenol	ND		ug/kg	780	220
4,6-Dinitro-o-cresol	ND		ug/kg	420	60.
Pentachlorophenol	ND		ug/kg	130	35.
Phenol	ND		ug/kg	160	48.
2-Methylphenol	ND		ug/kg	160	52.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	53.
2,4,5-Trichlorophenol	ND		ug/kg	160	53.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	35.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		25-120
Phenol-d6	44		10-120
Nitrobenzene-d5	40		23-120
2-Fluorobiphenyl	46		30-120
2,4,6-Tribromophenol	67		0-136
4-Terphenyl-d14	63		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG751338-2 WG751338-3								
Acenaphthene	75		69		31-137	8		50
1,2,4-Trichlorobenzene	72		66		38-107	9		50
Hexachlorobenzene	77		72		40-140	7		50
Bis(2-chloroethyl)ether	70		65		40-140	7		50
2-Chloronaphthalene	72		68		40-140	6		50
1,2-Dichlorobenzene	70		64		40-140	9		50
1,3-Dichlorobenzene	68		63		40-140	8		50
1,4-Dichlorobenzene	68		62		28-104	9		50
3,3'-Dichlorobenzidine	55		51		40-140	8		50
2,4-Dinitrotoluene	78		73		28-89	7		50
2,6-Dinitrotoluene	80		76		40-140	5		50
Fluoranthene	79		72		40-140	9		50
4-Chlorophenyl phenyl ether	74		70		40-140	6		50
4-Bromophenyl phenyl ether	80		74		40-140	8		50
Bis(2-chloroisopropyl)ether	75		70		40-140	7		50
Bis(2-chloroethoxy)methane	72		68		40-117	6		50
Hexachlorobutadiene	69		63		40-140	9		50
Hexachlorocyclopentadiene	68		64		40-140	6		50
Hexachloroethane	65		60		40-140	8		50
Isophorone	71		67		40-140	6		50
Naphthalene	68		62		40-140	9		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG751338-2 WG751338-3								
Nitrobenzene	69		64		40-140	8		50
NitrosoDiPhenylAmine(NDPA)/DPA	81		76			6		50
n-Nitrosodi-n-propylamine	77		73		32-121	5		50
Bis(2-Ethylhexyl)phthalate	82		75		40-140	9		50
Butyl benzyl phthalate	81		73		40-140	10		50
Di-n-butylphthalate	78		71		40-140	9		50
Di-n-octylphthalate	84		77		40-140	9		50
Diethyl phthalate	74		70		40-140	6		50
Dimethyl phthalate	75		70		40-140	7		50
Benzo(a)anthracene	75		70		40-140	7		50
Benzo(a)pyrene	79		73		40-140	8		50
Benzo(b)fluoranthene	78		71		40-140	9		50
Benzo(k)fluoranthene	77		72		40-140	7		50
Chrysene	74		70		40-140	6		50
Acenaphthylene	73		69		40-140	6		50
Anthracene	76		70		40-140	8		50
Benzo(ghi)perylene	77		73		40-140	5		50
Fluorene	76		70		40-140	8		50
Phenanthrene	76		70		40-140	8		50
Dibenzo(a,h)anthracene	77		73		40-140	5		50
Indeno(1,2,3-cd)Pyrene	78		72		40-140	8		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG751338-2 WG751338-3								
Pyrene	78		71		35-142	9		50
Biphenyl	81		75			8		50
4-Chloroaniline	93		84		40-140	10		50
2-Nitroaniline	83		80		47-134	4		50
3-Nitroaniline	68		65		26-129	5		50
4-Nitroaniline	85		78		41-125	9		50
Dibenzofuran	78		72		40-140	8		50
2-Methylnaphthalene	76		71		40-140	7		50
1,2,4,5-Tetrachlorobenzene	77		70		40-117	10		50
Acetophenone	82		76		14-144	8		50
2,4,6-Trichlorophenol	83		79		30-130	5		50
P-Chloro-M-Cresol	85		80		26-103	6		50
2-Chlorophenol	78		73		25-102	7		50
2,4-Dichlorophenol	85		80		30-130	6		50
2,4-Dimethylphenol	82		76		30-130	8		50
2-Nitrophenol	84		80		30-130	5		50
4-Nitrophenol	94		88		11-114	7		50
2,4-Dinitrophenol	79		73		4-130	8		50
4,6-Dinitro-o-cresol	88		84		10-130	5		50
Pentachlorophenol	88		81		17-109	8		50
Phenol	75		71		26-90	5		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG751338-2 WG751338-3								
2-Methylphenol	82		77		30-130.	6		50
3-Methylphenol/4-Methylphenol	83		79		30-130	5		50
2,4,5-Trichlorophenol	87		81		30-130	7		50
Benzoic Acid	40		33			19		50
Benzyl Alcohol	78		73		40-140	7		50
Carbazole	83		76		54-128	9		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	73		67		25-120
Phenol-d6	75		72		10-120
Nitrobenzene-d5	74		70		23-120
2-Fluorobiphenyl	75		71		30-120
2,4,6-Tribromophenol	95		88		0-136
4-Terphenyl-d14	84		75		18-120

PCBS

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-01	Date Collected:	12/18/14 09:08
Client ID:	T3 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/23/14 20:04
Analytical Date:	12/24/14 14:39	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/24/14
Percent Solids:	96%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/24/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.0	2.61	1	A
Aroclor 1221	ND		ug/kg	33.0	3.04	1	A
Aroclor 1232	ND		ug/kg	33.0	3.87	1	A
Aroclor 1242	ND		ug/kg	33.0	4.04	1	A
Aroclor 1248	ND		ug/kg	33.0	2.79	1	A
Aroclor 1254	ND		ug/kg	33.0	2.71	1	A
Aroclor 1260	ND		ug/kg	33.0	2.52	1	A
Aroclor 1262	ND		ug/kg	33.0	1.64	1	A
Aroclor 1268	ND		ug/kg	33.0	4.79	1	A
PCBs, Total	ND		ug/kg	33.0	1.64	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-02	Date Collected:	12/18/14 09:30
Client ID:	T3 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/23/14 20:04
Analytical Date:	12/24/14 14:51	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/24/14
Percent Solids:	88%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/24/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.9	2.99	1	A
Aroclor 1221	ND		ug/kg	37.9	3.49	1	A
Aroclor 1232	ND		ug/kg	37.9	4.44	1	A
Aroclor 1242	ND		ug/kg	37.9	4.63	1	A
Aroclor 1248	ND		ug/kg	37.9	3.20	1	A
Aroclor 1254	ND		ug/kg	37.9	3.11	1	A
Aroclor 1260	ND		ug/kg	37.9	2.88	1	A
Aroclor 1262	ND		ug/kg	37.9	1.88	1	A
Aroclor 1268	ND		ug/kg	37.9	5.49	1	A
PCBs, Total	ND		ug/kg	37.9	1.88	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	93		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-03	Date Collected:	12/18/14 10:50
Client ID:	T7 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/23/14 20:04
Analytical Date:	12/24/14 15:04	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/24/14
Percent Solids:	96%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/24/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.7	2.66	1	A
Aroclor 1221	ND		ug/kg	33.7	3.10	1	A
Aroclor 1232	ND		ug/kg	33.7	3.95	1	A
Aroclor 1242	ND		ug/kg	33.7	4.12	1	A
Aroclor 1248	ND		ug/kg	33.7	2.84	1	A
Aroclor 1254	ND		ug/kg	33.7	2.77	1	A
Aroclor 1260	ND		ug/kg	33.7	2.57	1	A
Aroclor 1262	ND		ug/kg	33.7	1.67	1	A
Aroclor 1268	ND		ug/kg	33.7	4.88	1	A
PCBs, Total	ND		ug/kg	33.7	1.67	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	96		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-04	Date Collected:	12/18/14 11:10
Client ID:	T7 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/23/14 20:04
Analytical Date:	12/24/14 15:17	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/24/14
Percent Solids:	98%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/24/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.8	2.67	1	A
Aroclor 1221	ND		ug/kg	33.8	3.12	1	A
Aroclor 1232	ND		ug/kg	33.8	3.97	1	A
Aroclor 1242	ND		ug/kg	33.8	4.14	1	A
Aroclor 1248	ND		ug/kg	33.8	2.86	1	A
Aroclor 1254	ND		ug/kg	33.8	2.78	1	A
Aroclor 1260	ND		ug/kg	33.8	2.58	1	A
Aroclor 1262	ND		ug/kg	33.8	1.68	1	A
Aroclor 1268	ND		ug/kg	33.8	4.91	1	A
PCBs, Total	ND		ug/kg	33.8	1.68	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	97		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	104		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-05	Date Collected:	12/18/14 10:00
Client ID:	T8 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/23/14 20:04
Analytical Date:	12/24/14 15:29	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/24/14
Percent Solids:	94%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/24/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.1	2.77	1	A
Aroclor 1221	ND		ug/kg	35.1	3.23	1	A
Aroclor 1232	ND		ug/kg	35.1	4.11	1	A
Aroclor 1242	ND		ug/kg	35.1	4.29	1	A
Aroclor 1248	ND		ug/kg	35.1	2.96	1	A
Aroclor 1254	ND		ug/kg	35.1	2.88	1	A
Aroclor 1260	ND		ug/kg	35.1	2.67	1	A
Aroclor 1262	ND		ug/kg	35.1	1.74	1	A
Aroclor 1268	ND		ug/kg	35.1	5.09	1	A
PCBs, Total	ND		ug/kg	35.1	1.74	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	87		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-06	Date Collected:	12/18/14 10:08
Client ID:	T8 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/23/14 20:04
Analytical Date:	12/24/14 15:42	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/24/14
Percent Solids:	89%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/24/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.4	2.87	1	A
Aroclor 1221	ND		ug/kg	36.4	3.35	1	A
Aroclor 1232	ND		ug/kg	36.4	4.26	1	A
Aroclor 1242	ND		ug/kg	36.4	4.45	1	A
Aroclor 1248	ND		ug/kg	36.4	3.07	1	A
Aroclor 1254	ND		ug/kg	36.4	2.99	1	A
Aroclor 1260	ND		ug/kg	36.4	2.77	1	A
Aroclor 1262	ND		ug/kg	36.4	1.80	1	A
Aroclor 1268	ND		ug/kg	36.4	5.27	1	A
PCBs, Total	ND		ug/kg	36.4	1.80	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	78		30-150	B

Project Name: 31-32 LIC

Project Number: 41.0162268.2

Lab Number: L1430558

Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 12/24/14 18:13
Analyst: JW

Extraction Method: EPA 3546
Extraction Date: 12/23/14 20:04
Cleanup Method: EPA 3665A
Cleanup Date: 12/24/14
Cleanup Method: EPA 3660B
Cleanup Date: 12/24/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-06 Batch: WG751547-1						
Aroclor 1016	ND		ug/kg	32.7	2.58	A
Aroclor 1221	ND		ug/kg	32.7	3.01	A
Aroclor 1232	ND		ug/kg	32.7	3.83	A
Aroclor 1242	ND		ug/kg	32.7	4.00	A
Aroclor 1248	ND		ug/kg	32.7	2.76	A
Aroclor 1254	ND		ug/kg	32.7	2.69	A
Aroclor 1260	ND		ug/kg	32.7	2.49	A
Aroclor 1262	ND		ug/kg	32.7	1.62	A
Aroclor 1268	ND		ug/kg	32.7	4.74	A
PCBs, Total	ND		ug/kg	32.7	1.62	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	85		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 31-32 LIC

Project Number: 41.0162268.2

Lab Number: L1430558

Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG751547-2 WG751547-3									
Aroclor 1016	61		66		40-140	8		50	A
Aroclor 1260	55		62		40-140	12		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		78		30-150	A
Decachlorobiphenyl	74		82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		84		30-150	B
Decachlorobiphenyl	83		92		30-150	B

PESTICIDES

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-01	Date Collected:	12/18/14 09:08
Client ID:	T3 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/24/14 11:38
Analytical Date:	12/27/14 23:06	Cleanup Method:	EPA 3620B
Analyst:	SS	Cleanup Date:	12/27/14
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.66	0.324	1	A
Lindane	ND		ug/kg	0.690	0.308	1	A
Alpha-BHC	ND		ug/kg	0.690	0.196	1	A
Beta-BHC	ND		ug/kg	1.66	0.628	1	A
Heptachlor	ND		ug/kg	0.828	0.371	1	A
Aldrin	ND		ug/kg	1.66	0.583	1	A
Heptachlor epoxide	ND		ug/kg	3.10	0.932	1	A
Endrin	ND		ug/kg	0.690	0.283	1	A
Endrin ketone	ND		ug/kg	1.66	0.426	1	A
Dieldrin	ND		ug/kg	1.04	0.518	1	A
4,4'-DDE	ND		ug/kg	1.66	0.383	1	A
4,4'-DDD	ND		ug/kg	1.66	0.591	1	A
4,4'-DDT	ND		ug/kg	3.10	1.33	1	A
Endosulfan I	ND		ug/kg	1.66	0.391	1	A
Endosulfan II	ND		ug/kg	1.66	0.554	1	A
Endosulfan sulfate	ND		ug/kg	0.690	0.328	1	A
Methoxychlor	ND		ug/kg	3.10	0.966	1	A
Toxaphene	ND		ug/kg	31.0	8.70	1	A
cis-Chlordane	ND		ug/kg	2.07	0.577	1	A
trans-Chlordane	ND		ug/kg	2.07	0.547	1	A
Chlordane	ND		ug/kg	13.4	5.49	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	75		30-150	B
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	74		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-01	Date Collected:	12/18/14 09:08
Client ID:	T3 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/22/14 14:00
Analytical Date:	12/24/14 09:22		
Analyst:	SS		
Percent Solids:	96%		
Methylation Date:	12/23/14 20:27		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	173	21.0	1	A
2,4,5-T	ND		ug/kg	173	10.8	1	A
2,4,5-TP (Silvex)	ND		ug/kg	173	9.53	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	73		30-150	A
DCAA	74		30-150	B

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-02	Date Collected:	12/18/14 09:30
Client ID:	T3 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/24/14 11:38
Analytical Date:	12/27/14 23:19	Cleanup Method:	EPA 3620B
Analyst:	SS	Cleanup Date:	12/27/14
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.80	0.352	1	A
Lindane	ND		ug/kg	0.748	0.334	1	A
Alpha-BHC	ND		ug/kg	0.748	0.212	1	A
Beta-BHC	ND		ug/kg	1.80	0.681	1	A
Heptachlor	ND		ug/kg	0.898	0.402	1	A
Aldrin	ND		ug/kg	1.80	0.632	1	A
Heptachlor epoxide	ND		ug/kg	3.37	1.01	1	A
Endrin	ND		ug/kg	0.748	0.307	1	A
Endrin ketone	ND		ug/kg	1.80	0.462	1	A
Dieldrin	ND		ug/kg	1.12	0.561	1	A
4,4'-DDE	ND		ug/kg	1.80	0.415	1	A
4,4'-DDD	ND		ug/kg	1.80	0.640	1	A
4,4'-DDT	ND		ug/kg	3.37	1.44	1	A
Endosulfan I	ND		ug/kg	1.80	0.424	1	A
Endosulfan II	ND		ug/kg	1.80	0.600	1	A
Endosulfan sulfate	ND		ug/kg	0.748	0.356	1	A
Methoxychlor	ND		ug/kg	3.37	1.05	1	A
Toxaphene	ND		ug/kg	33.7	9.43	1	A
cis-Chlordane	ND		ug/kg	2.24	0.626	1	A
trans-Chlordane	ND		ug/kg	2.24	0.593	1	A
Chlordane	ND		ug/kg	14.6	5.95	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	89		30-150	B
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	72		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-02	Date Collected:	12/18/14 09:30
Client ID:	T3 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/22/14 14:00
Analytical Date:	12/24/14 09:42		
Analyst:	SS		
Percent Solids:	88%		
Methylation Date:	12/23/14 20:27		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	184	22.4	1	A
2,4,5-T	ND		ug/kg	184	11.5	1	A
2,4,5-TP (Silvex)	ND		ug/kg	184	10.2	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	62		30-150	A
DCAA	69		30-150	B

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-03	Date Collected:	12/18/14 10:50
Client ID:	T7 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/24/14 11:38
Analytical Date:	12/27/14 23:32	Cleanup Method:	EPA 3620B
Analyst:	SS	Cleanup Date:	12/27/14
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.56	0.307	1	A
Lindane	ND		ug/kg	0.652	0.292	1	A
Alpha-BHC	ND		ug/kg	0.652	0.185	1	A
Beta-BHC	ND		ug/kg	1.56	0.594	1	A
Heptachlor	ND		ug/kg	0.783	0.351	1	A
Aldrin	ND		ug/kg	1.56	0.551	1	A
Heptachlor epoxide	ND		ug/kg	2.94	0.881	1	A
Endrin	ND		ug/kg	0.652	0.267	1	A
Endrin ketone	ND		ug/kg	1.56	0.403	1	A
Dieldrin	ND		ug/kg	0.979	0.489	1	A
4,4'-DDE	ND		ug/kg	1.56	0.362	1	A
4,4'-DDD	ND		ug/kg	1.56	0.558	1	A
4,4'-DDT	ND		ug/kg	2.94	1.26	1	A
Endosulfan I	ND		ug/kg	1.56	0.370	1	A
Endosulfan II	ND		ug/kg	1.56	0.523	1	A
Endosulfan sulfate	ND		ug/kg	0.652	0.310	1	A
Methoxychlor	ND		ug/kg	2.94	0.913	1	A
Toxaphene	ND		ug/kg	29.4	8.22	1	A
cis-Chlordane	ND		ug/kg	1.96	0.545	1	A
trans-Chlordane	ND		ug/kg	1.96	0.517	1	A
Chlordane	ND		ug/kg	12.7	5.19	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	81		30-150	B
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	78		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-03	Date Collected:	12/18/14 10:50
Client ID:	T7 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/22/14 14:00
Analytical Date:	12/24/14 10:01		
Analyst:	SS		
Percent Solids:	96%		
Methylation Date:	12/23/14 20:27		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	170	20.7	1	A
2,4,5-T	ND		ug/kg	170	10.6	1	A
2,4,5-TP (Silvex)	ND		ug/kg	170	9.41	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	71		30-150	A
DCAA	66		30-150	B

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-04	Date Collected:	12/18/14 11:10
Client ID:	T7 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/24/14 11:38
Analytical Date:	12/27/14 23:45	Cleanup Method:	EPA 3620B
Analyst:	SS	Cleanup Date:	12/27/14
Percent Solids:	98%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.60	0.314	1	A
Lindane	ND		ug/kg	0.667	0.298	1	A
Alpha-BHC	ND		ug/kg	0.667	0.190	1	A
Beta-BHC	ND		ug/kg	1.60	0.607	1	A
Heptachlor	ND		ug/kg	0.801	0.359	1	A
Aldrin	ND		ug/kg	1.60	0.564	1	A
Heptachlor epoxide	ND		ug/kg	3.00	0.901	1	A
Endrin	ND		ug/kg	0.667	0.274	1	A
Endrin ketone	ND		ug/kg	1.60	0.412	1	A
Dieldrin	ND		ug/kg	1.00	0.501	1	A
4,4'-DDE	ND		ug/kg	1.60	0.370	1	A
4,4'-DDD	ND		ug/kg	1.60	0.571	1	A
4,4'-DDT	ND		ug/kg	3.00	1.29	1	A
Endosulfan I	ND		ug/kg	1.60	0.378	1	A
Endosulfan II	ND		ug/kg	1.60	0.535	1	A
Endosulfan sulfate	ND		ug/kg	0.667	0.318	1	A
Methoxychlor	ND		ug/kg	3.00	0.934	1	A
Toxaphene	ND		ug/kg	30.0	8.41	1	A
cis-Chlordane	ND		ug/kg	2.00	0.558	1	A
trans-Chlordane	ND		ug/kg	2.00	0.529	1	A
Chlordane	ND		ug/kg	13.0	5.31	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	84		30-150	B
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	76		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-04	Date Collected:	12/18/14 11:10
Client ID:	T7 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/22/14 14:00
Analytical Date:	12/24/14 10:21		
Analyst:	SS		
Percent Solids:	98%		
Methylation Date:	12/23/14 20:27		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	168	20.5	1	A
2,4,5-T	ND		ug/kg	168	10.5	1	A
2,4,5-TP (Silvex)	ND		ug/kg	168	9.30	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	63		30-150	A
DCAA	59		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-05	Date Collected:	12/18/14 10:00
Client ID:	T8 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/24/14 11:38
Analytical Date:	12/27/14 23:58	Cleanup Method:	EPA 3620B
Analyst:	SS	Cleanup Date:	12/27/14
Percent Solids:	94%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.64	0.322	1	A
Lindane	ND		ug/kg	0.685	0.306	1	A
Alpha-BHC	ND		ug/kg	0.685	0.194	1	A
Beta-BHC	ND		ug/kg	1.64	0.623	1	A
Heptachlor	ND		ug/kg	0.822	0.368	1	A
Aldrin	ND		ug/kg	1.64	0.579	1	A
Heptachlor epoxide	ND		ug/kg	3.08	0.924	1	A
Endrin	ND		ug/kg	0.685	0.281	1	A
Endrin ketone	ND		ug/kg	1.64	0.423	1	A
Dieldrin	ND		ug/kg	1.03	0.514	1	A
4,4'-DDE	ND		ug/kg	1.64	0.380	1	A
4,4'-DDD	ND		ug/kg	1.64	0.586	1	A
4,4'-DDT	ND		ug/kg	3.08	1.32	1	A
Endosulfan I	ND		ug/kg	1.64	0.388	1	A
Endosulfan II	ND		ug/kg	1.64	0.549	1	A
Endosulfan sulfate	ND		ug/kg	0.685	0.326	1	A
Methoxychlor	ND		ug/kg	3.08	0.959	1	A
Toxaphene	ND		ug/kg	30.8	8.63	1	A
cis-Chlordane	ND		ug/kg	2.05	0.572	1	A
trans-Chlordane	ND		ug/kg	2.05	0.542	1	A
Chlordane	ND		ug/kg	13.4	5.44	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	89		30-150	B
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	80		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-05	Date Collected:	12/18/14 10:00
Client ID:	T8 (3-5)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/22/14 14:00
Analytical Date:	12/24/14 10:40		
Analyst:	SS		
Percent Solids:	94%		
Methylation Date:	12/23/14 20:27		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	174	21.2	1	A
2,4,5-T	ND		ug/kg	174	10.9	1	A
2,4,5-TP (Silvex)	ND		ug/kg	174	9.63	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	52		30-150	A
DCAA	50		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-06	Date Collected:	12/18/14 10:08
Client ID:	T8 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8081B	Extraction Date:	12/24/14 11:38
Analytical Date:	12/28/14 00:11	Cleanup Method:	EPA 3620B
Analyst:	SS	Cleanup Date:	12/27/14
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.73	0.339	1	A
Lindane	ND		ug/kg	0.721	0.322	1	A
Alpha-BHC	ND		ug/kg	0.721	0.205	1	A
Beta-BHC	ND		ug/kg	1.73	0.656	1	A
Heptachlor	ND		ug/kg	0.865	0.388	1	A
Aldrin	ND		ug/kg	1.73	0.609	1	A
Heptachlor epoxide	ND		ug/kg	3.24	0.973	1	A
Endrin	ND		ug/kg	0.721	0.296	1	A
Endrin ketone	ND		ug/kg	1.73	0.445	1	A
Dieldrin	ND		ug/kg	1.08	0.541	1	A
4,4'-DDE	ND		ug/kg	1.73	0.400	1	A
4,4'-DDD	ND		ug/kg	1.73	0.617	1	A
4,4'-DDT	ND		ug/kg	3.24	1.39	1	A
Endosulfan I	ND		ug/kg	1.73	0.409	1	A
Endosulfan II	ND		ug/kg	1.73	0.578	1	A
Endosulfan sulfate	ND		ug/kg	0.721	0.343	1	A
Methoxychlor	ND		ug/kg	3.24	1.01	1	A
Toxaphene	ND		ug/kg	32.4	9.08	1	A
cis-Chlordane	ND		ug/kg	2.16	0.603	1	A
trans-Chlordane	ND		ug/kg	2.16	0.571	1	A
Chlordane	ND		ug/kg	14.0	5.73	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	62		30-150	B
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	57		30-150	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID:	L1430558-06	Date Collected:	12/18/14 10:08
Client ID:	T8 (13-15)	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	12/22/14 14:00
Analytical Date:	12/24/14 11:00		
Analyst:	SS		
Percent Solids:	89%		
Methylation Date:	12/23/14 20:27		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	182	22.2	1	A
2,4,5-T	ND		ug/kg	182	11.4	1	A
2,4,5-TP (Silvex)	ND		ug/kg	182	10.1	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	72		30-150	A
DCAA	72		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 12/24/14 08:22
Analyst: SS

Extraction Method: EPA 8151A
Extraction Date: 12/22/14 14:00

Methylation Date: 12/23/14 20:27

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-06 Batch: WG751047-1						
2,4-D	ND		ug/kg	161	19.6	A
2,4,5-T	ND		ug/kg	161	10.1	A
2,4,5-TP (Silvex)	ND		ug/kg	161	8.91	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	70		30-150	A
DCAA	64		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/27/14 22:27
Analyst: SS

Extraction Method: EPA 3546
Extraction Date: 12/24/14 11:38
Cleanup Method: EPA 3620B
Cleanup Date: 12/27/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-06 Batch: WG751807-1						
Delta-BHC	ND		ug/kg	1.57	0.308	A
Lindane	ND		ug/kg	0.655	0.293	A
Alpha-BHC	ND		ug/kg	0.655	0.186	A
Beta-BHC	ND		ug/kg	1.57	0.596	A
Heptachlor	ND		ug/kg	0.786	0.352	A
Aldrin	ND		ug/kg	1.57	0.554	A
Heptachlor epoxide	ND		ug/kg	2.95	0.885	A
Endrin	ND		ug/kg	0.655	0.269	A
Endrin ketone	ND		ug/kg	1.57	0.405	A
Dieldrin	ND		ug/kg	0.983	0.491	A
4,4'-DDE	ND		ug/kg	1.57	0.364	A
4,4'-DDD	ND		ug/kg	1.57	0.561	A
4,4'-DDT	ND		ug/kg	2.95	1.26	A
Endosulfan I	ND		ug/kg	1.57	0.372	A
Endosulfan II	ND		ug/kg	1.57	0.526	A
Endosulfan sulfate	ND		ug/kg	0.655	0.312	A
Methoxychlor	ND		ug/kg	2.95	0.917	A
Toxaphene	ND		ug/kg	29.5	8.26	A
cis-Chlordane	ND		ug/kg	1.96	0.548	A
trans-Chlordane	ND		ug/kg	1.96	0.519	A
Chlordane	ND		ug/kg	12.8	5.21	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	92		30-150	B
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	86		30-150	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG751047-2 WG751047-3									
2,4-D	77		81		30-150	5		30	A
2,4,5-T	75		78		30-150	4		30	A
2,4,5-TP (Silvex)	72		77		30-150	7		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	62		68		30-150	A
DCAA	63		70		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG751807-2 WG751807-3									
Delta-BHC	62		81		30-150	27		30	A
Lindane	83		111		30-150	29		30	A
Alpha-BHC	74		97		30-150	27		30	A
Beta-BHC	96		130		30-150	30		30	A
Heptachlor	80		107		30-150	29		30	A
Aldrin	80		107		30-150	29		30	A
Heptachlor epoxide	81		104		30-150	25		30	A
Endrin	86		114		30-150	28		30	A
Endrin ketone	64		83		30-150	26		30	A
Dieldrin	85		112		30-150	27		30	A
4,4'-DDE	76		101		30-150	28		30	A
4,4'-DDD	81		105		30-150	26		30	A
4,4'-DDT	74		100		30-150	30		30	A
Endosulfan I	79		104		30-150	27		30	A
Endosulfan II	72		93		30-150	25		30	A
Endosulfan sulfate	69		90		30-150	26		30	A
Methoxychlor	69		97		30-150	**34**	Q	30	A
cis-Chlordane	76		100		30-150	27		30	A
trans-Chlordane	80		106		30-150	28		30	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG751807-2 WG751807-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		110		30-150	B
Decachlorobiphenyl	65		112		30-150	B
2,4,5,6-Tetrachloro-m-xylene	72		94		30-150	A
Decachlorobiphenyl	65		89		30-150	A

METALS

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-01
Client ID: T3 (3-5)
Sample Location: LONG ISLAND CITY, QUEENS
Matrix: Soil
Percent Solids: 96%

Date Collected: 12/18/14 09:08
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	4500		mg/kg	7.8	1.6	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Antimony, Total	ND		mg/kg	3.9	0.63	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Arsenic, Total	2.9		mg/kg	0.78	0.16	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Barium, Total	70		mg/kg	0.78	0.24	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Beryllium, Total	0.19	J	mg/kg	0.39	0.08	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Cadmium, Total	0.07	J	mg/kg	0.78	0.06	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Calcium, Total	4400		mg/kg	7.8	2.4	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Chromium, Total	9.9		mg/kg	0.78	0.16	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Cobalt, Total	4.0		mg/kg	1.6	0.39	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Copper, Total	18		mg/kg	0.78	0.16	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Iron, Total	8800		mg/kg	3.9	1.6	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Lead, Total	70		mg/kg	3.9	0.16	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Magnesium, Total	2100		mg/kg	7.8	0.78	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Manganese, Total	220		mg/kg	0.78	0.16	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Mercury, Total	0.21		mg/kg	0.07	0.02	1	12/23/14 06:00	12/23/14 14:54	EPA 7471B	1,7471B	MC
Nickel, Total	9.2		mg/kg	2.0	0.31	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Potassium, Total	680		mg/kg	200	31.	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Selenium, Total	ND		mg/kg	1.6	0.24	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Silver, Total	ND		mg/kg	0.78	0.16	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Sodium, Total	92	J	mg/kg	160	24.	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Thallium, Total	ND		mg/kg	1.6	0.31	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Vanadium, Total	12		mg/kg	0.78	0.08	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT
Zinc, Total	68		mg/kg	3.9	0.55	2	12/24/14 15:16	12/30/14 12:07	EPA 3050B	1,6010C	TT

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-02
Client ID: T3 (13-15)
Sample Location: LONG ISLAND CITY, QUEENS
Matrix: Soil
Percent Solids: 88%

Date Collected: 12/18/14 09:30
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	3000		mg/kg	8.7	1.7	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Antimony, Total	ND		mg/kg	4.4	0.70	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Arsenic, Total	1.9		mg/kg	0.87	0.17	2	12/24/14 15:16	12/30/14 15:54	EPA 3050B	1,6010C	TT
Barium, Total	22		mg/kg	0.87	0.26	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Beryllium, Total	0.12	J	mg/kg	0.44	0.09	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Cadmium, Total	ND		mg/kg	0.87	0.06	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Calcium, Total	940		mg/kg	8.7	2.6	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Chromium, Total	8.6		mg/kg	0.87	0.17	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Cobalt, Total	3.6		mg/kg	1.7	0.44	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Copper, Total	7.3		mg/kg	0.87	0.17	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Iron, Total	6600		mg/kg	4.4	1.7	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Lead, Total	1.3	J	mg/kg	4.4	0.17	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Magnesium, Total	1700		mg/kg	8.7	0.87	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Manganese, Total	160		mg/kg	0.87	0.17	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Mercury, Total	ND		mg/kg	0.07	0.02	1	12/23/14 06:00	12/23/14 15:01	EPA 7471B	1,7471B	MC
Nickel, Total	7.6		mg/kg	2.2	0.35	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Potassium, Total	480		mg/kg	220	35.	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Selenium, Total	ND		mg/kg	1.7	0.26	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Silver, Total	ND		mg/kg	0.87	0.17	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Sodium, Total	72	J	mg/kg	170	26.	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Thallium, Total	ND		mg/kg	1.7	0.35	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Vanadium, Total	12		mg/kg	0.87	0.09	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT
Zinc, Total	17		mg/kg	4.4	0.61	2	12/24/14 15:16	12/30/14 12:10	EPA 3050B	1,6010C	TT

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-03
Client ID: T7 (3-5)
Sample Location: LONG ISLAND CITY, QUEENS
Matrix: Soil
Percent Solids: 96%

Date Collected: 12/18/14 10:50
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	5300		mg/kg	7.9	1.6	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Antimony, Total	4.2		mg/kg	4.0	0.63	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Arsenic, Total	12		mg/kg	0.79	0.16	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Barium, Total	270		mg/kg	0.79	0.24	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Beryllium, Total	0.24	J	mg/kg	0.40	0.08	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Cadmium, Total	0.45	J	mg/kg	0.79	0.06	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Calcium, Total	9300		mg/kg	7.9	2.4	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Chromium, Total	15		mg/kg	0.79	0.16	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Cobalt, Total	5.1		mg/kg	1.6	0.40	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Copper, Total	170		mg/kg	0.79	0.16	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Iron, Total	16000		mg/kg	4.0	1.6	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Lead, Total	1000		mg/kg	4.0	0.16	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Magnesium, Total	2800		mg/kg	7.9	0.79	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Manganese, Total	180		mg/kg	0.79	0.16	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Mercury, Total	0.13		mg/kg	0.07	0.02	1	12/23/14 06:00	12/23/14 15:07	EPA 7471B	1,7471B	MC
Nickel, Total	16		mg/kg	2.0	0.32	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Potassium, Total	520		mg/kg	200	32.	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Selenium, Total	0.44	J	mg/kg	1.6	0.24	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Silver, Total	0.52	J	mg/kg	0.79	0.16	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Sodium, Total	130	J	mg/kg	160	24.	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Thallium, Total	ND		mg/kg	1.6	0.32	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Vanadium, Total	24		mg/kg	0.79	0.08	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT
Zinc, Total	400		mg/kg	4.0	0.55	2	12/24/14 15:16	12/30/14 12:14	EPA 3050B	1,6010C	TT

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-04
Client ID: T7 (13-15)
Sample Location: LONG ISLAND CITY, QUEENS
Matrix: Soil
Percent Solids: 98%

Date Collected: 12/18/14 11:10
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	4000		mg/kg	8.0	1.6	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Antimony, Total	ND		mg/kg	4.0	0.64	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Arsenic, Total	2.2		mg/kg	0.80	0.16	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Barium, Total	33		mg/kg	0.80	0.24	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Beryllium, Total	0.16	J	mg/kg	0.40	0.08	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Cadmium, Total	ND		mg/kg	0.80	0.06	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Calcium, Total	16000		mg/kg	8.0	2.4	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Chromium, Total	9.6		mg/kg	0.80	0.16	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Cobalt, Total	4.2		mg/kg	1.6	0.40	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Copper, Total	11		mg/kg	0.80	0.16	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Iron, Total	8700		mg/kg	4.0	1.6	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Lead, Total	1.8	J	mg/kg	4.0	0.16	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Magnesium, Total	8200		mg/kg	8.0	0.80	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Manganese, Total	180		mg/kg	0.80	0.16	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Mercury, Total	ND		mg/kg	0.07	0.02	1	12/23/14 06:00	12/23/14 15:09	EPA 7471B	1,7471B	MC
Nickel, Total	9.2		mg/kg	2.0	0.32	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Potassium, Total	960		mg/kg	200	32.	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Selenium, Total	ND		mg/kg	1.6	0.24	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Silver, Total	ND		mg/kg	0.80	0.16	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Sodium, Total	170		mg/kg	160	24.	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Thallium, Total	ND		mg/kg	1.6	0.32	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Vanadium, Total	13		mg/kg	0.80	0.08	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT
Zinc, Total	25		mg/kg	4.0	0.56	2	12/24/14 15:16	12/30/14 12:18	EPA 3050B	1,6010C	TT

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-05
Client ID: T8 (3-5)
Sample Location: LONG ISLAND CITY, QUEENS
Matrix: Soil
Percent Solids: 94%

Date Collected: 12/18/14 10:00
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	3000		mg/kg	8.0	1.6	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Antimony, Total	1.7	J	mg/kg	4.0	0.64	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Arsenic, Total	5.5		mg/kg	0.80	0.16	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Barium, Total	49		mg/kg	0.80	0.24	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Beryllium, Total	0.16	J	mg/kg	0.40	0.08	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Cadmium, Total	1.1		mg/kg	0.80	0.06	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Calcium, Total	2000		mg/kg	8.0	2.4	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Chromium, Total	7.8		mg/kg	0.80	0.16	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Cobalt, Total	3.3		mg/kg	1.6	0.40	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Copper, Total	31		mg/kg	0.80	0.16	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Iron, Total	11000		mg/kg	4.0	1.6	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Lead, Total	170		mg/kg	4.0	0.16	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Magnesium, Total	1600		mg/kg	8.0	0.80	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Manganese, Total	210		mg/kg	0.80	0.16	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Mercury, Total	0.12		mg/kg	0.07	0.02	1	12/23/14 06:00	12/23/14 15:11	EPA 7471B	1,7471B	MC
Nickel, Total	7.9		mg/kg	2.0	0.32	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Potassium, Total	380		mg/kg	200	32.	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Selenium, Total	ND		mg/kg	1.6	0.24	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Silver, Total	ND		mg/kg	0.80	0.16	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Sodium, Total	140	J	mg/kg	160	24.	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Thallium, Total	ND		mg/kg	1.6	0.32	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Vanadium, Total	11		mg/kg	0.80	0.08	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT
Zinc, Total	460		mg/kg	4.0	0.56	2	12/24/14 15:16	12/30/14 12:22	EPA 3050B	1,6010C	TT

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-06
Client ID: T8 (13-15)
Sample Location: LONG ISLAND CITY, QUEENS
Matrix: Soil
Percent Solids: 89%

Date Collected: 12/18/14 10:08
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	7300		mg/kg	8.7	1.7	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Antimony, Total	ND		mg/kg	4.4	0.70	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Arsenic, Total	3.4		mg/kg	0.87	0.17	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Barium, Total	53		mg/kg	0.87	0.26	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Beryllium, Total	0.25	J	mg/kg	0.44	0.09	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Cadmium, Total	ND		mg/kg	0.87	0.06	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Calcium, Total	1200		mg/kg	8.7	2.6	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Chromium, Total	14		mg/kg	0.87	0.17	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Cobalt, Total	5.9		mg/kg	1.7	0.44	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Copper, Total	15		mg/kg	0.87	0.17	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Iron, Total	13000		mg/kg	4.4	1.7	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Lead, Total	2.1	J	mg/kg	4.4	0.17	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Magnesium, Total	3000		mg/kg	8.7	0.87	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Manganese, Total	340		mg/kg	0.87	0.17	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Mercury, Total	0.03	J	mg/kg	0.08	0.02	1	12/23/14 06:00	12/23/14 15:12	EPA 7471B	1,7471B	MC
Nickel, Total	13		mg/kg	2.2	0.35	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Potassium, Total	970		mg/kg	220	35.	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Selenium, Total	ND		mg/kg	1.7	0.26	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Silver, Total	ND		mg/kg	0.87	0.17	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Sodium, Total	150	J	mg/kg	170	26.	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Thallium, Total	ND		mg/kg	1.7	0.35	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Vanadium, Total	21		mg/kg	0.87	0.09	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT
Zinc, Total	29		mg/kg	4.4	0.61	2	12/24/14 15:16	12/30/14 12:26	EPA 3050B	1,6010C	TT

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-06 Batch: WG750884-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	12/23/14 06:00	12/23/14 14:50	1,7471B	MC

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-06 Batch: WG751848-1										
Aluminum, Total	ND		mg/kg	4.0	0.80	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Antimony, Total	ND		mg/kg	2.0	0.32	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Arsenic, Total	0.13	J	mg/kg	0.40	0.08	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Barium, Total	ND		mg/kg	0.40	0.12	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Beryllium, Total	ND		mg/kg	0.20	0.04	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.40	0.03	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Calcium, Total	ND		mg/kg	4.0	1.2	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Chromium, Total	ND		mg/kg	0.40	0.08	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Cobalt, Total	ND		mg/kg	0.80	0.20	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Copper, Total	ND		mg/kg	0.40	0.08	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Iron, Total	ND		mg/kg	2.0	0.80	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Lead, Total	0.11	J	mg/kg	2.0	0.08	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Magnesium, Total	ND		mg/kg	4.0	0.40	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Manganese, Total	ND		mg/kg	0.40	0.08	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Nickel, Total	ND		mg/kg	1.0	0.16	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Potassium, Total	ND		mg/kg	100	16.	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Selenium, Total	ND		mg/kg	0.80	0.12	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Silver, Total	ND		mg/kg	0.40	0.08	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Sodium, Total	ND		mg/kg	80	12.	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Thallium, Total	ND		mg/kg	0.80	0.16	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Vanadium, Total	ND		mg/kg	0.40	0.04	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH
Zinc, Total	ND		mg/kg	2.0	0.28	1	12/24/14 15:16	12/29/14 15:18	1,6010C	JH

Project Name: 31-32 LIC

Project Number: 41.0162268.2

Lab Number: L1430558

Report Date: 12/30/14

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 Batch: WG750884-2 SRM Lot Number: D083-540								
Mercury, Total	110		-		75-126	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 Batch: WG751848-2 SRM Lot Number: D083-540					
Aluminum, Total	75	-	51-148	-	
Antimony, Total	155	-	1-210	-	
Arsenic, Total	98	-	78-122	-	
Barium, Total	90	-	82-117	-	
Beryllium, Total	92	-	82-118	-	
Cadmium, Total	88	-	82-118	-	
Calcium, Total	88	-	82-118	-	
Chromium, Total	89	-	79-121	-	
Cobalt, Total	88	-	83-117	-	
Copper, Total	91	-	80-120	-	
Iron, Total	93	-	47-153	-	
Lead, Total	85	-	81-119	-	
Magnesium, Total	83	-	75-124	-	
Manganese, Total	100	-	81-119	-	
Nickel, Total	87	-	82-118	-	
Potassium, Total	88	-	70-130	-	
Selenium, Total	90	-	78-123	-	
Silver, Total	91	-	74-125	-	
Sodium, Total	85	-	70-130	-	
Thallium, Total	86	-	78-122	-	
Vanadium, Total	89	-	65-135	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 Batch: WG751848-2 SRM Lot Number: D083-540					
Zinc, Total	87	-	80-121	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG750884-4 QC Sample: L1430558-01 Client ID: T3 (3-5)												
Mercury, Total	0.21	0.137	0.41	**146**	Q	-	-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG751848-4 QC Sample: L1430800-11 Client ID: MS Sample										
Aluminum, Total	4800	180	4100	**0**	Q	-	-	75-125	-	20
Antimony, Total	4.6	45.1	34	**65**	Q	-	-	75-125	-	20
Arsenic, Total	15.	10.8	18	**28**	Q	-	-	75-125	-	20
Barium, Total	220	180	330	**61**	Q	-	-	75-125	-	20
Beryllium, Total	0.22	4.51	3.2	**71**	Q	-	-	75-125	-	20
Cadmium, Total	0.69	4.6	3.8	**68**	Q	-	-	75-125	-	20
Calcium, Total	20000	903	17000	**0**	Q	-	-	75-125	-	20
Chromium, Total	14.	18	25	**61**	Q	-	-	75-125	-	20
Cobalt, Total	5.1	45.1	32	**60**	Q	-	-	75-125	-	20
Copper, Total	130	22.6	170	**177**	Q	-	-	75-125	-	20
Iron, Total	17000	90.3	17000	**0**	Q	-	-	75-125	-	20
Lead, Total	1200	46	490	**0**	Q	-	-	75-125	-	20
Magnesium, Total	5500	903	4800	**0**	Q	-	-	75-125	-	20
Manganese, Total	190	45.1	310	**266**	Q	-	-	75-125	-	20
Nickel, Total	12.	45.1	39	**60**	Q	-	-	75-125	-	20
Potassium, Total	880	903	1300	**46**	Q	-	-	75-125	-	20
Selenium, Total	ND	10.8	6.9	**64**	Q	-	-	75-125	-	20
Silver, Total	0.62	27.1	21	75		-	-	75-125	-	20
Sodium, Total	370	903	930	**62**	Q	-	-	75-125	-	20
Thallium, Total	ND	10.8	5.9	**54**	Q	-	-	75-125	-	20
Vanadium, Total	21.	45.1	49	**62**	Q	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG751848-4 QC Sample: L1430800-11 Client ID: MS Sample									
Zinc, Total	260	45.1	310	111	-	-	75-125	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG750884-3 QC Sample: L1430558-01 Client ID: T3 (3-5)						
Mercury, Total	0.21	0.21	mg/kg	0		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG751848-3 QC Sample: L1430800-11 Client ID: DUP Sample						
Aluminum, Total	4800	4300	mg/kg	11		20
Antimony, Total	4.6	3.7	mg/kg	**22**	Q	20
Arsenic, Total	15.	15	mg/kg	0		20
Barium, Total	220	230	mg/kg	4		20
Beryllium, Total	0.22	0.22	mg/kg	0		20
Cadmium, Total	0.69	1.2	mg/kg	**54**	Q	20
Calcium, Total	20000	28000	mg/kg	**33**	Q	20
Chromium, Total	14.	14	mg/kg	0		20
Cobalt, Total	5.1	4.2	mg/kg	19		20
Copper, Total	130	510	mg/kg	**119**	Q	20
Iron, Total	17000	24000	mg/kg	**34**	Q	20
Lead, Total	1200	500	mg/kg	**82**	Q	20
Magnesium, Total	5500	3600	mg/kg	**42**	Q	20
Manganese, Total	190	250	mg/kg	**27**	Q	20
Nickel, Total	12.	14	mg/kg	15		20
Potassium, Total	880	680	mg/kg	**26**	Q	20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	0.62	0.32J	mg/kg	NC		20
Sodium, Total	370	330	mg/kg	11		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG751848-3 QC Sample: L1430800-11 Client ID: DUP Sample						
Thallium, Total	ND	ND	mg/kg	NC		20
Vanadium, Total	21.	19	mg/kg	10		20
Zinc, Total	260	460	mg/kg	**56**	Q	20

INORGANICS
&
MISCELLANEOUS

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-01
Client ID: T3 (3-5)
Sample Location: LONG ISLAND CITY, QUEENS
Matrix: Soil

Date Collected: 12/18/14 09:08
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	9.9		mg/kg	0.84	0.84	1	-	12/30/14 16:18	107,-	JO
Solids, Total	95.7		%	0.100	NA	1	-	12/19/14 03:53	30,2540G	RT
Cyanide, Total	ND		mg/kg	1.0	0.24	1	12/21/14 13:45	12/23/14 15:38	1,9010C/9012B	JO
Chromium, Hexavalent	0.20	J	mg/kg	0.84	0.17	1	12/29/14 11:45	12/29/14 18:12	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-02
Client ID: T3 (13-15)
Sample Location: LONG ISLAND CITY, QUEENS
Matrix: Soil

Date Collected: 12/18/14 09:30
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	8.6		mg/kg	0.91	0.91	1	-	12/30/14 16:18	107,-	JO
Solids, Total	87.8		%	0.100	NA	1	-	12/19/14 03:53	30,2540G	RT
Cyanide, Total	ND		mg/kg	1.1	0.25	1	12/21/14 13:45	12/23/14 15:40	1,9010C/9012B	JO
Chromium, Hexavalent	0.22	J	mg/kg	0.91	0.18	1	12/29/14 11:45	12/29/14 18:12	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-03
Client ID: T7 (3-5)
Sample Location: LONG ISLAND CITY, QUEENS
Matrix: Soil

Date Collected: 12/18/14 10:50
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	15		mg/kg	0.83	0.83	1	-	12/30/14 16:18	107,-	JO
Solids, Total	96.4		%	0.100	NA	1	-	12/19/14 03:53	30,2540G	RT
Cyanide, Total	0.61	J	mg/kg	1.0	0.23	1	12/21/14 13:45	12/23/14 15:41	1,9010C/9012B	JO
Chromium, Hexavalent	ND		mg/kg	0.83	0.16	1	12/29/14 11:45	12/29/14 18:13	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-04
Client ID: T7 (13-15)
Sample Location: LONG ISLAND CITY, QUEENS
Matrix: Soil

Date Collected: 12/18/14 11:10
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	9.6		mg/kg	0.82	0.82	1	-	12/30/14 16:18	107,-	JO
Solids, Total	97.6		%	0.100	NA	1	-	12/19/14 03:53	30,2540G	RT
Cyanide, Total	ND		mg/kg	0.96	0.22	1	12/21/14 13:45	12/23/14 15:42	1,9010C/9012B	JO
Chromium, Hexavalent	ND		mg/kg	0.82	0.16	1	12/29/14 11:45	12/29/14 18:13	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-05
Client ID: T8 (3-5)
Sample Location: LONG ISLAND CITY, QUEENS
Matrix: Soil

Date Collected: 12/18/14 10:00
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	7.8		mg/kg	0.85	0.85	1	-	12/30/14 16:18	107,-	JO
Solids, Total	94.4		%	0.100	NA	1	-	12/19/14 03:53	30,2540G	RT
Cyanide, Total	ND		mg/kg	1.0	0.23	1	12/21/14 13:45	12/23/14 15:44	1,9010C/9012B	JO
Chromium, Hexavalent	ND		mg/kg	0.85	0.17	1	12/29/14 11:45	12/29/14 18:14	1,7196A	MD

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

SAMPLE RESULTS

Lab ID: L1430558-06
Client ID: T8 (13-15)
Sample Location: LONG ISLAND CITY, QUEENS
Matrix: Soil

Date Collected: 12/18/14 10:08
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chromium, Trivalent	14		mg/kg	0.90	0.90	1	-	12/30/14 16:18	107,-	JO
Solids, Total	89.1		%	0.100	NA	1	-	12/19/14 03:53	30,2540G	RT
Cyanide, Total	ND		mg/kg	1.1	0.25	1	12/21/14 13:45	12/23/14 15:45	1,9010C/9012B	JO
Chromium, Hexavalent	0.21	J	mg/kg	0.90	0.18	1	12/29/14 11:45	12/29/14 18:15	1,7196A	MD

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-06 Batch: WG750814-1										
Cyanide, Total	ND		mg/kg	0.96	0.22	1	12/21/14 13:45	12/23/14 15:35	1,9010C/9012B	JO
General Chemistry - Westborough Lab for sample(s): 01-06 Batch: WG752307-1										
Chromium, Hexavalent	ND		mg/kg	0.80	0.16	1	12/29/14 11:45	12/29/14 18:10	1,7196A	MD

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG750814-2 WG750814-3								
Cyanide, Total	103		94		80-120	12		35
General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG752307-2								
Chromium, Hexavalent	99		-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG750814-4 WG750814-5 QC Sample: L1430558-01 Client ID: T3 (3-5)												
Cyanide, Total	ND	10	11	110		11	110		65-135	0		35
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG752307-5 QC Sample: L1430558-04 Client ID: T7 (13-15)												
Chromium, Hexavalent	ND	1170	1200	100		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG750171-1 QC Sample: L1430492-01 Client ID: DUP Sample						
Solids, Total	87.9	87.6	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG752307-4 QC Sample: L1430558-04 Client ID: T7 (13-15)						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 12/19/2014 01:10

Cooler Information Custody Seal

Cooler	
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430558-01A	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-01B	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-01C	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-01D	Plastic 2oz unpreserved for TS	B	N/A	2.9	Y	Absent	TS(7)
L1430558-01E	Glass 250ml/8oz unpreserved	B	N/A	2.9	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430558-01F	Glass 250ml/8oz unpreserved	B	N/A	2.9	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430558-01X	Vial MeOH preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-01Y	Vial Water preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-01Z	Vial Water preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-02A	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-02B	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)

*Values in parentheses indicate holding time in days

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430558-02C	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-02D	Plastic 2oz unpreserved for TS	B	N/A	2.9	Y	Absent	TS(7)
L1430558-02E	Glass 250ml/8oz unpreserved	B	N/A	2.9	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430558-02F	Glass 250ml/8oz unpreserved	B	N/A	2.9	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430558-02X	Vial MeOH preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-02Y	Vial Water preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-02Z	Vial Water preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-03A	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-03B	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-03C	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-03D	Plastic 2oz unpreserved for TS	B	N/A	2.9	Y	Absent	TS(7)
L1430558-03E	Glass 250ml/8oz unpreserved	B	N/A	2.9	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)

*Values in parentheses indicate holding time in days

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430558-03F	Glass 250ml/8oz unpreserved	B	N/A	2.9	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430558-03X	Vial MeOH preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-03Y	Vial Water preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-03Z	Vial Water preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-04A	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-04B	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-04C	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-04D	Plastic 2oz unpreserved for TS	B	N/A	2.9	Y	Absent	TS(7)
L1430558-04E	Glass 250ml/8oz unpreserved	B	N/A	2.9	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430558-04F	Glass 250ml/8oz unpreserved	B	N/A	2.9	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430558-04X	Vial MeOH preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-04Y	Vial Water preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)

*Values in parentheses indicate holding time in days

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430558-04Z	Vial Water preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-05A	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-05B	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-05C	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-05D	Plastic 2oz unpreserved for TS	B	N/A	2.9	Y	Absent	TS(7)
L1430558-05E	Glass 250ml/8oz unpreserved	B	N/A	2.9	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430558-05F	Glass 250ml/8oz unpreserved	B	N/A	2.9	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430558-05X	Vial MeOH preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-05Y	Vial Water preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-05Z	Vial Water preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-06A	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-06B	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-06C	5 gram Encore Sampler	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(2)
L1430558-06D	Plastic 2oz unpreserved for TS	B	N/A	2.9	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430558
Report Date: 12/30/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430558-06E	Glass 250ml/8oz unpreserved	B	N/A	2.9	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430558-06F	Glass 250ml/8oz unpreserved	B	N/A	2.9	Y	Absent	BE-TI(180),NYTCL-8270(14),TCN-9010(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TRICR-CALC(30),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),HEXCR-7196(30),K-TI(180),NA-TI(180)
L1430558-06X	Vial MeOH preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-06Y	Vial Water preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)
L1430558-06Z	Vial Water preserved split	B	N/A	2.9	Y	Absent	NYTCL-8260HLW(14)

*Values in parentheses indicate holding time in days

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

Report Format: DU Report with 'J' Qualifiers

Project Name: 31-32 LIC **Lab Number:** L1430558

Project Number: 41.0162268.2 **Report Date:** 12/30/14

Data Qualifiers

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	31-32 LIC	**Lab Number:**	L1430558
Project Number:	41.0162268.2	**Report Date:**	12/30/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

107 Alpha Analytical - In-house calculation method.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised December 16, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

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Date Rec'd in Lab: 12/18/14

ALPHA Job #: L1433054

Project Information
Project Name: 31-32 LIC
Project Location: Long Island City Queens
Project #: 41.0016228.20
(Use Project name as Project #) ☐
Project Manager: Cliff Bell
ALPHAQuote #:

Client Information
Client: GZA GeoEnvironmental
Address: 104 W 29th St 10th Floor NY NY 10001
Phone: 347-271-1326
Fax:
Email: Ms.James.Colon@gza.com

Turn-Around Time
Standard ☑ Due Date: 12/30/14
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

For all samples analyze herbicides, TCN, Cr^{6+} and Cr^{3+}

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ **Done**
☐ **Lab to do**
Preservation
☐ **Lab to do**
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs	TCL SVOCs	TAL metals	Pesticides	PCB				Sample Specific Comments	Total Bottle
30653 01	T3 (3-5)	12/18/14	9:08	Soil	JFC	X	X	X	X	X					
02	T3 (13-15)		9:30		JFC										
03	T7 (3-5)		10:50		JFC										
04	T7 (13-15)		11:10		JFC										
05	T8 (3-5)		10:00		JFC										
06	T8 (13-15)		10:08		JFC										

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type									
Preservative									

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	12/18/14 15:45	[signature] AHL	12/18/14 1545
[signature]	12/18/14 1835	Tom Tolen	12-18-14 1835
Tom Tolen	12-18-14 2320	[signature]	12/18/14 2320

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page
of

Date Rec'd in Lab: 12/18/14

ALPHA Job #: L1433054

Project Information
Project Name: 31-32 LIC
Project Location: Long Island City Queens
Project #: 41.0016228.20
(Use Project name as Project #) ☐
Project Manager: Cliff Bell
ALPHAQuote #:

Turn-Around Time
Standard ☑ Due Date: 12/30/14
Rush (only if pre approved) ☐ # of Days:

Client Information
Client: GZA GeoEnvironmental
Address: 104 W 29th St 10th Floor NY NY 10001
Phone: 347-271-1326
Fax:
Email: Mr.James.Colon@gza.com

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information
☐ Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ **Done**
☐ **Lab to do**
Preservation
☐ **Lab to do**
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs	TCL SVOCs	TAL metals	Pesticides	PCB				Sample Specific Comments	Total Bottle
30653-01	T3 (3-5)	12/18/14	9:08	Soil	JFC	X	X	X	X	X					
02	T3 (13-15)		9:30		JFC										
03	T7 (3-5)		10:50		JFC										
04	T7 (13-15)		11:10		JFC										
05	T8 (3-5)		10:00		JFC										
06	T8 (13-15)		10:08		JFC										

Container Type
Preservative

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	12/18/14 15:45	[signature] AHL	12/18/14 1545
[signature]	12/18/14 1835	Tom Tolen	12-18-14 1835
Tom Tolen	12-18-14 2320	[signature]	12/18/14 2320

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1430583
Client:	GZA GeoEnvironmental, Inc. 104 West 29th Street, 10th Floor New York, NY 10001
ATTN:	Clifford Bell
Phone:	(212) 594-8140
Project Name:	31-32 LIC
Project Number:	41.0162268.2
Report Date:	12/31/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1430583-01	TW-2	WATER	LONG ISLAND CITY, QUEENS, NY	12/18/14 14:35	12/18/14
L1430583-02	TW-2 FILTERED	WATER	LONG ISLAND CITY, QUEENS, NY	12/18/14 14:35	12/18/14

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Case Narrative (continued)

Report Submission

This report replaces the report issued December 30, 2014. The erroneous set of Semivolatile Organics data on L1430583-02 was removed.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Dissolved Metals

The WG752260-4 MS recoveries for calcium (74%), magnesium (74%), and sodium (130%), performed on L1430583-02, do not apply because the sample concentrations are greater than four times the spike amounts added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative

Date: 12/31/14

ORGANICS

VOLATILES

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

SAMPLE RESULTS

Lab ID: L1430583-01
Client ID: TW-2
Sample Location: LONG ISLAND CITY, QUEENS, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/23/14 13:53
Analyst: PD

Date Collected: 12/18/14 14:35
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	2.8		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.69		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	2.1		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 31-32 LIC **Lab Number:** L1430583

Project Number: 41.0162268.2 **Report Date:** 12/31/14

SAMPLE RESULTS

Lab ID: L1430583-01 Date Collected: 12/18/14 14:35

Client ID: TW-2 Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Project Name: 31-32 LIC **Lab Number:** L1430583

Project Number: 41.0162268.2 **Report Date:** 12/31/14

SAMPLE RESULTS

Lab ID: L1430583-01 Date Collected: 12/18/14 14:35

Client ID: TW-2 Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	41.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	106		70-130

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/23/14 10:09
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG751535-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.13
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.33
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.14
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/23/14 10:09
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG751535-3					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/23/14 10:09
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG751535-3					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	41.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG751535-1 WG751535-2								
Methylene chloride	111		111		70-130	0		20
1,1-Dichloroethane	112		115		70-130	3		20
Chloroform	107		110		70-130	3		20
Carbon tetrachloride	106		107		63-132	1		20
1,2-Dichloropropane	116		118		70-130	2		20
Dibromochloromethane	104		105		63-130	1		20
1,1,2-Trichloroethane	109		110		70-130	1		20
Tetrachloroethene	105		106		70-130	1		20
Chlorobenzene	106		108		75-130	2		20
Trichlorofluoromethane	97		97		62-150	0		20
1,2-Dichloroethane	106		106		70-130	0		20
1,1,1-Trichloroethane	104		104		67-130	0		20
Bromodichloromethane	105		108		67-130	3		20
trans-1,3-Dichloropropene	101		102		70-130	1		20
cis-1,3-Dichloropropene	105		108		70-130	3		20
1,1-Dichloropropene	106		104		70-130	2		20
Bromoform	102		104		54-136	2		20
1,1,2,2-Tetrachloroethane	105		108		67-130	3		20
Benzene	109		110		70-130	1		20
Toluene	107		107		70-130	0		20
Ethylbenzene	104		105		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG751535-1 WG751535-2								
Chloromethane	92		92		64-130	0		20
Bromomethane	83		91		39-139	9		20
Vinyl chloride	89		89		55-140	0		20
Chloroethane	96		96		55-138	0		20
1,1-Dichloroethene	94		91		61-145	3		20
trans-1,2-Dichloroethene	108		110		70-130	2		20
Trichloroethene	113		115		70-130	2		20
1,2-Dichlorobenzene	99		104		70-130	5		20
1,3-Dichlorobenzene	102		104		70-130	2		20
1,4-Dichlorobenzene	99		104		70-130	5		20
Methyl tert butyl ether	104		105		63-130	1		20
p/m-Xylene	106		107		70-130	1		20
o-Xylene	103		105		70-130	2		20
cis-1,2-Dichloroethene	109		111		70-130	2		20
Dibromomethane	111		111		70-130	0		20
1,2,3-Trichloropropane	102		105		64-130	3		20
Acrylonitrile	118		125		70-130	6		20
Styrene	102		104		70-130	2		20
Dichlorodifluoromethane	71		69		36-147	3		20
Acetone	**51**	Q	**54**	Q	58-148	6		20
Carbon disulfide	81		81		51-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG751535-1 WG751535-2								
2-Butanone	90		93		63-138	3		20
Vinyl acetate	102		104		70-130	2		20
4-Methyl-2-pentanone	105		104		59-130	1		20
2-Hexanone	78		81		57-130	4		20
Bromochloromethane	118		119		70-130	1		20
2,2-Dichloropropane	105		105		63-133	0		20
1,2-Dibromoethane	102		106		70-130	4		20
1,3-Dichloropropane	104		108		70-130	4		20
1,1,1,2-Tetrachloroethane	108		108		64-130	0		20
Bromobenzene	104		105		70-130	1		20
n-Butylbenzene	91		97		53-136	6		20
sec-Butylbenzene	92		102		70-130	10		20
tert-Butylbenzene	95		102		70-130	7		20
o-Chlorotoluene	105		109		70-130	4		20
p-Chlorotoluene	101		106		70-130	5		20
1,2-Dibromo-3-chloropropane	90		97		41-144	7		20
Hexachlorobutadiene	85		93		63-130	9		20
Isopropylbenzene	103		106		70-130	3		20
p-Isopropyltoluene	90		100		70-130	11		20
Naphthalene	**67**	Q	88		70-130	**27**	Q	20
n-Propylbenzene	100		104		69-130	4		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG751535-1 WG751535-2								
1,2,3-Trichlorobenzene	72		89		70-130	**21**	Q	20
1,2,4-Trichlorobenzene	75		84		70-130	11		20
1,3,5-Trimethylbenzene	101		105		64-130	4		20
1,2,4-Trimethylbenzene	99		104		70-130	5		20
1,4-Dioxane	71		104		56-162	**38**	Q	20
p-Diethylbenzene	93		96		70-130	3		20
p-Ethyltoluene	98		104		70-130	6		20
1,2,4,5-Tetramethylbenzene	98		101		70-130	3		20
Ethyl ether	98		98		59-134	0		20
trans-1,4-Dichloro-2-butene	99		98		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	92		92		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	97		97		70-130
Dibromofluoromethane	103		102		70-130

SEMIVOLATILES

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

SAMPLE RESULTS

Lab ID:	L1430583-01	Date Collected:	12/18/14 14:35
Client ID:	TW-2	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS, NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	12/23/14 01:47
Analytical Date:	12/29/14 20:35		
Analyst:	JB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.58	1
Isophorone	ND		ug/l	5.0	0.79	1
Nitrobenzene	ND		ug/l	2.0	0.40	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	0.93	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.1	1
Di-n-butylphthalate	ND		ug/l	5.0	0.77	1
Di-n-octylphthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate	ND		ug/l	5.0	0.33	1
Biphenyl	ND		ug/l	2.0	0.24	1
4-Chloroaniline	ND		ug/l	5.0	0.84	1
2-Nitroaniline	ND		ug/l	5.0	0.96	1
3-Nitroaniline	ND		ug/l	5.0	0.67	1
4-Nitroaniline	ND		ug/l	5.0	0.83	1
Dibenzofuran	ND		ug/l	2.0	0.22	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36	1

Project Name: 31-32 LIC **Lab Number:** L1430583

Project Number: 41.0162268.2 **Report Date:** 12/31/14

SAMPLE RESULTS

Lab ID: L1430583-01 Date Collected: 12/18/14 14:35

Client ID: TW-2 Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acetophenone	ND		ug/l	5.0	0.43	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54	1
2-Chlorophenol	ND		ug/l	2.0	0.58	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.56	1
2,4-Dimethylphenol	ND		ug/l	5.0	0.58	1
2-Nitrophenol	ND		ug/l	10	1.0	1
4-Nitrophenol	ND		ug/l	10	1.1	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4	1
Phenol	ND		ug/l	5.0	0.27	1
2-Methylphenol	ND		ug/l	5.0	0.70	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.68	1
Carbazole	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	33		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	78		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

SAMPLE RESULTS

Lab ID:	L1430583-01	Date Collected:	12/18/14 14:35
Client ID:	TW-2	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS, NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	12/23/14 01:48
Analytical Date:	12/24/14 12:56		
Analyst:	KV		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	ND		ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	ND		ug/l	0.20	0.06	1
Phenanthrene	ND		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	ND		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Project Name: 31-32 LIC **Lab Number:** L1430583

Project Number: 41.0162268.2 **Report Date:** 12/31/14

SAMPLE RESULTS

Lab ID: L1430583-01 Date Collected: 12/18/14 14:35

Client ID: TW-2 Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	99		10-120
4-Terphenyl-d14	86		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

SAMPLE RESULTS

Lab ID:	L1430583-02	Date Collected:	12/18/14 14:35
Client ID:	TW-2 FILTERED	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS, NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	12/23/14 11:06
Analytical Date:	12/25/14 01:24		
Analyst:	PS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.58	1
Isophorone	ND		ug/l	5.0	0.79	1
Nitrobenzene	ND		ug/l	2.0	0.40	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	0.93	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.1	1
Di-n-butylphthalate	ND		ug/l	5.0	0.77	1
Di-n-octylphthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate	ND		ug/l	5.0	0.33	1
Biphenyl	0.61	J	ug/l	2.0	0.24	1
4-Chloroaniline	ND		ug/l	5.0	0.84	1
2-Nitroaniline	ND		ug/l	5.0	0.96	1
3-Nitroaniline	ND		ug/l	5.0	0.67	1
4-Nitroaniline	ND		ug/l	5.0	0.83	1
Dibenzofuran	ND		ug/l	2.0	0.22	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36	1

Project Name: 31-32 LIC **Lab Number:** L1430583

Project Number: 41.0162268.2 **Report Date:** 12/31/14

SAMPLE RESULTS

Lab ID: L1430583-02 Date Collected: 12/18/14 14:35

Client ID: TW-2 FILTERED Date Received: 12/18/14

Sample Location: LONG ISLAND CITY, QUEENS, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acetophenone	ND		ug/l	5.0	0.43	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54	1
2-Chlorophenol	ND		ug/l	2.0	0.58	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.56	1
2,4-Dimethylphenol	ND		ug/l	5.0	0.58	1
2-Nitrophenol	ND		ug/l	10	1.0	1
4-Nitrophenol	ND		ug/l	10	1.1	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4	1
Phenol	ND		ug/l	5.0	0.27	1
2-Methylphenol	ND		ug/l	5.0	0.70	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75	1
Benzoic Acid	10	J	ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.68	1
Carbazole	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	73		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

SAMPLE RESULTS

Lab ID:	L1430583-02	Date Collected:	12/18/14 14:35
Client ID:	TW-2 FILTERED	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS, NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	12/23/14 11:09
Analytical Date:	12/23/14 18:20		
Analyst:	KV		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	0.08	J	ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	ND		ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	ND		ug/l	0.20	0.06	1
Phenanthrene	ND		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	ND		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Project Name: 31-32 LIC **Lab Number:** L1430583

Project Number: 41.0162268.2 **Report Date:** 12/31/14

SAMPLE RESULTS

Lab ID:	L1430583-02	Date Collected:	12/18/14 14:35
Client ID:	TW-2 FILTERED	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS, NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	37		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	66		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/24/14 11:07
Analyst: KV

Extraction Method: EPA 3510C
Extraction Date: 12/23/14 01:48

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG751206-1					
Acenaphthene	ND		ug/l	0.20	0.06
2-Chloronaphthalene	ND		ug/l	0.20	0.07
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.07
Naphthalene	0.07	J	ug/l	0.20	0.06
Benzo(a)anthracene	ND		ug/l	0.20	0.06
Benzo(a)pyrene	ND		ug/l	0.20	0.07
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07
Chrysene	ND		ug/l	0.20	0.05
Acenaphthylene	ND		ug/l	0.20	0.05
Anthracene	ND		ug/l	0.20	0.06
Benzo(ghi)perylene	ND		ug/l	0.20	0.07
Fluorene	ND		ug/l	0.20	0.06
Phenanthrene	ND		ug/l	0.20	0.06
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08
Pyrene	ND		ug/l	0.20	0.06
2-Methylnaphthalene	ND		ug/l	0.20	0.06
Pentachlorophenol	ND		ug/l	0.80	0.19
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.07

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/24/14 11:07
Analyst: KV

Extraction Method: EPA 3510C
Extraction Date: 12/23/14 01:48

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG751206-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	82		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/29/14 09:54
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 12/23/14 01:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG751209-1					
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60
Hexachlorocyclopentadiene	ND		ug/l	20	0.58
Isophorone	ND		ug/l	5.0	0.79
Nitrobenzene	ND		ug/l	2.0	0.40
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	0.93
Butyl benzyl phthalate	ND		ug/l	5.0	1.1
Di-n-butylphthalate	ND		ug/l	5.0	0.77
Di-n-octylphthalate	ND		ug/l	5.0	1.2
Diethyl phthalate	ND		ug/l	5.0	0.39
Dimethyl phthalate	ND		ug/l	5.0	0.33
Biphenyl	ND		ug/l	2.0	0.24
4-Chloroaniline	ND		ug/l	5.0	0.84
2-Nitroaniline	ND		ug/l	5.0	0.96
3-Nitroaniline	ND		ug/l	5.0	0.67
4-Nitroaniline	ND		ug/l	5.0	0.83
Dibenzofuran	ND		ug/l	2.0	0.22

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/29/14 09:54
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 12/23/14 01:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG751209-1					
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36
Acetophenone	ND		ug/l	5.0	0.43
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54
2-Chlorophenol	ND		ug/l	2.0	0.58
2,4-Dichlorophenol	ND		ug/l	5.0	0.56
2,4-Dimethylphenol	ND		ug/l	5.0	0.58
2-Nitrophenol	ND		ug/l	10	1.0
4-Nitrophenol	ND		ug/l	10	1.1
2,4-Dinitrophenol	ND		ug/l	20	1.4
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4
Phenol	ND		ug/l	5.0	0.27
2-Methylphenol	ND		ug/l	5.0	0.70
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75
Benzoic Acid	ND		ug/l	50	1.0
Benzyl Alcohol	ND		ug/l	2.0	0.68
Carbazole	ND		ug/l	2.0	0.37

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	30		21-120
Phenol-d6	20		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	72		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/26/14 12:58
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 12/23/14 11:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG751362-1					
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60
Hexachlorocyclopentadiene	ND		ug/l	20	0.58
Isophorone	ND		ug/l	5.0	0.79
Nitrobenzene	ND		ug/l	2.0	0.40
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	0.93
Butyl benzyl phthalate	ND		ug/l	5.0	1.1
Di-n-butylphthalate	ND		ug/l	5.0	0.77
Di-n-octylphthalate	ND		ug/l	5.0	1.2
Diethyl phthalate	ND		ug/l	5.0	0.39
Dimethyl phthalate	ND		ug/l	5.0	0.33
Biphenyl	ND		ug/l	2.0	0.24
4-Chloroaniline	ND		ug/l	5.0	0.84
2-Nitroaniline	ND		ug/l	5.0	0.96
3-Nitroaniline	ND		ug/l	5.0	0.67
4-Nitroaniline	ND		ug/l	5.0	0.83
Dibenzofuran	ND		ug/l	2.0	0.22

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/26/14 12:58
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 12/23/14 11:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG751362-1					
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36
Acetophenone	ND		ug/l	5.0	0.43
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54
2-Chlorophenol	ND		ug/l	2.0	0.58
2,4-Dichlorophenol	ND		ug/l	5.0	0.56
2,4-Dimethylphenol	ND		ug/l	5.0	0.58
2-Nitrophenol	ND		ug/l	10	1.0
4-Nitrophenol	ND		ug/l	10	1.1
2,4-Dinitrophenol	ND		ug/l	20	1.4
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4
Phenol	ND		ug/l	5.0	0.27
2-Methylphenol	ND		ug/l	5.0	0.70
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75
Benzoic Acid	ND		ug/l	50	1.0
Benzyl Alcohol	ND		ug/l	2.0	0.68
Carbazole	ND		ug/l	2.0	0.37

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	68		10-120
4-Terphenyl-d14	85		41-149

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/23/14 17:04
Analyst: KV

Extraction Method: EPA 3510C
Extraction Date: 12/23/14 11:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02 Batch: WG751365-1					
Acenaphthene	ND		ug/l	0.20	0.06
2-Chloronaphthalene	ND		ug/l	0.20	0.07
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.20	0.06
Benzo(a)anthracene	ND		ug/l	0.20	0.06
Benzo(a)pyrene	ND		ug/l	0.20	0.07
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07
Chrysene	ND		ug/l	0.20	0.05
Acenaphthylene	ND		ug/l	0.20	0.05
Anthracene	ND		ug/l	0.20	0.06
Benzo(ghi)perylene	ND		ug/l	0.20	0.07
Fluorene	ND		ug/l	0.20	0.06
Phenanthrene	ND		ug/l	0.20	0.06
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08
Pyrene	ND		ug/l	0.20	0.06
2-Methylnaphthalene	ND		ug/l	0.20	0.06
Pentachlorophenol	ND		ug/l	0.80	0.19
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.07

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/23/14 17:04
Analyst: KV

Extraction Method: EPA 3510C
Extraction Date: 12/23/14 11:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02 Batch: WG751365-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	76		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG751206-2 WG751206-3								
Acenaphthene	71		73		37-111	3		40
2-Chloronaphthalene	70		72		40-140	3		40
Fluoranthene	87		86		40-140	1		40
Hexachlorobutadiene	56		59		40-140	5		40
Naphthalene	68		69		40-140	1		40
Benzo(a)anthracene	91		89		40-140	2		40
Benzo(a)pyrene	78		76		40-140	3		40
Benzo(b)fluoranthene	90		88		40-140	2		40
Benzo(k)fluoranthene	84		82		40-140	2		40
Chrysene	86		84		40-140	2		40
Acenaphthylene	76		78		40-140	3		40
Anthracene	80		82		40-140	2		40
Benzo(ghi)perylene	85		82		40-140	4		40
Fluorene	78		80		40-140	3		40
Phenanthrene	77		78		40-140	1		40
Dibenzo(a,h)anthracene	86		84		40-140	2		40
Indeno(1,2,3-cd)Pyrene	89		87		40-140	2		40
Pyrene	86		83		26-127	4		40
2-Methylnaphthalene	75		77		40-140	3		40
Pentachlorophenol	78		67		9-103	15		40
Hexachlorobenzene	73		75		40-140	3		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG751206-2 WG751206-3								
Hexachloroethane	59		44		40-140	29		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	34		24		21-120
Phenol-d6	26		27		10-120
Nitrobenzene-d5	73		50		23-120
2-Fluorobiphenyl	71		72		15-120
2,4,6-Tribromophenol	83		85		10-120
4-Terphenyl-d14	77		74		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG751209-2 WG751209-3								
1,2,4-Trichlorobenzene	58		56		39-98	4		30
Bis(2-chloroethyl)ether	62		60		40-140	3		30
1,2-Dichlorobenzene	55		54		40-140	2		30
1,3-Dichlorobenzene	53		52		40-140	2		30
1,4-Dichlorobenzene	51		53		36-97	4		30
3,3'-Dichlorobenzidine	81		78		40-140	4		30
2,4-Dinitrotoluene	96		91		24-96	5		30
2,6-Dinitrotoluene	92		88		40-140	4		30
4-Chlorophenyl phenyl ether	73		70		40-140	4		30
4-Bromophenyl phenyl ether	79		73		40-140	8		30
Bis(2-chloroisopropyl)ether	62		59		40-140	5		30
Bis(2-chloroethoxy)methane	70		67		40-140	4		30
Hexachlorocyclopentadiene	**31**	Q	**30**	Q	40-140	3		30
Isophorone	73		70		40-140	4		30
Nitrobenzene	80		75		40-140	6		30
NitrosoDiPhenylAmine(NDPA)/DPA	83		79		40-140	5		30
n-Nitrosodi-n-propylamine	76		71		29-132	7		30
Bis(2-Ethylhexyl)phthalate	91		86		40-140	6		30
Butyl benzyl phthalate	86		84		40-140	2		30
Di-n-butylphthalate	86		83		40-140	4		30
Di-n-octylphthalate	93		88		40-140	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG751209-2 WG751209-3								
Diethyl phthalate	84		80		40-140	5		30
Dimethyl phthalate	81		76		40-140	6		30
Biphenyl	67		61			9		30
4-Chloroaniline	73		71		40-140	3		30
2-Nitroaniline	97		94		52-143	3		30
3-Nitroaniline	68		66		25-145	3		30
4-Nitroaniline	79		77		51-143	3		30
Dibenzofuran	74		69		40-140	7		30
1,2,4,5-Tetrachlorobenzene	62		57		2-134	8		30
Acetophenone	80		77		39-129	4		30
2,4,6-Trichlorophenol	94		88		30-130	7		30
P-Chloro-M-Cresol	83		81		23-97	2		30
2-Chlorophenol	66		65		27-123	2		30
2,4-Dichlorophenol	84		83		30-130	1		30
2,4-Dimethylphenol	64		60		30-130	6		30
2-Nitrophenol	92		87		30-130	6		30
4-Nitrophenol	46		44		10-80	4		30
2,4-Dinitrophenol	116		102		20-130	13		30
4,6-Dinitro-o-cresol	115		110		20-164	4		30
Phenol	24		24		12-110	0		30
2-Methylphenol	55		51		30-130	8		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG751209-2 WG751209-3								
3-Methylphenol/4-Methylphenol	52		48		30-130	8		30
2,4,5-Trichlorophenol	92		90		30-130	2		30
Benzoic Acid	28		13			**73**	Q	30
Benzyl Alcohol	59		56			5		30
Carbazole	86		83		55-144	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	36		35		21-120
Phenol-d6	25		24		10-120
Nitrobenzene-d5	87		85		23-120
2-Fluorobiphenyl	83		80		15-120
2,4,6-Tribromophenol	90		84		10-120
4-Terphenyl-d14	87		84		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG751362-2 WG751362-3								
1,2,4-Trichlorobenzene	52		72		39-98	**32**	Q	30
Bis(2-chloroethyl)ether	48		67		40-140	**33**	Q	30
1,2-Dichlorobenzene	46		64		40-140	**33**	Q	30
1,3-Dichlorobenzene	45		63		40-140	**33**	Q	30
1,4-Dichlorobenzene	45		64		36-97	**35**	Q	30
3,3'-Dichlorobenzidine	55		72		40-140	27		30
2,4-Dinitrotoluene	55		80		24-96	**37**	Q	30
2,6-Dinitrotoluene	52		77		40-140	**39**	Q	30
4-Chlorophenyl phenyl ether	58		81		40-140	**33**	Q	30
4-Bromophenyl phenyl ether	56		81		40-140	**36**	Q	30
Bis(2-chloroisopropyl)ether	47		66		40-140	**34**	Q	30
Bis(2-chloroethoxy)methane	51		72		40-140	**34**	Q	30
Hexachlorocyclopentadiene	61		80		40-140	27		30
Isophorone	52		75		40-140	**36**	Q	30
Nitrobenzene	56		77		40-140	**32**	Q	30
NitrosoDiPhenylAmine(NDPA)/DPA	63		91		40-140	**36**	Q	30
n-Nitrosodi-n-propylamine	56		79		29-132	**34**	Q	30
Bis(2-Ethylhexyl)phthalate	66		95		40-140	**36**	Q	30
Butyl benzyl phthalate	63		94		40-140	**39**	Q	30
Di-n-butylphthalate	64		94		40-140	**38**	Q	30
Di-n-octylphthalate	64		96		40-140	**40**	Q	30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG751362-2 WG751362-3								
Diethyl phthalate	61		88		40-140	**36**	Q	30
Dimethyl phthalate	60		85		40-140	**34**	Q	30
Biphenyl	53		73			**32**	Q	30
4-Chloroaniline	56		63		40-140	12		30
2-Nitroaniline	58		79		52-143	**31**	Q	30
3-Nitroaniline	45		60		25-145	29		30
4-Nitroaniline	56		81		51-143	**36**	Q	30
Dibenzofuran	62		86		40-140	**32**	Q	30
1,2,4,5-Tetrachlorobenzene	52		70		2-134	30		30
Acetophenone	51		72		39-129	**34**	Q	30
2,4,6-Trichlorophenol	58		83		30-130	**35**	Q	30
P-Chloro-M-Cresol	61		88		23-97	**36**	Q	30
2-Chlorophenol	53		76		27-123	**36**	Q	30
2,4-Dichlorophenol	65		90		30-130	**32**	Q	30
2,4-Dimethylphenol	60		86		30-130	**36**	Q	30
2-Nitrophenol	52		76		30-130	**38**	Q	30
4-Nitrophenol	43		61		10-80	**35**	Q	30
2,4-Dinitrophenol	65		91		20-130	**33**	Q	30
4,6-Dinitro-o-cresol	63		90		20-164	**35**	Q	30
Phenol	27		39		12-110	**36**	Q	30
2-Methylphenol	51		74		30-130	**37**	Q	30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG751362-2 WG751362-3								
3-Methylphenol/4-Methylphenol	49		70		30-130	**35**	Q	30
2,4,5-Trichlorophenol	60		90		30-130	**40**	Q	30
Benzoic Acid	41		48			16		30
Benzyl Alcohol	45		65			**36**	Q	30
Carbazole	68		98		55-144	**36**	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	34		48		21-120
Phenol-d6	25		35		10-120
Nitrobenzene-d5	51		73		23-120
2-Fluorobiphenyl	56		76		15-120
2,4,6-Tribromophenol	56		77		10-120
4-Terphenyl-d14	58		84		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02 Batch: WG751365-2 WG751365-3								
Acenaphthene	84		79		37-111	6		40
2-Chloronaphthalene	84		79		40-140	6		40
Fluoranthene	96		89		40-140	8		40
Hexachlorobutadiene	78		72		40-140	8		40
Naphthalene	77		73		40-140	5		40
Benzo(a)anthracene	90		85		40-140	6		40
Benzo(a)pyrene	92		86		40-140	7		40
Benzo(b)fluoranthene	91		86		40-140	6		40
Benzo(k)fluoranthene	86		80		40-140	7		40
Chrysene	88		82		40-140	7		40
Acenaphthylene	87		82		40-140	6		40
Anthracene	91		86		40-140	6		40
Benzo(ghi)perylene	86		80		40-140	7		40
Fluorene	95		90		40-140	5		40
Phenanthrene	90		84		40-140	7		40
Dibenzo(a,h)anthracene	87		81		40-140	7		40
Indeno(1,2,3-cd)Pyrene	87		81		40-140	7		40
Pyrene	95		88		26-127	8		40
2-Methylnaphthalene	85		80		40-140	6		40
Pentachlorophenol	85		78		9-103	9		40
Hexachlorobenzene	87		81		40-140	7		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02 Batch: WG751365-2 WG751365-3								
Hexachloroethane	76		69		40-140	10		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	48		42		21-120
Phenol-d6	35		31		10-120
Nitrobenzene-d5	78		73		23-120
2-Fluorobiphenyl	78		75		15-120
2,4,6-Tribromophenol	96		93		10-120
4-Terphenyl-d14	82		76		41-149

PCBS

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

SAMPLE RESULTS

Lab ID:	L1430583-01	Date Collected:	12/18/14 14:35
Client ID:	TW-2	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS, NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8082A	Extraction Date:	12/22/14 21:39
Analytical Date:	12/23/14 13:41	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	12/23/14
		Cleanup Method:	EPA 3660B
		Cleanup Date:	12/23/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.055	1	A
Aroclor 1221	ND		ug/l	0.083	0.053	1	A
Aroclor 1232	ND		ug/l	0.083	0.031	1	A
Aroclor 1242	ND		ug/l	0.083	0.060	1	A
Aroclor 1248	ND		ug/l	0.083	0.051	1	A
Aroclor 1254	ND		ug/l	0.083	0.034	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.029	1	A
Aroclor 1268	ND		ug/l	0.083	0.038	1	A
PCBs, Total	ND		ug/l	0.083	0.029	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	97		30-150	B
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	92		30-150	A

Project Name: 31-32 LIC

Project Number: 41.0162268.2

Lab Number: L1430583

Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 12/23/14 13:54
Analyst: JW

Extraction Method: EPA 3510C
Extraction Date: 12/22/14 21:39
Cleanup Method: EPA 3665A
Cleanup Date: 12/23/14
Cleanup Method: EPA 3660B
Cleanup Date: 12/23/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG751168-1						
Aroclor 1016	ND		ug/l	0.083	0.055	A
Aroclor 1221	ND		ug/l	0.083	0.053	A
Aroclor 1232	ND		ug/l	0.083	0.031	A
Aroclor 1242	ND		ug/l	0.083	0.060	A
Aroclor 1248	ND		ug/l	0.083	0.051	A
Aroclor 1254	ND		ug/l	0.083	0.034	A
Aroclor 1260	ND		ug/l	0.083	0.032	A
Aroclor 1262	ND		ug/l	0.083	0.029	A
Aroclor 1268	ND		ug/l	0.083	0.038	A
PCBs, Total	ND		ug/l	0.083	0.029	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	91		30-150	B
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	88		30-150	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG751168-2 WG751168-3									
Aroclor 1016	86		78		40-140	9		50	A
Aroclor 1260	96		94		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		76		30-150	B
Decachlorobiphenyl	116		115		30-150	B
2,4,5,6-Tetrachloro-m-xylene	80		76		30-150	A
Decachlorobiphenyl	118		112		30-150	A

PESTICIDES

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

SAMPLE RESULTS

Lab ID:	L1430583-01	Date Collected:	12/18/14 14:35
Client ID:	TW-2	Date Received:	12/18/14
Sample Location:	LONG ISLAND CITY, QUEENS, NY	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8081B	Extraction Date:	12/22/14 19:09
Analytical Date:	12/23/14 16:34	Cleanup Method:	EPA 3620B
Analyst:	SS	Cleanup Date:	12/23/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.020	0.005	1	A
Lindane	ND		ug/l	0.020	0.004	1	A
Alpha-BHC	ND		ug/l	0.020	0.004	1	A
Beta-BHC	ND		ug/l	0.020	0.006	1	A
Heptachlor	ND		ug/l	0.020	0.003	1	A
Aldrin	ND		ug/l	0.020	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.020	0.004	1	A
Endrin	ND		ug/l	0.040	0.004	1	A
Endrin ketone	ND		ug/l	0.040	0.005	1	A
Dieldrin	ND		ug/l	0.040	0.004	1	A
4,4'-DDE	ND		ug/l	0.040	0.004	1	A
4,4'-DDD	ND		ug/l	0.040	0.005	1	A
4,4'-DDT	ND		ug/l	0.040	0.004	1	A
Endosulfan I	ND		ug/l	0.020	0.003	1	A
Endosulfan II	ND		ug/l	0.040	0.005	1	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	1	A
Methoxychlor	ND		ug/l	0.200	0.007	1	A
Toxaphene	ND		ug/l	0.200	0.063	1	A
cis-Chlordane	ND		ug/l	0.020	0.007	1	A
trans-Chlordane	ND		ug/l	0.020	0.006	1	A
Chlordane	ND		ug/l	0.200	0.046	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	A
Decachlorobiphenyl	83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	85		30-150	B

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/23/14 14:45
Analyst: SS

Extraction Method: EPA 3510C
Extraction Date: 12/22/14 19:09
Cleanup Method: EPA 3620B
Cleanup Date: 12/23/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG751148-1						
Delta-BHC	ND		ug/l	0.020	0.005	A
Lindane	ND		ug/l	0.020	0.004	A
Alpha-BHC	ND		ug/l	0.020	0.004	A
Beta-BHC	ND		ug/l	0.020	0.006	A
Heptachlor	ND		ug/l	0.020	0.003	A
Aldrin	ND		ug/l	0.020	0.002	A
Heptachlor epoxide	ND		ug/l	0.020	0.004	A
Endrin	ND		ug/l	0.040	0.004	A
Endrin aldehyde	ND		ug/l	0.040	0.008	A
Endrin ketone	ND		ug/l	0.040	0.005	A
Dieldrin	ND		ug/l	0.040	0.004	A
4,4'-DDE	ND		ug/l	0.040	0.004	A
4,4'-DDD	ND		ug/l	0.040	0.005	A
4,4'-DDT	ND		ug/l	0.040	0.004	A
Endosulfan I	ND		ug/l	0.020	0.003	A
Endosulfan II	ND		ug/l	0.040	0.005	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	A
Methoxychlor	ND		ug/l	0.200	0.007	A
Toxaphene	ND		ug/l	0.200	0.063	A
cis-Chlordane	ND		ug/l	0.020	0.007	A
trans-Chlordane	ND		ug/l	0.020	0.006	A
Chlordane	ND		ug/l	0.200	0.046	A

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/23/14 14:45
Analyst: SS

Extraction Method: EPA 3510C
Extraction Date: 12/22/14 19:09
Cleanup Method: EPA 3620B
Cleanup Date: 12/23/14

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG751148-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	79		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG751148-2 WG751148-3									
Delta-BHC	93		84		30-150	11		20	A
Lindane	100		91		30-150	10		20	A
Alpha-BHC	121		108		30-150	11		20	A
Beta-BHC	109		98		30-150	10		20	A
Heptachlor	99		89		30-150	10		20	A
Aldrin	105		93		30-150	12		20	A
Heptachlor epoxide	100		90		30-150	11		20	A
Endrin	109		99		30-150	10		20	A
Endrin aldehyde	66		59		30-150	10		20	A
Endrin ketone	87		79		30-150	9		20	A
Dieldrin	107		96		30-150	11		20	A
4,4'-DDE	101		90		30-150	11		20	A
4,4'-DDD	104		94		30-150	11		20	A
4,4'-DDT	98		90		30-150	9		20	A
Endosulfan I	102		92		30-150	11		20	A
Endosulfan II	91		82		30-150	10		20	A
Endosulfan sulfate	84		76		30-150	10		20	A
Methoxychlor	106		98		30-150	8		20	A
cis-Chlordane	100		90		30-150	11		20	A
trans-Chlordane	105		93		30-150	12		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 31-32 LIC

Project Number: 41.0162268.2

Lab Number: L1430583

Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG751148-2 WG751148-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		79		30-150	A
Decachlorobiphenyl	80		72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		79		30-150	B
Decachlorobiphenyl	84		75		30-150	B

METALS

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

SAMPLE RESULTS

Lab ID: L1430583-01
Client ID: TW-2
Sample Location: LONG ISLAND CITY, QUEENS, NY
Matrix: Water

Date Collected: 12/18/14 14:35
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	0.0722		mg/l	0.0100	0.00169	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Antimony, Total	0.00223	J	mg/l	0.00300	0.00006	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Arsenic, Total	0.00026	J	mg/l	0.00050	0.00012	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Barium, Total	0.1042		mg/l	0.00050	0.00006	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Beryllium, Total	ND		mg/l	0.00050	0.00015	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Calcium, Total	88.4		mg/l	2.00	0.640	20	12/29/14 10:47	12/30/14 00:41	EPA 3005A	1,6020A	BM
Chromium, Total	0.00139		mg/l	0.00100	0.00025	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Cobalt, Total	0.00110		mg/l	0.00020	0.00006	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Copper, Total	0.00146		mg/l	0.00100	0.00026	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Iron, Total	0.271		mg/l	0.0500	0.0120	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Lead, Total	0.00016	J	mg/l	0.00100	0.00012	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Magnesium, Total	37.6		mg/l	0.0700	0.0223	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Manganese, Total	0.07142		mg/l	0.00050	0.00030	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	12/30/14 10:24	12/30/14 17:44	EPA 7470A	1,7470A	AB
Nickel, Total	0.00229		mg/l	0.00050	0.00008	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Potassium, Total	4.79		mg/l	0.100	0.0193	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Selenium, Total	ND		mg/l	0.00500	0.00100	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Silver, Total	ND		mg/l	0.00025	0.00007	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Sodium, Total	96.5		mg/l	2.00	0.322	20	12/29/14 10:47	12/30/14 00:41	EPA 3005A	1,6020A	BM
Thallium, Total	ND		mg/l	0.00020	0.00005	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Vanadium, Total	0.00092	J	mg/l	0.00500	0.00055	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM
Zinc, Total	0.01390		mg/l	0.01000	0.00256	1	12/29/14 10:47	12/30/14 00:37	EPA 3005A	1,6020A	BM

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

SAMPLE RESULTS

Lab ID: L1430583-02
Client ID: TW-2 FILTERED
Sample Location: LONG ISLAND CITY, QUEENS, NY
Matrix: Water

Date Collected: 12/18/14 14:35
Date Received: 12/18/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Westborough Lab											
Aluminum, Dissolved	0.014		mg/l	0.010	0.002	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Antimony, Dissolved	0.0003	J	mg/l	0.0010	0.0001	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Arsenic, Dissolved	ND		mg/l	0.0005	0.0001	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Barium, Dissolved	0.1092		mg/l	0.0005	0.0001	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Beryllium, Dissolved	ND		mg/l	0.0005	0.0002	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.0002	0.0001	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Calcium, Dissolved	87.7		mg/l	2.00	0.640	20	12/19/14 01:30	12/29/14 21:29	NA	1,6020A	BM
Chromium, Dissolved	0.0006	J	mg/l	0.0050	0.0003	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Cobalt, Dissolved	0.0013		mg/l	0.0002	0.0001	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Copper, Dissolved	0.00099	J	mg/l	0.00100	0.00026	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Iron, Dissolved	0.030	J	mg/l	0.050	0.012	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Lead, Dissolved	0.0002	J	mg/l	0.0010	0.0001	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Magnesium, Dissolved	40.4		mg/l	0.070	0.022	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Manganese, Dissolved	0.0735		mg/l	0.0010	0.0003	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	12/23/14 14:44	12/23/14 21:25	EPA 7470A	1,7470A	AK
Nickel, Dissolved	0.0024		mg/l	0.0020	0.0001	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Potassium, Dissolved	5.33		mg/l	0.100	0.019	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Selenium, Dissolved	ND		mg/l	0.005	0.001	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.0003	0.0001	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Sodium, Dissolved	117		mg/l	16.0	0.322	20	12/19/14 01:30	12/29/14 21:29	NA	1,6020A	BM
Thallium, Dissolved	ND		mg/l	0.0002	0.0001	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Vanadium, Dissolved	ND		mg/l	0.0050	0.0006	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM
Zinc, Dissolved	ND		mg/l	0.0100	0.0026	1	12/19/14 01:30	12/29/14 21:26	NA	1,6020A	BM

Project Name: 31-32 LIC **Lab Number:** L1430583

Project Number: 41.0162268.2 **Report Date:** 12/31/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 02 Batch: WG751458-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	12/23/14 14:44	12/23/14 21:21	1,7470A	AK

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG752186-1										
Aluminum, Total	ND		mg/l	0.0100	0.00169	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Antimony, Total	0.00056	J	mg/l	0.00300	0.00006	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Arsenic, Total	ND		mg/l	0.00050	0.00012	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Barium, Total	ND		mg/l	0.00050	0.00006	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Beryllium, Total	ND		mg/l	0.00050	0.00015	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Calcium, Total	ND		mg/l	0.100	0.0320	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Chromium, Total	ND		mg/l	0.00100	0.00025	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Cobalt, Total	ND		mg/l	0.00020	0.00006	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Copper, Total	ND		mg/l	0.00100	0.00026	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Iron, Total	ND		mg/l	0.0500	0.0120	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Lead, Total	ND		mg/l	0.00100	0.00012	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Magnesium, Total	ND		mg/l	0.0700	0.0223	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Manganese, Total	ND		mg/l	0.00050	0.00030	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Nickel, Total	ND		mg/l	0.00050	0.00008	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Potassium, Total	ND		mg/l	0.100	0.0193	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Selenium, Total	ND		mg/l	0.00500	0.00100	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Silver, Total	ND		mg/l	0.00025	0.00007	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Sodium, Total	ND		mg/l	0.100	0.0161	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Thallium, Total	ND		mg/l	0.00020	0.00005	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Vanadium, Total	ND		mg/l	0.00500	0.00055	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM
Zinc, Total	ND		mg/l	0.01000	0.00256	1	12/29/14 10:47	12/30/14 00:23	1,6020A	BM

Project Name: 31-32 LIC **Lab Number:** L1430583

Project Number: 41.0162268.2 **Report Date:** 12/31/14

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 02 Batch: WG752260-1										
Aluminum, Dissolved	0.003	J	mg/l	0.010	0.002	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Antimony, Dissolved	0.0005	J	mg/l	0.0010	0.0001	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Arsenic, Dissolved	ND		mg/l	0.0005	0.0001	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Barium, Dissolved	0.0004	J	mg/l	0.0005	0.0001	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Beryllium, Dissolved	ND		mg/l	0.0005	0.0002	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.0002	0.0001	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Calcium, Dissolved	0.070	J	mg/l	0.100	0.032	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Chromium, Dissolved	0.0040	J	mg/l	0.0050	0.0003	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Cobalt, Dissolved	ND		mg/l	0.0002	0.0001	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Copper, Dissolved	0.0003	J	mg/l	0.0010	0.0003	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Iron, Dissolved	0.016	J	mg/l	0.050	0.012	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Lead, Dissolved	ND		mg/l	0.0010	0.0001	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Magnesium, Dissolved	ND		mg/l	0.070	0.022	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Manganese, Dissolved	0.0005	J	mg/l	0.0010	0.0003	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Nickel, Dissolved	0.0014	J	mg/l	0.0020	0.0001	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Potassium, Dissolved	0.020	J	mg/l	0.100	0.019	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Selenium, Dissolved	ND		mg/l	0.005	0.001	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.0003	0.0001	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Sodium, Dissolved	0.730	J	mg/l	0.800	0.016	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Thallium, Dissolved	ND		mg/l	0.0002	0.0001	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Vanadium, Dissolved	ND		mg/l	0.0050	0.0006	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM
Zinc, Dissolved	ND		mg/l	0.0100	0.0026	1	12/19/14 01:30	12/29/14 21:00	1,6020A	BM

Prep Information

Digestion Method: NA

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG752523-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	12/30/14 10:24	12/30/14 17:41	1,7470A	AB

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02 Batch: WG751458-2								
Mercury, Dissolved	111		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG752186-2					
Aluminum, Total	88	-	80-120	-	
Antimony, Total	89	-	80-120	-	
Arsenic, Total	91	-	80-120	-	
Barium, Total	91	-	80-120	-	
Beryllium, Total	94	-	80-120	-	
Cadmium, Total	98	-	80-120	-	
Calcium, Total	96	-	80-120	-	
Chromium, Total	85	-	80-120	-	
Cobalt, Total	93	-	80-120	-	
Copper, Total	91	-	80-120	-	
Iron, Total	93	-	80-120	-	
Lead, Total	93	-	80-120	-	
Magnesium, Total	104	-	80-120	-	
Manganese, Total	90	-	80-120	-	
Nickel, Total	90	-	80-120	-	
Potassium, Total	102	-	80-120	-	
Selenium, Total	112	-	80-120	-	
Silver, Total	91	-	80-120	-	
Sodium, Total	102	-	80-120	-	
Thallium, Total	88	-	80-120	-	
Vanadium, Total	90	-	80-120	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG752186-2					
Zinc, Total	101	-	80-120	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02 Batch: WG752260-2					
Aluminum, Dissolved	97	-	80-120	-	
Antimony, Dissolved	97	-	80-120	-	
Arsenic, Dissolved	87	-	80-120	-	
Barium, Dissolved	89	-	80-120	-	
Beryllium, Dissolved	99	-	80-120	-	
Cadmium, Dissolved	104	-	80-120	-	
Calcium, Dissolved	101	-	80-120	-	
Chromium, Dissolved	103	-	80-120	-	
Cobalt, Dissolved	97	-	80-120	-	
Copper, Dissolved	96	-	80-120	-	
Iron, Dissolved	94	-	80-120	-	
Lead, Dissolved	103	-	80-120	-	
Magnesium, Dissolved	98	-	80-120	-	
Manganese, Dissolved	93	-	80-120	-	
Nickel, Dissolved	92	-	80-120	-	
Potassium, Dissolved	92	-	80-120	-	
Selenium, Dissolved	103	-	80-120	-	
Silver, Dissolved	98	-	80-120	-	
Sodium, Dissolved	111	-	80-120	-	
Thallium, Dissolved	104	-	80-120	-	
Vanadium, Dissolved	95	-	80-120	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02 Batch: WG752260-2					
Zinc, Dissolved	98	-	80-120	-	
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG752523-2					
Mercury, Total	98	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02 QC Batch ID: WG751458-4 QC Sample: L1430583-02 Client ID: TW-2 FILTERED												
Mercury, Dissolved	ND	0.005	0.00504	101		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG752186-4 QC Sample: L1430883-02 Client ID: MS Sample										
Aluminum, Total	0.017	2	1.85	92		-	-	75-125	-	20
Antimony, Total	0.0015B	0.5	0.4708	94		-	-	75-125	-	20
Arsenic, Total	0.00142	0.12	0.1079	89		-	-	75-125	-	20
Barium, Total	0.0793	2	1.971	94		-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.04968	99		-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.05130	100		-	-	75-125	-	20
Calcium, Total	101.	10	110	90		-	-	75-125	-	20
Chromium, Total	0.0046	0.2	0.1792	87		-	-	75-125	-	20
Cobalt, Total	0.0001J	0.5	0.4614	92		-	-	75-125	-	20
Copper, Total	0.00084J	0.25	0.2237	89		-	-	75-125	-	20
Iron, Total	0.260	1	1.27	101		-	-	75-125	-	20
Lead, Total	ND	0.51	0.4880	96		-	-	75-125	-	20
Magnesium, Total	10.7	10	14.9	**42**	Q	-	-	75-125	-	20
Manganese, Total	0.1054	0.5	0.5654	92		-	-	75-125	-	20
Nickel, Total	0.00038J	0.5	0.4397	88		-	-	75-125	-	20
Potassium, Total	4.98	10	11.1	**61**	Q	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.122	102		-	-	75-125	-	20
Silver, Total	ND	0.05	0.04643	93		-	-	75-125	-	20
Sodium, Total	114.	10	118	**40**	Q	-	-	75-125	-	20
Thallium, Total	ND	0.12	0.1096	91		-	-	75-125	-	20
Vanadium, Total	0.0031J	0.5	0.4553	91		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG752186-4 QC Sample: L1430883-02 Client ID: MS Sample									
Zinc, Total	ND	0.5	0.4933	99	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02 QC Batch ID: WG752260-4 QC Sample: L1430583-02 Client ID: TW-2 FILTERED										
Aluminum, Dissolved	0.014	2	1.93	96		-	-	75-125	-	20
Antimony, Dissolved	0.0003J	0.5	0.4896	98		-	-	75-125	-	20
Arsenic, Dissolved	ND	0.12	0.1225	102		-	-	75-125	-	20
Barium, Dissolved	0.1092	2	1.889	89		-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.0461	92		-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.0524	103		-	-	75-125	-	20
Calcium, Dissolved	87.7	10	95.1	**74**	Q	-	-	75-125	-	20
Chromium, Dissolved	0.0006J	0.2	0.1935	97		-	-	75-125	-	20
Cobalt, Dissolved	0.0013	0.5	0.4631	92		-	-	75-125	-	20
Copper, Dissolved	0.00099J	0.25	0.2423	97		-	-	75-125	-	20
Iron, Dissolved	0.030J	1	0.946	95		-	-	75-125	-	20
Lead, Dissolved	0.0002J	0.51	0.5204	102		-	-	75-125	-	20
Magnesium, Dissolved	40.4	10	47.8	**74**	Q	-	-	75-125	-	20
Manganese, Dissolved	0.0735	0.5	0.5180	89		-	-	75-125	-	20
Nickel, Dissolved	0.0024	0.5	0.4592	91		-	-	75-125	-	20
Potassium, Dissolved	5.33	10	14.2	89		-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.132	110		-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.0479	96		-	-	75-125	-	20
Sodium, Dissolved	117.	10	130	**130**	Q	-	-	75-125	-	20
Thallium, Dissolved	ND	0.12	0.1250	104		-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.4597	92		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02 QC Batch ID: WG752260-4 QC Sample: L1430583-02 Client ID: TW-2 FILTERED									
Zinc, Dissolved	ND	0.5	0.4571	91	-	-	75-125	-	20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG752523-4 QC Sample: L1430583-01 Client ID: TW-2									
Mercury, Total	ND	0.005	0.00464	93	-	-	75-125	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02 QC Batch ID: WG751458-3 QC Sample: L1430583-02 Client ID: TW-2 FILTERED						
Mercury, Dissolved	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG752186-3 QC Sample: L1430883-02 Client ID: DUP Sample						
Arsenic, Total	0.00142	0.00152	mg/l	7		20
Cadmium, Total	ND	ND	mg/l	NC		20
Copper, Total	0.00084J	0.00089J	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Nickel, Total	0.00038J	0.00029J	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02 QC Batch ID: WG752260-3 QC Sample: L1430583-02 Client ID: TW-2 FILTERED					
Aluminum, Dissolved	0.014	0.014	mg/l	5	20
Antimony, Dissolved	0.0003J	0.0003J	mg/l	NC	20
Arsenic, Dissolved	ND	ND	mg/l	NC	20
Barium, Dissolved	0.1092	0.1127	mg/l	3	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Chromium, Dissolved	0.0006J	0.0018J	mg/l	NC	20
Cobalt, Dissolved	0.0013	0.0014	mg/l	10	20
Copper, Dissolved	0.00099J	0.0009J	mg/l	NC	20
Iron, Dissolved	0.030J	0.035J	mg/l	NC	20
Lead, Dissolved	0.0002J	0.0002J	mg/l	NC	20
Magnesium, Dissolved	40.4	40.5	mg/l	0	20
Manganese, Dissolved	0.0735	0.0756	mg/l	3	20
Nickel, Dissolved	0.0024	0.0027	mg/l	11	20
Potassium, Dissolved	5.33	5.41	mg/l	1	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Thallium, Dissolved	ND	ND	mg/l	NC	20
Vanadium, Dissolved	ND	0.0006J	mg/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02 QC Batch ID: WG752260-3 QC Sample: L1430583-02 Client ID: TW-2 FILTERED					
Zinc, Dissolved	ND	ND	mg/l	NC	20
Dissolved Metals - Westborough Lab Associated sample(s): 02 QC Batch ID: WG752260-3 QC Sample: L1430583-02 Client ID: TW-2 FILTERED					
Calcium, Dissolved	87.7	87.2	mg/l	1	20
Sodium, Dissolved	117.	122	mg/l	4	20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG752523-3 QC Sample: L1430583-01 Client ID: TW-2					
Mercury, Total	ND	ND	mg/l	NC	20

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430583-01A	Vial HCl preserved	A	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1430583-01B	Vial HCl preserved	A	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1430583-01C	Vial HCl preserved	A	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1430583-01D	Plastic 250ml HNO3 preserved	A	<2	2.3	Y	Absent	BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1430583-01E	Amber 500ml unpreserved	A	8	2.3	Y	Absent	NYTCL-8081(7)
L1430583-01F	Amber 500ml unpreserved	A	8	2.3	Y	Absent	NYTCL-8081(7)
L1430583-01G	Amber 1000ml unpreserved	A	8	2.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1430583-01H	Amber 1000ml unpreserved	A	8	2.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1430583-01I	Amber 1000ml unpreserved	A	8	2.3	Y	Absent	NYTCL-8082-1200ML(7)
L1430583-01J	Amber 1000ml unpreserved	A	8	2.3	Y	Absent	NYTCL-8082-1200ML(7)
L1430583-02A	Plastic 250ml unpreserved	A	8	2.3	Y	Absent	FILTER-MET(1)
L1430583-02B	Amber 1000ml unpreserved	A	8	2.3	Y	Absent	FILTER-EXT(1)
L1430583-02C	Amber 1000ml unpreserved	A	8	2.3	Y	Absent	FILTER-EXT(1)
L1430583-02W	Amber 1000ml unpreserved split	A	N/A	2.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)

*Values in parentheses indicate holding time in days

Project Name: 31-32 LIC
Project Number: 41.0162268.2

Lab Number: L1430583
Report Date: 12/31/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1430583-02X	Plastic 120ml HNO3 preserved spl	A	<2	2.3	Y	Absent	CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1430583-02Y	Amber 1000ml unpreserved split	A	8	2.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1430583-02Z	Amber 1000ml unpreserved split	A	8	2.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)

Container Comments

L1430583-02Z

*Values in parentheses indicate holding time in days

Project Name:	31-32 LIC	**Lab Number:**	L1430583
Project Number:	41.0162268.2	**Report Date:**	12/31/14

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

Report Format: DU Report with 'J' Qualifiers

Project Name:	31-32 LIC	**Lab Number:**	L1430583
Project Number:	41.0162268.2	**Report Date:**	12/31/14

Data Qualifiers

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name: 31-32 LIC
Project Number: 41.0162268.2
Lab Number: L1430583
Report Date: 12/31/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised December 16, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page
of

Date Rec'd in Lab: 12/18/14

ALPHA Job #: L1430583

Project Information

Project Name: 31-32 LIC
Project Location: Long Island City, Queens NY
Project #: 41.0162268.20
(Use Project name as Project #) ☐
Project Manager: Cliff Bell
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date: 12/30/14
Rush (only if pre approved) ☐ # of Days:

Client Information

Client: GZA GeoEnvironmental
Address: 104 W 29th St 10th Floor NY, NY 10001
Phone: 347-271-1326
Fax:
Email: James.Colony@gza.com

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information

☐ Same as Client Info
PO #

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Sample Filtration
☐ Done
☑ Lab to do (Some)

Preservation
☐ Lab to do

(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs	TCL SVOCs	TAL Metals	Pesticides	PCBs	SVOC Lab Filter	Metals Lab Filter		Sample Specific Comments	Total Bottle
30583-01	TW-2	12/18/14	14:35	GW	JFC	X	X	X	X	X	X	X			
	~~[illegible]~~ JFC														

Container Type								
Preservative								

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	12/18/14 15:45	[signature] AAL	12/18/14 15:45
[signature]	12/18/14 1835	[signature]	12-18-14 1835
[signature]	12-18-14 2320	[signature]	12/18/14 2320

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

DATA FOR

VOLATILE ORGANICS

SEMI-VOLATILE ORGANICS

GC SEMI-VOLATILES

METALS

GENERAL CHEMISTRY

PROJECT NAME : 410162268.20

GZA GEOENVIRONMENTAL, INC.

104 West 29th Street, 10th Floor

New York, NY - 10001

Phone No: 212-594-8140

ORDER ID : G1158

ATTENTION : Clifford Bell

ACCREDITED IN ACCORDANCE WITH nelac

DoD ELAP

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Date : 01/29/2015

Dear Clifford Bell,

6 soil samples for the **410162268.20** project were received on **01/22/2015.** The analytical fax results for those samples requested for an expedited turn around time may be seen in this report. Please contact me if you have any questions or concerns regarding this report.

Regards,

Jordan Hedvat

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.
QUOTE NO.
COC Number 028503

CLIENT INFORMATION (REPORT TO BE SENT TO:)

COMPANY: GZA GeoEnvironmental
ADDRESS: 104 West 29th Street 10th Fl
CITY: New York STATE: NY ZIP: 10001
ATTENTION: Clifford Bell
PHONE: 347-271-1326 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: 31-32 LIC
PROJECT NO: 41.0162268.2 LOCATION: Long Island City
PROJECT MANAGER: Clifford Bell
e-mail: James.Carey@GZA.Com
PHONE: 347-271-1326 FAX:

CLIENT BILLING INFORMATION

BILL TO: Same As Client PO#:
ADDRESS:
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: _____ DAYS *
PREAPPROVED TAT: ☐ YES ☐ NO
* STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ LEVEL 1: Results only ☐ Others _____
☐ LEVEL 2: Results + QC
☐ LEVEL 3: Results (plus results raw data) + QC
☐ LEVEL 4: Results + QC (all raw data)
☐ EDD Format: _____

ANALYSIS

1 TAL/TCL+30 (No Pest or Herb) 2 Cr+6 3 Cr+3 4 TPH (GRO/DRO) 5 TCLP - Full 6 RCRA 7 8 9

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1	2	3	4	5	6	7	8	9	COMMENTS
1. CC-1	" "	CC		X	1/22/15	11:20	1	X	X	X	X	1	1				
2. CC-2						10:50											
3. CC-3						10:40											
4. CC-4						10:10						HOLD	HOLD				
5. CC-5						9:30											
6. CC-6						9:20											
7.																	
8.																	
9.																	
10.																	

PRESERVATIVES ← Specify Preservatives
A – HCl B – HNO_3
C – H_2SO_4 D – NaOH
E – ICE F – Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. [signature]	1/22/15 13:34	1. [signature]
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3. [signature]	1.22.15 1530	3. [signature]

Conditions of bottles or coolers at receipt: ☒ Compliant ☐ Non Compliant
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments:

Cooler Temp. 5°
Ice in Cooler?: yes

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☒ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☒ YES ☐ NO

Revision 8/2007

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15 11:20
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-1	SDG No.:	G1158
Lab Sample ID:	G1158-01	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	0.133	J	1	0.032	0.122	0.243	mg/Kg	01/23/15 08:01	01/26/15 10:33	9012B
Hexavalent Chromium	0.154	J	1	0.077	0.193	0.386	mg/Kg	01/26/15 09:45	01/26/15 16:03	7196A
Trivalent Chromium	9		1	0.1	0.1	0.1	mg/Kg		01/26/15 00:00	6010B

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-1	SDG No.:	G1158
Lab Sample ID:	G1158-01	Matrix:	SOIL
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	4600		1	0.7	1.04	4.17	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-36-0	Antimony	0.521	U	1	0.467	0.521	2.08	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-38-2	Arsenic	1.56		1	0.208	0.208	0.833	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-39-3	Barium	32.6		1	0.333	1.04	4.17	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-41-7	Beryllium	0.208	J	1	0.05	0.063	0.25	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-43-9	Cadmium	0.748		1	0.05	0.063	0.25	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-70-2	Calcium	49700		1	0.892	20.8	83.3	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-47-3	Chromium	9.15	N	1	0.104	0.104	0.417	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-48-4	Cobalt	15.5		1	0.313	0.313	1.25	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-50-8	Copper	18.2		1	0.208	0.208	0.833	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7439-89-6	Iron	6100		1	1.04	1.04	4.17	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7439-92-1	Lead	11.6		1	0.1	0.208	0.5	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7439-95-4	Magnesium	1820		1	3.82	20.8	83.3	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7439-96-5	Manganese	128		1	0.158	0.208	0.833	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7439-97-6	Mercury	0.034		1	0.004	0.004	0.009	mg/Kg	01/23/15 10:00	01/26/15 12:50	SW7471A
7440-02-0	Nickel	7.86	N	1	0.383	0.417	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-09-7	Potassium	1160		1	2.92	20.8	83.3	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7782-49-2	Selenium	0.208	U	1	0.208	0.208	0.833	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-22-4	Silver	0.104	U	1	0.104	0.104	0.417	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-23-5	Sodium	916	N	1	2.1	20.8	83.3	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-28-0	Thallium	0.417	U	1	0.225	0.417	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-62-2	Vanadium	6.99		1	0.417	0.417	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010
7440-66-6	Zinc	62.2		1	0.417	0.417	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:08	SW6010

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	No
Comments:	Metals Group1				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-1	SDG No.:	G1158
Lab Sample ID:	G1158-01	Matrix:	SOIL
Analytical Method:	SW8082A	% Moisture:	0 Decanted:
Sample Wt/Vol:	30.02 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	PCB
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP007706.D	1	01/26/15 08:00	01/27/15 19:38	PB81517

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
12674-11-2	Aroclor-1016	3.3	U	3.3	3.3	17	ug/kg
11104-28-2	Aroclor-1221	3.3	U	3.3	3.3	17	ug/kg
11141-16-5	Aroclor-1232	3.3	U	3.3	3.3	17	ug/kg
53469-21-9	Aroclor-1242	3.3	U	3.3	3.3	17	ug/kg
12672-29-6	Aroclor-1248	3.3	U	3.3	3.3	17	ug/kg
11097-69-1	Aroclor-1254	25.9	P	1.5	3.3	17	ug/kg
11096-82-5	Aroclor-1260	3.3	U	3.3	3.3	17	ug/kg
SURROGATES							
877-09-8	Tetrachloro-m-xylene	22.1		10 - 166		111%	SPK: 20
2051-24-3	Decachlorobiphenyl	19.2		60 - 125		96%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-1	SDG No.:	G1158
Lab Sample ID:	G1158-01	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077067.D	1	01/26/15 08:00	01/27/15 01:21	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
100-52-7	Benzaldehyde	33.2	U	17.4	33.2	330	ug/Kg
108-95-2	Phenol	100	J	7.7	33.2	330	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	33.2	U	16	33.2	330	ug/Kg
95-57-8	2-Chlorophenol	33.2	U	17.6	33.2	330	ug/Kg
95-48-7	2-Methylphenol	33.2	U	18.1	33.2	330	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	33.2	U	13.8	33.2	330	ug/Kg
98-86-2	Acetophenone	33.2	U	10.2	33.2	330	ug/Kg
65794-96-9	3+4-Methylphenols	33.2	U	17.3	33.2	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	33.2	U	16.8	33.2	330	ug/Kg
67-72-1	Hexachloroethane	33.2	U	14.9	33.2	330	ug/Kg
98-95-3	Nitrobenzene	33.2	U	12.6	33.2	330	ug/Kg
78-59-1	Isophorone	33.2	U	11	33.2	330	ug/Kg
88-75-5	2-Nitrophenol	33.2	U	16.1	33.2	330	ug/Kg
105-67-9	2,4-Dimethylphenol	33.2	U	18.8	33.2	330	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	33.2	U	19.1	33.2	330	ug/Kg
120-83-2	2,4-Dichlorophenol	33.2	U	12.7	33.2	330	ug/Kg
91-20-3	Naphthalene	33.2	U	11.5	33.2	330	ug/Kg
106-47-8	4-Chloroaniline	33.2	U	23.4	33.2	330	ug/Kg
87-68-3	Hexachlorobutadiene	33.2	U	12.1	33.2	330	ug/Kg
105-60-2	Caprolactam	66.5	U	15.5	66.5	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.2	U	14.8	33.2	330	ug/Kg
91-57-6	2-Methylnaphthalene	33.2	U	8.4	33.2	330	ug/Kg
77-47-4	Hexachlorocyclopentadiene	33.2	U	8.1	33.2	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	33.2	U	10.2	33.2	330	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.2	U	23.3	33.2	330	ug/Kg
92-52-4	1,1-Biphenyl	33.2	U	12.6	33.2	330	ug/Kg
91-58-7	2-Chloronaphthalene	33.2	U	7.6	33.2	330	ug/Kg
88-74-4	2-Nitroaniline	33.2	U	14.8	33.2	330	ug/Kg
131-11-3	Dimethylphthalate	120	J	9	33.2	330	ug/Kg
208-96-8	Acenaphthylene	33.2	U	8.4	33.2	330	ug/Kg
606-20-2	2,6-Dinitrotoluene	33.2	U	13.6	33.2	330	ug/Kg

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-1	SDG No.:	G1158
Lab Sample ID:	G1158-01	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077067.D	1	01/26/15 08:00	01/27/15 01:21	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
99-09-2	3-Nitroaniline	66.5	U	21.3	66.5	330	ug/Kg
83-32-9	Acenaphthene	33.2	U	9.4	33.2	330	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	33.8	270	330	ug/Kg
100-02-7	4-Nitrophenol	170	U	61.7	170	330	ug/Kg
132-64-9	Dibenzofuran	33.2	U	13	33.2	330	ug/Kg
121-14-2	2,4-Dinitrotoluene	33.2	U	10	33.2	330	ug/Kg
84-66-2	Diethylphthalate	33.2	U	5.2	33.2	330	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	33.2	U	18.1	33.2	330	ug/Kg
86-73-7	Fluorene	33.2	U	12.6	33.2	330	ug/Kg
100-01-6	4-Nitroaniline	66.5	U	43.3	66.5	330	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	170	U	19	170	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	33.2	U	8	33.2	330	ug/Kg
101-55-3	4-Bromophenyl-phenylether	33.2	U	6.5	33.2	330	ug/Kg
118-74-1	Hexachlorobenzene	33.2	U	13.6	33.2	330	ug/Kg
1912-24-9	Atrazine	33.2	U	17.6	33.2	330	ug/Kg
87-86-5	Pentachlorophenol	33.2	U	22.7	33.2	330	ug/Kg
85-01-8	Phenanthrene	33.2	U	9	33.2	330	ug/Kg
120-12-7	Anthracene	33.2	U	6.8	33.2	330	ug/Kg
86-74-8	Carbazole	33.2	U	7.3	33.2	330	ug/Kg
84-74-2	Di-n-butylphthalate	33.2	U	26.1	33.2	330	ug/Kg
206-44-0	Fluoranthene	33.2	U	6.7	33.2	330	ug/Kg
129-00-0	Pyrene	33.2	U	8	33.2	330	ug/Kg
85-68-7	Butylbenzylphthalate	33.2	U	16	33.2	330	ug/Kg
91-94-1	3,3-Dichlorobenzidine	33.2	U	21.3	33.2	330	ug/Kg
56-55-3	Benzo(a)anthracene	33.2	U	15.9	33.2	330	ug/Kg
218-01-9	Chrysene	33.2	U	15.1	33.2	330	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	33.2	U	11.8	33.2	330	ug/Kg
117-84-0	Di-n-octyl phthalate	33.2	U	3.8	33.2	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	33.2	U	10.9	33.2	330	ug/Kg
207-08-9	Benzo(k)fluoranthene	33.2	U	15.7	33.2	330	ug/Kg
50-32-8	Benzo(a)pyrene	33.2	U	7.2	33.2	330	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.2	U	11.1	33.2	330	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	33.2	U	9.6	33.2	330	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-1	SDG No.:	G1158
Lab Sample ID:	G1158-01	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077067.D	1	01/26/15 08:00	01/27/15 01:21	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	33.2	U	13.5	33.2	330	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	33.2	U	13.1	33.2	330	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	33.2	U	13.1	33.2	330	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	120		28 - 127		83%	SPK: 150
13127-88-3	Phenol-d6	120		34 - 127		83%	SPK: 150
4165-60-0	Nitrobenzene-d5	76.8		31 - 132		77%	SPK: 100
321-60-8	2-Fluorobiphenyl	74.1		39 - 123		74%	SPK: 100
118-79-6	2,4,6-Tribromophenol	120		30 - 133		83%	SPK: 150
1718-51-0	Terphenyl-d14	62.6		37 - 115		63%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	22439	7.76				
1146-65-2	Naphthalene-d8	91835	10.68				
15067-26-2	Acenaphthene-d10	45268	14.8				
1517-22-2	Phenanthrene-d10	82209	17.63				
1719-03-5	Chrysene-d12	80418	21.13				
1520-96-3	Perylene-d12	75443	22.77				
TENTATIVE IDENTIFIED COMPOUNDS							
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	520	A			3.83	ug/Kg
	unknown7.25	3400	J			7.25	ug/Kg
	unknown19.32	210	J			19.32	ug/Kg
	unknown24.27	77.5	J			24.27	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-1	SDG No.:	G1158
Lab Sample ID:	G1158-01	Matrix:	SOIL
Analytical Method:	8015B TPH	% Moisture:	0 Decanted:
Sample Wt/Vol:	30.11 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FD007134.D	1	01/26/15 08:00	01/29/15 12:37	PB81519

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Petroleum Hydroca	Petroleum Hydrocarbons	31883		1500	1500	2820	ug/kg
SURROGATES							
16416-32-3	TETRACOSANE-d50	18.7		37 - 130		93%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-1	SDG No.:	G1158
Lab Sample ID:	G1158-01	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044262.D	1		01/26/15 21:44	VF012615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-71-8	Dichlorodifluoromethane	0.5	U	0.5	0.5	5	ug/Kg
74-87-3	Chloromethane	0.5	U	0.5	0.5	5	ug/Kg
75-01-4	Vinyl Chloride	0.5	U	0.5	0.5	5	ug/Kg
74-83-9	Bromomethane	1	U	1	1	5	ug/Kg
75-00-3	Chloroethane	0.5	U	0.5	0.5	5	ug/Kg
75-69-4	Trichlorofluoromethane	0.5	U	0.5	0.5	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.5	0.5	5	ug/Kg
75-35-4	1,1-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
67-64-1	Acetone	2.5	U	2.5	2.5	25	ug/Kg
75-15-0	Carbon Disulfide	0.5	U	0.5	0.5	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.5	0.5	5	ug/Kg
79-20-9	Methyl Acetate	1	U	1	1	5	ug/Kg
75-09-2	Methylene Chloride	1.7	J	0.5	0.5	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
75-34-3	1,1-Dichloroethane	0.5	U	0.5	0.5	5	ug/Kg
110-82-7	Cyclohexane	0.5	U	0.5	0.5	5	ug/Kg
78-93-3	2-Butanone	7.5	U	3.1	7.5	25	ug/Kg
56-23-5	Carbon Tetrachloride	0.5	U	0.5	0.5	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
74-97-5	Bromochloromethane	0.5	U	0.5	0.5	5	ug/Kg
67-66-3	Chloroform	0.5	U	0.5	0.5	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.5	U	0.5	0.5	5	ug/Kg
108-87-2	Methylcyclohexane	0.5	U	0.5	0.5	5	ug/Kg
71-43-2	Benzene	0.5	U	0.38	0.5	5	ug/Kg
107-06-2	1,2-Dichloroethane	0.5	U	0.5	0.5	5	ug/Kg
79-01-6	Trichloroethene	0.5	U	0.5	0.5	5	ug/Kg
78-87-5	1,2-Dichloropropane	0.5	U	0.26	0.5	5	ug/Kg
75-27-4	Bromodichloromethane	0.5	U	0.5	0.5	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.5	2.5	25	ug/Kg
108-88-3	Toluene	0.5	U	0.5	0.5	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.5	0.5	5	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-1	SDG No.:	G1158
Lab Sample ID:	G1158-01	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044262.D	1		01/26/15 21:44	VF012615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.5	0.5	5	ug/Kg
79-00-5	1,1,2-Trichloroethane	1	U	0.9	1	5	ug/Kg
591-78-6	2-Hexanone	2.5	U	2.5	2.5	25	ug/Kg
124-48-1	Dibromochloromethane	0.5	U	0.5	0.5	5	ug/Kg
106-93-4	1,2-Dibromoethane	0.5	U	0.5	0.5	5	ug/Kg
127-18-4	Tetrachloroethene	0.5	U	0.5	0.5	5	ug/Kg
108-90-7	Chlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	0.5	U	0.5	0.5	5	ug/Kg
179601-23-1	m/p-Xylenes	1	U	0.72	1	10	ug/Kg
95-47-6	o-Xylene	0.5	U	0.5	0.5	5	ug/Kg
100-42-5	Styrene	0.5	U	0.45	0.5	5	ug/Kg
75-25-2	Bromoform	1.5	U	0.74	1.5	5	ug/Kg
98-82-8	Isopropylbenzene	0.5	U	0.48	0.5	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.46	0.5	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.5	U	0.37	0.5	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.5	U	0.41	0.5	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5	U	0.87	5	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1	U	0.5	1	5	ug/Kg
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	56.1		56 - 120		112%	SPK: 50
1868-53-7	Dibromofluoromethane	52.7		57 - 135		105%	SPK: 50
2037-26-5	Toluene-d8	42.5		67 - 123		85%	SPK: 50
460-00-4	4-Bromofluorobenzene	39.4		33 - 141		79%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	318872	4.84				
540-36-3	1,4-Difluorobenzene	535208	5.56				
3114-55-4	Chlorobenzene-d5	425395	9.69				
3855-82-1	1,4-Dichlorobenzene-d4	152529	12.46				
TENTATIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-1	SDG No.:	G1158
Lab Sample ID:	G1158-01	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044262.D	1		01/26/15 21:44	VF012615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
99-87-6	p-Isopropyltoluene	1.2	J			12.38	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15 10:50
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2	SDG No.:	G1158
Lab Sample ID:	G1158-02	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	0.043	J	1	0.032	0.12	0.24	mg/Kg	01/23/15 08:01	01/26/15 10:33	9012B
Hexavalent Chromium	0.4		1	0.08	0.2	0.4	mg/Kg	01/26/15 09:45	01/26/15 16:04	7196A
Trivalent Chromium	9.21		1	0.1	0.1	0.1	mg/Kg		01/26/15 00:00	6010B

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2	SDG No.:	G1158
Lab Sample ID:	G1158-02	Matrix:	SOIL
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	5440		1	0.677	1.01	4.03	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-36-0	Antimony	0.504	U	1	0.452	0.504	2.02	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-38-2	Arsenic	1.63		1	0.202	0.202	0.806	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-39-3	Barium	69.1		1	0.323	1.01	4.03	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-41-7	Beryllium	0.245		1	0.048	0.06	0.242	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-43-9	Cadmium	2.91		1	0.048	0.06	0.242	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-70-2	Calcium	70000		1	0.863	20.2	80.6	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-47-3	Chromium	9.61	N	1	0.101	0.101	0.403	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-48-4	Cobalt	9		1	0.302	0.302	1.21	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-50-8	Copper	165		1	0.202	0.202	0.806	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7439-89-6	Iron	7220		1	1.01	1.01	4.03	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7439-92-1	Lead	24.6		1	0.097	0.202	0.484	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7439-95-4	Magnesium	2820		1	3.69	20.2	80.6	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7439-96-5	Manganese	134		1	0.153	0.202	0.806	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7439-97-6	Mercury	0.064		1	0.005	0.005	0.01	mg/Kg	01/23/15 10:00	01/26/15 12:57	SW7471A
7440-02-0	Nickel	7.39	N	1	0.371	0.403	1.61	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-09-7	Potassium	1140		1	2.82	20.2	80.6	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7782-49-2	Selenium	0.202	U	1	0.202	0.202	0.806	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-22-4	Silver	0.101	U	1	0.101	0.101	0.403	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-23-5	Sodium	932	N	1	2.03	20.2	80.6	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-28-0	Thallium	0.403	U	1	0.218	0.403	1.61	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-62-2	Vanadium	6.82		1	0.403	0.403	1.61	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010
7440-66-6	Zinc	236		1	0.403	0.403	1.61	mg/Kg	01/23/15 08:00	01/26/15 17:23	SW6010

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	No
Comments:	Metals Group1				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2	SDG No.:	G1158
Lab Sample ID:	G1158-02	Matrix:	SOIL
Analytical Method:	SW8082A	% Moisture:	0 Decanted:
Sample Wt/Vol:	30.06 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	PCB
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP007707.D	1	01/26/15 08:00	01/27/15 19:54	PB81517

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
12674-11-2	Aroclor-1016	3.3	U	3.3	3.3	17	ug/kg
11104-28-2	Aroclor-1221	3.3	U	3.3	3.3	17	ug/kg
11141-16-5	Aroclor-1232	3.3	U	3.3	3.3	17	ug/kg
53469-21-9	Aroclor-1242	3.3	U	3.3	3.3	17	ug/kg
12672-29-6	Aroclor-1248	3.3	U	3.3	3.3	17	ug/kg
11097-69-1	Aroclor-1254	52.5		1.5	3.3	17	ug/kg
11096-82-5	Aroclor-1260	3.3	U	3.3	3.3	17	ug/kg
SURROGATES							
877-09-8	Tetrachloro-m-xylene	13.4		10 - 166		67%	SPK: 20
2051-24-3	Decachlorobiphenyl	13.6		60 - 125		68%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2	SDG No.:	G1158
Lab Sample ID:	G1158-02	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077068.D	1	01/26/15 08:00	01/27/15 01:56	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
100-52-7	Benzaldehyde	33.3	U	17.4	33.3	330	ug/Kg
108-95-2	Phenol	33.3	U	7.7	33.3	330	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	33.3	U	16	33.3	330	ug/Kg
95-57-8	2-Chlorophenol	33.3	U	17.6	33.3	330	ug/Kg
95-48-7	2-Methylphenol	33.3	U	18.1	33.3	330	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	33.3	U	13.8	33.3	330	ug/Kg
98-86-2	Acetophenone	33.3	U	10.2	33.3	330	ug/Kg
65794-96-9	3+4-Methylphenols	33.3	U	17.3	33.3	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	33.3	U	16.8	33.3	330	ug/Kg
67-72-1	Hexachloroethane	33.3	U	14.9	33.3	330	ug/Kg
98-95-3	Nitrobenzene	33.3	U	12.6	33.3	330	ug/Kg
78-59-1	Isophorone	33.3	U	11	33.3	330	ug/Kg
88-75-5	2-Nitrophenol	33.3	U	16.1	33.3	330	ug/Kg
105-67-9	2,4-Dimethylphenol	33.3	U	18.9	33.3	330	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	33.3	U	19.2	33.3	330	ug/Kg
120-83-2	2,4-Dichlorophenol	33.3	U	12.7	33.3	330	ug/Kg
91-20-3	Naphthalene	33.3	U	11.5	33.3	330	ug/Kg
106-47-8	4-Chloroaniline	33.3	U	23.5	33.3	330	ug/Kg
87-68-3	Hexachlorobutadiene	33.3	U	12.1	33.3	330	ug/Kg
105-60-2	Caprolactam	66.6	U	15.5	66.6	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.3	U	14.8	33.3	330	ug/Kg
91-57-6	2-Methylnaphthalene	33.3	U	8.4	33.3	330	ug/Kg
77-47-4	Hexachlorocyclopentadiene	33.3	U	8.1	33.3	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	33.3	U	10.2	33.3	330	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.3	U	23.4	33.3	330	ug/Kg
92-52-4	1,1-Biphenyl	33.3	U	12.6	33.3	330	ug/Kg
91-58-7	2-Chloronaphthalene	33.3	U	7.6	33.3	330	ug/Kg
88-74-4	2-Nitroaniline	33.3	U	14.8	33.3	330	ug/Kg
131-11-3	Dimethylphthalate	190	J	9	33.3	330	ug/Kg
208-96-8	Acenaphthylene	33.3	U	8.4	33.3	330	ug/Kg
606-20-2	2,6-Dinitrotoluene	33.3	U	13.6	33.3	330	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2	SDG No.:	G1158
Lab Sample ID:	G1158-02	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077068.D	1	01/26/15 08:00	01/27/15 01:56	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
99-09-2	3-Nitroaniline	66.6	U	21.4	66.6	330	ug/Kg
83-32-9	Acenaphthene	33.3	U	9.4	33.3	330	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	33.8	270	330	ug/Kg
100-02-7	4-Nitrophenol	170	U	61.8	170	330	ug/Kg
132-64-9	Dibenzofuran	33.3	U	13	33.3	330	ug/Kg
121-14-2	2,4-Dinitrotoluene	33.3	U	10	33.3	330	ug/Kg
84-66-2	Diethylphthalate	130	J	5.2	33.3	330	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	33.3	U	18.1	33.3	330	ug/Kg
86-73-7	Fluorene	33.3	U	12.6	33.3	330	ug/Kg
100-01-6	4-Nitroaniline	66.6	U	43.3	66.6	330	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	170	U	19.1	170	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	33.3	U	8	33.3	330	ug/Kg
101-55-3	4-Bromophenyl-phenylether	33.3	U	6.5	33.3	330	ug/Kg
118-74-1	Hexachlorobenzene	33.3	U	13.6	33.3	330	ug/Kg
1912-24-9	Atrazine	33.3	U	17.6	33.3	330	ug/Kg
87-86-5	Pentachlorophenol	33.3	U	22.8	33.3	330	ug/Kg
85-01-8	Phenanthrene	230	J	9	33.3	330	ug/Kg
120-12-7	Anthracene	33.3	U	6.8	33.3	330	ug/Kg
86-74-8	Carbazole	33.3	U	7.3	33.3	330	ug/Kg
84-74-2	Di-n-butylphthalate	1200		26.2	33.3	330	ug/Kg
206-44-0	Fluoranthene	33.3	U	6.7	33.3	330	ug/Kg
129-00-0	Pyrene	33.3	U	8	33.3	330	ug/Kg
85-68-7	Butylbenzylphthalate	33.3	U	16	33.3	330	ug/Kg
91-94-1	3,3-Dichlorobenzidine	33.3	U	21.4	33.3	330	ug/Kg
56-55-3	Benzo(a)anthracene	33.3	U	15.9	33.3	330	ug/Kg
218-01-9	Chrysene	33.3	U	15.1	33.3	330	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	7000	E	11.8	33.3	330	ug/Kg
117-84-0	Di-n-octyl phthalate	33.3	U	3.8	33.3	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	33.3	U	10.9	33.3	330	ug/Kg
207-08-9	Benzo(k)fluoranthene	33.3	U	15.7	33.3	330	ug/Kg
50-32-8	Benzo(a)pyrene	33.3	U	7.2	33.3	330	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.3	U	11.1	33.3	330	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	33.3	U	9.6	33.3	330	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2	SDG No.:	G1158
Lab Sample ID:	G1158-02	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077068.D	1	01/26/15 08:00	01/27/15 01:56	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	33.3	U	13.5	33.3	330	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	33.3	U	13.1	33.3	330	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	33.3	U	13.1	33.3	330	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	60.6		28 - 127		40%	SPK: 150
13127-88-3	Phenol-d6	60.2		34 - 127		40%	SPK: 150
4165-60-0	Nitrobenzene-d5	37.4		31 - 132		37%	SPK: 100
321-60-8	2-Fluorobiphenyl	44.9		39 - 123		45%	SPK: 100
118-79-6	2,4,6-Tribromophenol	60.2		30 - 133		40%	SPK: 150
1718-51-0	Terphenyl-d14	40.2		37 - 115		40%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	22340	7.76				
1146-65-2	Naphthalene-d8	94711	10.68				
15067-26-2	Acenaphthene-d10	43788	14.8				
1517-22-2	Phenanthrene-d10	78992	17.64				
1719-03-5	Chrysene-d12	73607	21.21				
1520-96-3	Perylene-d12	72527	22.88				
TENTATIVE IDENTIFIED COMPOUNDS							
000111-46-6	Ethanol, 2,2-oxybis-	1500	J			6.94	ug/Kg
100-51-6	Benzyl Alcohol	210	J			8.21	ug/Kg
65-85-0	Benzoic acid	870	J			10.49	ug/Kg
000088-99-3	1,2-Benzenedicarboxylic acid	750	J			12.6	ug/Kg
000629-50-5	Tridecane	840	J			13.76	ug/Kg
000544-76-3	Hexadecane	1000	J			15.04	ug/Kg
006165-40-8	Pentadecane, 7-methyl-	1400	J			16.16	ug/Kg
003892-00-0	Pentadecane, 2,6,10-trimethyl-	950	J			16.57	ug/Kg
000629-78-7	Heptadecane	4300	J			17.01	ug/Kg
	unknown17.09	2000	J			17.09	ug/Kg
000112-40-3	Dodecane	1100	J			17.32	ug/Kg
	unknown17.52	920	J			17.52	ug/Kg
000504-44-9	Hexadecane, 2,6,11,15-tetramethyl-	3700	J			17.75	ug/Kg
001560-89-0	Heptadecane, 2-methyl-	1500	J			17.98	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2	SDG No.:	G1158
Lab Sample ID:	G1158-02	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077068.D	1	01/26/15 08:00	01/27/15 01:56	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
	unknown18.15	1100	J			18.15	ug/Kg
006418-41-3	Tridecane, 3-methyl-	1700	J			18.27	ug/Kg
000630-02-4	Octacosane	7700	J			18.33	ug/Kg
013287-24-6	Nonadecane, 9-methyl-	5500	J			18.89	ug/Kg
001560-86-7	Nonadecane, 2-methyl-	4500	J			19.26	ug/Kg
000629-94-7	Heneicosane	6900	J			19.41	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2DL	SDG No.:	G1158
Lab Sample ID:	G1158-02DL	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077109.D	10	01/26/15 08:00	01/28/15 19:13	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
100-52-7	Benzaldehyde	330	UD	170	330	3300	ug/Kg
108-95-2	Phenol	330	UD	76.9	330	3300	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	330	UD	160	330	3300	ug/Kg
95-57-8	2-Chlorophenol	330	UD	180	330	3300	ug/Kg
95-48-7	2-Methylphenol	330	UD	180	330	3300	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	330	UD	140	330	3300	ug/Kg
98-86-2	Acetophenone	330	UD	100	330	3300	ug/Kg
65794-96-9	3+4-Methylphenols	330	UD	170	330	3300	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	330	UD	170	330	3300	ug/Kg
67-72-1	Hexachloroethane	330	UD	150	330	3300	ug/Kg
98-95-3	Nitrobenzene	330	UD	130	330	3300	ug/Kg
78-59-1	Isophorone	330	UD	110	330	3300	ug/Kg
88-75-5	2-Nitrophenol	330	UD	160	330	3300	ug/Kg
105-67-9	2,4-Dimethylphenol	330	UD	190	330	3300	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	330	UD	190	330	3300	ug/Kg
120-83-2	2,4-Dichlorophenol	330	UD	130	330	3300	ug/Kg
91-20-3	Naphthalene	330	UD	110	330	3300	ug/Kg
106-47-8	4-Chloroaniline	330	UD	230	330	3300	ug/Kg
87-68-3	Hexachlorobutadiene	330	UD	120	330	3300	ug/Kg
105-60-2	Caprolactam	670	UD	150	670	3300	ug/Kg
59-50-7	4-Chloro-3-methylphenol	330	UD	150	330	3300	ug/Kg
91-57-6	2-Methylnaphthalene	330	UD	83.9	330	3300	ug/Kg
77-47-4	Hexachlorocyclopentadiene	330	UD	80.9	330	3300	ug/Kg
88-06-2	2,4,6-Trichlorophenol	330	UD	100	330	3300	ug/Kg
95-95-4	2,4,5-Trichlorophenol	330	UD	230	330	3300	ug/Kg
92-52-4	1,1-Biphenyl	330	UD	130	330	3300	ug/Kg
91-58-7	2-Chloronaphthalene	330	UD	75.9	330	3300	ug/Kg
88-74-4	2-Nitroaniline	330	UD	150	330	3300	ug/Kg
131-11-3	Dimethylphthalate	330	UD	89.9	330	3300	ug/Kg
208-96-8	Acenaphthylene	330	UD	83.9	330	3300	ug/Kg
606-20-2	2,6-Dinitrotoluene	330	UD	140	330	3300	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2DL	SDG No.:	G1158
Lab Sample ID:	G1158-02DL	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077109.D	10	01/26/15 08:00	01/28/15 19:13	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
99-09-2	3-Nitroaniline	670	UD	210	670	3300	ug/Kg
83-32-9	Acenaphthene	330	UD	93.8	330	3300	ug/Kg
51-28-5	2,4-Dinitrophenol	2700	UD	340	2700	3300	ug/Kg
100-02-7	4-Nitrophenol	1700	UD	620	1700	3300	ug/Kg
132-64-9	Dibenzofuran	330	UD	130	330	3300	ug/Kg
121-14-2	2,4-Dinitrotoluene	330	UD	99.8	330	3300	ug/Kg
84-66-2	Diethylphthalate	330	UD	51.9	330	3300	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	330	UD	180	330	3300	ug/Kg
86-73-7	Fluorene	330	UD	130	330	3300	ug/Kg
100-01-6	4-Nitroaniline	670	UD	430	670	3300	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1700	UD	190	1700	3300	ug/Kg
86-30-6	n-Nitrosodiphenylamine	330	UD	79.9	330	3300	ug/Kg
101-55-3	4-Bromophenyl-phenylether	330	UD	64.9	330	3300	ug/Kg
118-74-1	Hexachlorobenzene	330	UD	140	330	3300	ug/Kg
1912-24-9	Atrazine	330	UD	180	330	3300	ug/Kg
87-86-5	Pentachlorophenol	330	UD	230	330	3300	ug/Kg
85-01-8	Phenanthrene	330	UD	89.9	330	3300	ug/Kg
120-12-7	Anthracene	330	UD	67.9	330	3300	ug/Kg
86-74-8	Carbazole	330	UD	72.9	330	3300	ug/Kg
84-74-2	Di-n-butylphthalate	1100	JD	260	330	3300	ug/Kg
206-44-0	Fluoranthene	330	UD	66.9	330	3300	ug/Kg
129-00-0	Pyrene	330	UD	79.9	330	3300	ug/Kg
85-68-7	Butylbenzylphthalate	330	UD	160	330	3300	ug/Kg
91-94-1	3,3-Dichlorobenzidine	330	UD	210	330	3300	ug/Kg
56-55-3	Benzo(a)anthracene	330	UD	160	330	3300	ug/Kg
218-01-9	Chrysene	330	UD	150	330	3300	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	7300	D	120	330	3300	ug/Kg
117-84-0	Di-n-octyl phthalate	330	UD	37.9	330	3300	ug/Kg
205-99-2	Benzo(b)fluoranthene	330	UD	110	330	3300	ug/Kg
207-08-9	Benzo(k)fluoranthene	330	UD	160	330	3300	ug/Kg
50-32-8	Benzo(a)pyrene	330	UD	71.9	330	3300	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	330	UD	110	330	3300	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	330	UD	95.8	330	3300	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2DL	SDG No.:	G1158
Lab Sample ID:	G1158-02DL	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077109.D	10	01/26/15 08:00	01/28/15 19:13	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	330	UD	130	330	3300	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	330	UD	130	330	3300	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	330	UD	130	330	3300	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	45.5		28 - 127		30%	SPK: 150
13127-88-3	Phenol-d6	48.2	*	34 - 127		32%	SPK: 150
4165-60-0	Nitrobenzene-d5	29.2	*	31 - 132		29%	SPK: 100
321-60-8	2-Fluorobiphenyl	38.8		39 - 123		39%	SPK: 100
118-79-6	2,4,6-Tribromophenol	51.5		30 - 133		34%	SPK: 150
1718-51-0	Terphenyl-d14	34.3	*	37 - 115		34%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	29824	7.72				
1146-65-2	Naphthalene-d8	129138	10.63				
15067-26-2	Acenaphthene-d10	59461	14.75				
1517-22-2	Phenanthrene-d10	107131	17.59				
1719-03-5	Chrysene-d12	92828	21.1				
1520-96-3	Perylene-d12	92522	22.75				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2	SDG No.:	G1158
Lab Sample ID:	G1158-02	Matrix:	SOIL
Analytical Method:	8015B TPH	% Moisture:	0 Decanted:
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FD007140.D	200	01/26/15 08:00	01/29/15 16:14	PB81519

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Petroleum Hydroca	Petroleum Hydrocarbons	4119800		300000	300000	566000	ug/kg
SURROGATES							
16416-32-3	TETRACOSANE-d50	0	*	37 - 130		0%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2	SDG No.:	G1158
Lab Sample ID:	G1158-02	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044269.D	1		01/28/15 16:03	VF012815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-71-8	Dichlorodifluoromethane	0.5	U	0.5	0.5	5	ug/Kg
74-87-3	Chloromethane	0.5	U	0.5	0.5	5	ug/Kg
75-01-4	Vinyl Chloride	0.5	U	0.5	0.5	5	ug/Kg
74-83-9	Bromomethane	1	U	1	1	5	ug/Kg
75-00-3	Chloroethane	0.5	U	0.5	0.5	5	ug/Kg
75-69-4	Trichlorofluoromethane	0.5	U	0.5	0.5	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.5	0.5	5	ug/Kg
75-35-4	1,1-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
67-64-1	Acetone	2.5	U	2.5	2.5	25	ug/Kg
75-15-0	Carbon Disulfide	0.5	U	0.5	0.5	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.5	0.5	5	ug/Kg
79-20-9	Methyl Acetate	1	U	1	1	5	ug/Kg
75-09-2	Methylene Chloride	5.9		0.5	0.5	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
75-34-3	1,1-Dichloroethane	0.5	U	0.5	0.5	5	ug/Kg
110-82-7	Cyclohexane	0.5	U	0.5	0.5	5	ug/Kg
78-93-3	2-Butanone	7.5	U	3.1	7.5	25	ug/Kg
56-23-5	Carbon Tetrachloride	0.5	U	0.5	0.5	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
74-97-5	Bromochloromethane	0.5	U	0.5	0.5	5	ug/Kg
67-66-3	Chloroform	0.5	U	0.5	0.5	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.5	U	0.5	0.5	5	ug/Kg
108-87-2	Methylcyclohexane	0.5	U	0.5	0.5	5	ug/Kg
71-43-2	Benzene	0.5	U	0.38	0.5	5	ug/Kg
107-06-2	1,2-Dichloroethane	0.5	U	0.5	0.5	5	ug/Kg
79-01-6	Trichloroethene	0.5	U	0.5	0.5	5	ug/Kg
78-87-5	1,2-Dichloropropane	0.5	U	0.26	0.5	5	ug/Kg
75-27-4	Bromodichloromethane	0.5	U	0.5	0.5	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	33.7		2.5	2.5	25	ug/Kg
108-88-3	Toluene	30.9		0.5	0.5	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.5	0.5	5	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2	SDG No.:	G1158
Lab Sample ID:	G1158-02	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044269.D	1		01/28/15 16:03	VF012815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.5	0.5	5	ug/Kg
79-00-5	1,1,2-Trichloroethane	1	U	0.9	1	5	ug/Kg
591-78-6	2-Hexanone	2.5	U	2.5	2.5	25	ug/Kg
124-48-1	Dibromochloromethane	0.5	U	0.5	0.5	5	ug/Kg
106-93-4	1,2-Dibromoethane	0.5	U	0.5	0.5	5	ug/Kg
127-18-4	Tetrachloroethene	0.5	U	0.5	0.5	5	ug/Kg
108-90-7	Chlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	7.4		0.5	0.5	5	ug/Kg
179601-23-1	m/p-Xylenes	24.5		0.72	1	10	ug/Kg
95-47-6	o-Xylene	12		0.5	0.5	5	ug/Kg
100-42-5	Styrene	12.6		0.45	0.5	5	ug/Kg
75-25-2	Bromoform	1.5	U	0.74	1.5	5	ug/Kg
98-82-8	Isopropylbenzene	0.5	U	0.48	0.5	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.46	0.5	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.5	U	0.37	0.5	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.5	U	0.41	0.5	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5	U	0.87	5	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1	U	0.5	1	5	ug/Kg
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	70	*	56 - 120		140%	SPK: 50
1868-53-7	Dibromofluoromethane	62.1		57 - 135		124%	SPK: 50
2037-26-5	Toluene-d8	45.2		67 - 123		90%	SPK: 50
460-00-4	4-Bromofluorobenzene	31.7		33 - 141		63%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	268958	4.81				
540-36-3	1,4-Difluorobenzene	444531	5.53				
3114-55-4	Chlorobenzene-d5	287018	9.67				
3855-82-1	1,4-Dichlorobenzene-d4	78412	12.45				
TENTATIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2	SDG No.:	G1158
Lab Sample ID:	G1158-02	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044269.D	1		01/28/15 16:03	VF012815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
103-65-1	n-propylbenzene	1.1	J			11.49	ug/Kg
000124-18-5	Decane	23.1	J			11.57	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	2.8	J			11.73	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	9.9	J			12.11	ug/Kg
000111-13-7	2-Octanone	25.1	J			12.63	ug/Kg
001120-21-4	Undecane	56.9	J			12.73	ug/Kg
000104-76-7	1-Hexanol, 2-ethyl-	43.5	J			12.84	ug/Kg
000821-55-6	2-Nonanone	24.4	J			13.27	ug/Kg
000544-76-3	Hexadecane	43.5	J			13.61	ug/Kg
	unknown13.75	24.5	J			13.75	ug/Kg
91-20-3	Naphthalene	10.3	J			14.34	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2RE	SDG No.:	G1158
Lab Sample ID:	G1158-02RE	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044272.D	1		01/28/15 17:30	VF012815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-71-8	Dichlorodifluoromethane	0.5	U	0.5	0.5	5	ug/Kg
74-87-3	Chloromethane	0.5	U	0.5	0.5	5	ug/Kg
75-01-4	Vinyl Chloride	0.5	U	0.5	0.5	5	ug/Kg
74-83-9	Bromomethane	1	U	1	1	5	ug/Kg
75-00-3	Chloroethane	0.5	U	0.5	0.5	5	ug/Kg
75-69-4	Trichlorofluoromethane	0.5	U	0.5	0.5	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.5	0.5	5	ug/Kg
75-35-4	1,1-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
67-64-1	Acetone	2.5	U	2.5	2.5	25	ug/Kg
75-15-0	Carbon Disulfide	0.5	U	0.5	0.5	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.5	0.5	5	ug/Kg
79-20-9	Methyl Acetate	1	U	1	1	5	ug/Kg
75-09-2	Methylene Chloride	5.6		0.5	0.5	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
75-34-3	1,1-Dichloroethane	0.5	U	0.5	0.5	5	ug/Kg
110-82-7	Cyclohexane	0.5	U	0.5	0.5	5	ug/Kg
78-93-3	2-Butanone	7.5	U	3.1	7.5	25	ug/Kg
56-23-5	Carbon Tetrachloride	0.5	U	0.5	0.5	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
74-97-5	Bromochloromethane	0.5	U	0.5	0.5	5	ug/Kg
67-66-3	Chloroform	0.5	U	0.5	0.5	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.5	U	0.5	0.5	5	ug/Kg
108-87-2	Methylcyclohexane	0.5	U	0.5	0.5	5	ug/Kg
71-43-2	Benzene	0.5	U	0.38	0.5	5	ug/Kg
107-06-2	1,2-Dichloroethane	0.5	U	0.5	0.5	5	ug/Kg
79-01-6	Trichloroethene	0.5	U	0.5	0.5	5	ug/Kg
78-87-5	1,2-Dichloropropane	0.5	U	0.26	0.5	5	ug/Kg
75-27-4	Bromodichloromethane	0.5	U	0.5	0.5	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	20.5	J	2.5	2.5	25	ug/Kg
108-88-3	Toluene	22.2		0.5	0.5	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.5	0.5	5	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2RE	SDG No.:	G1158
Lab Sample ID:	G1158-02RE	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044272.D	1		01/28/15 17:30	VF012815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.5	0.5	5	ug/Kg
79-00-5	1,1,2-Trichloroethane	1	U	0.9	1	5	ug/Kg
591-78-6	2-Hexanone	2.5	U	2.5	2.5	25	ug/Kg
124-48-1	Dibromochloromethane	0.5	U	0.5	0.5	5	ug/Kg
106-93-4	1,2-Dibromoethane	0.5	U	0.5	0.5	5	ug/Kg
127-18-4	Tetrachloroethene	0.5	U	0.5	0.5	5	ug/Kg
108-90-7	Chlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	4.4	J	0.5	0.5	5	ug/Kg
179601-23-1	m/p-Xylenes	16.3		0.72	1	10	ug/Kg
95-47-6	o-Xylene	7.8		0.5	0.5	5	ug/Kg
100-42-5	Styrene	7.7		0.45	0.5	5	ug/Kg
75-25-2	Bromoform	1.5	U	0.74	1.5	5	ug/Kg
98-82-8	Isopropylbenzene	0.5	U	0.48	0.5	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.46	0.5	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.5	U	0.37	0.5	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.5	U	0.41	0.5	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5	U	0.87	5	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1	U	0.5	1	5	ug/Kg
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	60.9	*	56 - 120		122%	SPK: 50
1868-53-7	Dibromofluoromethane	53.8		57 - 135		108%	SPK: 50
2037-26-5	Toluene-d8	44.4		67 - 123		89%	SPK: 50
460-00-4	4-Bromofluorobenzene	34.8		33 - 141		70%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	230641	4.8				
540-36-3	1,4-Difluorobenzene	367674	5.53				
3114-55-4	Chlorobenzene-d5	274616	9.67				
3855-82-1	1,4-Dichlorobenzene-d4	77332	12.45				
TENTATIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-2RE	SDG No.:	G1158
Lab Sample ID:	G1158-02RE	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044272.D	1		01/28/15 17:30	VF012815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
000110-43-0	2-Heptanone	15.8	J			11.37	ug/Kg
000124-18-5	Decane	10.3	J			11.57	ug/Kg
000928-68-7	2-Heptanone, 6-methyl-	22.5	J			12.24	ug/Kg
000111-13-7	2-Octanone	13.2	J			12.62	ug/Kg
001120-21-4	Undecane	25.4	J			12.72	ug/Kg
000104-76-7	1-Hexanol, 2-ethyl-	20.2	J			12.84	ug/Kg
	unknown13.26	10.5	J			13.26	ug/Kg
000105-42-0	2-Hexanone, 4-methyl-	11.6	J			13.33	ug/Kg
056862-62-5	10-Methylnonadecane	18.1	J			13.61	ug/Kg
	unknown13.75	10	J			13.75	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15 10:40
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3	SDG No.:	G1158
Lab Sample ID:	G1158-03	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	0.912		1	0.033	0.124	0.248	mg/Kg	01/23/15 08:01	01/26/15 10:33	9012B
Hexavalent Chromium	11.3		1	0.079	0.198	0.395	mg/Kg	01/26/15 09:45	01/26/15 16:04	7196A
Trivalent Chromium	145		1	0.1	0.1	0.1	mg/Kg		01/26/15 00:00	6010B

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3	SDG No.:	G1158
Lab Sample ID:	G1158-03	Matrix:	SOIL
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	6510		1	0.703	1.05	4.18	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-36-0	Antimony	1.4	J	1	0.469	0.523	2.09	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-38-2	Arsenic	8.66		1	0.209	0.209	0.837	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-39-3	Barium	1420		1	0.335	1.05	4.18	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-41-7	Beryllium	0.27		1	0.05	0.063	0.251	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-43-9	Cadmium	15.5		1	0.05	0.063	0.251	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-70-2	Calcium	61900		1	0.895	20.9	83.7	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-47-3	Chromium	156	N	1	0.105	0.105	0.418	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-48-4	Cobalt	29.5		1	0.314	0.314	1.26	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-50-8	Copper	79.7		1	0.209	0.209	0.837	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7439-89-6	Iron	12600		1	1.05	1.05	4.18	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7439-92-1	Lead	817		1	0.1	0.209	0.502	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7439-95-4	Magnesium	5890		1	3.83	20.9	83.7	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7439-96-5	Manganese	160		1	0.159	0.209	0.837	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7439-97-6	Mercury	0.133		1	0.005	0.005	0.009	mg/Kg	01/23/15 10:00	01/26/15 12:59	SW7471A
7440-02-0	Nickel	49.3	N	1	0.385	0.418	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-09-7	Potassium	2290		1	2.93	20.9	83.7	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7782-49-2	Selenium	2.1		1	0.209	0.209	0.837	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-22-4	Silver	0.105	U	1	0.105	0.105	0.418	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-23-5	Sodium	4450	N	1	2.11	20.9	83.7	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-28-0	Thallium	0.418	U	1	0.226	0.418	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-62-2	Vanadium	8.89		1	0.418	0.418	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010
7440-66-6	Zinc	941		1	0.418	0.418	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:28	SW6010

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	No
Comments:	Metals Group1				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3	SDG No.:	G1158
Lab Sample ID:	G1158-03	Matrix:	SOIL
Analytical Method:	SW8082A	% Moisture:	0 Decanted:
Sample Wt/Vol:	30.08 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	PCB
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP007708.D	1	01/26/15 08:00	01/27/15 20:09	PB81517

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
12674-11-2	Aroclor-1016	3.3	U	3.3	3.3	17	ug/kg
11104-28-2	Aroclor-1221	3.3	U	3.3	3.3	17	ug/kg
11141-16-5	Aroclor-1232	3.3	U	3.3	3.3	17	ug/kg
53469-21-9	Aroclor-1242	3.3	U	3.3	3.3	17	ug/kg
12672-29-6	Aroclor-1248	3.3	U	3.3	3.3	17	ug/kg
11097-69-1	Aroclor-1254	110		1.5	3.3	17	ug/kg
11096-82-5	Aroclor-1260	3.3	U	3.3	3.3	17	ug/kg
SURROGATES							
877-09-8	Tetrachloro-m-xylene	16.4		10 - 166		82%	SPK: 20
2051-24-3	Decachlorobiphenyl	19.3		60 - 125		97%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3	SDG No.:	G1158
Lab Sample ID:	G1158-03	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.09 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077083.D	10	01/26/15 08:00	01/27/15 10:34	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
100-52-7	Benzaldehyde	1700	U	870	1700	16500	ug/Kg
108-95-2	Phenol	1700	U	380	1700	16500	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1700	U	800	1700	16500	ug/Kg
95-57-8	2-Chlorophenol	1700	U	880	1700	16500	ug/Kg
95-48-7	2-Methylphenol	1700	U	900	1700	16500	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1700	U	690	1700	16500	ug/Kg
98-86-2	Acetophenone	1700	U	510	1700	16500	ug/Kg
65794-96-9	3+4-Methylphenols	1700	U	860	1700	16500	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1700	U	840	1700	16500	ug/Kg
67-72-1	Hexachloroethane	1700	U	740	1700	16500	ug/Kg
98-95-3	Nitrobenzene	1700	U	630	1700	16500	ug/Kg
78-59-1	Isophorone	1700	U	550	1700	16500	ug/Kg
88-75-5	2-Nitrophenol	1700	U	800	1700	16500	ug/Kg
105-67-9	2,4-Dimethylphenol	1700	U	940	1700	16500	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1700	U	960	1700	16500	ug/Kg
120-83-2	2,4-Dichlorophenol	1700	U	630	1700	16500	ug/Kg
91-20-3	Naphthalene	1700	U	570	1700	16500	ug/Kg
106-47-8	4-Chloroaniline	1700	U	1200	1700	16500	ug/Kg
87-68-3	Hexachlorobutadiene	1700	U	600	1700	16500	ug/Kg
105-60-2	Caprolactam	3300	U	770	3300	16500	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1700	U	740	1700	16500	ug/Kg
91-57-6	2-Methylnaphthalene	1700	U	420	1700	16500	ug/Kg
77-47-4	Hexachlorocyclopentadiene	1700	U	400	1700	16500	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1700	U	510	1700	16500	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1700	U	1200	1700	16500	ug/Kg
92-52-4	1,1-Biphenyl	1700	U	630	1700	16500	ug/Kg
91-58-7	2-Chloronaphthalene	1700	U	380	1700	16500	ug/Kg
88-74-4	2-Nitroaniline	1700	U	740	1700	16500	ug/Kg
131-11-3	Dimethylphthalate	1700	U	450	1700	16500	ug/Kg
208-96-8	Acenaphthylene	1700	U	420	1700	16500	ug/Kg
606-20-2	2,6-Dinitrotoluene	1700	U	680	1700	16500	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3	SDG No.:	G1158
Lab Sample ID:	G1158-03	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.09 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077083.D	10	01/26/15 08:00	01/27/15 10:34	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
99-09-2	3-Nitroaniline	3300	U	1100	3300	16500	ug/Kg
83-32-9	Acenaphthene	1700	U	470	1700	16500	ug/Kg
51-28-5	2,4-Dinitrophenol	13300	U	1700	13300	16500	ug/Kg
100-02-7	4-Nitrophenol	8300	U	3100	8300	16500	ug/Kg
132-64-9	Dibenzofuran	1700	U	650	1700	16500	ug/Kg
121-14-2	2,4-Dinitrotoluene	1700	U	500	1700	16500	ug/Kg
84-66-2	Diethylphthalate	1700	U	260	1700	16500	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1700	U	900	1700	16500	ug/Kg
86-73-7	Fluorene	1700	U	630	1700	16500	ug/Kg
100-01-6	4-Nitroaniline	3300	U	2200	3300	16500	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	8300	U	950	8300	16500	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1700	U	400	1700	16500	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1700	U	320	1700	16500	ug/Kg
118-74-1	Hexachlorobenzene	1700	U	680	1700	16500	ug/Kg
1912-24-9	Atrazine	1700	U	880	1700	16500	ug/Kg
87-86-5	Pentachlorophenol	1700	U	1100	1700	16500	ug/Kg
85-01-8	Phenanthrene	1700	U	450	1700	16500	ug/Kg
120-12-7	Anthracene	1700	U	340	1700	16500	ug/Kg
86-74-8	Carbazole	1700	U	360	1700	16500	ug/Kg
84-74-2	Di-n-butylphthalate	7300	J	1300	1700	16500	ug/Kg
206-44-0	Fluoranthene	1700	U	330	1700	16500	ug/Kg
129-00-0	Pyrene	1700	U	400	1700	16500	ug/Kg
85-68-7	Butylbenzylphthalate	134300	E	800	1700	16500	ug/Kg
91-94-1	3,3-Dichlorobenzidine	1700	U	1100	1700	16500	ug/Kg
56-55-3	Benzo(a)anthracene	1700	U	790	1700	16500	ug/Kg
218-01-9	Chrysene	1700	U	750	1700	16500	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	37700		590	1700	16500	ug/Kg
117-84-0	Di-n-octyl phthalate	1700	U	190	1700	16500	ug/Kg
205-99-2	Benzo(b)fluoranthene	1700	U	540	1700	16500	ug/Kg
207-08-9	Benzo(k)fluoranthene	1700	U	780	1700	16500	ug/Kg
50-32-8	Benzo(a)pyrene	1700	U	360	1700	16500	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1700	U	550	1700	16500	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1700	U	480	1700	16500	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3	SDG No.:	G1158
Lab Sample ID:	G1158-03	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.09 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077083.D	10	01/26/15 08:00	01/27/15 10:34	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	1700	U	670	1700	16500	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1700	U	650	1700	16500	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1700	U	650	1700	16500	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	12.5	*	28 - 127		8%	SPK: 150
13127-88-3	Phenol-d6	19.5	*	34 - 127		13%	SPK: 150
4165-60-0	Nitrobenzene-d5	0	*	31 - 132		0%	SPK: 100
321-60-8	2-Fluorobiphenyl	34.5	*	39 - 123		34%	SPK: 100
118-79-6	2,4,6-Tribromophenol	0	*	30 - 133		0%	SPK: 150
1718-51-0	Terphenyl-d14	35.5	*	37 - 115		35%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	22036	7.76				
1146-65-2	Naphthalene-d8	94032	10.68				
15067-26-2	Acenaphthene-d10	45827	14.8				
1517-22-2	Phenanthrene-d10	85990	17.64				
1719-03-5	Chrysene-d12	82775	21.15				
1520-96-3	Perylene-d12	77568	22.77				
TENTATIVE IDENTIFIED COMPOUNDS							
002761-09-3	2-Propenoic acid, 2-methyl-, 3-hyd	12600	J			1.18	ug/Kg
	unknown7.18	4800	J			7.18	ug/Kg
000088-99-3	1,2-Benzenedicarboxylic acid	23500	J			12.61	ug/Kg
000822-06-0	Hexane, 1,6-diisocyanato-	13500	J			13.26	ug/Kg
118972-97-7	3-Hydroxy-azetidine-1-carboxylic a	25400	J			16.44	ug/Kg
	unknown17.08	3900	J			17.08	ug/Kg
000142-90-5	2-Propenoic acid, 2-methyl-, dodec	3400	J			17.51	ug/Kg
	unknown18.30	18300	J			18.3	ug/Kg
	unknown19.34	4200	J			19.34	ug/Kg
	unknown21.43	6900	J			21.43	ug/Kg
	unknown21.58	3500	J			21.58	ug/Kg
025973-55-1	Phenol, 2-(2H-benzotriazol-2-yl)-4	15000	J			21.8	ug/Kg
	unknown23.43	6100	J			23.43	ug/Kg
	unknown24.00	5400	J			24	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3	SDG No.:	G1158
Lab Sample ID:	G1158-03	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.09 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077083.D	10	01/26/15 08:00	01/27/15 10:34	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
041556-26-7	Decanedioic acid, bis(1,2,2,6,6-pe	9700	J			24.83	ug/Kg
	unknown26.22	22700	J			26.22	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3DL	SDG No.:	G1158
Lab Sample ID:	G1158-03DL	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.09 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077110.D	20	01/26/15 08:00	01/28/15 19:48	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
100-52-7	Benzaldehyde	3300	UD	1700	3300	32900	ug/Kg
108-95-2	Phenol	3300	UD	770	3300	32900	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	3300	UD	1600	3300	32900	ug/Kg
95-57-8	2-Chlorophenol	3300	UD	1800	3300	32900	ug/Kg
95-48-7	2-Methylphenol	3300	UD	1800	3300	32900	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	3300	UD	1400	3300	32900	ug/Kg
98-86-2	Acetophenone	3300	UD	1000	3300	32900	ug/Kg
65794-96-9	3+4-Methylphenols	3300	UD	1700	3300	32900	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	3300	UD	1700	3300	32900	ug/Kg
67-72-1	Hexachloroethane	3300	UD	1500	3300	32900	ug/Kg
98-95-3	Nitrobenzene	3300	UD	1300	3300	32900	ug/Kg
78-59-1	Isophorone	3300	UD	1100	3300	32900	ug/Kg
88-75-5	2-Nitrophenol	3300	UD	1600	3300	32900	ug/Kg
105-67-9	2,4-Dimethylphenol	3300	UD	1900	3300	32900	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	3300	UD	1900	3300	32900	ug/Kg
120-83-2	2,4-Dichlorophenol	3300	UD	1300	3300	32900	ug/Kg
91-20-3	Naphthalene	3300	UD	1100	3300	32900	ug/Kg
106-47-8	4-Chloroaniline	3300	UD	2300	3300	32900	ug/Kg
87-68-3	Hexachlorobutadiene	3300	UD	1200	3300	32900	ug/Kg
105-60-2	Caprolactam	6600	UD	1500	6600	32900	ug/Kg
59-50-7	4-Chloro-3-methylphenol	3300	UD	1500	3300	32900	ug/Kg
91-57-6	2-Methylnaphthalene	3300	UD	840	3300	32900	ug/Kg
77-47-4	Hexachlorocyclopentadiene	3300	UD	810	3300	32900	ug/Kg
88-06-2	2,4,6-Trichlorophenol	3300	UD	1000	3300	32900	ug/Kg
95-95-4	2,4,5-Trichlorophenol	3300	UD	2300	3300	32900	ug/Kg
92-52-4	1,1-Biphenyl	3300	UD	1300	3300	32900	ug/Kg
91-58-7	2-Chloronaphthalene	3300	UD	760	3300	32900	ug/Kg
88-74-4	2-Nitroaniline	3300	UD	1500	3300	32900	ug/Kg
131-11-3	Dimethylphthalate	3300	UD	900	3300	32900	ug/Kg
208-96-8	Acenaphthylene	3300	UD	840	3300	32900	ug/Kg
606-20-2	2,6-Dinitrotoluene	3300	UD	1400	3300	32900	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3DL	SDG No.:	G1158
Lab Sample ID:	G1158-03DL	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.09 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077110.D	20	01/26/15 08:00	01/28/15 19:48	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
99-09-2	3-Nitroaniline	6600	UD	2100	6600	32900	ug/Kg
83-32-9	Acenaphthene	3300	UD	940	3300	32900	ug/Kg
51-28-5	2,4-Dinitrophenol	26600	UD	3400	26600	32900	ug/Kg
100-02-7	4-Nitrophenol	16600	UD	6200	16600	32900	ug/Kg
132-64-9	Dibenzofuran	3300	UD	1300	3300	32900	ug/Kg
121-14-2	2,4-Dinitrotoluene	3300	UD	1000	3300	32900	ug/Kg
84-66-2	Diethylphthalate	3300	UD	520	3300	32900	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	3300	UD	1800	3300	32900	ug/Kg
86-73-7	Fluorene	3300	UD	1300	3300	32900	ug/Kg
100-01-6	4-Nitroaniline	6600	UD	4300	6600	32900	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	16600	UD	1900	16600	32900	ug/Kg
86-30-6	n-Nitrosodiphenylamine	3300	UD	800	3300	32900	ug/Kg
101-55-3	4-Bromophenyl-phenylether	3300	UD	650	3300	32900	ug/Kg
118-74-1	Hexachlorobenzene	3300	UD	1400	3300	32900	ug/Kg
1912-24-9	Atrazine	3300	UD	1800	3300	32900	ug/Kg
87-86-5	Pentachlorophenol	3300	UD	2300	3300	32900	ug/Kg
85-01-8	Phenanthrene	3300	UD	900	3300	32900	ug/Kg
120-12-7	Anthracene	3300	UD	680	3300	32900	ug/Kg
86-74-8	Carbazole	3300	UD	730	3300	32900	ug/Kg
84-74-2	Di-n-butylphthalate	3300	UD	2600	3300	32900	ug/Kg
206-44-0	Fluoranthene	3300	UD	670	3300	32900	ug/Kg
129-00-0	Pyrene	3300	UD	800	3300	32900	ug/Kg
85-68-7	Butylbenzylphthalate	118800	D	1600	3300	32900	ug/Kg
91-94-1	3,3-Dichlorobenzidine	3300	UD	2100	3300	32900	ug/Kg
56-55-3	Benzo(a)anthracene	3300	UD	1600	3300	32900	ug/Kg
218-01-9	Chrysene	3300	UD	1500	3300	32900	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	32600	JD	1200	3300	32900	ug/Kg
117-84-0	Di-n-octyl phthalate	3300	UD	380	3300	32900	ug/Kg
205-99-2	Benzo(b)fluoranthene	3300	UD	1100	3300	32900	ug/Kg
207-08-9	Benzo(k)fluoranthene	3300	UD	1600	3300	32900	ug/Kg
50-32-8	Benzo(a)pyrene	3300	UD	720	3300	32900	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	3300	UD	1100	3300	32900	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	3300	UD	960	3300	32900	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3DL	SDG No.:	G1158
Lab Sample ID:	G1158-03DL	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.09 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077110.D	20	01/26/15 08:00	01/28/15 19:48	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	3300	UD	1300	3300	32900	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	3300	UD	1300	3300	32900	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	3300	UD	1300	3300	32900	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	0	*	28 - 127		0%	SPK: 150
13127-88-3	Phenol-d6	0	*	34 - 127		0%	SPK: 150
4165-60-0	Nitrobenzene-d5	10	*	31 - 132		10%	SPK: 100
321-60-8	2-Fluorobiphenyl	27	*	39 - 123		27%	SPK: 100
118-79-6	2,4,6-Tribromophenol	0	*	30 - 133		0%	SPK: 150
1718-51-0	Terphenyl-d14	29	*	37 - 115		29%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	28824	7.72				
1146-65-2	Naphthalene-d8	123977	10.63				
15067-26-2	Acenaphthene-d10	60541	14.75				
1517-22-2	Phenanthrene-d10	113184	17.59				
1719-03-5	Chrysene-d12	95996	21.1				
1520-96-3	Perylene-d12	88779	22.73				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3	SDG No.:	G1158
Lab Sample ID:	G1158-03	Matrix:	SOIL
Analytical Method:	8015B TPH	% Moisture:	0 Decanted:
Sample Wt/Vol:	30.02 Units: g	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FD007141.D	10	01/26/15 08:00	01/29/15 16:51	PB81519

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Petroleum Hydroca	Petroleum Hydrocarbons	804464		75000	75000	142000	ug/kg
SURROGATES							
16416-32-3	TETRACOSANE-d50	0.34	*	37 - 130		17%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3	SDG No.:	G1158
Lab Sample ID:	G1158-03	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	MED

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR015978.D	1		01/26/15 16:13	VR012615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-71-8	Dichlorodifluoromethane	50	U	50	50	500	ug/Kg
74-87-3	Chloromethane	50	U	50	50	500	ug/Kg
75-01-4	Vinyl Chloride	50	U	50	50	500	ug/Kg
74-83-9	Bromomethane	100	U	100	100	500	ug/Kg
75-00-3	Chloroethane	50	U	50	50	500	ug/Kg
75-69-4	Trichlorofluoromethane	50	U	50	50	500	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	50	U	50	50	500	ug/Kg
75-35-4	1,1-Dichloroethene	50	U	50	50	500	ug/Kg
67-64-1	Acetone	3800		250	250	2500	ug/Kg
75-15-0	Carbon Disulfide	50	U	50	50	500	ug/Kg
1634-04-4	Methyl tert-butyl Ether	50	U	50	50	500	ug/Kg
79-20-9	Methyl Acetate	620		100	100	500	ug/Kg
75-09-2	Methylene Chloride	50	U	50	50	500	ug/Kg
156-60-5	trans-1,2-Dichloroethene	50	U	50	50	500	ug/Kg
75-34-3	1,1-Dichloroethane	50	U	50	50	500	ug/Kg
110-82-7	Cyclohexane	50	U	50	50	500	ug/Kg
78-93-3	2-Butanone	750	U	310	750	2500	ug/Kg
56-23-5	Carbon Tetrachloride	50	U	50	50	500	ug/Kg
156-59-2	cis-1,2-Dichloroethene	50	U	50	50	500	ug/Kg
74-97-5	Bromochloromethane	50	U	50	50	500	ug/Kg
67-66-3	Chloroform	50	U	50	50	500	ug/Kg
71-55-6	1,1,1-Trichloroethane	50	U	50	50	500	ug/Kg
108-87-2	Methylcyclohexane	1600		50	50	500	ug/Kg
71-43-2	Benzene	50	U	38	50	500	ug/Kg
107-06-2	1,2-Dichloroethane	50	U	50	50	500	ug/Kg
79-01-6	Trichloroethene	50	U	50	50	500	ug/Kg
78-87-5	1,2-Dichloropropane	50	U	26	50	500	ug/Kg
75-27-4	Bromodichloromethane	50	U	50	50	500	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2600		250	250	2500	ug/Kg
108-88-3	Toluene	31400	E	50	50	500	ug/Kg
10061-02-6	t-1,3-Dichloropropene	50	U	50	50	500	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3	SDG No.:	G1158
Lab Sample ID:	G1158-03	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	MED

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR015978.D	1		01/26/15 16:13	VR012615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
10061-01-5	cis-1,3-Dichloropropene	50	U	50	50	500	ug/Kg
79-00-5	1,1,2-Trichloroethane	100	U	90	100	500	ug/Kg
591-78-6	2-Hexanone	250	U	250	250	2500	ug/Kg
124-48-1	Dibromochloromethane	50	U	50	50	500	ug/Kg
106-93-4	1,2-Dibromoethane	50	U	50	50	500	ug/Kg
127-18-4	Tetrachloroethene	50	U	50	50	500	ug/Kg
108-90-7	Chlorobenzene	50	U	50	50	500	ug/Kg
100-41-4	Ethyl Benzene	3500		50	50	500	ug/Kg
179601-23-1	m/p-Xylenes	12500		72	100	1000	ug/Kg
95-47-6	o-Xylene	9400		50	50	500	ug/Kg
100-42-5	Styrene	50	U	45	50	500	ug/Kg
75-25-2	Bromoform	150	U	74	150	500	ug/Kg
98-82-8	Isopropylbenzene	280	J	48	50	500	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	50	U	46	50	500	ug/Kg
541-73-1	1,3-Dichlorobenzene	50	U	37	50	500	ug/Kg
106-46-7	1,4-Dichlorobenzene	50	U	41	50	500	ug/Kg
95-50-1	1,2-Dichlorobenzene	50	U	50	50	500	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	500	U	87	500	500	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	50	U	50	50	500	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	100	U	50	100	500	ug/Kg
123-91-1	1,4-Dioxane	10000	U	10000	10000	10000	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	47.2		56 - 120		94%	SPK: 50
1868-53-7	Dibromofluoromethane	45.1		57 - 135		90%	SPK: 50
2037-26-5	Toluene-d8	49.3		67 - 123		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.5		33 - 141		103%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	577604	7.47				
540-36-3	1,4-Difluorobenzene	996821	8.42				
3114-55-4	Chlorobenzene-d5	824565	11.26				
3855-82-1	1,4-Dichlorobenzene-d4	299222	13.21				
TENTATIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3	SDG No.:	G1158
Lab Sample ID:	G1158-03	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	MED

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR015978.D	1		01/26/15 16:13	VR012615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
003073-66-3	Cyclohexane, 1,1,3-trimethyl-	2100	J			10.86	ug/Kg
001795-27-3	Cyclohexane, 1,3,5-trimethyl-, (1.	3000	J			11.07	ug/Kg
103-65-1	n-propylbenzene	460	J			12.46	ug/Kg
000620-14-4	Benzene, 1-ethyl-3-methyl-	2900	J			12.52	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	1800	J			12.6	ug/Kg
000611-14-3	Benzene, 1-ethyl-2-methyl-	2300	J			12.75	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	3900	J			12.9	ug/Kg
135-98-8	sec-Butylbenzene	310	J			13.03	ug/Kg
99-87-6	p-Isopropyltoluene	230	J			13.16	ug/Kg
001074-43-7	Benzene, 1-methyl-3-propyl-	1800	J			13.4	ug/Kg
104-51-8	n-Butylbenzene	270	J			13.48	ug/Kg
	unknown13.54	2200	J			13.54	ug/Kg
000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	1900	J			13.75	ug/Kg
000934-74-7	Benzene, 1-ethyl-3,5-dimethyl-	3500	J			14.12	ug/Kg
076089-59-3	1,3-Cyclopentadiene, 1,2,3,4-tetra	3100	J			14.45	ug/Kg
91-20-3	Naphthalene	2100	J			15	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3DL	SDG No.:	G1158
Lab Sample ID:	G1158-03DL	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	MED

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR015992.D	20		01/27/15 17:13	VR012715

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-71-8	Dichlorodifluoromethane	1000	UD	1000	1000	10000	ug/Kg
74-87-3	Chloromethane	1000	UD	1000	1000	10000	ug/Kg
75-01-4	Vinyl Chloride	1000	UD	1000	1000	10000	ug/Kg
74-83-9	Bromomethane	2000	UD	2000	2000	10000	ug/Kg
75-00-3	Chloroethane	1000	UD	1000	1000	10000	ug/Kg
75-69-4	Trichlorofluoromethane	1000	UD	1000	1000	10000	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1000	UD	1000	1000	10000	ug/Kg
75-35-4	1,1-Dichloroethene	1000	UD	1000	1000	10000	ug/Kg
67-64-1	Acetone	5000	UD	5000	5000	50000	ug/Kg
75-15-0	Carbon Disulfide	1000	UD	1000	1000	10000	ug/Kg
1634-04-4	Methyl tert-butyl Ether	1000	UD	1000	1000	10000	ug/Kg
79-20-9	Methyl Acetate	2000	UD	2000	2000	10000	ug/Kg
75-09-2	Methylene Chloride	1000	UD	1000	1000	10000	ug/Kg
156-60-5	trans-1,2-Dichloroethene	1000	UD	1000	1000	10000	ug/Kg
75-34-3	1,1-Dichloroethane	1000	UD	1000	1000	10000	ug/Kg
110-82-7	Cyclohexane	1000	UD	1000	1000	10000	ug/Kg
78-93-3	2-Butanone	15000	UD	6200	15000	50000	ug/Kg
56-23-5	Carbon Tetrachloride	1000	UD	1000	1000	10000	ug/Kg
156-59-2	cis-1,2-Dichloroethene	1000	UD	1000	1000	10000	ug/Kg
74-97-5	Bromochloromethane	1000	UD	1000	1000	10000	ug/Kg
67-66-3	Chloroform	1000	UD	1000	1000	10000	ug/Kg
71-55-6	1,1,1-Trichloroethane	1000	UD	1000	1000	10000	ug/Kg
108-87-2	Methylcyclohexane	1000	UD	1000	1000	10000	ug/Kg
71-43-2	Benzene	1000	UD	760	1000	10000	ug/Kg
107-06-2	1,2-Dichloroethane	1000	UD	1000	1000	10000	ug/Kg
79-01-6	Trichloroethene	1000	UD	1000	1000	10000	ug/Kg
78-87-5	1,2-Dichloropropane	1000	UD	520	1000	10000	ug/Kg
75-27-4	Bromodichloromethane	1000	UD	1000	1000	10000	ug/Kg
108-10-1	4-Methyl-2-Pentanone	5000	UD	5000	5000	50000	ug/Kg
108-88-3	Toluene	54800	D	1000	1000	10000	ug/Kg
10061-02-6	t-1,3-Dichloropropene	1000	UD	1000	1000	10000	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3DL	SDG No.:	G1158
Lab Sample ID:	G1158-03DL	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	MED

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR015992.D	20		01/27/15 17:13	VR012715

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
10061-01-5	cis-1,3-Dichloropropene	1000	UD	1000	1000	10000	ug/Kg
79-00-5	1,1,2-Trichloroethane	2000	UD	1800	2000	10000	ug/Kg
591-78-6	2-Hexanone	5000	UD	5000	5000	50000	ug/Kg
124-48-1	Dibromochloromethane	1000	UD	1000	1000	10000	ug/Kg
106-93-4	1,2-Dibromoethane	1000	UD	1000	1000	10000	ug/Kg
127-18-4	Tetrachloroethene	1000	UD	1000	1000	10000	ug/Kg
108-90-7	Chlorobenzene	1000	UD	1000	1000	10000	ug/Kg
100-41-4	Ethyl Benzene	2700	JD	1000	1000	10000	ug/Kg
179601-23-1	m/p-Xylenes	12400	JD	1400	2000	20000	ug/Kg
95-47-6	o-Xylene	7600	JD	1000	1000	10000	ug/Kg
100-42-5	Styrene	1000	UD	900	1000	10000	ug/Kg
75-25-2	Bromoform	3000	UD	1500	3000	10000	ug/Kg
98-82-8	Isopropylbenzene	1000	UD	960	1000	10000	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1000	UD	920	1000	10000	ug/Kg
541-73-1	1,3-Dichlorobenzene	1000	UD	740	1000	10000	ug/Kg
106-46-7	1,4-Dichlorobenzene	1000	UD	820	1000	10000	ug/Kg
95-50-1	1,2-Dichlorobenzene	1000	UD	1000	1000	10000	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	10000	UD	1700	10000	10000	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	1000	UD	1000	1000	10000	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2000	UD	1000	2000	10000	ug/Kg
123-91-1	1,4-Dioxane	200000	UD	200000	200000	200000	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	49.9		56 - 120		100%	SPK: 50
1868-53-7	Dibromofluoromethane	47		57 - 135		94%	SPK: 50
2037-26-5	Toluene-d8	48.6		67 - 123		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.4		33 - 141		99%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	530296	7.47				
540-36-3	1,4-Difluorobenzene	919717	8.42				
3114-55-4	Chlorobenzene-d5	748925	11.26				
3855-82-1	1,4-Dichlorobenzene-d4	257299	13.21				

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-3DL	SDG No.:	G1158
Lab Sample ID:	G1158-03DL	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	MED

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR015992.D	20		01/27/15 17:13	VR012715

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15 10:10
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-4	SDG No.:	G1158
Lab Sample ID:	G1158-04	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	0.182	J	1	0.032	0.122	0.243	mg/Kg	01/23/15 08:01	01/26/15 10:33	9012B
Hexavalent Chromium	30.1		1	0.079	0.199	0.397	mg/Kg	01/26/15 09:45	01/26/15 16:05	7196A
Trivalent Chromium	505		1	0.1	0.1	0.1	mg/Kg		01/26/15 00:00	6010B

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-4	SDG No.:	G1158
Lab Sample ID:	G1158-04	Matrix:	SOIL
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	5270		1	0.703	1.05	4.18	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-36-0	Antimony	0.523	U	1	0.469	0.523	2.09	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-38-2	Arsenic	0.478	J	1	0.209	0.209	0.837	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-39-3	Barium	41.4		1	0.335	1.05	4.18	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-41-7	Beryllium	0.238	J	1	0.05	0.063	0.251	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-43-9	Cadmium	1.46		1	0.05	0.063	0.251	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-70-2	Calcium	64400		1	0.895	20.9	83.7	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-47-3	Chromium	535	N	1	0.105	0.105	0.418	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-48-4	Cobalt	18.2		1	0.314	0.314	1.26	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-50-8	Copper	25.8		1	0.209	0.209	0.837	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7439-89-6	Iron	6070		1	1.05	1.05	4.18	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7439-92-1	Lead	50.8		1	0.1	0.209	0.502	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7439-95-4	Magnesium	3130		1	3.83	20.9	83.7	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7439-96-5	Manganese	139		1	0.159	0.209	0.837	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7439-97-6	Mercury	0.036		1	0.005	0.005	0.009	mg/Kg	01/23/15 10:00	01/26/15 13:01	SW7471A
7440-02-0	Nickel	16.9	N	1	0.385	0.418	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-09-7	Potassium	1960		1	2.93	20.9	83.7	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7782-49-2	Selenium	0.209	U	1	0.209	0.209	0.837	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-22-4	Silver	0.105	U	1	0.105	0.105	0.418	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-23-5	Sodium	2710	N	1	2.11	20.9	83.7	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-28-0	Thallium	0.418	U	1	0.226	0.418	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-62-2	Vanadium	9.61		1	0.418	0.418	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010
7440-66-6	Zinc	89.8		1	0.418	0.418	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:34	SW6010

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	No
Comments:	Metals Group1				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-4	SDG No.:	G1158
Lab Sample ID:	G1158-04	Matrix:	SOIL
Analytical Method:	SW8082A	% Moisture:	0 Decanted:
Sample Wt/Vol:	30 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	PCB
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP007709.D	1	01/26/15 08:00	01/27/15 20:24	PB81517

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
12674-11-2	Aroclor-1016	3.3	U	3.3	3.3	17	ug/kg
11104-28-2	Aroclor-1221	3.3	U	3.3	3.3	17	ug/kg
11141-16-5	Aroclor-1232	3.3	U	3.3	3.3	17	ug/kg
53469-21-9	Aroclor-1242	3.3	U	3.3	3.3	17	ug/kg
12672-29-6	Aroclor-1248	3.3	U	3.3	3.3	17	ug/kg
11097-69-1	Aroclor-1254	65.3		1.5	3.3	17	ug/kg
11096-82-5	Aroclor-1260	3.3	U	3.3	3.3	17	ug/kg
SURROGATES							
877-09-8	Tetrachloro-m-xylene	14.6		10 - 166		73%	SPK: 20
2051-24-3	Decachlorobiphenyl	45.6	*	60 - 125		228%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-4	SDG No.:	G1158
Lab Sample ID:	G1158-04	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077117.D	1	01/26/15 08:00	01/29/15 03:17	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
100-52-7	Benzaldehyde	33.3	U	17.4	33.3	330	ug/Kg
108-95-2	Phenol	33.3	U	7.7	33.3	330	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	33.3	U	16	33.3	330	ug/Kg
95-57-8	2-Chlorophenol	33.3	U	17.6	33.3	330	ug/Kg
95-48-7	2-Methylphenol	33.3	U	18.1	33.3	330	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	33.3	U	13.8	33.3	330	ug/Kg
98-86-2	Acetophenone	33.3	U	10.2	33.3	330	ug/Kg
65794-96-9	3+4-Methylphenols	33.3	U	17.3	33.3	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	33.3	U	16.8	33.3	330	ug/Kg
67-72-1	Hexachloroethane	33.3	U	14.9	33.3	330	ug/Kg
98-95-3	Nitrobenzene	33.3	U	12.6	33.3	330	ug/Kg
78-59-1	Isophorone	33.3	U	11	33.3	330	ug/Kg
88-75-5	2-Nitrophenol	33.3	U	16.1	33.3	330	ug/Kg
105-67-9	2,4-Dimethylphenol	33.3	U	18.9	33.3	330	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	33.3	U	19.2	33.3	330	ug/Kg
120-83-2	2,4-Dichlorophenol	33.3	U	12.7	33.3	330	ug/Kg
91-20-3	Naphthalene	33.3	U	11.5	33.3	330	ug/Kg
106-47-8	4-Chloroaniline	33.3	U	23.5	33.3	330	ug/Kg
87-68-3	Hexachlorobutadiene	33.3	U	12.1	33.3	330	ug/Kg
105-60-2	Caprolactam	66.7	U	15.5	66.7	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.3	U	14.8	33.3	330	ug/Kg
91-57-6	2-Methylnaphthalene	33.3	U	8.4	33.3	330	ug/Kg
77-47-4	Hexachlorocyclopentadiene	33.3	U	8.1	33.3	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	33.3	U	10.2	33.3	330	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.3	U	23.4	33.3	330	ug/Kg
92-52-4	1,1-Biphenyl	33.3	U	12.6	33.3	330	ug/Kg
91-58-7	2-Chloronaphthalene	33.3	U	7.6	33.3	330	ug/Kg
88-74-4	2-Nitroaniline	33.3	U	14.8	33.3	330	ug/Kg
131-11-3	Dimethylphthalate	33.3	U	9	33.3	330	ug/Kg
208-96-8	Acenaphthylene	33.3	U	8.4	33.3	330	ug/Kg
606-20-2	2,6-Dinitrotoluene	33.3	U	13.6	33.3	330	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-4	SDG No.:	G1158
Lab Sample ID:	G1158-04	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077117.D	1	01/26/15 08:00	01/29/15 03:17	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
99-09-2	3-Nitroaniline	66.7	U	21.4	66.7	330	ug/Kg
83-32-9	Acenaphthene	33.3	U	9.4	33.3	330	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	33.9	270	330	ug/Kg
100-02-7	4-Nitrophenol	170	U	61.9	170	330	ug/Kg
132-64-9	Dibenzofuran	33.3	U	13	33.3	330	ug/Kg
121-14-2	2,4-Dinitrotoluene	33.3	U	10	33.3	330	ug/Kg
84-66-2	Diethylphthalate	33.3	U	5.2	33.3	330	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	33.3	U	18.1	33.3	330	ug/Kg
86-73-7	Fluorene	33.3	U	12.6	33.3	330	ug/Kg
100-01-6	4-Nitroaniline	66.7	U	43.4	66.7	330	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	170	U	19.1	170	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	33.3	U	8	33.3	330	ug/Kg
101-55-3	4-Bromophenyl-phenylether	33.3	U	6.5	33.3	330	ug/Kg
118-74-1	Hexachlorobenzene	33.3	U	13.6	33.3	330	ug/Kg
1912-24-9	Atrazine	33.3	U	17.6	33.3	330	ug/Kg
87-86-5	Pentachlorophenol	33.3	U	22.8	33.3	330	ug/Kg
85-01-8	Phenanthrene	180	J	9	33.3	330	ug/Kg
120-12-7	Anthracene	33.3	U	6.8	33.3	330	ug/Kg
86-74-8	Carbazole	33.3	U	7.3	33.3	330	ug/Kg
84-74-2	Di-n-butylphthalate	33.3	U	26.2	33.3	330	ug/Kg
206-44-0	Fluoranthene	33.3	U	6.7	33.3	330	ug/Kg
129-00-0	Pyrene	33.3	U	8	33.3	330	ug/Kg
85-68-7	Butylbenzylphthalate	33.3	U	16	33.3	330	ug/Kg
91-94-1	3,3-Dichlorobenzidine	33.3	U	21.4	33.3	330	ug/Kg
56-55-3	Benzo(a)anthracene	33.3	U	15.9	33.3	330	ug/Kg
218-01-9	Chrysene	33.3	U	15.1	33.3	330	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	33.3	U	11.8	33.3	330	ug/Kg
117-84-0	Di-n-octyl phthalate	33.3	U	3.8	33.3	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	33.3	U	10.9	33.3	330	ug/Kg
207-08-9	Benzo(k)fluoranthene	33.3	U	15.7	33.3	330	ug/Kg
50-32-8	Benzo(a)pyrene	33.3	U	7.2	33.3	330	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.3	U	11.1	33.3	330	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	33.3	U	9.6	33.3	330	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-4	SDG No.:	G1158
Lab Sample ID:	G1158-04	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077117.D	1	01/26/15 08:00	01/29/15 03:17	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	33.3	U	13.5	33.3	330	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	33.3	U	13.1	33.3	330	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	33.3	U	13.1	33.3	330	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	43.2		28 - 127		29%	SPK: 150
13127-88-3	Phenol-d6	53.9		34 - 127		36%	SPK: 150
4165-60-0	Nitrobenzene-d5	36.1		31 - 132		36%	SPK: 100
321-60-8	2-Fluorobiphenyl	44.2		39 - 123		44%	SPK: 100
118-79-6	2,4,6-Tribromophenol	28.1	*	30 - 133		19%	SPK: 150
1718-51-0	Terphenyl-d14	40.3		37 - 115		40%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	26470	7.72				
1146-65-2	Naphthalene-d8	107753	10.63				
15067-26-2	Acenaphthene-d10	50050	14.75				
1517-22-2	Phenanthrene-d10	89333	17.6				
1719-03-5	Chrysene-d12	80878	21.18				
1520-96-3	Perylene-d12	71343	22.88				
TENTATIVE IDENTIFIED COMPOUNDS							
	unknown7.21	1300	J			7.21	ug/Kg
000085-44-9	Phthalic anhydride	640	J			12.55	ug/Kg
000544-76-3	Hexadecane	290	J			13.72	ug/Kg
001786-94-3	3,6,9,12,15-Pentaoxanonadecan-1-ol	430	J			14.52	ug/Kg
000112-95-8	Eicosane	340	J			15	ug/Kg
	unknown15.57	270	J			15.57	ug/Kg
000629-62-9	Pentadecane	530	J			16.12	ug/Kg
	unknown16.73	280	J			16.73	ug/Kg
	unknown16.80	280	J			16.8	ug/Kg
001921-70-6	Pentadecane, 2,6,10,14-tetramethyl	2800	J			17	ug/Kg
033933-74-3	3-Heptene, 4-ethyl-	240	J			17.2	ug/Kg
001559-34-8	3,6,9,12-Tetraoxahexadecan-1-ol	760	J			17.26	ug/Kg
	unknown17.43	380	J			17.43	ug/Kg
070928-52-8	4-n-Hexylthiane, S,S-dioxide	690	J			17.49	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-4	SDG No.:	G1158
Lab Sample ID:	G1158-04	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077117.D	1	01/26/15 08:00	01/29/15 03:17	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
000638-36-8	Hexadecane, 2,6,10,14-tetramethyl-	3000	J			17.72	ug/Kg
195194-80-0	2-Piperidinone, N-[4-bromo-n-butyl	680	J			17.93	ug/Kg
000593-45-3	Octadecane	1600	J			18.22	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-4	SDG No.:	G1158
Lab Sample ID:	G1158-04	Matrix:	SOIL
Analytical Method:	8015B TPH	% Moisture:	0 Decanted:
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FD007142.D	200	01/26/15 08:00	01/29/15 17:26	PB81519

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Petroleum Hydroca	Petroleum Hydrocarbons	3488682		300000	300000	566000	ug/kg
SURROGATES							
16416-32-3	TETRACOSANE-d50	0	*	37 - 130		0%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-4	SDG No.:	G1158
Lab Sample ID:	G1158-04	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044270.D	1		01/28/15 16:32	VF012815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-71-8	Dichlorodifluoromethane	0.5	U	0.5	0.5	5	ug/Kg
74-87-3	Chloromethane	0.5	U	0.5	0.5	5	ug/Kg
75-01-4	Vinyl Chloride	0.5	U	0.5	0.5	5	ug/Kg
74-83-9	Bromomethane	1	U	1	1	5	ug/Kg
75-00-3	Chloroethane	0.5	U	0.5	0.5	5	ug/Kg
75-69-4	Trichlorofluoromethane	0.5	U	0.5	0.5	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.5	0.5	5	ug/Kg
75-35-4	1,1-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
67-64-1	Acetone	2.5	U	2.5	2.5	25	ug/Kg
75-15-0	Carbon Disulfide	0.5	U	0.5	0.5	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.5	0.5	5	ug/Kg
79-20-9	Methyl Acetate	1	U	1	1	5	ug/Kg
75-09-2	Methylene Chloride	6.8		0.5	0.5	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
75-34-3	1,1-Dichloroethane	0.5	U	0.5	0.5	5	ug/Kg
110-82-7	Cyclohexane	0.5	U	0.5	0.5	5	ug/Kg
78-93-3	2-Butanone	7.5	U	3.1	7.5	25	ug/Kg
56-23-5	Carbon Tetrachloride	0.5	U	0.5	0.5	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
74-97-5	Bromochloromethane	0.5	U	0.5	0.5	5	ug/Kg
67-66-3	Chloroform	0.5	U	0.5	0.5	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.5	U	0.5	0.5	5	ug/Kg
108-87-2	Methylcyclohexane	0.5	U	0.5	0.5	5	ug/Kg
71-43-2	Benzene	0.5	U	0.38	0.5	5	ug/Kg
107-06-2	1,2-Dichloroethane	0.5	U	0.5	0.5	5	ug/Kg
79-01-6	Trichloroethene	0.5	U	0.5	0.5	5	ug/Kg
78-87-5	1,2-Dichloropropane	0.5	U	0.26	0.5	5	ug/Kg
75-27-4	Bromodichloromethane	0.5	U	0.5	0.5	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	6.4	J	2.5	2.5	25	ug/Kg
108-88-3	Toluene	5.9		0.5	0.5	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.5	0.5	5	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-4	SDG No.:	G1158
Lab Sample ID:	G1158-04	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044270.D	1		01/28/15 16:32	VF012815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.5	0.5	5	ug/Kg
79-00-5	1,1,2-Trichloroethane	1	U	0.9	1	5	ug/Kg
591-78-6	2-Hexanone	2.5	U	2.5	2.5	25	ug/Kg
124-48-1	Dibromochloromethane	0.5	U	0.5	0.5	5	ug/Kg
106-93-4	1,2-Dibromoethane	0.5	U	0.5	0.5	5	ug/Kg
127-18-4	Tetrachloroethene	0.5	U	0.5	0.5	5	ug/Kg
108-90-7	Chlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	0.5	U	0.5	0.5	5	ug/Kg
179601-23-1	m/p-Xylenes	2.2	J	0.72	1	10	ug/Kg
95-47-6	o-Xylene	1	J	0.5	0.5	5	ug/Kg
100-42-5	Styrene	0.5	U	0.45	0.5	5	ug/Kg
75-25-2	Bromoform	1.5	U	0.74	1.5	5	ug/Kg
98-82-8	Isopropylbenzene	0.5	U	0.48	0.5	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.46	0.5	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.5	U	0.37	0.5	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.5	U	0.41	0.5	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5	U	0.87	5	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1	U	0.5	1	5	ug/Kg
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	62.8	*	56 - 120		125%	SPK: 50
1868-53-7	Dibromofluoromethane	47		57 - 135		94%	SPK: 50
2037-26-5	Toluene-d8	42.3		67 - 123		85%	SPK: 50
460-00-4	4-Bromofluorobenzene	31.5		33 - 141		63%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	267382	4.81				
540-36-3	1,4-Difluorobenzene	440986	5.52				
3114-55-4	Chlorobenzene-d5	278511	9.67				
3855-82-1	1,4-Dichlorobenzene-d4	79233	12.45				
TENTATIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-4	SDG No.:	G1158
Lab Sample ID:	G1158-04	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044270.D	1		01/28/15 16:32	VF012815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
000124-18-5	Decane	10.4	J			11.57	ug/Kg
126186-97-8	2,7-Dioxabicyclo[4.1.0]heptan-3-on	6.2	J			12.05	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	2.8	J			12.11	ug/Kg
	unknown12.19	5.2	J			12.19	ug/Kg
	unknown12.51	5.4	J			12.51	ug/Kg
001120-21-4	Undecane	18.2	J			12.72	ug/Kg
000104-76-7	1-Hexanol, 2-ethyl-	14.5	J			12.84	ug/Kg
	unknown13.44	5.1	J			13.44	ug/Kg
006418-46-8	Eicosane, 3-methyl-	7.8	J			13.61	ug/Kg
91-20-3	Naphthalene	3.1	J			14.34	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15 09:30
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5	SDG No.:	G1158
Lab Sample ID:	G1158-05	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	0.169	J	1	0.033	0.125	0.25	mg/Kg	01/23/15 08:01	01/26/15 10:33	9012B
Hexavalent Chromium	9.5		1	0.078	0.194	0.388	mg/Kg	01/26/15 09:45	01/26/15 16:06	7196A
Trivalent Chromium	21.1		1	0.1	0.1	0.1	mg/Kg		01/26/15 00:00	6010B

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5	SDG No.:	G1158
Lab Sample ID:	G1158-05	Matrix:	SOIL
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	5310		1	0.691	1.03	4.12	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-36-0	Antimony	0.514	U	1	0.461	0.514	2.06	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-38-2	Arsenic	3.18		1	0.206	0.206	0.823	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-39-3	Barium	45.1		1	0.329	1.03	4.12	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-41-7	Beryllium	0.391		1	0.049	0.062	0.247	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-43-9	Cadmium	0.062	U	1	0.049	0.062	0.247	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-70-2	Calcium	75700		1	0.881	20.6	82.3	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-47-3	Chromium	30.6	N	1	0.103	0.103	0.412	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-48-4	Cobalt	5.88		1	0.309	0.309	1.23	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-50-8	Copper	14.7		1	0.206	0.206	0.823	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7439-89-6	Iron	6420		1	1.03	1.03	4.12	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7439-92-1	Lead	12		1	0.099	0.206	0.494	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7439-95-4	Magnesium	3220		1	3.77	20.6	82.3	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7439-96-5	Manganese	243		1	0.156	0.206	0.823	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7439-97-6	Mercury	0.011		1	0.005	0.005	0.01	mg/Kg	01/23/15 10:00	01/26/15 13:03	SW7471A
7440-02-0	Nickel	13.9	N	1	0.379	0.412	1.65	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-09-7	Potassium	853		1	2.88	20.6	82.3	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7782-49-2	Selenium	0.25	J	1	0.206	0.206	0.823	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-22-4	Silver	0.103	U	1	0.103	0.103	0.412	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-23-5	Sodium	407	N	1	2.07	20.6	82.3	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-28-0	Thallium	0.412	U	1	0.222	0.412	1.65	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-62-2	Vanadium	12		1	0.412	0.412	1.65	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010
7440-66-6	Zinc	89.5		1	0.412	0.412	1.65	mg/Kg	01/23/15 08:00	01/26/15 17:39	SW6010

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	No
Comments:	Metals Group1				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
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* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5	SDG No.:	G1158
Lab Sample ID:	G1158-05	Matrix:	SOIL
Analytical Method:	SW8082A	% Moisture:	0 Decanted:
Sample Wt/Vol:	30.09 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	PCB
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP007710.D	1	01/26/15 08:00	01/27/15 20:40	PB81517

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
12674-11-2	Aroclor-1016	3.3	U	3.3	3.3	16.9	ug/kg
11104-28-2	Aroclor-1221	3.3	U	3.3	3.3	16.9	ug/kg
11141-16-5	Aroclor-1232	3.3	U	3.3	3.3	16.9	ug/kg
53469-21-9	Aroclor-1242	3.3	U	3.3	3.3	16.9	ug/kg
12672-29-6	Aroclor-1248	3.3	U	3.3	3.3	16.9	ug/kg
11097-69-1	Aroclor-1254	3.3	U	1.5	3.3	16.9	ug/kg
11096-82-5	Aroclor-1260	3.3	U	3.3	3.3	16.9	ug/kg
SURROGATES							
877-09-8	Tetrachloro-m-xylene	18.2		10 - 166		91%	SPK: 20
2051-24-3	Decachlorobiphenyl	15.6		60 - 125		78%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5	SDG No.:	G1158
Lab Sample ID:	G1158-05	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG015959.D	1	01/26/15 08:00	01/27/15 23:43	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
100-52-7	Benzaldehyde	33.3	U	17.4	33.3	330	ug/Kg
108-95-2	Phenol	33.3	U	7.7	33.3	330	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	33.3	U	16	33.3	330	ug/Kg
95-57-8	2-Chlorophenol	33.3	U	17.6	33.3	330	ug/Kg
95-48-7	2-Methylphenol	33.3	U	18.1	33.3	330	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	33.3	U	13.8	33.3	330	ug/Kg
98-86-2	Acetophenone	33.3	U	10.2	33.3	330	ug/Kg
65794-96-9	3+4-Methylphenols	33.3	U	17.3	33.3	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	33.3	U	16.8	33.3	330	ug/Kg
67-72-1	Hexachloroethane	33.3	U	14.9	33.3	330	ug/Kg
98-95-3	Nitrobenzene	33.3	U	12.6	33.3	330	ug/Kg
78-59-1	Isophorone	33.3	U	11	33.3	330	ug/Kg
88-75-5	2-Nitrophenol	33.3	U	16.1	33.3	330	ug/Kg
105-67-9	2,4-Dimethylphenol	33.3	U	18.9	33.3	330	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	33.3	U	19.2	33.3	330	ug/Kg
120-83-2	2,4-Dichlorophenol	33.3	U	12.7	33.3	330	ug/Kg
91-20-3	Naphthalene	490		11.5	33.3	330	ug/Kg
106-47-8	4-Chloroaniline	33.3	U	23.5	33.3	330	ug/Kg
87-68-3	Hexachlorobutadiene	33.3	U	12.1	33.3	330	ug/Kg
105-60-2	Caprolactam	66.5	U	15.5	66.5	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.3	U	14.8	33.3	330	ug/Kg
91-57-6	2-Methylnaphthalene	220	J	8.4	33.3	330	ug/Kg
77-47-4	Hexachlorocyclopentadiene	33.3	U	8.1	33.3	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	33.3	U	10.2	33.3	330	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.3	U	23.4	33.3	330	ug/Kg
92-52-4	1,1-Biphenyl	33.3	U	12.6	33.3	330	ug/Kg
91-58-7	2-Chloronaphthalene	33.3	U	7.6	33.3	330	ug/Kg
88-74-4	2-Nitroaniline	33.3	U	14.8	33.3	330	ug/Kg
131-11-3	Dimethylphthalate	83.8	J	9	33.3	330	ug/Kg
208-96-8	Acenaphthylene	33.3	U	8.4	33.3	330	ug/Kg
606-20-2	2,6-Dinitrotoluene	33.3	U	13.6	33.3	330	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5	SDG No.:	G1158
Lab Sample ID:	G1158-05	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG015959.D	1	01/26/15 08:00	01/27/15 23:43	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
99-09-2	3-Nitroaniline	66.5	U	21.4	66.5	330	ug/Kg
83-32-9	Acenaphthene	33.3	U	9.4	33.3	330	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	33.8	270	330	ug/Kg
100-02-7	4-Nitrophenol	170	U	61.8	170	330	ug/Kg
132-64-9	Dibenzofuran	33.3	U	13	33.3	330	ug/Kg
121-14-2	2,4-Dinitrotoluene	33.3	U	10	33.3	330	ug/Kg
84-66-2	Diethylphthalate	33.3	U	5.2	33.3	330	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	33.3	U	18.1	33.3	330	ug/Kg
86-73-7	Fluorene	33.3	U	12.6	33.3	330	ug/Kg
100-01-6	4-Nitroaniline	66.5	U	43.3	66.5	330	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	170	U	19.1	170	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	33.3	U	8	33.3	330	ug/Kg
101-55-3	4-Bromophenyl-phenylether	33.3	U	6.5	33.3	330	ug/Kg
118-74-1	Hexachlorobenzene	33.3	U	13.6	33.3	330	ug/Kg
1912-24-9	Atrazine	33.3	U	17.6	33.3	330	ug/Kg
87-86-5	Pentachlorophenol	33.3	U	22.8	33.3	330	ug/Kg
85-01-8	Phenanthrene	33.3	U	9	33.3	330	ug/Kg
120-12-7	Anthracene	33.3	U	6.8	33.3	330	ug/Kg
86-74-8	Carbazole	33.3	U	7.3	33.3	330	ug/Kg
84-74-2	Di-n-butylphthalate	470		26.1	33.3	330	ug/Kg
206-44-0	Fluoranthene	33.3	U	6.7	33.3	330	ug/Kg
129-00-0	Pyrene	33.3	U	8	33.3	330	ug/Kg
85-68-7	Butylbenzylphthalate	480		16	33.3	330	ug/Kg
91-94-1	3,3-Dichlorobenzidine	33.3	U	21.4	33.3	330	ug/Kg
56-55-3	Benzo(a)anthracene	33.3	U	15.9	33.3	330	ug/Kg
218-01-9	Chrysene	33.3	U	15.1	33.3	330	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	340		11.8	33.3	330	ug/Kg
117-84-0	Di-n-octyl phthalate	460		3.8	33.3	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	33.3	U	10.9	33.3	330	ug/Kg
207-08-9	Benzo(k)fluoranthene	33.3	U	15.7	33.3	330	ug/Kg
50-32-8	Benzo(a)pyrene	33.3	U	7.2	33.3	330	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.3	U	11.1	33.3	330	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	33.3	U	9.6	33.3	330	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5	SDG No.:	G1158
Lab Sample ID:	G1158-05	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG015959.D	1	01/26/15 08:00	01/27/15 23:43	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	33.3	U	13.5	33.3	330	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	33.3	U	13.1	33.3	330	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	33.3	U	13.1	33.3	330	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	24	*	28 - 127		16%	SPK: 150
13127-88-3	Phenol-d6	73.6		34 - 127		49%	SPK: 150
4165-60-0	Nitrobenzene-d5	65.3		31 - 132		65%	SPK: 100
321-60-8	2-Fluorobiphenyl	83		39 - 123		83%	SPK: 100
118-79-6	2,4,6-Tribromophenol	19.3	*	30 - 133		13%	SPK: 150
1718-51-0	Terphenyl-d14	76.5		37 - 115		76%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	74914	7.68				
1146-65-2	Naphthalene-d8	301480	10.47				
15067-26-2	Acenaphthene-d10	246541	14.33				
1517-22-2	Phenanthrene-d10	661989	17.08				
1719-03-5	Chrysene-d12	925598	21.27				
1520-96-3	Perylene-d12	889626	23.52				
TENTATIVE IDENTIFIED COMPOUNDS							
000071-36-3	1-Butanol	2300	J			2.76	ug/Kg
000107-98-2	2-Propanol, 1-methoxy-	3300	J			2.86	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	1900	A			4.81	ug/Kg
000098-56-6	Benzene, 1-chloro-4-(trifluorometh	1400	J			5.07	ug/Kg
000108-38-3	Benzene, 1,3-dimethyl-	1600	J			5.71	ug/Kg
000111-76-2	Ethanol, 2-butoxy-	3300	J			5.78	ug/Kg
	unknown7.22	1100	J			7.22	ug/Kg
000108-67-8	Benzene, 1,3,5-trimethyl-	2300	J			7.34	ug/Kg
	unknown7.77	1300	J			7.77	ug/Kg
005989-54-8	Cyclohexene, 1-methyl-4-(1-methyle	1600	J			7.91	ug/Kg
	unknown7.93	1200	J			7.93	ug/Kg
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	1300	J			9.36	ug/Kg
054446-78-5	Ethanol, 1-(2-butoxyethoxy)-	5000	J			10.26	ug/Kg
074367-33-2	Propanoic acid, 2-methyl-, 2,2-dim	1200	J			12.68	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5	SDG No.:	G1158
Lab Sample ID:	G1158-05	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG015959.D	1	01/26/15 08:00	01/27/15 23:43	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
074381-40-1	Propanoic acid, 2-methyl-, 1-(1,1-	1200	J			15.13	ug/Kg
025973-55-1	Phenol, 2-(2H-benzotriazol-2-yl)-4	3600	J			21.88	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5RE	SDG No.:	G1158
Lab Sample ID:	G1158-05RE	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077103.D	1	01/26/15 08:00	01/28/15 15:46	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
100-52-7	Benzaldehyde	33.3	U	17.4	33.3	330	ug/Kg
108-95-2	Phenol	33.3	U	7.7	33.3	330	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	33.3	U	16	33.3	330	ug/Kg
95-57-8	2-Chlorophenol	33.3	U	17.6	33.3	330	ug/Kg
95-48-7	2-Methylphenol	33.3	U	18.1	33.3	330	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	33.3	U	13.8	33.3	330	ug/Kg
98-86-2	Acetophenone	33.3	U	10.2	33.3	330	ug/Kg
65794-96-9	3+4-Methylphenols	33.3	U	17.3	33.3	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	33.3	U	16.8	33.3	330	ug/Kg
67-72-1	Hexachloroethane	33.3	U	14.9	33.3	330	ug/Kg
98-95-3	Nitrobenzene	33.3	U	12.6	33.3	330	ug/Kg
78-59-1	Isophorone	33.3	U	11	33.3	330	ug/Kg
88-75-5	2-Nitrophenol	33.3	U	16.1	33.3	330	ug/Kg
105-67-9	2,4-Dimethylphenol	33.3	U	18.9	33.3	330	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	33.3	U	19.2	33.3	330	ug/Kg
120-83-2	2,4-Dichlorophenol	33.3	U	12.7	33.3	330	ug/Kg
91-20-3	Naphthalene	460		11.5	33.3	330	ug/Kg
106-47-8	4-Chloroaniline	33.3	U	23.5	33.3	330	ug/Kg
87-68-3	Hexachlorobutadiene	33.3	U	12.1	33.3	330	ug/Kg
105-60-2	Caprolactam	66.5	U	15.5	66.5	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.3	U	14.8	33.3	330	ug/Kg
91-57-6	2-Methylnaphthalene	200	J	8.4	33.3	330	ug/Kg
77-47-4	Hexachlorocyclopentadiene	33.3	U	8.1	33.3	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	33.3	U	10.2	33.3	330	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.3	U	23.4	33.3	330	ug/Kg
92-52-4	1,1-Biphenyl	33.3	U	12.6	33.3	330	ug/Kg
91-58-7	2-Chloronaphthalene	33.3	U	7.6	33.3	330	ug/Kg
88-74-4	2-Nitroaniline	33.3	U	14.8	33.3	330	ug/Kg
131-11-3	Dimethylphthalate	94.1	J	9	33.3	330	ug/Kg
208-96-8	Acenaphthylene	33.3	U	8.4	33.3	330	ug/Kg
606-20-2	2,6-Dinitrotoluene	33.3	U	13.6	33.3	330	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5RE	SDG No.:	G1158
Lab Sample ID:	G1158-05RE	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077103.D	1	01/26/15 08:00	01/28/15 15:46	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
99-09-2	3-Nitroaniline	66.5	U	21.4	66.5	330	ug/Kg
83-32-9	Acenaphthene	33.3	U	9.4	33.3	330	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	33.8	270	330	ug/Kg
100-02-7	4-Nitrophenol	170	U	61.8	170	330	ug/Kg
132-64-9	Dibenzofuran	33.3	U	13	33.3	330	ug/Kg
121-14-2	2,4-Dinitrotoluene	33.3	U	10	33.3	330	ug/Kg
84-66-2	Diethylphthalate	33.3	U	5.2	33.3	330	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	33.3	U	18.1	33.3	330	ug/Kg
86-73-7	Fluorene	33.3	U	12.6	33.3	330	ug/Kg
100-01-6	4-Nitroaniline	66.5	U	43.3	66.5	330	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	170	U	19.1	170	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	33.3	U	8	33.3	330	ug/Kg
101-55-3	4-Bromophenyl-phenylether	33.3	U	6.5	33.3	330	ug/Kg
118-74-1	Hexachlorobenzene	33.3	U	13.6	33.3	330	ug/Kg
1912-24-9	Atrazine	33.3	U	17.6	33.3	330	ug/Kg
87-86-5	Pentachlorophenol	33.3	U	22.8	33.3	330	ug/Kg
85-01-8	Phenanthrene	33.3	U	9	33.3	330	ug/Kg
120-12-7	Anthracene	33.3	U	6.8	33.3	330	ug/Kg
86-74-8	Carbazole	33.3	U	7.3	33.3	330	ug/Kg
84-74-2	Di-n-butylphthalate	500		26.1	33.3	330	ug/Kg
206-44-0	Fluoranthene	33.3	U	6.7	33.3	330	ug/Kg
129-00-0	Pyrene	33.3	U	8	33.3	330	ug/Kg
85-68-7	Butylbenzylphthalate	590		16	33.3	330	ug/Kg
91-94-1	3,3-Dichlorobenzidine	33.3	U	21.4	33.3	330	ug/Kg
56-55-3	Benzo(a)anthracene	33.3	U	15.9	33.3	330	ug/Kg
218-01-9	Chrysene	33.3	U	15.1	33.3	330	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	390		11.8	33.3	330	ug/Kg
117-84-0	Di-n-octyl phthalate	490		3.8	33.3	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	33.3	U	10.9	33.3	330	ug/Kg
207-08-9	Benzo(k)fluoranthene	33.3	U	15.7	33.3	330	ug/Kg
50-32-8	Benzo(a)pyrene	33.3	U	7.2	33.3	330	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.3	U	11.1	33.3	330	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	33.3	U	9.6	33.3	330	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5RE	SDG No.:	G1158
Lab Sample ID:	G1158-05RE	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077103.D	1	01/26/15 08:00	01/28/15 15:46	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	33.3	U	13.5	33.3	330	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	33.3	U	13.1	33.3	330	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	33.3	U	13.1	33.3	330	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	23.2	*	28 - 127		15%	SPK: 150
13127-88-3	Phenol-d6	69.5		34 - 127		46%	SPK: 150
4165-60-0	Nitrobenzene-d5	69.9		31 - 132		70%	SPK: 100
321-60-8	2-Fluorobiphenyl	77.8		39 - 123		78%	SPK: 100
118-79-6	2,4,6-Tribromophenol	18.2	*	30 - 133		12%	SPK: 150
1718-51-0	Terphenyl-d14	72.8		37 - 115		73%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	25957	7.72				
1146-65-2	Naphthalene-d8	105455	10.63				
15067-26-2	Acenaphthene-d10	49656	14.75				
1517-22-2	Phenanthrene-d10	90055	17.59				
1719-03-5	Chrysene-d12	77943	21.1				
1520-96-3	Perylene-d12	71531	22.78				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5	SDG No.:	G1158
Lab Sample ID:	G1158-05	Matrix:	SOIL
Analytical Method:	8015B TPH	% Moisture:	0 Decanted:
Sample Wt/Vol:	30.09 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FD007143.D	5	01/26/15 08:00	01/29/15 18:02	PB81519

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Petroleum Hydroca	Petroleum Hydrocarbons	73280		7480	7480	14100	ug/kg
SURROGATES							
16416-32-3	TETRACOSANE-d50	3.52		37 - 130		88%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5	SDG No.:	G1158
Lab Sample ID:	G1158-05	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	4.99 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	MED

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR015980.D	1		01/26/15 17:09	VR012615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-71-8	Dichlorodifluoromethane	50.1	U	50.1	50.1	500	ug/Kg
74-87-3	Chloromethane	50.1	U	50.1	50.1	500	ug/Kg
75-01-4	Vinyl Chloride	50.1	U	50.1	50.1	500	ug/Kg
74-83-9	Bromomethane	100	U	100	100	500	ug/Kg
75-00-3	Chloroethane	50.1	U	50.1	50.1	500	ug/Kg
75-69-4	Trichlorofluoromethane	50.1	U	50.1	50.1	500	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	50.1	U	50.1	50.1	500	ug/Kg
75-35-4	1,1-Dichloroethene	50.1	U	50.1	50.1	500	ug/Kg
67-64-1	Acetone	6200		250	250	2500	ug/Kg
75-15-0	Carbon Disulfide	50.1	U	50.1	50.1	500	ug/Kg
1634-04-4	Methyl tert-butyl Ether	50.1	U	50.1	50.1	500	ug/Kg
79-20-9	Methyl Acetate	21900	E	100	100	500	ug/Kg
75-09-2	Methylene Chloride	50.1	U	50.1	50.1	500	ug/Kg
156-60-5	trans-1,2-Dichloroethene	50.1	U	50.1	50.1	500	ug/Kg
75-34-3	1,1-Dichloroethane	50.1	U	50.1	50.1	500	ug/Kg
110-82-7	Cyclohexane	50.1	U	50.1	50.1	500	ug/Kg
78-93-3	2-Butanone	750	U	310	750	2500	ug/Kg
56-23-5	Carbon Tetrachloride	50.1	U	50.1	50.1	500	ug/Kg
156-59-2	cis-1,2-Dichloroethene	50.1	U	50.1	50.1	500	ug/Kg
74-97-5	Bromochloromethane	50.1	U	50.1	50.1	500	ug/Kg
67-66-3	Chloroform	50.1	U	50.1	50.1	500	ug/Kg
71-55-6	1,1,1-Trichloroethane	50.1	U	50.1	50.1	500	ug/Kg
108-87-2	Methylcyclohexane	11900		50.1	50.1	500	ug/Kg
71-43-2	Benzene	50.1	U	38.1	50.1	500	ug/Kg
107-06-2	1,2-Dichloroethane	50.1	U	50.1	50.1	500	ug/Kg
79-01-6	Trichloroethene	50.1	U	50.1	50.1	500	ug/Kg
78-87-5	1,2-Dichloropropane	50.1	U	26.1	50.1	500	ug/Kg
75-27-4	Bromodichloromethane	50.1	U	50.1	50.1	500	ug/Kg
108-10-1	4-Methyl-2-Pentanone	62500		250	250	2500	ug/Kg
108-88-3	Toluene	65000	E	50.1	50.1	500	ug/Kg
10061-02-6	t-1,3-Dichloropropene	50.1	U	50.1	50.1	500	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5	SDG No.:	G1158
Lab Sample ID:	G1158-05	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	4.99 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	MED

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR015980.D	1		01/26/15 17:09	VR012615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
10061-01-5	cis-1,3-Dichloropropene	50.1	U	50.1	50.1	500	ug/Kg
79-00-5	1,1,2-Trichloroethane	100	U	90.2	100	500	ug/Kg
591-78-6	2-Hexanone	250	U	250	250	2500	ug/Kg
124-48-1	Dibromochloromethane	50.1	U	50.1	50.1	500	ug/Kg
106-93-4	1,2-Dibromoethane	50.1	U	50.1	50.1	500	ug/Kg
127-18-4	Tetrachloroethene	50.1	U	50.1	50.1	500	ug/Kg
108-90-7	Chlorobenzene	50.1	U	50.1	50.1	500	ug/Kg
100-41-4	Ethyl Benzene	8300		50.1	50.1	500	ug/Kg
179601-23-1	m/p-Xylenes	31400	E	72.1	100	1000	ug/Kg
95-47-6	o-Xylene	20500	E	50.1	50.1	500	ug/Kg
100-42-5	Styrene	50.1	U	45.1	50.1	500	ug/Kg
75-25-2	Bromoform	150	U	74.1	150	500	ug/Kg
98-82-8	Isopropylbenzene	1300		48.1	50.1	500	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	50.1	U	46.1	50.1	500	ug/Kg
541-73-1	1,3-Dichlorobenzene	50.1	U	37.1	50.1	500	ug/Kg
106-46-7	1,4-Dichlorobenzene	50.1	U	41.1	50.1	500	ug/Kg
95-50-1	1,2-Dichlorobenzene	50.1	U	50.1	50.1	500	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	500	U	87.2	500	500	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	50.1	U	50.1	50.1	500	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	100	U	50.1	100	500	ug/Kg
123-91-1	1,4-Dioxane	10000	U	10000	10000	10000	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	47.6		56 - 120		95%	SPK: 50
1868-53-7	Dibromofluoromethane	46.2		57 - 135		92%	SPK: 50
2037-26-5	Toluene-d8	49.8		67 - 123		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.7		33 - 141		103%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	613767	7.47				
540-36-3	1,4-Difluorobenzene	1036550	8.42				
3114-55-4	Chlorobenzene-d5	865700	11.26				
3855-82-1	1,4-Dichlorobenzene-d4	297643	13.21				
TENTATIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5	SDG No.:	G1158
Lab Sample ID:	G1158-05	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	4.99 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	MED

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR015980.D	1		01/26/15 17:09	VR012615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
75-65-0	Tert butyl alcohol	6600	J			4.54	ug/Kg
000554-12-1	Methyl propionate	8300	J			7.2	ug/Kg
000547-63-7	Propanoic acid, 2-methyl-, methyl	9500	J			8.5	ug/Kg
80-62-6	Methyl methacrylate	3900	J			9.04	ug/Kg
000623-42-7	Butanoic acid, methyl ester	10800	J			9.26	ug/Kg
000592-27-8	Heptane, 2-methyl-	5500	J			9.58	ug/Kg
000589-81-1	Heptane, 3-methyl-	4900	J			9.72	ug/Kg
000111-65-9	Octane	4400	J			10.14	ug/Kg
003221-61-2	Octane, 2-methyl-	8200	J			11.06	ug/Kg
000110-43-0	2-Heptanone	8000	J			11.88	ug/Kg
103-65-1	n-propylbenzene	4500	J			12.45	ug/Kg
000620-14-4	Benzene, 1-ethyl-3-methyl-	4800	J			12.52	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	13400	J			12.6	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	31700	J			12.9	ug/Kg
91-20-3	Naphthalene	4100	J			15	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5DL	SDG No.:	G1158
Lab Sample ID:	G1158-05DL	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	4.99 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	MED

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR015993.D	40		01/27/15 17:41	VR012715

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-71-8	Dichlorodifluoromethane	2000	UD	2000	2000	20000	ug/Kg
74-87-3	Chloromethane	2000	UD	2000	2000	20000	ug/Kg
75-01-4	Vinyl Chloride	2000	UD	2000	2000	20000	ug/Kg
74-83-9	Bromomethane	4000	UD	4000	4000	20000	ug/Kg
75-00-3	Chloroethane	2000	UD	2000	2000	20000	ug/Kg
75-69-4	Trichlorofluoromethane	2000	UD	2000	2000	20000	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2000	UD	2000	2000	20000	ug/Kg
75-35-4	1,1-Dichloroethene	2000	UD	2000	2000	20000	ug/Kg
67-64-1	Acetone	10000	UD	10000	10000	100200	ug/Kg
75-15-0	Carbon Disulfide	2000	UD	2000	2000	20000	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2000	UD	2000	2000	20000	ug/Kg
79-20-9	Methyl Acetate	19800	JD	4000	4000	20000	ug/Kg
75-09-2	Methylene Chloride	2000	UD	2000	2000	20000	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2000	UD	2000	2000	20000	ug/Kg
75-34-3	1,1-Dichloroethane	2000	UD	2000	2000	20000	ug/Kg
110-82-7	Cyclohexane	2000	UD	2000	2000	20000	ug/Kg
78-93-3	2-Butanone	30100	UD	12500	30100	100200	ug/Kg
56-23-5	Carbon Tetrachloride	2000	UD	2000	2000	20000	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2000	UD	2000	2000	20000	ug/Kg
74-97-5	Bromochloromethane	2000	UD	2000	2000	20000	ug/Kg
67-66-3	Chloroform	2000	UD	2000	2000	20000	ug/Kg
71-55-6	1,1,1-Trichloroethane	2000	UD	2000	2000	20000	ug/Kg
108-87-2	Methylcyclohexane	7600	JD	2000	2000	20000	ug/Kg
71-43-2	Benzene	2000	UD	1500	2000	20000	ug/Kg
107-06-2	1,2-Dichloroethane	2000	UD	2000	2000	20000	ug/Kg
79-01-6	Trichloroethene	2000	UD	2000	2000	20000	ug/Kg
78-87-5	1,2-Dichloropropane	2000	UD	1000	2000	20000	ug/Kg
75-27-4	Bromodichloromethane	2000	UD	2000	2000	20000	ug/Kg
108-10-1	4-Methyl-2-Pentanone	45200	JD	10000	10000	100200	ug/Kg
108-88-3	Toluene	160700	D	2000	2000	20000	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2000	UD	2000	2000	20000	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5DL	SDG No.:	G1158
Lab Sample ID:	G1158-05DL	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	4.99 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	MED

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR015993.D	40		01/27/15 17:41	VR012715

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
10061-01-5	cis-1,3-Dichloropropene	2000	UD	2000	2000	20000	ug/Kg
79-00-5	1,1,2-Trichloroethane	4000	UD	3600	4000	20000	ug/Kg
591-78-6	2-Hexanone	10000	UD	10000	10000	100200	ug/Kg
124-48-1	Dibromochloromethane	2000	UD	2000	2000	20000	ug/Kg
106-93-4	1,2-Dibromoethane	2000	UD	2000	2000	20000	ug/Kg
127-18-4	Tetrachloroethene	2000	UD	2000	2000	20000	ug/Kg
108-90-7	Chlorobenzene	2000	UD	2000	2000	20000	ug/Kg
100-41-4	Ethyl Benzene	7500	JD	2000	2000	20000	ug/Kg
179601-23-1	m/p-Xylenes	46300	D	2900	4000	40100	ug/Kg
95-47-6	o-Xylene	22700	D	2000	2000	20000	ug/Kg
100-42-5	Styrene	2000	UD	1800	2000	20000	ug/Kg
75-25-2	Bromoform	6000	UD	3000	6000	20000	ug/Kg
98-82-8	Isopropylbenzene	2000	UD	1900	2000	20000	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2000	UD	1800	2000	20000	ug/Kg
541-73-1	1,3-Dichlorobenzene	2000	UD	1500	2000	20000	ug/Kg
106-46-7	1,4-Dichlorobenzene	2000	UD	1600	2000	20000	ug/Kg
95-50-1	1,2-Dichlorobenzene	2000	UD	2000	2000	20000	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	20000	UD	3500	20000	20000	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2000	UD	2000	2000	20000	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	4000	UD	2000	4000	20000	ug/Kg
123-91-1	1,4-Dioxane	400800	UD	400800	400800	400800	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.6		56 - 120		101%	SPK: 50
1868-53-7	Dibromofluoromethane	47.6		57 - 135		95%	SPK: 50
2037-26-5	Toluene-d8	50.9		67 - 123		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.8		33 - 141		104%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	529203	7.48				
540-36-3	1,4-Difluorobenzene	914368	8.42				
3114-55-4	Chlorobenzene-d5	753005	11.26				
3855-82-1	1,4-Dichlorobenzene-d4	270337	13.21				

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-5DL	SDG No.:	G1158
Lab Sample ID:	G1158-05DL	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	4.99 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	MED

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VR015993.D	40		01/27/15 17:41	VR012715

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15 09:20
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6	SDG No.:	G1158
Lab Sample ID:	G1158-06	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	0.123	U	1	0.032	0.123	0.245	mg/Kg	01/23/15 08:01	01/26/15 10:33	9012B
Hexavalent Chromium	7.8		1	0.08	0.2	0.4	mg/Kg	01/26/15 09:45	01/26/15 16:07	7196A
Trivalent Chromium	33		1	0.1	0.1	0.1	mg/Kg		01/26/15 00:00	6010B

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6	SDG No.:	G1158
Lab Sample ID:	G1158-06	Matrix:	SOIL
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	5890		1	0.7	1.04	4.17	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-36-0	Antimony	0.521	U	1	0.467	0.521	2.08	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-38-2	Arsenic	3.01		1	0.208	0.208	0.833	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-39-3	Barium	53		1	0.333	1.04	4.17	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-41-7	Beryllium	0.435		1	0.05	0.063	0.25	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-43-9	Cadmium	4.51		1	0.05	0.063	0.25	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-70-2	Calcium	80800		1	0.892	20.8	83.3	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-47-3	Chromium	40.8	N	1	0.104	0.104	0.417	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-48-4	Cobalt	19		1	0.313	0.313	1.25	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-50-8	Copper	53.5		1	0.208	0.208	0.833	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7439-89-6	Iron	7580		1	1.04	1.04	4.17	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7439-92-1	Lead	38.6		1	0.1	0.208	0.5	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7439-95-4	Magnesium	3900		1	3.82	20.8	83.3	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7439-96-5	Manganese	262		1	0.158	0.208	0.833	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7439-97-6	Mercury	0.02		1	0.005	0.005	0.01	mg/Kg	01/23/15 10:00	01/26/15 13:06	SW7471A
7440-02-0	Nickel	36.7	N	1	0.383	0.417	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-09-7	Potassium	1560		1	2.92	20.8	83.3	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7782-49-2	Selenium	0.231	J	1	0.208	0.208	0.833	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-22-4	Silver	0.104	U	1	0.104	0.104	0.417	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-23-5	Sodium	658	N	1	2.1	20.8	83.3	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-28-0	Thallium	0.417	U	1	0.225	0.417	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-62-2	Vanadium	13.7		1	0.417	0.417	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010
7440-66-6	Zinc	136		1	0.417	0.417	1.67	mg/Kg	01/23/15 08:00	01/26/15 17:44	SW6010

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	No
Comments:	Metals Group1				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6	SDG No.:	G1158
Lab Sample ID:	G1158-06	Matrix:	SOIL
Analytical Method:	SW8082A	% Moisture:	0 Decanted:
Sample Wt/Vol:	30.11 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	PCB
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP007711.D	1	01/26/15 08:00	01/27/15 20:55	PB81517

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
12674-11-2	Aroclor-1016	3.3	U	3.3	3.3	16.9	ug/kg
11104-28-2	Aroclor-1221	3.3	U	3.3	3.3	16.9	ug/kg
11141-16-5	Aroclor-1232	3.3	U	3.3	3.3	16.9	ug/kg
53469-21-9	Aroclor-1242	3.3	U	3.3	3.3	16.9	ug/kg
12672-29-6	Aroclor-1248	3.3	U	3.3	3.3	16.9	ug/kg
11097-69-1	Aroclor-1254	3.3	U	1.5	3.3	16.9	ug/kg
11096-82-5	Aroclor-1260	3.3	U	3.3	3.3	16.9	ug/kg
SURROGATES							
877-09-8	Tetrachloro-m-xylene	19.9		10 - 166		99%	SPK: 20
2051-24-3	Decachlorobiphenyl	15.9		60 - 125		80%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6	SDG No.:	G1158
Lab Sample ID:	G1158-06	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.1 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077070.D	1	01/26/15 08:00	01/27/15 03:05	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
100-52-7	Benzaldehyde	33.2	U	17.3	33.2	330	ug/Kg
108-95-2	Phenol	33.2	U	7.7	33.2	330	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	33.2	U	15.9	33.2	330	ug/Kg
95-57-8	2-Chlorophenol	33.2	U	17.5	33.2	330	ug/Kg
95-48-7	2-Methylphenol	33.2	U	18	33.2	330	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	33.2	U	13.8	33.2	330	ug/Kg
98-86-2	Acetophenone	33.2	U	10.2	33.2	330	ug/Kg
65794-96-9	3+4-Methylphenols	33.2	U	17.2	33.2	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	33.2	U	16.7	33.2	330	ug/Kg
67-72-1	Hexachloroethane	33.2	U	14.9	33.2	330	ug/Kg
98-95-3	Nitrobenzene	33.2	U	12.6	33.2	330	ug/Kg
78-59-1	Isophorone	33.2	U	11	33.2	330	ug/Kg
88-75-5	2-Nitrophenol	33.2	U	16	33.2	330	ug/Kg
105-67-9	2,4-Dimethylphenol	33.2	U	18.8	33.2	330	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	33.2	U	19.1	33.2	330	ug/Kg
120-83-2	2,4-Dichlorophenol	33.2	U	12.7	33.2	330	ug/Kg
91-20-3	Naphthalene	33.2	U	11.5	33.2	330	ug/Kg
106-47-8	4-Chloroaniline	33.2	U	23.4	33.2	330	ug/Kg
87-68-3	Hexachlorobutadiene	33.2	U	12.1	33.2	330	ug/Kg
105-60-2	Caprolactam	66.4	U	15.4	66.4	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.2	U	14.8	33.2	330	ug/Kg
91-57-6	2-Methylnaphthalene	33.2	U	8.4	33.2	330	ug/Kg
77-47-4	Hexachlorocyclopentadiene	33.2	U	8.1	33.2	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	33.2	U	10.2	33.2	330	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.2	U	23.3	33.2	330	ug/Kg
92-52-4	1,1-Biphenyl	33.2	U	12.6	33.2	330	ug/Kg
91-58-7	2-Chloronaphthalene	33.2	U	7.6	33.2	330	ug/Kg
88-74-4	2-Nitroaniline	33.2	U	14.8	33.2	330	ug/Kg
131-11-3	Dimethylphthalate	110	J	9	33.2	330	ug/Kg
208-96-8	Acenaphthylene	33.2	U	8.4	33.2	330	ug/Kg
606-20-2	2,6-Dinitrotoluene	33.2	U	13.6	33.2	330	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6	SDG No.:	G1158
Lab Sample ID:	G1158-06	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.1 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077070.D	1	01/26/15 08:00	01/27/15 03:05	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
99-09-2	3-Nitroaniline	66.4	U	21.3	66.4	330	ug/Kg
83-32-9	Acenaphthene	33.2	U	9.4	33.2	330	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	33.8	270	330	ug/Kg
100-02-7	4-Nitrophenol	170	U	61.7	170	330	ug/Kg
132-64-9	Dibenzofuran	33.2	U	13	33.2	330	ug/Kg
121-14-2	2,4-Dinitrotoluene	33.2	U	10	33.2	330	ug/Kg
84-66-2	Diethylphthalate	33.2	U	5.2	33.2	330	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	33.2	U	18	33.2	330	ug/Kg
86-73-7	Fluorene	33.2	U	12.6	33.2	330	ug/Kg
100-01-6	4-Nitroaniline	66.4	U	43.3	66.4	330	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	170	U	19	170	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	33.2	U	8	33.2	330	ug/Kg
101-55-3	4-Bromophenyl-phenylether	33.2	U	6.5	33.2	330	ug/Kg
118-74-1	Hexachlorobenzene	33.2	U	13.6	33.2	330	ug/Kg
1912-24-9	Atrazine	33.2	U	17.5	33.2	330	ug/Kg
87-86-5	Pentachlorophenol	33.2	U	22.7	33.2	330	ug/Kg
85-01-8	Phenanthrene	33.2	U	9	33.2	330	ug/Kg
120-12-7	Anthracene	33.2	U	6.8	33.2	330	ug/Kg
86-74-8	Carbazole	33.2	U	7.3	33.2	330	ug/Kg
84-74-2	Di-n-butylphthalate	33.2	U	26.1	33.2	330	ug/Kg
206-44-0	Fluoranthene	33.2	U	6.7	33.2	330	ug/Kg
129-00-0	Pyrene	33.2	U	8	33.2	330	ug/Kg
85-68-7	Butylbenzylphthalate	33.2	U	15.9	33.2	330	ug/Kg
91-94-1	3,3-Dichlorobenzidine	33.2	U	21.3	33.2	330	ug/Kg
56-55-3	Benzo(a)anthracene	33.2	U	15.8	33.2	330	ug/Kg
218-01-9	Chrysene	33.2	U	15	33.2	330	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	33.2	U	11.8	33.2	330	ug/Kg
117-84-0	Di-n-octyl phthalate	33.2	U	3.8	33.2	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	33.2	U	10.9	33.2	330	ug/Kg
207-08-9	Benzo(k)fluoranthene	33.2	U	15.6	33.2	330	ug/Kg
50-32-8	Benzo(a)pyrene	33.2	U	7.2	33.2	330	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.2	U	11.1	33.2	330	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	33.2	U	9.6	33.2	330	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6	SDG No.:	G1158
Lab Sample ID:	G1158-06	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.1 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077070.D	1	01/26/15 08:00	01/27/15 03:05	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	33.2	U	13.5	33.2	330	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	33.2	U	13.1	33.2	330	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	33.2	U	13.1	33.2	330	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	3.1	*	28 - 127		2%	SPK: 150
13127-88-3	Phenol-d6	30.5	*	34 - 127		20%	SPK: 150
4165-60-0	Nitrobenzene-d5	83		31 - 132		83%	SPK: 100
321-60-8	2-Fluorobiphenyl	94.7		39 - 123		95%	SPK: 100
118-79-6	2,4,6-Tribromophenol	0	*	30 - 133		0%	SPK: 150
1718-51-0	Terphenyl-d14	83.8		37 - 115		84%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	20506	7.77				
1146-65-2	Naphthalene-d8	89349	10.68				
15067-26-2	Acenaphthene-d10	44259	14.81				
1517-22-2	Phenanthrene-d10	78203	17.64				
1719-03-5	Chrysene-d12	71290	21.17				
1520-96-3	Perylene-d12	67273	22.8				
TENTATIVE IDENTIFIED COMPOUNDS							
000141-79-7	3-Penten-2-one, 4-methyl-	4800	A			2.62	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	6800	A			3.88	ug/Kg
000144-19-4	1,3-Pentanediol, 2,2,4-trimethyl-	660	J			10.23	ug/Kg
000112-34-5	Ethanol, 2-(2-butoxyethoxy)-	320	J			10.73	ug/Kg
006383-11-5	Bicyclo[4.2.0]octa-1,3,5-triene-7,	170	J			12.61	ug/Kg
000143-22-6	Ethanol, 2-[2-(2-butoxyethoxy)etho	440	J			14.57	ug/Kg
003892-00-0	Pentadecane, 2,6,10-trimethyl-	180	J			17.03	ug/Kg
001786-94-3	3,6,9,12,15-Pentaoxanonadecan-1-ol	180	J			17.29	ug/Kg
	unknown17.52	240	J			17.52	ug/Kg
006418-41-3	Tridecane, 3-methyl-	180	J			17.74	ug/Kg
	unknown18.31	220	J			18.31	ug/Kg
	unknown18.72	350	J			18.72	ug/Kg
007098-22-8	Tetratetracontane	290	J			18.87	ug/Kg
	unknown18.92	260	J			18.92	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6	SDG No.:	G1158
Lab Sample ID:	G1158-06	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.1 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077070.D	1	01/26/15 08:00	01/27/15 03:05	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
001560-86-7	Nonadecane, 2-methyl-	750	J			19.25	ug/Kg
000593-49-7	Heptacosane	450	J			19.39	ug/Kg
000693-38-9	Palmitic acid vinyl ester	260	J			19.58	ug/Kg
017312-55-9	Decane, 3,8-dimethyl-	230	J			19.74	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6RE	SDG No.:	G1158
Lab Sample ID:	G1158-06RE	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.1 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077118.D	1	01/26/15 08:00	01/29/15 03:51	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
100-52-7	Benzaldehyde	33.2	U	17.3	33.2	330	ug/Kg
108-95-2	Phenol	33.2	U	7.7	33.2	330	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	33.2	U	15.9	33.2	330	ug/Kg
95-57-8	2-Chlorophenol	33.2	U	17.5	33.2	330	ug/Kg
95-48-7	2-Methylphenol	33.2	U	18	33.2	330	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	33.2	U	13.8	33.2	330	ug/Kg
98-86-2	Acetophenone	33.2	U	10.2	33.2	330	ug/Kg
65794-96-9	3+4-Methylphenols	33.2	U	17.2	33.2	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	33.2	U	16.7	33.2	330	ug/Kg
67-72-1	Hexachloroethane	33.2	U	14.9	33.2	330	ug/Kg
98-95-3	Nitrobenzene	33.2	U	12.6	33.2	330	ug/Kg
78-59-1	Isophorone	33.2	U	11	33.2	330	ug/Kg
88-75-5	2-Nitrophenol	33.2	U	16	33.2	330	ug/Kg
105-67-9	2,4-Dimethylphenol	33.2	U	18.8	33.2	330	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	33.2	U	19.1	33.2	330	ug/Kg
120-83-2	2,4-Dichlorophenol	33.2	U	12.7	33.2	330	ug/Kg
91-20-3	Naphthalene	33.2	U	11.5	33.2	330	ug/Kg
106-47-8	4-Chloroaniline	33.2	U	23.4	33.2	330	ug/Kg
87-68-3	Hexachlorobutadiene	33.2	U	12.1	33.2	330	ug/Kg
105-60-2	Caprolactam	66.4	U	15.4	66.4	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.2	U	14.8	33.2	330	ug/Kg
91-57-6	2-Methylnaphthalene	33.2	U	8.4	33.2	330	ug/Kg
77-47-4	Hexachlorocyclopentadiene	33.2	U	8.1	33.2	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	33.2	U	10.2	33.2	330	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.2	U	23.3	33.2	330	ug/Kg
92-52-4	1,1-Biphenyl	33.2	U	12.6	33.2	330	ug/Kg
91-58-7	2-Chloronaphthalene	33.2	U	7.6	33.2	330	ug/Kg
88-74-4	2-Nitroaniline	33.2	U	14.8	33.2	330	ug/Kg
131-11-3	Dimethylphthalate	120	J	9	33.2	330	ug/Kg
208-96-8	Acenaphthylene	33.2	U	8.4	33.2	330	ug/Kg
606-20-2	2,6-Dinitrotoluene	33.2	U	13.6	33.2	330	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6RE	SDG No.:	G1158
Lab Sample ID:	G1158-06RE	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.1 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077118.D	1	01/26/15 08:00	01/29/15 03:51	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
99-09-2	3-Nitroaniline	66.4	U	21.3	66.4	330	ug/Kg
83-32-9	Acenaphthene	33.2	U	9.4	33.2	330	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	33.8	270	330	ug/Kg
100-02-7	4-Nitrophenol	170	U	61.7	170	330	ug/Kg
132-64-9	Dibenzofuran	33.2	U	13	33.2	330	ug/Kg
121-14-2	2,4-Dinitrotoluene	33.2	U	10	33.2	330	ug/Kg
84-66-2	Diethylphthalate	33.2	U	5.2	33.2	330	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	33.2	U	18	33.2	330	ug/Kg
86-73-7	Fluorene	33.2	U	12.6	33.2	330	ug/Kg
100-01-6	4-Nitroaniline	66.4	U	43.3	66.4	330	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	170	U	19	170	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	33.2	U	8	33.2	330	ug/Kg
101-55-3	4-Bromophenyl-phenylether	33.2	U	6.5	33.2	330	ug/Kg
118-74-1	Hexachlorobenzene	33.2	U	13.6	33.2	330	ug/Kg
1912-24-9	Atrazine	33.2	U	17.5	33.2	330	ug/Kg
87-86-5	Pentachlorophenol	33.2	U	22.7	33.2	330	ug/Kg
85-01-8	Phenanthrene	33.2	U	9	33.2	330	ug/Kg
120-12-7	Anthracene	33.2	U	6.8	33.2	330	ug/Kg
86-74-8	Carbazole	33.2	U	7.3	33.2	330	ug/Kg
84-74-2	Di-n-butylphthalate	33.2	U	26.1	33.2	330	ug/Kg
206-44-0	Fluoranthene	33.2	U	6.7	33.2	330	ug/Kg
129-00-0	Pyrene	33.2	U	8	33.2	330	ug/Kg
85-68-7	Butylbenzylphthalate	33.2	U	15.9	33.2	330	ug/Kg
91-94-1	3,3-Dichlorobenzidine	33.2	U	21.3	33.2	330	ug/Kg
56-55-3	Benzo(a)anthracene	33.2	U	15.8	33.2	330	ug/Kg
218-01-9	Chrysene	33.2	U	15	33.2	330	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	33.2	U	11.8	33.2	330	ug/Kg
117-84-0	Di-n-octyl phthalate	33.2	U	3.8	33.2	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	33.2	U	10.9	33.2	330	ug/Kg
207-08-9	Benzo(k)fluoranthene	33.2	U	15.6	33.2	330	ug/Kg
50-32-8	Benzo(a)pyrene	33.2	U	7.2	33.2	330	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.2	U	11.1	33.2	330	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	33.2	U	9.6	33.2	330	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6RE	SDG No.:	G1158
Lab Sample ID:	G1158-06RE	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	0
Sample Wt/Vol:	30.1 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077118.D	1	01/26/15 08:00	01/29/15 03:51	PB81510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	33.2	U	13.5	33.2	330	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	33.2	U	13.1	33.2	330	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	33.2	U	13.1	33.2	330	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	3.4	*	28 - 127		2%	SPK: 150
13127-88-3	Phenol-d6	31.2	*	34 - 127		21%	SPK: 150
4165-60-0	Nitrobenzene-d5	86.5		31 - 132		87%	SPK: 100
321-60-8	2-Fluorobiphenyl	100		39 - 123		100%	SPK: 100
118-79-6	2,4,6-Tribromophenol	0	*	30 - 133		0%	SPK: 150
1718-51-0	Terphenyl-d14	80.9		37 - 115		81%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	25277	7.73				
1146-65-2	Naphthalene-d8	105896	10.64				
15067-26-2	Acenaphthene-d10	50414	14.76				
1517-22-2	Phenanthrene-d10	90020	17.6				
1719-03-5	Chrysene-d12	82739	21.13				
1520-96-3	Perylene-d12	72733	22.79				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6	SDG No.:	G1158
Lab Sample ID:	G1158-06	Matrix:	SOIL
Analytical Method:	8015B TPH	% Moisture:	0 Decanted:
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	TPH GC
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FD007144.D	20	01/26/15 08:00	01/29/15 18:38	PB81519

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Petroleum Hydroca	Petroleum Hydrocarbons	452579		30000	30000	56600	ug/kg
SURROGATES							
16416-32-3	TETRACOSANE-d50	0.95		37 - 130		95%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6	SDG No.:	G1158
Lab Sample ID:	G1158-06	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044263.D	1		01/26/15 22:41	VF012615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-71-8	Dichlorodifluoromethane	0.5	U	0.5	0.5	5	ug/Kg
74-87-3	Chloromethane	0.5	U	0.5	0.5	5	ug/Kg
75-01-4	Vinyl Chloride	0.5	U	0.5	0.5	5	ug/Kg
74-83-9	Bromomethane	1	U	1	1	5	ug/Kg
75-00-3	Chloroethane	0.5	U	0.5	0.5	5	ug/Kg
75-69-4	Trichlorofluoromethane	0.5	U	0.5	0.5	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.5	0.5	5	ug/Kg
75-35-4	1,1-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
67-64-1	Acetone	2.5	U	2.5	2.5	25	ug/Kg
75-15-0	Carbon Disulfide	0.5	U	0.5	0.5	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.5	0.5	5	ug/Kg
79-20-9	Methyl Acetate	1	U	1	1	5	ug/Kg
75-09-2	Methylene Chloride	2.1	J	0.5	0.5	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
75-34-3	1,1-Dichloroethane	0.5	U	0.5	0.5	5	ug/Kg
110-82-7	Cyclohexane	0.5	U	0.5	0.5	5	ug/Kg
78-93-3	2-Butanone	7.5	U	3.1	7.5	25	ug/Kg
56-23-5	Carbon Tetrachloride	0.5	U	0.5	0.5	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
74-97-5	Bromochloromethane	0.5	U	0.5	0.5	5	ug/Kg
67-66-3	Chloroform	0.5	U	0.5	0.5	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.5	U	0.5	0.5	5	ug/Kg
108-87-2	Methylcyclohexane	0.5	U	0.5	0.5	5	ug/Kg
71-43-2	Benzene	0.5	U	0.38	0.5	5	ug/Kg
107-06-2	1,2-Dichloroethane	0.5	U	0.5	0.5	5	ug/Kg
79-01-6	Trichloroethene	0.5	U	0.5	0.5	5	ug/Kg
78-87-5	1,2-Dichloropropane	0.5	U	0.26	0.5	5	ug/Kg
75-27-4	Bromodichloromethane	0.5	U	0.5	0.5	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.5	2.5	25	ug/Kg
108-88-3	Toluene	0.5	U	0.5	0.5	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.5	0.5	5	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6	SDG No.:	G1158
Lab Sample ID:	G1158-06	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044263.D	1		01/26/15 22:41	VF012615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.5	0.5	5	ug/Kg
79-00-5	1,1,2-Trichloroethane	1	U	0.9	1	5	ug/Kg
591-78-6	2-Hexanone	2.5	U	2.5	2.5	25	ug/Kg
124-48-1	Dibromochloromethane	0.5	U	0.5	0.5	5	ug/Kg
106-93-4	1,2-Dibromoethane	0.5	U	0.5	0.5	5	ug/Kg
127-18-4	Tetrachloroethene	0.5	U	0.5	0.5	5	ug/Kg
108-90-7	Chlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	0.5	U	0.5	0.5	5	ug/Kg
179601-23-1	m/p-Xylenes	1	U	0.72	1	10	ug/Kg
95-47-6	o-Xylene	0.5	U	0.5	0.5	5	ug/Kg
100-42-5	Styrene	0.5	U	0.45	0.5	5	ug/Kg
75-25-2	Bromoform	1.5	U	0.74	1.5	5	ug/Kg
98-82-8	Isopropylbenzene	0.5	U	0.48	0.5	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.46	0.5	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.5	U	0.37	0.5	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.5	U	0.41	0.5	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5	U	0.87	5	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1	U	0.5	1	5	ug/Kg
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	51.7		56 - 120		103%	SPK: 50
1868-53-7	Dibromofluoromethane	0.06	*	57 - 135		0%	SPK: 50
2037-26-5	Toluene-d8	43		67 - 123		86%	SPK: 50
460-00-4	4-Bromofluorobenzene	38.3		33 - 141		77%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	351534	4.83				
540-36-3	1,4-Difluorobenzene	558445	5.56				
3114-55-4	Chlorobenzene-d5	448679	9.7				
3855-82-1	1,4-Dichlorobenzene-d4	171509	12.47				
TENTATIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6	SDG No.:	G1158
Lab Sample ID:	G1158-06	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044263.D	1		01/26/15 22:41	VF012615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
000071-36-3	1-Butanol	12.2	J			6.191	ug/Kg
000104-76-7	1-Hexanol, 2-ethyl-	10.8	J			12.859	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6RE	SDG No.:	G1158
Lab Sample ID:	G1158-06RE	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044271.D	1		01/28/15 17:01	VF012815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-71-8	Dichlorodifluoromethane	0.5	U	0.5	0.5	5	ug/Kg
74-87-3	Chloromethane	0.5	U	0.5	0.5	5	ug/Kg
75-01-4	Vinyl Chloride	0.5	U	0.5	0.5	5	ug/Kg
74-83-9	Bromomethane	1	U	1	1	5	ug/Kg
75-00-3	Chloroethane	0.5	U	0.5	0.5	5	ug/Kg
75-69-4	Trichlorofluoromethane	0.5	U	0.5	0.5	5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.5	U	0.5	0.5	5	ug/Kg
75-35-4	1,1-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
67-64-1	Acetone	2.5	U	2.5	2.5	25.1	ug/Kg
75-15-0	Carbon Disulfide	0.5	U	0.5	0.5	5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.5	0.5	5	ug/Kg
79-20-9	Methyl Acetate	1	U	1	1	5	ug/Kg
75-09-2	Methylene Chloride	2.7	J	0.5	0.5	5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
75-34-3	1,1-Dichloroethane	0.5	U	0.5	0.5	5	ug/Kg
110-82-7	Cyclohexane	0.5	U	0.5	0.5	5	ug/Kg
78-93-3	2-Butanone	7.5	U	3.1	7.5	25.1	ug/Kg
56-23-5	Carbon Tetrachloride	0.5	U	0.5	0.5	5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.5	U	0.5	0.5	5	ug/Kg
74-97-5	Bromochloromethane	0.5	U	0.5	0.5	5	ug/Kg
67-66-3	Chloroform	0.5	U	0.5	0.5	5	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.5	U	0.5	0.5	5	ug/Kg
108-87-2	Methylcyclohexane	0.5	U	0.5	0.5	5	ug/Kg
71-43-2	Benzene	0.5	U	0.38	0.5	5	ug/Kg
107-06-2	1,2-Dichloroethane	0.5	U	0.5	0.5	5	ug/Kg
79-01-6	Trichloroethene	0.5	U	0.5	0.5	5	ug/Kg
78-87-5	1,2-Dichloropropane	0.5	U	0.26	0.5	5	ug/Kg
75-27-4	Bromodichloromethane	0.5	U	0.5	0.5	5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2.5	U	2.5	2.5	25.1	ug/Kg
108-88-3	Toluene	0.5	U	0.5	0.5	5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.5	U	0.5	0.5	5	ug/Kg

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6RE	SDG No.:	G1158
Lab Sample ID:	G1158-06RE	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044271.D	1		01/28/15 17:01	VF012815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
10061-01-5	cis-1,3-Dichloropropene	0.5	U	0.5	0.5	5	ug/Kg
79-00-5	1,1,2-Trichloroethane	1	U	0.9	1	5	ug/Kg
591-78-6	2-Hexanone	2.5	U	2.5	2.5	25.1	ug/Kg
124-48-1	Dibromochloromethane	0.5	U	0.5	0.5	5	ug/Kg
106-93-4	1,2-Dibromoethane	0.5	U	0.5	0.5	5	ug/Kg
127-18-4	Tetrachloroethene	0.5	U	0.5	0.5	5	ug/Kg
108-90-7	Chlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
100-41-4	Ethyl Benzene	0.5	U	0.5	0.5	5	ug/Kg
179601-23-1	m/p-Xylenes	1	U	0.72	1	10	ug/Kg
95-47-6	o-Xylene	0.5	U	0.5	0.5	5	ug/Kg
100-42-5	Styrene	0.5	U	0.45	0.5	5	ug/Kg
75-25-2	Bromoform	1.5	U	0.74	1.5	5	ug/Kg
98-82-8	Isopropylbenzene	0.5	U	0.48	0.5	5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U	0.46	0.5	5	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.5	U	0.37	0.5	5	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.5	U	0.41	0.5	5	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5	U	0.87	5	5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	0.5	U	0.5	0.5	5	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1	U	0.5	1	5	ug/Kg
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	57		56 - 120		114%	SPK: 50
1868-53-7	Dibromofluoromethane	3.1	*	57 - 135		6%	SPK: 50
2037-26-5	Toluene-d8	47.9		67 - 123		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	43		33 - 141		86%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	347543	4.8				
540-36-3	1,4-Difluorobenzene	555750	5.53				
3114-55-4	Chlorobenzene-d5	461065	9.67				
3855-82-1	1,4-Dichlorobenzene-d4	175515	12.45				

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	CC-6RE	SDG No.:	G1158
Lab Sample ID:	G1158-06RE	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	0
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RTX-VMS ID : 0.18	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF044271.D	1		01/28/15 17:01	VF012815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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DATA PACKAGE

VOLATILE ORGANICS
GENERAL CHEMISTRY
METALS
GC SEMI-VOLATILES
SEMI-VOLATILE ORGANICS

PROJECT NAME : 410162268.20

GZA GEOENVIRONMENTAL, INC.

104 West 29th Street, 10th Floor

New York, NY - 10001

Phone No: 212-594-8140

ORDER ID : G1217

ATTENTION : Clifford Bell

ACCREDITED IN ACCORDANCE WITH nelac

DoD ELAP

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Cover Page

Order ID : G1217

Project ID : 410162268.20

Client : GZA GeoEnvironmental, Inc.

Lab Sample Number	Client Sample Number
G1217-01	COMP-CC-2-CC-3-CC-4-CC-5-CC-6
G1217-02	COMP-CC-2-CC-3-CC-4-CC-5-CC-6

I certify that the data package is in compliance with the terms and conditions of the contract,both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : Mildred V Reyes

APPROVED

Date: 2/12/2015

By Mildred V Reyes QA/QC Supervisor at 9:53 am, Feb 13, 2015

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

GZA GeoEnvironmental, Inc.
Project Name: 410162268.20
Project # N/A
Chemtech Project # G1217
Test Name: TCLP VOA

A. Number of Samples and Date of Receipt:
2 Solid samples were received on 01/22/2015.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Ignitability, Metals Group5, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction and TCLP-FULL. This data package contains results for TCLP VOA.

C. Analytical Techniques:
The analysis performed on instrument MSVOA_N were done using GC column RXI-624SIL MS 30m 0.25mm 1.4 um. Cat#13868.The analysis of TCLP VOA was based on method 8260C and TCLP extraction method was 1311.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The RPD recoveries met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration File ID VN021768.D met the requirements except for 2-Butanone .
The Tuning criteria met requirements.
Samples COMP-CC-2-CC-3-CC-4-CC-5-CC-6 was diluted due to bad matrix.

E. Additional Comments:
Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

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F. Manual Integration Comments:
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Signature Mildred V Reyes

APPROVED
By Mildred V Reyes QA/QC Supervisor at 9:53 am, Feb 13, 2015

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CASE NARRATIVE

GZA GeoEnvironmental, Inc.
Project Name: 410162268.20
Project # N/A
Chemtech Project # G1217
Test Name: TCLP BNA

A. Number of Samples and Date of Receipt:
2 Solid samples were received on 01/22/2015.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Ignitability, Metals Group5, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction and TCLP-FULL. This data package contains results for TCLP BNA.

C. Analytical Techniques:
The samples were analyzed on instrument BNA_F using GC Column RTX-5 which is 20 meters, 0.18 mm ID, 0.36 um dfThe analysis of TCLP BNA was based on method 8270D and extraction was done based on method 3510 and TCLP extraction method was 1311.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The MS {G1217-01MS} with File ID: BF077199.D recoveries met the requirements for all compounds except for Pyridine[36%] .
The MSD {G1217-01MSD} with File ID: BF077200.D recoveries met the acceptable requirements except for Pyridine[42%] .
The RPD for {G1217-01MSD} with File ID: BF077200.D recoveries met criteria except for 1,4-Dichlorobenzene[26%], 2,4,5-Trichlorophenol[39%], 2,4,6-Trichlorophenol[43%], 2,4-Dinitrotoluene[32%], 2-Methylphenol[21%], 3+4-Methylphenols[21%], Hexachlorobenzene[21%], Hexachlorobutadiene[27%], Hexachloroethane[27%] and Nitrobenzene[29%] .
The Blank Spike met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The %RSD is greater than 15% in the Initial Calibration (Method 8270-BF011415.M) for 2,4-Dinitrotoluene and Pentachlorophenol these compounds are passing on Linear regression.
The Continuous Calibration File ID BF077184.D met the requirements except for Pentachlorophenol .
The Tuning criteria met requirements.

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E. Additional Comments:
Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature Mildred V Reyes

APPROVED
By Mildred V Reyes QA/QC Supervisor at 9:53 am, Feb 13, 2015

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CASE NARRATIVE

GZA GeoEnvironmental, Inc.
Project Name: 410162268.20
Project # N/A
Chemtech Project # G1217
Test Name: TCLP Pesticide

A. Number of Samples and Date of Receipt:
2 Solid samples were received on 01/22/2015.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Ignitability, Metals Group5, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction and TCLP-FULL. This data package contains results for TCLP Pesticide.

C. Analytical Techniques:
The analyses were performed on instrument GCECD_D. The front column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HM-G017-11 . The rear column is ZBMR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalog # 7HM-G016-17.The analysis of TCLP Pesticides was based on method 8081B and extraction was done based on method 3510 and TCLP extraction method was 1311.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Retention Times were acceptable for all samples.
The MS recoveries met the requirements for all compounds .
The MSD recoveries met the acceptable requirements .
The RPD recoveries met criteria .
The Blank Spike met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration met the requirements .

E. Additional Comments:
F. Manual Integration Comments:
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed

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above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature Mildred V Reyes

APPROVED

By Mildred V Reyes QA/QC Supervisor at 9:53 am, Feb 13, 2015

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CASE NARRATIVE

GZA GeoEnvironmental, Inc.
Project Name: 410162268.20
Project # N/A
Chemtech Project # G1217
Test Name: TCLP Herbicide

A. Number of Samples and Date of Receipt:
2 Solid samples were received on 01/22/2015.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Ignitability, Metals Group5, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction and TCLP-FULL. This data package contains results for TCLP Herbicide.

C. Analytical Techniques:
The analyses were performed on instrument GCECD_E. The front column is ZB-35-HT Inferno which is 30 meters, 0.25 mm ID, 0.25 um df, Catalog # 7HG-G025-11. The rear column is ZB-XLB-HT Inferno which is 30 meters, 0.25 mm ID, 0.25 um df, Catalog # 7HG-G024-11.The analysis of TCLP Herbicides was based on method 8151A and extraction was done based on method 3510 and TCLP extraction method was 1311.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Retention Times were acceptable for all samples.
The MS {G1217-01MS} with File ID: PE013055.D recoveries met the requirements for all compounds except for 2,4,5-TP(Silvex)[67%] .
The MSD {G1217-01MSD} with File ID: PE013056.D recoveries met the acceptable requirements except for 2,4,5-TP(Silvex)[61%] and 2,4-D[75%] .
The RPD for {G1217-01MSD} with File ID: PE013056.D recoveries met criteria except for 2,4-D[33%] .
The Blank Spike met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration File ID PE013049.D met the requirements except for 2,4-DCAA is failing in 2nd column but passing in 2nd column .The Continuous Calibration File ID PE013058.D met the requirements except for 2,4,5-TP (Silvex) is failing in 1st column but passing in 2nd column.

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E. Additional Comments:
F. Manual Integration Comments:
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature Mildred V Reyes

APPROVED
By Mildred V Reyes QA/QC Supervisor at 9:53 am, Feb 13, 2015

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CASE NARRATIVE

GZA GeoEnvironmental, Inc.
Project Name: 410162268.20
Project # N/A
Chemtech Project # G1217
Test Name: Metals Group5

A. Number of Samples and Date of Receipt:
2 Solid samples were received on 01/22/2015.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Ignitability, Metals Group5, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction and TCLP-FULL. This data package contains results for Metals Group5.

C. Analytical Techniques:
The analysis of Metals Group5 was based on method 6010C and digestion based on method 3050 (soils).

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.
The Duplicate analysis met criteria for all samples.
The Matrix Spike analysis met criteria for all samples.
The Matrix Spike Duplicate analysis met criteria for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution met the acceptable requirements.

E. Additional Comments:

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature Mildred V Reyes

APPROVED
By Mildred V Reyes QA/QC Supervisor at 9:53 am, Feb 13, 2015

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CASE NARRATIVE

GZA GeoEnvironmental, Inc.
Project Name: 410162268.20
Project # N/A
Chemtech Project # G1217
Test Name: TCLP Mercury,TCLP ICP Metals

A. Number of Samples and Date of Receipt:
2 Solid samples were received on 01/22/2015.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Ignitability, Metals Group5, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction and TCLP-FULL. This data package contains results for TCLP Mercury,TCLP ICP Metals.

C. Analytical Techniques:
The analysis of TCLP ICP Metals was based on method 6010B, digestion based on method 3010 (waters). The analysis and digestion of TCLP Mercury was based on method 7470A and TCLP extraction method was 1311.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.
The Duplicate analysis met criteria for all samples.
The Matrix Spike analysis met criteria for all samples.
The Matrix Spike Duplicate analysis met criteria for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution met the acceptable requirements.

E. Additional Comments:
The LLICV and LLCCV is not required for 6010B analytical method.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_ Mildred V Reyes

APPROVED
By Mildred V Reyes QA/QC Supervisor at 9:53 am, Feb 13, 2015

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CASE NARRATIVE

GZA GeoEnvironmental, Inc.
Project Name: 410162268.20
Project # N/A
Chemtech Project # G1217
Test Name: Corrosivity,Ignitability,Reactive Cyanide,Reactive Sulfide

A. Number of Samples and Date of Receipt:
2 Solid samples were received on 01/22/2015.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Ignitability, Metals Group5, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction and TCLP-FULL. This data package contains results for Corrosivity,Ignitability,Reactive Cyanide,Reactive Sulfide.

C. Analytical Techniques:
The analysis of Ignitability was based on method 1030, The analysis of Reactive Cyanide was based on method 9014, The analysis of Reactive Sulfide was based on method 9034 and The analysis of Corrosivity was based on method 9045C.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.
The Duplicate analysis met criteria for all samples.
The Matrix Spike analysis met criteria for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.

E. Additional Comments:

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature Mildred V Reyes

APPROVED
By Mildred V Reyes QA/QC Supervisor at 9:53 am, Feb 13, 2015

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DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following " Results Qualifiers" are used:

J Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).

U Indicates the analyte was analyzed for, but not detected.

ND Indicates the analyte was analyzed for, but not detected

E Indicates the reported value is estimated because of the presence of interference

M Indicates Duplicate injection precision not met.

N Indicates the spiked sample recovery is not within control limits.

S Indicates the reported value was determined by the Method of Standard Addition (MSA).

***** Indicates that the duplicate analysis is not within control limits.

+ Indicates the correlation coefficient for the MSA is less than 0.995.

D Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

M Method qualifiers
"P" for ICP instrument
"PM" for ICP when Microwave Digestion is used
"CV" for Manual Cold Vapor AA
"AV" for automated Cold Vapor AA
"CA" for MIDI-Distillation Spectrophotometric
"AS" for Semi –Automated Spectrophotometric
"C" for Manual Spectrophotometric
"T" for Titrimetric
"NR" for analyte not required to be analyzed

OR Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.

Q Indicates the LCS did not meet the control limits requirements

H Sample Analysis Out Of Hold Time

QA Control # A3040961

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DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value**.** This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

QA Control # A3040960

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: G1217

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

1st Level QA Review Signature: HIMA MODI **Date:** 02/12/2015

2nd Level QA Review Signature: Mildred V Reyes **Date:**

APPROVED
By Mildred V Reyes QA/QC Supervisor at 9:53 am, Feb 13, 2015

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

LAB CHRONICLE

OrderID:	G1217	**OrderDate:**	2/4/2015 9:09:07 AM
Client:	GZA GeoEnvironmental, Inc.	**Project:**	410162268.20
Contact:	Clifford Bell	**Location:**	H11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
G1217-01	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6**	**TCLP**			**01/22/15**			**01/22/15**
			TCLP VOA	8260C			02/05/15	

CHEMTECH

Hit Summary Sheet
SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units

Client ID:

Total Concentration:

SAMPLE DATA

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6	SDG No.:	G1217
Lab Sample ID:	G1217-01	Matrix:	TCLP
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN021772.D	5		02/05/15 13:53	VN020515

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	2.5	U	1.7	2.5	25	ug/L
75-35-4	1,1-Dichloroethene	2.5	U	2.4	2.5	25	ug/L
78-93-3	2-Butanone	12.5	U	6.6	12.5	130	ug/L
56-23-5	Carbon Tetrachloride	2.5	U	1	2.5	25	ug/L
67-66-3	Chloroform	2.5	U	1.7	2.5	25	ug/L
71-43-2	Benzene	2.5	U	1.6	2.5	25	ug/L
107-06-2	1,2-Dichloroethane	3.8	U	2.4	3.8	25	ug/L
79-01-6	Trichloroethene	2.5	U	1.4	2.5	25	ug/L
127-18-4	Tetrachloroethene	2.5	U	1.4	2.5	25	ug/L
108-90-7	Chlorobenzene	2.5	U	2.5	2.5	25	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	48		61 - 141		96%	SPK: 50
1868-53-7	Dibromofluoromethane	48.1		69 - 133		96%	SPK: 50
2037-26-5	Toluene-d8	50.1		65 - 126		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.7		58 - 135		85%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	495661	7.87				
540-36-3	1,4-Difluorobenzene	782012	8.79				
3114-55-4	Chlorobenzene-d5	676860	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	291366	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

QC SUMMARY

Surrogate Summary

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: SW8260C

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Qual	Limits Low	Limits High
G1217-01	COMP-CC-2-CC-3-CC-4-CC-5-CC-6	1,2-Dichloroethane-d4	50	47.99	96		61	141
		Dibromofluoromethane	50	48.09	96		69	133
		Toluene-d8	50	50.05	100		65	126
		4-Bromofluorobenzene	50	42.7	85		58	135

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Surrogate Summary

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
VN0205WBL01	VN0205WBL01	1,2-Dichloroethane-d4	50	47.87	96	61	141
		Dibromofluoromethane	50	48.42	97	69	133
		Toluene-d8	50	49.43	99	65	126
		4-Bromofluorobenzene	50	42.54	85	58	135
VN0205WBS01	VN0205WBS01	1,2-Dichloroethane-d4	50	51.722	103	61	141
		Dibromofluoromethane	50	51.399	103	69	133
		Toluene-d8	50	49.611	99	65	126
		4-Bromofluorobenzene	50	46.513	93	58	135
VN0205WBSD0	VN0205WBSD01	1,2-Dichloroethane-d4	50	49.937	100	61	141
		Dibromofluoromethane	50	47.893	96	69	133
		Toluene-d8	50	46.586	93	65	126
		4-Bromofluorobenzene	50	44.169	88	58	135

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: SW8260-Low **Datafile :** VN021770.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0205WBS01	Vinyl chloride	20	20.6	ug/L	103			65	137	
	1,1-Dichloroethene	20	20.1	ug/L	101			69	134	
	2-Butanone	100	110	ug/L	110			64	146	
	Carbon Tetrachloride	20	18.7	ug/L	94			71	134	
	Chloroform	20	21	ug/L	105			74	134	
	Benzene	20	20.8	ug/L	104			75	125	
	1,2-Dichloroethane	20	21.2	ug/L	106			76	130	
	Trichloroethene	20	20.1	ug/L	101			73	127	
	Tetrachloroethene	20	20.2	ug/L	101			46	157	
	Chlorobenzene	20	20.4	ug/L	102			76	123	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: SW8260-Low **Datafile :** VN021771.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0205WBSD01	Vinyl chloride	20	21.6	ug/L	108	5		65	137	20
	1,1-Dichloroethene	20	21.2	ug/L	106	5		69	134	20
	2-Butanone	100	120	ug/L	120	9		64	146	20
	Carbon Tetrachloride	20	19.5	ug/L	98	4		71	134	20
	Chloroform	20	22.6	ug/L	113	7		74	134	20
	Benzene	20	21.5	ug/L	108	4		75	125	20
	1,2-Dichloroethane	20	21.9	ug/L	110	4		76	130	20
	Trichloroethene	20	20.5	ug/L	103	2		73	127	20
	Tetrachloroethene	20	20.1	ug/L	101	0		46	157	20
	Chlorobenzene	20	20.9	ug/L	104	2		76	123	20

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0205WBL01

Lab Name: CHEMTECH

Contract: GZAG04

Lab Code: CHEM

Case No.: G1217

SAS No.: G1217

SDG NO.: G1217

Lab File ID: VN021769.D

Lab Sample ID: VN0205WBL01

Date Analyzed: 02/05/2015

Time Analyzed: 10:49

GC Column: RXI-624

ID: 0.25 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN0205WBS01	VN0205WBS01	VN021770.D	02/05/2015
VN0205WBSD01	VN0205WBSD01	VN021771.D	02/05/2015
COMP-CC-2-CC-3-CC-4-CC-5-CC-6	G1217-01	VN021772.D	02/05/2015

COMMENTS:

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

Lab File ID: VN021679.D BFB Injection Date: 01/30/2015

Instrument ID: MSVOA_N BFB Injection Time: 09:03

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.4
75	30.0 - 60.0% of mass 95	49.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	0.7 (0.9) 1
174	50.0 - 100.0% of mass 95	79.5
175	5.0 - 9.0% of mass 174	6 (7.5) 1
176	95.0 - 101.0% of mass 174	77.2 (97.1) 1
177	5.0 - 9.0% of mass 176	5.1 (6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC001	VSTDICC001	VN021680.D	01/30/2015	10:23
VSTDICC005	VSTDICC005	VN021681.D	01/30/2015	10:56
VSTDICC020	VSTDICC020	VN021682.D	01/30/2015	11:25
VSTDICCC050	VSTDICCC050	VN021683.D	01/30/2015	11:55
VSTDICC100	VSTDICC100	VN021684.D	01/30/2015	12:24
VSTDICC200	VSTDICC200	VN021685.D	01/30/2015	12:54

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

Lab File ID: VN021767.D BFB Injection Date: 02/05/2015

Instrument ID: MSVOA_N BFB Injection Time: 08:58

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.8
75	30.0 - 60.0% of mass 95	48.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.6 (0.8) 1
174	50.0 - 100.0% of mass 95	77.3
175	5.0 - 9.0% of mass 174	5.1 (6.7) 1
176	95.0 - 101.0% of mass 174	74 (95.7) 1
177	5.0 - 9.0% of mass 176	4.9 (6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN021768.D	02/05/2015	09:43
VN0205WBL01	VN0205WBL01	VN021769.D	02/05/2015	10:49
VN0205WBS01	VN0205WBS01	VN021770.D	02/05/2015	12:53
VN0205WBSD01	VN0205WBSD01	VN021771.D	02/05/2015	13:23
COMP-CC-2-CC-3-CC-4-CC-5-CC-6	G1217-01	VN021772.D	02/05/2015	13:53
VSTDCCC050EC	VSTDCCC050	VN021782.D	02/05/2015	18:49

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

Lab File ID: VN021768.D Date Analyzed: 02/05/2015

Instrument ID: MSVOA_N Time Analyzed: 09:43

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	459679	7.86	736209	8.78	665164	11.61
UPPER LIMIT	919358	8.36	1472420	9.28	1330330	12.11
LOWER LIMIT	229840	7.36	368105	8.28	332582	11.11
EPA SAMPLE NO.						
COMP-CC-2-CC-3-CC-4-CC-5-CC-6	495661	7.87	782012	8.79	676860	11.61
VN0205WBL01	544230	7.87	852851	8.79	730224	11.61
VN0205WBS01	381737	7.87	626419	8.79	553827	11.61
VN0205WBSD01	389936	7.87	650261	8.78	578122	11.61

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

Lab File ID: VN021768.D Date Analyzed: 02/05/2015

Instrument ID: MSVOA_N Time Analyzed: 09:43

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	317585	13.56				
UPPER LIMIT	635170	14.06				
LOWER LIMIT	158793	13.06				
EPA SAMPLE NO.						
COMP-CC-2-CC-3-CC-4-CC-5-CC-6	291366	13.56				
VN0205WBL01	307166	13.56				
VN0205WBS01	263075	13.56				
VN0205WBSD01	266190	13.56				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

QC SAMPLE DATA

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	
Project:	410162268.20	Date Received:	
Client Sample ID:	VN0205WBL01	SDG No.:	G1217
Lab Sample ID:	VN0205WBL01	Matrix:	TCLP
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN021769.D	1		02/05/15 10:49	VN020515

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.2	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.2	U	0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	47.9		61 - 141		96%	SPK: 50
1868-53-7	Dibromofluoromethane	48.4		69 - 133		97%	SPK: 50
2037-26-5	Toluene-d8	49.4		65 - 126		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.5		58 - 135		85%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	544230	7.87				
540-36-3	1,4-Difluorobenzene	852851	8.79				
3114-55-4	Chlorobenzene-d5	730224	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	307166	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	
Project:	410162268.20	Date Received:	
Client Sample ID:	VN0205WBS01	SDG No.:	G1217
Lab Sample ID:	VN0205WBS01	Matrix:	TCLP
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN021770.D	1		02/05/15 12:53	VN020515

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	20.6		0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	20.1		0.2	0.2	1	ug/L
78-93-3	2-Butanone	110		1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	18.7		0.2	0.2	1	ug/L
67-66-3	Chloroform	21		0.2	0.2	1	ug/L
71-43-2	Benzene	20.8		0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	21.2		0.2	0.2	1	ug/L
79-01-6	Trichloroethene	20.1		0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	20.2		0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	20.4		0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	51.7		61 - 141		103%	SPK: 50
1868-53-7	Dibromofluoromethane	51.4		69 - 133		103%	SPK: 50
2037-26-5	Toluene-d8	49.6		65 - 126		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.5		58 - 135		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	381737	7.87				
540-36-3	1,4-Difluorobenzene	626419	8.79				
3114-55-4	Chlorobenzene-d5	553827	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	263075	13.56				

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	
Project:	410162268.20	Date Received:	
Client Sample ID:	VN0205WBSD01	SDG No.:	G1217
Lab Sample ID:	VN0205WBSD01	Matrix:	TCLP
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN021771.D	1		02/05/15 13:23	VN020515

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-01-4	Vinyl Chloride	21.6		0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	21.2		0.2	0.2	1	ug/L
78-93-3	2-Butanone	120		1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	19.5		0.2	0.2	1	ug/L
67-66-3	Chloroform	22.6		0.2	0.2	1	ug/L
71-43-2	Benzene	21.5		0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	21.9		0.2	0.2	1	ug/L
79-01-6	Trichloroethene	20.5		0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	20.1		0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	20.9		0.2	0.2	1	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	49.9		61 - 141		100%	SPK: 50
1868-53-7	Dibromofluoromethane	47.9		69 - 133		96%	SPK: 50
2037-26-5	Toluene-d8	46.6		65 - 126		93%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.2		58 - 135		88%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	389936	7.87				
540-36-3	1,4-Difluorobenzene	650261	8.78				
3114-55-4	Chlorobenzene-d5	578122	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	266190	13.56				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
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E = Value Exceeds Calibration Range
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J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CALIBRATION SUMMARY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH
Contract: GZAG04
Lab Code: CHEM
Case No.: G1217
SAS No.: G1217
SDG No.: G1217
Instrument ID: MSVOA_N
Calibration Date(s): 01/30/2015 01/30/2015
Heated Purge: (Y/N) N
Calibration Time(s): 10:23 12:54
GC Column: RXI-624
ID: 0.25 (mm)

LAB FILE ID: RRF001 = VN021680.D RRF005 = VN021681.D RRF020 = VN021682.D
RRF050 = VN021683.D RRF100 = VN021684.D RRF200 = VN021685.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	% RSD
Vinyl Chloride	0.756	0.752	0.661	0.703	0.697	0.697	0.711	5.1
1,1-Dichloroethene	0.514	0.512	0.460	0.490	0.483	0.488	0.491	4.1
2-Butanone	0.193	0.212	0.220	0.250	0.249	0.253	0.229	10.7
Carbon Tetrachloride	0.460	0.405	0.393	0.416	0.426	0.426	0.421	5.5
Chloroform	0.959	0.976	0.910	0.958	0.952	0.968	0.954	2.4
Benzene	1.488	1.380	1.323	1.389	1.382	1.383	1.391	3.8
1,2-Dichloroethane	0.480	0.487	0.461	0.489	0.480	0.479	0.479	2.1
Trichloroethene	0.371	0.359	0.343	0.354	0.355	0.355	0.356	2.5
Tetrachloroethene	0.371	0.318	0.312	0.318	0.315	0.314	0.325	7
Chlorobenzene	1.141	1.093	1.033	1.063	1.063	1.058	1.075	3.5
1,2-Dichloroethane-d4	0.668	0.636	0.634	0.647	0.632	0.635	0.642	2.2
Dibromofluoromethane	0.281	0.296	0.306	0.314	0.306	0.309	0.302	3.9
Toluene-d8	1.228	1.183	1.256	1.246	1.233	1.222	1.228	2
4-Bromofluorobenzene	0.551	0.439	0.444	0.459	0.457	0.447	0.466	9.1

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG No.: G1217

Instrument ID: MSVOA_N Calibration Date/Time: 02/05/2015 09:43

Lab File ID: VN021768.D Init. Calib. Date(s): 01/30/2015 01/30/2015

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:23 12:54

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.711	0.743		4.5	20
1,1-Dichloroethene	0.491	0.498		1.43	20
2-Butanone	0.229	0.294		28.38	20
Carbon Tetrachloride	0.421	0.419		-0.47	20
Chloroform	0.954	0.999		4.72	20
Benzene	1.391	1.452		4.39	20
1,2-Dichloroethane	0.479	0.510		6.47	20
Trichloroethene	0.356	0.364		2.25	20
Tetrachloroethene	0.325	0.327		0.62	20
Chlorobenzene	1.075	1.102	0.3	2.51	20
1,2-Dichloroethane-d4	0.642	0.615		-4.21	20
Dibromofluoromethane	0.302	0.295		-2.32	20
Toluene-d8	1.228	1.191		-3.01	20
4-Bromofluorobenzene	0.466	0.437		-6.22	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG No.: G1217

Instrument ID: MSVOA_N Calibration Date/Time: 02/05/2015 18:49

Lab File ID: VN021782.D Init. Calib. Date(s): 01/30/2015 01/30/2015

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:23 12:54

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.711	0.759		6.75	50
1,1-Dichloroethene	0.491	0.518		5.5	50
2-Butanone	0.229	0.255		11.35	50
Carbon Tetrachloride	0.421	0.425		0.95	50
Chloroform	0.954	1.053		10.38	50
Benzene	1.391	1.489		7.05	50
1,2-Dichloroethane	0.479	0.519		8.35	50
Trichloroethene	0.356	0.363		1.97	50
Tetrachloroethene	0.325	0.319		-1.85	50
Chlorobenzene	1.075	1.111	0.3	3.35	50
1,2-Dichloroethane-d4	0.642	0.671		4.52	50
Dibromofluoromethane	0.302	0.313		3.64	50
Toluene-d8	1.228	1.254		2.12	50
4-Bromofluorobenzene	0.466	0.454		-2.58	50

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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LAB CHRONICLE

OrderID:	G1217	**OrderDate:**	2/4/2015 9:09:07 AM
Client:	GZA GeoEnvironmental, Inc.	**Project:**	410162268.20
Contact:	Clifford Bell	**Location:**	H11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
G1217-01	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6**	**TCLP**			**01/22/15**			**01/22/15**
			TCLP BNA	8270D		02/05/15	02/05/15	

CHEMTECH

Hit Summary Sheet
SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :								

Total Concentration:

SAMPLE DATA

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6	SDG No.:	G1217
Lab Sample ID:	G1217-01	Matrix:	TCLP
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077198.D	1	02/05/15 08:00	02/05/15 23:57	PB81602

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
110-86-1	Pyridine	10	U	10	10	100	ug/L
106-46-7	1,4-Dichlorobenzene	10	U	2	10	100	ug/L
95-48-7	2-Methylphenol	10	U	2.4	10	100	ug/L
65794-96-9	3+4-Methylphenols	10	U	3.8	10	100	ug/L
67-72-1	Hexachloroethane	10	U	2.5	10	100	ug/L
98-95-3	Nitrobenzene	10	U	6.8	10	100	ug/L
87-68-3	Hexachlorobutadiene	10	U	2.5	10	100	ug/L
88-06-2	2,4,6-Trichlorophenol	10	U	5.6	10	100	ug/L
95-95-4	2,4,5-Trichlorophenol	10	U	4	10	100	ug/L
121-14-2	2,4-Dinitrotoluene	10	U	10	10	100	ug/L
118-74-1	Hexachlorobenzene	10	U	1.8	10	100	ug/L
87-86-5	Pentachlorophenol	10	U	10	10	100	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	96.4		10 - 130		64%	SPK: 150
13127-88-3	Phenol-d6	86.7		10 - 130		58%	SPK: 150
4165-60-0	Nitrobenzene-d5	66.1		36 - 131		66%	SPK: 100
321-60-8	2-Fluorobiphenyl	70.1		39 - 131		70%	SPK: 100
118-79-6	2,4,6-Tribromophenol	110		25 - 155		70%	SPK: 150
1718-51-0	Terphenyl-d14	67.2		23 - 130		67%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	34223	7.69				
1146-65-2	Naphthalene-d8	137687	10.59				
15067-26-2	Acenaphthene-d10	74066	14.71				
1517-22-2	Phenanthrene-d10	124759	17.56				
1719-03-5	Chrysene-d12	131133	21.07				
1520-96-3	Perylene-d12	124502	22.74				

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6	SDG No.:	G1217
Lab Sample ID:	G1217-01	Matrix:	TCLP
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077198.D	1	02/05/15 08:00	02/05/15 23:57	PB81602

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	02/05/15
Project:	410162268.20	Date Received:	02/05/15
Client Sample ID:	PB81602TB	SDG No.:	G1217
Lab Sample ID:	PB81602TB	Matrix:	TCLP
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077187.D	1	02/05/15 08:00	02/05/15 16:32	PB81602

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
110-86-1	Pyridine	10	U	10	10	100	ug/L
106-46-7	1,4-Dichlorobenzene	10	U	2	10	100	ug/L
95-48-7	2-Methylphenol	10	U	2.4	10	100	ug/L
65794-96-9	3+4-Methylphenols	10	U	3.8	10	100	ug/L
67-72-1	Hexachloroethane	10	U	2.5	10	100	ug/L
98-95-3	Nitrobenzene	10	U	6.8	10	100	ug/L
87-68-3	Hexachlorobutadiene	10	U	2.5	10	100	ug/L
88-06-2	2,4,6-Trichlorophenol	10	U	5.6	10	100	ug/L
95-95-4	2,4,5-Trichlorophenol	10	U	4	10	100	ug/L
121-14-2	2,4-Dinitrotoluene	10	U	10	10	100	ug/L
118-74-1	Hexachlorobenzene	10	U	1.8	10	100	ug/L
87-86-5	Pentachlorophenol	10	U	10	10	100	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	94		20 - 110		63%	SPK: 150
13127-88-3	Phenol-d6	92.7		10 - 160		62%	SPK: 150
4165-60-0	Nitrobenzene-d5	55.5		40 - 110		55%	SPK: 100
321-60-8	2-Fluorobiphenyl	62		50 - 110		62%	SPK: 100
118-79-6	2,4,6-Tribromophenol	79.7		40 - 125		53%	SPK: 150
1718-51-0	Terphenyl-d14	61.1		50 - 135		61%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	28479	7.69				
1146-65-2	Naphthalene-d8	117069	10.59				
15067-26-2	Acenaphthene-d10	61474	14.71				
1517-22-2	Phenanthrene-d10	108077	17.56				
1719-03-5	Chrysene-d12	118292	21.07				
1520-96-3	Perylene-d12	100661	22.76				

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.			Date Collected:	02/05/15
Project:	410162268.20			Date Received:	02/05/15
Client Sample ID:	PB81602TB			SDG No.:	G1217
Lab Sample ID:	PB81602TB			Matrix:	TCLP
Analytical Method:	SW8270			% Moisture:	100
Sample Wt/Vol:	100	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	TCLP BNA
Extraction Type :		Decanted :	N	Level :	LOW
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077187.D	1	02/05/15 08:00	02/05/15 16:32	PB81602

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: 8270D

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
G1217-01	COMP-CC-2-CC-3-CC-4-C	2-Fluorophenol	150	96.43	64		10	130
		Phenol-d6	150	86.66	58		10	130
		Nitrobenzene-d5	100	66.13	66		36	131
		2-Fluorobiphenyl	100	70.09	70		39	131
		2,4,6-Tribromophenol	150	105.56	70		25	155
		Terphenyl-d14	100	67.18	67		23	130
G1217-01MS	COMP-CC-2-CC-3-CC-4-C	2-Fluorophenol	150	98.53	66		10	130
		Phenol-d6	150	90.41	60		10	130
		Nitrobenzene-d5	100	68.75	69		36	131
		2-Fluorobiphenyl	100	71.64	72		39	131
		2,4,6-Tribromophenol	150	106.49	71		25	155
		Terphenyl-d14	100	71.27	71		23	130
G1217-01MSD	COMP-CC-2-CC-3-CC-4-C	2-Fluorophenol	150	128.40	86		10	130
		Phenol-d6	150	118.53	79		10	130
		Nitrobenzene-d5	100	92.00	92		36	131
		2-Fluorobiphenyl	100	103.09	103		39	131
		2,4,6-Tribromophenol	150	158.28	106		25	155
		Terphenyl-d14	100	91.86	92		23	130
PB81602BL	PB81602BL	2-Fluorophenol	150	100.64	67		20	110
		Phenol-d6	150	97.89	65		10	160
		Nitrobenzene-d5	100	58.55	59		40	110
		2-Fluorobiphenyl	100	63.64	64		50	110
		2,4,6-Tribromophenol	150	79.32	53		40	125
		Terphenyl-d14	100	63.98	64		50	135
PB81602BS	PB81602BS	2-Fluorophenol	150	109.09	73		20	110
		Phenol-d6	150	108.37	72		10	160
		Nitrobenzene-d5	100	67.67	68		40	110
		2-Fluorobiphenyl	100	77.88	78		50	110
		2,4,6-Tribromophenol	150	118.29	79		40	125
		Terphenyl-d14	100	66.87	67		50	135
PB81602TB	PB81602TB	2-Fluorophenol	150	94.04	63		20	110
		Phenol-d6	150	92.69	62		10	160
		Nitrobenzene-d5	100	55.48	55		40	110
		2-Fluorobiphenyl	100	61.95	62		50	110
		2,4,6-Tribromophenol	150	79.72	53		40	125
		Terphenyl-d14	100	61.09	61		50	135

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Matrix Spike/Matrix Spike Duplicate Summary
SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: SW8270D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: G1217-01MS		**Client Sample ID: COMP-CC-2-CC-3-CC-4-CC-5-CC-6M**					**DataFile: BF077199.D**				
Pyridine	500	0	180	ug/L	36	*			70	130	
1,4-Dichlorobenzene	500	0	300	ug/L	60				19	137	
2-Methylphenol	500	0	300	ug/L	60				14	118	
3+4-Methylphenols	500	0	260	ug/L	52				12	109	
Hexachloroethane	500	0	320	ug/L	64				19	149	
Nitrobenzene	500	0	320	ug/L	64				30	150	
Hexachlorobutadiene	500	0	320	ug/L	64				20	150	
2,4,6-Trichlorophenol	500	0	310	ug/L	62				24	155	
2,4,5-Trichlorophenol	500	0	290	ug/L	58				26	154	
2,4-Dinitrotoluene	500	0	340	ug/L	68				41	152	
Hexachlorobenzene	500	0	350	ug/L	70				33	154	
Pentachlorophenol	1000	0	570	ug/L	57				28	171	

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Matrix Spike/Matrix Spike Duplicate Summary
SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: SW8270D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: G1217-01MSD		**Client Sample ID: COMP-CC-2-CC-3-CC-4-CC-5-CC-6M**						**DataFile: BF077200.D**			
Pyridine	500	0	210	ug/L	42	*	15		70	130	20
1,4-Dichlorobenzene	500	0	390	ug/L	78		26	*	19	137	20
2-Methylphenol	500	0	370	ug/L	74		21	*	14	118	20
3+4-Methylphenols	500	0	320	ug/L	64		21	*	12	109	20
Hexachloroethane	500	0	420	ug/L	84		27	*	19	149	20
Nitrobenzene	500	0	430	ug/L	86		29	*	30	150	20
Hexachlorobutadiene	500	0	420	ug/L	84		27	*	20	150	20
2,4,6-Trichlorophenol	500	0	480	ug/L	96		43	*	24	155	20
2,4,5-Trichlorophenol	500	0	430	ug/L	86		39	*	26	154	20
2,4-Dinitrotoluene	500	0	470	ug/L	94		32	*	41	152	20
Hexachlorobenzene	500	0	430	ug/L	86		21	*	33	154	20
Pentachlorophenol	1000	0	690	ug/L	69		19		28	171	20

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: 8270D **DataFile:** BF077216.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB81602BS	Pyridine	50	28.9	ug/L	58				10	153	
	1,4-Dichlorobenzene	50	30.1	ug/L	60				30	100	
	2-Methylphenol	50	31.8	ug/L	64				40	110	
	3+4-Methylphenols	50	28	ug/L	56				30	110	
	Hexachloroethane	50	34	ug/L	68				30	100	
	Nitrobenzene	50	30.3	ug/L	61				45	110	
	Hexachlorobutadiene	50	31.7	ug/L	63				25	105	
	2,4,6-Trichlorophenol	50	32.5	ug/L	65				50	115	
	2,4,5-Trichlorophenol	50	29.5	ug/L	59				50	110	
	2,4-Dinitrotoluene	50	36.5	ug/L	73				50	120	
	Hexachlorobenzene	50	31.8	ug/L	64				50	110	
	Pentachlorophenol	100	48.5	ug/L	49				40	115	

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB81602BL

Lab Name: CHEMTECH

Contract: GZAG04

Lab Code: CHEM

Case No.: G1217

SAS No.: G1217

SDG NO.: G1217

Lab File ID: BF077185.D

Lab Sample ID: PB81602BL

Instrument ID: BNA_F

Date Extracted: 02/05/2015

Matrix: (soil/water) water

Date Analyzed: 02/05/2015

Level: (low/med) LOW

Time Analyzed: 15:23

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB81602TB	PB81602TB	BF077187.D	02/05/2015
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD	G1217-01MSD	BF077200.D	02/06/2015
PB81602BS	PB81602BS	BF077216.D	02/06/2015
COMP-CC-2-CC-3-CC-4-CC-5-CC-6	G1217-01	BF077198.D	02/05/2015
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	G1217-01MS	BF077199.D	02/06/2015

COMMENTS:

Form IV SV

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM SAS No.: G1217 SDG NO.: G1217

Lab File ID: BF076854.D DFTPP Injection Date: 01/14/2015

Instrument ID: BNA_F DFTPP Injection Time: 11:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	46.8
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	40.8
70	Less than 2.0% of mass 69	0.0 (0.0) 1
127	10.0 - 80.0% of mass 198	53.7
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	5.6
275	10.0 - 60.0% of mass 198	22.3
365	Greater than 1% of mass 198	1.6
441	Present, but less than mass 443	15.7
442	Greater than 50% of mass 198	97.6
443	15.0 - 24.0% of mass 442	19.9 (20.4) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC2.5	SSTDICC2.5	BF076855.D	01/14/2015	12:33
SSTDICC010	SSTDICC010	BF076856.D	01/14/2015	13:07
SSTDICC025	SSTDICC025	BF076857.D	01/14/2015	13:41
SSTDICCC040	SSTDICCC040	BF076858.D	01/14/2015	14:16
SSTDICC050	SSTDICC050	BF076859.D	01/14/2015	14:50
SSTDICC060	SSTDICC060	BF076860.D	01/14/2015	15:25
SSTDICC080	SSTDICC080	BF076861.D	01/14/2015	15:59

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM SAS No.: G1217 SDG NO.: G1217

Lab File ID: BF077183.D DFTPP Injection Date: 02/05/2015

Instrument ID: BNA_F DFTPP Injection Time: 10:23

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	42.5
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	41.2
70	Less than 2.0% of mass 69	0.0 (0.0) 1
127	10.0 - 80.0% of mass 198	56.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 60.0% of mass 198	23.6
365	Greater than 1% of mass 198	2.4
441	Present, but less than mass 443	15.3
442	Greater than 50% of mass 198	92.1
443	15.0 - 24.0% of mass 442	17.9 (19.4) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF077184.D	02/05/2015	13:30
PB81602BL	PB81602BL	BF077185.D	02/05/2015	15:23
PB81602TB	PB81602TB	BF077187.D	02/05/2015	16:32
SSTDCCC040EC	SSTDCCC040	BF077195.D	02/05/2015	21:06

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM SAS No.: G1217 SDG NO.: G1217

Lab File ID: BF077196.D DFTPP Injection Date: 02/05/2015

Instrument ID: BNA_F DFTPP Injection Time: 21:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	42.9
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	39.7
70	Less than 2.0% of mass 69	0.0 (0.0) 1
127	10.0 - 80.0% of mass 198	52.5
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	5.9
275	10.0 - 60.0% of mass 198	24
365	Greater than 1% of mass 198	2.7
441	Present, but less than mass 443	16.4
442	Greater than 50% of mass 198	98
443	15.0 - 24.0% of mass 442	19.2 (19.6) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF077197.D	02/05/2015	23:23
COMP-CC-2-CC-3-CC-4-CC-5-CC-6	G1217-01	BF077198.D	02/05/2015	23:57
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	G1217-01MS	BF077199.D	02/06/2015	00:31
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD	G1217-01MSD	BF077200.D	02/06/2015	01:05

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM SAS No.: G1217 SDG NO.: G1217

Lab File ID: BF077201.D DFTPP Injection Date: 02/06/2015

Instrument ID: BNA_F DFTPP Injection Time: 12:42

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	39.3
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	38.2
70	Less than 2.0% of mass 69	0.0 (0.0) 1
127	10.0 - 80.0% of mass 198	56.4
197	Less than 2.0% of mass 198	0.6
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	5.8
275	10.0 - 60.0% of mass 198	23.8
365	Greater than 1% of mass 198	2.7
441	Present, but less than mass 443	13.6
442	Greater than 50% of mass 198	93.5
443	15.0 - 24.0% of mass 442	17.3 (18.5) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF077202.D	02/06/2015	13:31
PB81602BS	PB81602BS	BF077216.D	02/06/2015	23:12
SSTDCCC040EC	SSTDCCC040	BF077220.D	02/07/2015	01:31

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/05/2015

Lab File ID: BF077184.D Time Analyzed: 13:30

Instrument ID: BNA_F GC Column: RTX-5 ID: 0.18 (mm)

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	23872	7.69	99373	10.59	53830	14.72
	UPPER LIMIT	47744	8.19	198746	11.09	107660	15.22
	LOWER LIMIT	11936	7.19	49686.5	10.09	26915	14.22
	EPA SAMPLE NO.						
01	PB81602BL	29865	7.69	124745	10.59	68343	14.71
02	PB81602TB	28479	7.69	117069	10.59	61474	14.71

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/05/2015

Lab File ID: BF077184.D Time Analyzed: 13:30

Instrument ID: BNA_F GC Column: RTX-5 ID: 0.18 (mm)

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	89672	17.56	91846	21.07	83250	22.75
	UPPER LIMIT	179344	18.06	183692	21.57	166500	23.25
	LOWER LIMIT	44836	17.06	45923	20.57	41625	22.25
	EPA SAMPLE NO.						
01	PB81602BL	122284	17.56	122328	21.07	111953	22.72
02	PB81602TB	108077	17.56	118292	21.07	100661	22.76

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/05/2015

Lab File ID: BF077197.D Time Analyzed: 23:23

Instrument ID: BNA_F GC Column: RTX-5 ID: 0.18 (mm)

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	24902	7.69	97692	10.59	51405	14.72
	UPPER LIMIT	49804	8.19	195384	11.09	102810	15.22
	LOWER LIMIT	12451	7.19	48846	10.09	25702.5	14.22
	EPA SAMPLE NO.						
01	COMP-CC-2-CC-3-CC-4-CC-5	34223	7.69	137687	10.59	74066	14.71
02	COMP-CC-2-CC-3-CC-4-CC-5	33133	7.69	140551	10.59	74709	14.72
03	COMP-CC-2-CC-3-CC-4-CC-5	25719	7.69	106924	10.59	50802	14.72

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/05/2015

Lab File ID: BF077197.D Time Analyzed: 23:23

Instrument ID: BNA_F GC Column: RTX-5 ID: 0.18 (mm)

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	89803	17.56	90027	21.07	80095	22.71
	UPPER LIMIT	179606	18.06	180054	21.57	160190	23.21
	LOWER LIMIT	44901.5	17.06	45013.5	20.57	40047.5	22.21
	EPA SAMPLE NO.						
01	COMP-CC-2-CC-3-CC-4-CC-5	124759	17.56	131133	21.07	124502	22.74
02	COMP-CC-2-CC-3-CC-4-CC-5	124302	17.57	121424	21.08	112622	22.73
03	COMP-CC-2-CC-3-CC-4-CC-5	95718	17.56	94781	21.07	87127	22.73

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/06/2015

Lab File ID: BF077202.D Time Analyzed: 13:31

Instrument ID: BNA_F GC Column: RTX-5 ID: 0.18 (mm)

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	25087	7.64	105811	10.56	55747	14.67
	UPPER LIMIT	50174	8.14	211622	11.06	111494	15.17
	LOWER LIMIT	12543.5	7.14	52905.5	10.06	27873.5	14.17
	EPA SAMPLE NO.						
01	PB81602BS	25210	7.64	108397	10.56	53639	14.67

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/06/2015

Lab File ID: BF077202.D Time Analyzed: 13:31

Instrument ID: BNA_F GC Column: RTX-5 ID: 0.18 (mm)

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	94160	17.54	92614	21.05	80892	22.73
	UPPER LIMIT	188320	18.04	185228	21.55	161784	23.23
	LOWER LIMIT	47080	17.04	46307	20.55	40446	22.23
	EPA SAMPLE NO.						
01	PB81602BS	105100	17.54	105423	21.05	88619	22.69

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

QC SAMPLE DATA

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.			Date Collected:	
Project:	410162268.20			Date Received:	
Client Sample ID:	PB81602BL			SDG No.:	G1217
Lab Sample ID:	PB81602BL			Matrix:	TCLP
Analytical Method:	SW8270			% Moisture:	100
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	TCLP BNA
Extraction Type :		Decanted :	N	Level :	LOW
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077185.D	1	02/05/15 08:00	02/05/15 15:23	PB81602

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
110-86-1	Pyridine	1	U	1	1	10	ug/L
106-46-7	1,4-Dichlorobenzene	1	U	0.2	1	10	ug/L
95-48-7	2-Methylphenol	1	U	0.24	1	10	ug/L
65794-96-9	3+4-Methylphenols	1	U	0.38	1	10	ug/L
67-72-1	Hexachloroethane	1	U	0.25	1	10	ug/L
98-95-3	Nitrobenzene	1	U	0.68	1	10	ug/L
87-68-3	Hexachlorobutadiene	1	U	0.25	1	10	ug/L
88-06-2	2,4,6-Trichlorophenol	1	U	0.56	1	10	ug/L
95-95-4	2,4,5-Trichlorophenol	1	U	0.4	1	10	ug/L
121-14-2	2,4-Dinitrotoluene	1	U	1	1	10	ug/L
118-74-1	Hexachlorobenzene	1	U	0.18	1	10	ug/L
87-86-5	Pentachlorophenol	1	U	1	1	10	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	100		20 - 110		67%	SPK: 150
13127-88-3	Phenol-d6	97.9		10 - 160		65%	SPK: 150
4165-60-0	Nitrobenzene-d5	58.6		40 - 110		59%	SPK: 100
321-60-8	2-Fluorobiphenyl	63.6		50 - 110		64%	SPK: 100
118-79-6	2,4,6-Tribromophenol	79.3		40 - 125		53%	SPK: 150
1718-51-0	Terphenyl-d14	64		50 - 135		64%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	29865	7.69				
1146-65-2	Naphthalene-d8	124745	10.59				
15067-26-2	Acenaphthene-d10	68343	14.71				
1517-22-2	Phenanthrene-d10	122284	17.56				
1719-03-5	Chrysene-d12	122328	21.07				
1520-96-3	Perylene-d12	111953	22.72				

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	
Project:	410162268.20	Date Received:	
Client Sample ID:	PB81602BL	SDG No.:	G1217
Lab Sample ID:	PB81602BL	Matrix:	TCLP
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077185.D	1	02/05/15 08:00	02/05/15 15:23	PB81602

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	
Project:	410162268.20	Date Received:	
Client Sample ID:	PB81602BS	SDG No.:	G1217
Lab Sample ID:	PB81602BS	Matrix:	TCLP
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077216.D	1	02/05/15 08:00	02/06/15 23:12	PB81602

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
110-86-1	Pyridine	28.9		1	1	10	ug/L
106-46-7	1,4-Dichlorobenzene	30.1		0.2	1	10	ug/L
95-48-7	2-Methylphenol	31.8		0.24	1	10	ug/L
65794-96-9	3+4-Methylphenols	28		0.38	1	10	ug/L
67-72-1	Hexachloroethane	34		0.25	1	10	ug/L
98-95-3	Nitrobenzene	30.3		0.68	1	10	ug/L
87-68-3	Hexachlorobutadiene	31.7		0.25	1	10	ug/L
88-06-2	2,4,6-Trichlorophenol	32.5		0.56	1	10	ug/L
95-95-4	2,4,5-Trichlorophenol	29.5		0.4	1	10	ug/L
121-14-2	2,4-Dinitrotoluene	36.5		1	1	10	ug/L
118-74-1	Hexachlorobenzene	31.8		0.18	1	10	ug/L
87-86-5	Pentachlorophenol	48.5		1	1	10	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	110		20 - 110		73%	SPK: 150
13127-88-3	Phenol-d6	110		10 - 160		72%	SPK: 150
4165-60-0	Nitrobenzene-d5	67.7		40 - 110		68%	SPK: 100
321-60-8	2-Fluorobiphenyl	77.9		50 - 110		78%	SPK: 100
118-79-6	2,4,6-Tribromophenol	120		40 - 125		79%	SPK: 150
1718-51-0	Terphenyl-d14	66.9		50 - 135		67%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	25210	7.64				
1146-65-2	Naphthalene-d8	108397	10.56				
15067-26-2	Acenaphthene-d10	53639	14.67				
1517-22-2	Phenanthrene-d10	105100	17.54				
1719-03-5	Chrysene-d12	105423	21.05				
1520-96-3	Perylene-d12	88619	22.69				

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.			Date Collected:	
Project:	410162268.20			Date Received:	
Client Sample ID:	PB81602BS			SDG No.:	G1217
Lab Sample ID:	PB81602BS			Matrix:	TCLP
Analytical Method:	SW8270			% Moisture:	100
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	TCLP BNA
Extraction Type :		Decanted :	N	Level :	LOW
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077216.D	1	02/05/15 08:00	02/06/15 23:12	PB81602

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	SDG No.:	G1217
Lab Sample ID:	G1217-01MS	Matrix:	TCLP
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077199.D	1	02/05/15 08:00	02/06/15 00:31	PB81602

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
110-86-1	Pyridine	180		10	10	100	ug/L
106-46-7	1,4-Dichlorobenzene	300		2	10	100	ug/L
95-48-7	2-Methylphenol	300		2.4	10	100	ug/L
65794-96-9	3+4-Methylphenols	260		3.8	10	100	ug/L
67-72-1	Hexachloroethane	320		2.5	10	100	ug/L
98-95-3	Nitrobenzene	320		6.8	10	100	ug/L
87-68-3	Hexachlorobutadiene	320		2.5	10	100	ug/L
88-06-2	2,4,6-Trichlorophenol	310		5.6	10	100	ug/L
95-95-4	2,4,5-Trichlorophenol	290		4	10	100	ug/L
121-14-2	2,4-Dinitrotoluene	340		10	10	100	ug/L
118-74-1	Hexachlorobenzene	350		1.8	10	100	ug/L
87-86-5	Pentachlorophenol	570		10	10	100	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	98.5		10 - 130		66%	SPK: 150
13127-88-3	Phenol-d6	90.4		10 - 130		60%	SPK: 150
4165-60-0	Nitrobenzene-d5	68.8		36 - 131		69%	SPK: 100
321-60-8	2-Fluorobiphenyl	71.6		39 - 131		72%	SPK: 100
118-79-6	2,4,6-Tribromophenol	110		25 - 155		71%	SPK: 150
1718-51-0	Terphenyl-d14	71.3		23 - 130		71%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	33133	7.69				
1146-65-2	Naphthalene-d8	140551	10.59				
15067-26-2	Acenaphthene-d10	74709	14.72				
1517-22-2	Phenanthrene-d10	124302	17.57				
1719-03-5	Chrysene-d12	121424	21.08				
1520-96-3	Perylene-d12	112622	22.73				

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	SDG No.:	G1217
Lab Sample ID:	G1217-01MS	Matrix:	TCLP
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077199.D	1	02/05/15 08:00	02/06/15 00:31	PB81602

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD	SDG No.:	G1217
Lab Sample ID:	G1217-01MSD	Matrix:	TCLP
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077200.D	1	02/05/15 08:00	02/06/15 01:05	PB81602

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
110-86-1	Pyridine	210		10	10	100	ug/L
106-46-7	1,4-Dichlorobenzene	390		2	10	100	ug/L
95-48-7	2-Methylphenol	370		2.4	10	100	ug/L
65794-96-9	3+4-Methylphenols	320		3.8	10	100	ug/L
67-72-1	Hexachloroethane	420		2.5	10	100	ug/L
98-95-3	Nitrobenzene	430		6.8	10	100	ug/L
87-68-3	Hexachlorobutadiene	420		2.5	10	100	ug/L
88-06-2	2,4,6-Trichlorophenol	480		5.6	10	100	ug/L
95-95-4	2,4,5-Trichlorophenol	430		4	10	100	ug/L
121-14-2	2,4-Dinitrotoluene	470		10	10	100	ug/L
118-74-1	Hexachlorobenzene	430		1.8	10	100	ug/L
87-86-5	Pentachlorophenol	690		10	10	100	ug/L
SURROGATES							
367-12-4	2-Fluorophenol	130		10 - 130		86%	SPK: 150
13127-88-3	Phenol-d6	120		10 - 130		79%	SPK: 150
4165-60-0	Nitrobenzene-d5	92		36 - 131		92%	SPK: 100
321-60-8	2-Fluorobiphenyl	100		39 - 131		103%	SPK: 100
118-79-6	2,4,6-Tribromophenol	160		25 - 155		106%	SPK: 150
1718-51-0	Terphenyl-d14	91.9		23 - 130		92%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	25719	7.69				
1146-65-2	Naphthalene-d8	106924	10.59				
15067-26-2	Acenaphthene-d10	50802	14.72				
1517-22-2	Phenanthrene-d10	95718	17.56				
1719-03-5	Chrysene-d12	94781	21.07				
1520-96-3	Perylene-d12	87127	22.73				

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD	SDG No.:	G1217
Lab Sample ID:	G1217-01MSD	Matrix:	TCLP
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF077200.D	1	02/05/15 08:00	02/06/15 01:05	PB81602

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
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LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit

CALIBRATION SUMMARY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG No.: G1217

Instrument ID: BNA_F Calibration Date(s): 01/14/2015 01/14/2015

Calibration Time(s): 12:33 15:59

LAB FILE ID: RRF2.5 = BF076855.D RRF010 = BF076856.D RRF025 = BF076857.D
RRF040 = BF076858.D RRF050 = BF076859.D RRF060 = BF076860.D

COMPOUND	RRF2.5	RRF010	RRF025	RRF040	RRF050	RRF060	RRF	% RSD
Pyridine		1.114	1.502	1.621	1.314	1.224	1.348	13.7
2-Fluorophenol	1.013	1.154	1.249	1.278	1.233	1.282	1.216	8.4
Phenol-d6	1.289	1.440	1.643	1.612	1.541	1.600	1.535	8.3
1,4-Dichlorobenzene	1.626	1.684	1.728	1.733	1.639	1.729	1.692	2.6
2-Methylphenol	0.978	1.054	1.184	1.229	1.190	1.212	1.146	8.1
3+4-Methylphenols	1.402	1.391	1.540	1.593	1.553	1.583	1.517	5.6
Nitrobenzene-d5	0.313	0.344	0.369	0.387	0.362	0.368	0.361	7.0
Hexachloroethane	0.484	0.565	0.606	0.620	0.619	0.621	0.588	8.5
Nitrobenzene	0.299	0.360	0.378	0.400	0.374	0.373	0.368	9.0
Hexachlorobutadiene	0.161	0.178	0.174	0.189	0.175	0.170	0.175	4.9
2,4,6-Trichlorophenol	0.300	0.348	0.365	0.390	0.367	0.377	0.360	8.2
2-Fluorobiphenyl	1.269	1.342	1.322	1.374	1.293	1.284	1.314	2.7
2,4,5-Trichlorophenol	0.261	0.359	0.383	0.396	0.388	0.388	0.367	13.2
2,4-Dinitrotoluene	0.237	0.350	0.392	0.428	0.418	0.419	0.384	18.5
2,4,6-Tribromophenol	0.125	0.159	0.167	0.176	0.168	0.172	0.162	10.7
Hexachlorobenzene	0.203	0.214	0.207	0.224	0.215	0.214	0.214	3.3
Pentachlorophenol		0.044	0.070	0.091	0.092	0.095	0.082	25.4
Terphenyl-d14	0.816	0.902	0.858	0.937	0.858	0.849	0.869	4.5

All other compounds must meet a minimum RRF of 0.010.

Form VI SV-1

Response Factor Report Instrumen

Method Path : Z:\HPCHEM1\BNA_F\METHODS\
Method File : 8270-BF011415.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Jan 15 11:52:04 2015
Response Via : Initial Calibration

Calibration Files
2.5 =BF076855.D 10 =BF076856.D 25 =BF076857.D 40 =BF076858.D 50 =BF076859.D 60 =BF076860.D 80 =BF076861.D

		Compound	2.5	10	25	40	50	60	80	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------ISTD----------								
2)		1,4-Dioxane	0.635	0.472	0.477	0.493	0.533	0.517	0.519	0.521	10.56
3)		Pyridine		1.114	1.502	1.621	1.314	1.224	1.313	1.348	13.71
4)		n-Nitrosodimet...		0.667	0.758	0.672	0.596	0.663	0.650	0.668	7.85
5)	S	2-Fluorophenol	1.013	1.154	1.249	1.278	1.233	1.282	1.306	1.216	8.42
6)		Aniline	1.924	1.981	2.124	2.264	2.127	2.231	2.215	2.124	6.07
7)	S	Phenol-d6	1.289	1.440	1.643	1.612	1.541	1.600	1.618	1.535	8.33
8)		2-Chlorophenol	1.209	1.341	1.443	1.492	1.401	1.473	1.456	1.402	7.04
9)		Benzaldehyde	1.025	1.029	1.050	0.783	0.845	0.814	0.711	0.894	15.43
10)	C	Phenol	1.348	1.509	1.694	1.780	1.658	1.689	1.728	1.629	9.19
11)		bis(2-Chloroet...	1.164	1.201	1.290	1.315	1.319	1.316	1.320	1.275	5.10
12)		1,3-Dichlorobe...	1.465	1.545	1.633	1.642	1.595	1.638	1.651	1.595	4.28
13)	C	1,4-Dichlorobe...	1.626	1.684	1.728	1.733	1.639	1.729	1.702	1.692	2.60
14)		1,2-Dichlorobe...	1.334	1.509	1.590	1.639	1.556	1.651	1.633	1.559	7.13
15)		Benzyl Alcohol	0.901	1.149	1.305	1.337	1.297	1.350	1.352	1.242	13.36
16)		2,2'-oxybis(1-...	1.670	1.679	1.728	1.776	1.714	1.749	1.682	1.714	2.31
17)		2-Methylphenol	0.978	1.054	1.184	1.229	1.190	1.212	1.175	1.146	8.14
18)		Hexachloroethane	0.484	0.565	0.606	0.620	0.619	0.621	0.605	0.588	8.51
19)	P	n-Nitroso-di-n...	0.954	0.991	1.073	1.146	1.109	1.141	1.105	1.074	6.93
20)		3+4-Methylphenols	1.402	1.391	1.540	1.593	1.553	1.583	1.560	1.517	5.58
21)	I	Naphthalene-d8	----------ISTD----------								
22)		Acetophenone	0.440	0.486	0.497	0.522	0.486	0.488	0.510	0.490	5.26
23)	S	Nitrobenzene-d5	0.313	0.344	0.369	0.387	0.362	0.368	0.384	0.361	7.04
24)		Nitrobenzene	0.299	0.360	0.378	0.400	0.374	0.373	0.391	0.368	9.00
25)		Isophorone	0.606	0.624	0.662	0.707	0.664	0.667	0.673	0.657	5.05
26)	C	2-Nitrophenol	0.106	0.171	0.172	0.196	0.181	0.185	0.195	0.172	17.84
27)		2,4-Dimethylph...	0.228	0.274	0.283	0.312	0.296	0.301	0.297	0.284	9.81
28)		bis(2-Chloroet...	0.324	0.359	0.378	0.411	0.387	0.375	0.382	0.374	7.24
29)	C	2,4-Dichloroph...	0.198	0.248	0.269	0.290	0.276	0.279	0.295	0.265	12.53
30)		1,2,4-Trichlor...	0.245	0.280	0.298	0.325	0.295	0.300	0.316	0.294	8.85
31)		Naphthalene	0.970	0.994	1.032	1.106	1.025	1.019	1.062	1.030	4.33
32)		Benzoic acid		0.122	0.170	0.171	0.162	0.157	0.163	0.158	11.51
33)		4-Chloroaniline	0.370	0.406	0.431	0.444	0.416	0.417	0.429	0.416	5.75
34)	C	Hexachlorobuta...	0.161	0.178	0.174	0.189	0.175	0.170	0.175	0.175	4.86
35)		Caprolactam		0.066	0.078	0.088	0.080	0.077	0.080	0.078	9.16
36)	C	4-Chloro-3-met...	0.260	0.269	0.309	0.326	0.315	0.320	0.324	0.303	8.94
37)		2-Methylnaphth...	0.619	0.702	0.706	0.743	0.729	0.702	0.721	0.703	5.70

Method Path : Z:\HPCHEM1\BNA_F\METHODS\
Method File : 8270-BF011415.M

6

38)	I	Acenaphthene-d10	----------ISTD----------								
39)		1,2,4,5-Tetrac...	0.499	0.473	0.506	0.507	0.489	0.489	0.499	0.494	2.44
40)	P	Hexachlorocycl...	0.027	0.159	0.197	0.249	0.253	0.258	0.272	0.202	43.03
41)	S	2,4,6-Tribromo...	0.125	0.159	0.167	0.176	0.168	0.172	0.171	0.162	10.74
42)	C	2,4,6-Trichlor...	0.300	0.348	0.365	0.390	0.367	0.377	0.375	0.360	8.23
43)		2,4,5-Trichlor...	0.261	0.359	0.383	0.396	0.388	0.388	0.398	0.367	13.19
44)	S	2-Fluorobiphenyl	1.269	1.342	1.321	1.374	1.293	1.284	1.317	1.314	2.74
45)		1,1'-Biphenyl	1.309	1.483	1.508	1.581	1.482	1.474	1.542	1.483	5.79
46)		2-Chloronaphth...	1.154	1.198	1.243	1.260	1.225	1.196	1.264	1.220	3.26
47)		2-Nitroaniline	0.253	0.352	0.379	0.403	0.397	0.395	0.412	0.370	14.91
48)		Acenaphthylene	1.855	1.993	2.067	2.170	2.075	2.079	2.167	2.058	5.27
49)		Dimethylphthalate	1.360	1.379	1.420	1.464	1.434	1.432	1.439	1.418	2.57
50)		2,6-Dinitrotol...	0.208	0.255	0.285	0.314	0.306	0.304	0.313	0.283	13.89
51)	C	Acenaphthene	1.107	1.119	1.197	1.219	1.173	1.155	1.203	1.168	3.67
52)		3-Nitroaniline	0.228	0.311	0.354	0.377	0.359	0.359	0.386	0.339	16.07
53)	P	2,4-Dinitrophenol		0.021	0.071	0.107	0.114	0.121	0.138	0.095	44.73
54)		Dibenzofuran	1.580	1.716	1.731	1.763	1.707	1.669	1.740	1.701	3.57
55)	P	4-Nitrophenol		0.182	0.198	0.240	0.229	0.234	0.252	0.222	12.11
56)		2,4-Dinitrotol...	0.237	0.350	0.392	0.428	0.418	0.419	0.441	0.384	18.52
57)		Fluorene	1.361	1.397	1.446	1.493	1.434	1.459	1.498	1.441	3.44
58)		2,3,4,6-Tetrac...	0.204	0.253	0.263	0.289	0.284	0.290	0.289	0.268	11.80
59)		Diethylphthalate	1.299	1.455	1.456	1.499	1.457	1.413	1.455	1.433	4.48
60)		4-Chlorophenyl...	0.583	0.581	0.583	0.610	0.586	0.588	0.595	0.590	1.71
61)		4-Nitroaniline	0.197	0.323	0.344	0.363	0.340	0.363	0.364	0.328	18.19
62)		Azobenzene	1.454	1.460	1.507	1.561	1.516	1.464	1.494	1.494	2.55
63)	I	Phenanthrene-d10	----------ISTD----------								
64)		4,6-Dinitro-2-...	0.015	0.074	0.110	0.132	0.133	0.131	0.131	0.104	43.05
65)	c	n-Nitrosodiphe...	0.675	0.700	0.719	0.772	0.698	0.710	0.718	0.713	4.22
66)		4-Bromophenyl-...	0.179	0.202	0.198	0.222	0.204	0.208	0.205	0.203	6.34
67)		Hexachlorobenzene	0.203	0.214	0.207	0.224	0.215	0.214	0.218	0.214	3.30
68)		Atrazine	0.177	0.218	0.231	0.247	0.217	0.219	0.206	0.216	9.97
69)	C	Pentachlorophenol		0.044	0.070	0.091	0.092	0.095	0.098	0.082	25.39
70)		Phenanthrene	1.211	1.261	1.288	1.306	1.226	1.250	1.189	1.247	3.35
71)		Anthracene	1.081	1.202	1.255	1.269	1.240	1.231	1.235	1.216	5.20
72)		Carbazole	1.047	1.139	1.252	1.258	1.142	1.164	1.256	1.180	6.75
73)		Di-n-butylphth...	1.126	1.387	1.435	1.478	1.418	1.374	1.340	1.365	8.40
74)	C	Fluoranthene	1.175	1.269	1.313	1.382	1.239	1.299	1.269	1.278	5.05
75)	I	Chrysene-d12	----------ISTD----------								
76)		Benzidine	0.649	0.603	0.744	0.639	0.648	0.637	0.560	0.640	8.74
77)		Pyrene	1.283	1.416	1.373	1.504	1.325	1.349	1.346	1.371	5.23
78)	S	Terphenyl-d14	0.816	0.902	0.858	0.937	0.858	0.849	0.862	0.869	4.50
79)		Butylbenzylpht...	0.509	0.620	0.612	0.706	0.645	0.620	0.633	0.621	9.43
80)		Benzo(a)anthra...	1.168	1.296	1.249	1.361	1.222	1.212	1.275	1.255	5.00
81)		3,3'-Dichlorob...	0.337	0.430	0.411	0.431	0.400	0.407	0.375	0.399	8.30
82)		Chrysene	0.997	1.208	1.137	1.246	1.141	1.102	1.179	1.144	7.07

Method Path : Z:\HPCHEM1\BNA_F\METHODS\
Method File : 8270-BF011415.M

83)		Bis(2-ethylhex...	0.704	0.931	0.868	0.927	0.888	0.852	0.842	0.859	8.89
84)	c	Di-n-octyl pht...	1.183	1.625	1.497	1.640	1.496	1.532	1.461	1.491	10.16
85)		Indeno(1,2,3-c...	0.969	1.211	1.256	1.331	1.184	1.217	1.321	1.213	9.98
86)	I	Perylene-d12	----------ISTD----------								
87)		Benzo(b)fluora...	1.152	1.228	1.356	1.287	1.443	1.493	1.470	1.347	9.66
88)		Benzo(k)fluora...	1.119	1.214	1.216	1.344	1.075	1.057	1.213	1.177	8.50
89)	C	Benzo(a)pyrene	1.086	1.156	1.195	1.257	1.167	1.214	1.242	1.188	4.88
90)		Dibenzo(a,h)an...	0.926	1.000	1.096	1.160	1.086	1.166	1.197	1.090	8.94
91)		Benzo(g,h,i)pe...	0.896	1.018	1.122	1.153	1.087	1.110	1.201	1.084	9.23

(#) = Out of Range

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG No.: G1217

Instrument ID: BNA_F Calibration Date/Time: 02/05/2015 13:30

Lab File ID: BF077184.D Init. Calib. Date(s): 01/14/2015 01/14/2015

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 12:33 15:59

GC Column: RTX-5 ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Pyridine	1.348	1.194		-11.4	
2-Fluorophenol	1.216	1.251		2.9	
Phenol-d6	1.535	1.528		-0.5	
1,4-Dichlorobenzene	1.692	1.689		-0.2	20.0
2-Methylphenol	1.146	1.122		-2.1	
3+4-Methylphenols	1.517	1.289		-15.0	
Nitrobenzene-d5	0.361	0.373		3.3	
Hexachloroethane	0.588	0.623		6.0	
Nitrobenzene	0.368	0.361		-1.9	
Hexachlorobutadiene	0.175	0.188		7.4	20.0
2,4,6-Trichlorophenol	0.360	0.357		-0.8	20.0
2-Fluorobiphenyl	1.314	1.403		6.8	
2,4,5-Trichlorophenol	0.367	0.318		-13.4	
2,4-Dinitrotoluene	0.384	0.430		12.0	
2,4,6-Tribromophenol	0.162	0.157		-3.1	
Hexachlorobenzene	0.214	0.229		7.0	
Pentachlorophenol	0.082	0.061		-25.6	20.0
Terphenyl-d14	0.869	0.926		6.6	

All other compounds must meet a minimum RRF of 0.010.

Form VII SV-1

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG No.: G1217

Instrument ID: BNA_F Calibration Date/Time: 02/05/2015 23:23

Lab File ID: BF077197.D Init. Calib. Date(s): 01/14/2015 01/14/2015

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 12:33 15:59

GC Column: RTX-5 ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Pyridine	1.348	1.360		0.9	
2-Fluorophenol	1.216	1.184		-2.6	
Phenol-d6	1.535	1.429		-6.9	
1,4-Dichlorobenzene	1.692	1.587		-6.2	20.0
2-Methylphenol	1.146	1.053		-8.1	
3+4-Methylphenols	1.517	1.305		-14.0	
Nitrobenzene-d5	0.361	0.372		3.0	
Hexachloroethane	0.588	0.599		1.9	
Nitrobenzene	0.368	0.359		-2.4	
Hexachlorobutadiene	0.175	0.182		4.0	20.0
2,4,6-Trichlorophenol	0.360	0.363		0.8	20.0
2-Fluorobiphenyl	1.314	1.427		8.6	
2,4,5-Trichlorophenol	0.367	0.338		-7.9	
2,4-Dinitrotoluene	0.384	0.412		7.3	
2,4,6-Tribromophenol	0.162	0.159		-1.9	
Hexachlorobenzene	0.214	0.227		6.1	
Pentachlorophenol	0.082	0.075		-8.5	20.0
Terphenyl-d14	0.869	0.905		4.1	

All other compounds must meet a minimum RRF of 0.010.

Form VII SV-1

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG No.: G1217

Instrument ID: BNA_F Calibration Date/Time: 02/06/2015 13:31

Lab File ID: BF077202.D Init. Calib. Date(s): 01/14/2015 01/14/2015

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 12:33 15:59

GC Column: RTX-5 ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Pyridine	1.348	1.306		-3.1	
2-Fluorophenol	1.216	1.262		3.8	
Phenol-d6	1.535	1.575		2.6	
1,4-Dichlorobenzene	1.692	1.710		1.1	20.0
2-Methylphenol	1.146	1.175		2.5	
3+4-Methylphenols	1.517	1.362		-10.2	
Nitrobenzene-d5	0.361	0.375		3.9	
Hexachloroethane	0.588	0.617		4.9	
Nitrobenzene	0.368	0.361		-1.9	
Hexachlorobutadiene	0.175	0.178		1.7	20.0
2,4,6-Trichlorophenol	0.360	0.370		2.8	20.0
2-Fluorobiphenyl	1.314	1.421		8.1	
2,4,5-Trichlorophenol	0.367	0.375		2.2	
2,4-Dinitrotoluene	0.384	0.426		10.9	
2,4,6-Tribromophenol	0.162	0.177		9.3	
Hexachlorobenzene	0.214	0.227		6.1	
Pentachlorophenol	0.082	0.107		30.5	20.0
Terphenyl-d14	0.869	0.945		8.7	

All other compounds must meet a minimum RRF of 0.010.

Form VII SV-1

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

LAB CHRONICLE

OrderID:	G1217	**OrderDate:**	2/4/2015 9:09:07 AM
Client:	GZA GeoEnvironmental, Inc.	**Project:**	410162268.20
Contact:	Clifford Bell	**Location:**	H11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
G1217-01	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6**	**TCLP**			**01/22/15**			**01/22/15**
			TCLP Herbicide	8151A		02/05/15	02/05/15	
			TCLP Pesticide	8081B		02/05/15	02/05/15	

CHEMTECH

Hit Summary Sheet
SW-846

SDG No.: **Order ID:**

Client: **Project ID:**

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :								

Total Concentration:

SAMPLE DATA

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6	SDG No.:	G1217
Lab Sample ID:	G1217-01	Matrix:	TCLP
Analytical Method:	SW8081	% Moisture:	100 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Pesticide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD026118.D	1	02/05/15 08:00	02/05/15 16:30	PB81604

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
58-89-9	gamma-BHC (Lindane)	0.1	U	0.055	0.1	0.5	ug/L
76-44-8	Heptachlor	0.1	U	0.069	0.1	0.5	ug/L
1024-57-3	Heptachlor epoxide	0.1	U	0.067	0.1	0.5	ug/L
72-20-8	Endrin	0.1	U	0.058	0.1	0.5	ug/L
72-43-5	Methoxychlor	0.1	U	0.05	0.1	0.5	ug/L
8001-35-2	Toxaphene	1	U	1	1	5	ug/L
57-74-9	Chlordane	1	U	1	1	5	ug/L
SURROGATES							
2051-24-3	Decachlorobiphenyl	19.8		10 - 192		99%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.8		10 - 172		104%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	
Project:	410162268.20	Date Received:	02/05/15
Client Sample ID:	PB81604TB	SDG No.:	G1217
Lab Sample ID:	PB81604TB	Matrix:	TCLP
Analytical Method:	SW8081	% Moisture:	100 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Pesticide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD026117.D	1	02/05/15 08:00	02/05/15 16:16	PB81604

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
58-89-9	gamma-BHC (Lindane)	0.1	U	0.055	0.1	0.5	ug/L
76-44-8	Heptachlor	0.1	U	0.069	0.1	0.5	ug/L
1024-57-3	Heptachlor epoxide	0.1	U	0.067	0.1	0.5	ug/L
72-20-8	Endrin	0.1	U	0.058	0.1	0.5	ug/L
72-43-5	Methoxychlor	0.1	U	0.05	0.1	0.5	ug/L
8001-35-2	Toxaphene	1	U	1	1	5	ug/L
57-74-9	Chlordane	1	U	1	1	5	ug/L
SURROGATES							
2051-24-3	Decachlorobiphenyl	19.2		30 - 135		96%	SPK: 20
877-09-8	Tetrachloro-m-xylene	17.2		25 - 140		86%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

QC SUMMARY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Surrogate Summary

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: 8081B

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits Low	Limits High
I.BLK-PD025701.D	PIBLK-PD025701.D	Decachlorobiphenyl	1	20	18.36	92		10	192
		Tetrachloro-m-xylene	1	20	18.48	92		10	172
		Decachlorobiphenyl	2	20	17.6	88		10	192
		Tetrachloro-m-xylene	2	20	18.3	92		10	172
I.BLK-PD026107.D	PIBLK-PD026107.D	Decachlorobiphenyl	1	20	22.6	113		10	192
		Tetrachloro-m-xylene	1	20	20.51	103		10	172
		Decachlorobiphenyl	2	20	21.14	106		10	192
		Tetrachloro-m-xylene	2	20	20.33	102		10	172
PB81604BL	PB81604BL	Decachlorobiphenyl	1	20	19.42	97		30	135
		Tetrachloro-m-xylene	1	20	17.48	87		25	140
		Decachlorobiphenyl	2	20	18.16	91		30	135
		Tetrachloro-m-xylene	2	20	17.88	89		25	140
PB81604BS	PB81604BS	Decachlorobiphenyl	1	20	19.25	96		30	135
		Tetrachloro-m-xylene	1	20	17.35	87		25	140
		Decachlorobiphenyl	2	20	18.02	90		30	135
		Tetrachloro-m-xylene	2	20	17.65	88		25	140
PB81604TB	PB81604TB	Decachlorobiphenyl	1	20	19.21	96		30	135
		Tetrachloro-m-xylene	1	20	17.22	86		25	140
		Decachlorobiphenyl	2	20	18.05	90		30	135
		Tetrachloro-m-xylene	2	20	17.71	89		25	140
G1217-01	COMP-CC-2-CC-3-CC-4-CC-5-CC-	Decachlorobiphenyl	1	20	19.84	99		10	192
		Tetrachloro-m-xylene	1	20	20.84	104		10	172
		Decachlorobiphenyl	2	20	18.48	92		10	192
		Tetrachloro-m-xylene	2	20	19.57	98		10	172
I.BLK-PD026119.D	PIBLK-PD026119.D	Decachlorobiphenyl	1	20	21.94	110		10	192
		Tetrachloro-m-xylene	1	20	19.58	98		10	172
		Decachlorobiphenyl	2	20	20.55	103		10	192
		Tetrachloro-m-xylene	2	20	19.91	100		10	172
G1217-01MS	COMP-CC-2-CC-3-CC-4-CC-5-CC-	Decachlorobiphenyl	1	20	21.61	108		10	192
		Tetrachloro-m-xylene	1	20	22.33	112		10	172
		Decachlorobiphenyl	2	20	20.24	101		10	192
		Tetrachloro-m-xylene	2	20	20.83	104		10	172
G1217-01MSD	COMP-CC-2-CC-3-CC-4-CC-5-CC-	Decachlorobiphenyl	1	20	21.52	108		10	192
		Tetrachloro-m-xylene	1	20	22.17	111		10	172
		Decachlorobiphenyl	2	20	20.01	100		10	192
		Tetrachloro-m-xylene	2	20	20.75	104		10	172
I.BLK-PD026125.D	PIBLK-PD026125.D	Decachlorobiphenyl	1	20	22.38	112		10	192
		Tetrachloro-m-xylene	1	20	19.95	100		10	172
		Decachlorobiphenyl	2	20	20.59	103		10	192
		Tetrachloro-m-xylene	2	20	20.29	101		10	172

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: 8081B **DataFile :** PD026123.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Client Sample ID:	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS**											
G1217-01MS	gamma-BHC (Lindane)	5	0	6.3	ug/L	126				39	164	
	Heptachlor	5	0	6.1	ug/L	122				38	169	
	Heptachlor epoxide	5	0	6.3	ug/L	126				17	170	
	Endrin	5	0	6.4	ug/L	128				33	170	
	Methoxychlor	5	0	6.5	ug/L	130				20	189	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: 8081B **DataFile :** PD026124.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Client Sample ID:	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD**											
G1217-01MSD	gamma-BHC (Lindane)	5	0	6	ug/L	120		5		39	164	20
	Heptachlor	5	0	6.1	ug/L	122		0		38	169	20
	Heptachlor epoxide	5	0	6.2	ug/L	124		2		17	170	20
	Endrin	5	0	6.3	ug/L	126		2		33	170	20
	Methoxychlor	5	0	6.4	ug/L	128		2		20	189	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: 8081B **Datafile :** PD026116.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB81604BS	gamma-BHC (Lindane)	0.5	0.517	ug/L	103				25	135	
	Heptachlor	0.5	0.53	ug/L	106				40	130	
	Heptachlor epoxide	0.5	0.536	ug/L	107				60	130	
	Endrin	0.5	0.521	ug/L	104				55	135	
	Methoxychlor	0.5	0.547	ug/L	109				55	150	

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4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB81604BL

Lab Name: CHEMTECH

Contract: GZAG04

Lab Code: CHEM

Case No.: G1217

SAS No.: G1217

SDG NO.: G1217

Lab Sample ID: PB81604BL

Lab File ID: PD026115.D

Matrix: (soil/water) water

Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N

Date Extracted: 02/05/2015

Date Analyzed (1): 02/05/2015

Date Analyzed (2): 02/05/2015

Time Analyzed (1): 15:48

Time Analyzed (2): 15:48

Instrument ID (1): ECD_D

Instrument ID (2): ECD_D

GC Column (1): ZB-MR2 ID: 0.32 (mm)

GC Column (2): ZB-MR1 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
PB81604BS	PB81604BS	PD026116.D	02/05/2015	02/05/2015
PB81604TB	PB81604TB	PD026117.D	02/05/2015	02/05/2015
COMP-CC-2-CC-3-CC-4-CC-5-CC-6	G1217-01	PD026118.D	02/05/2015	02/05/2015
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	G1217-01MS	PD026123.D	02/05/2015	02/05/2015
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD	G1217-01MSD	PD026124.D	02/05/2015	02/05/2015

COMMENTS:

QC SAMPLE DATA

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	
Project:	410162268.20	Date Received:	
Client Sample ID:	PB81604BL	SDG No.:	G1217
Lab Sample ID:	PB81604BL	Matrix:	TCLP
Analytical Method:	SW8081	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Pesticide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD026115.D	1	02/05/15 08:00	02/05/15 15:48	PB81604

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
58-89-9	gamma-BHC (Lindane)	0.01	U	0.006	0.01	0.05	ug/L
76-44-8	Heptachlor	0.01	U	0.007	0.01	0.05	ug/L
1024-57-3	Heptachlor epoxide	0.01	U	0.007	0.01	0.05	ug/L
72-20-8	Endrin	0.01	U	0.006	0.01	0.05	ug/L
72-43-5	Methoxychlor	0.01	U	0.005	0.01	0.05	ug/L
8001-35-2	Toxaphene	0.1	U	0.1	0.1	0.5	ug/L
57-74-9	Chlordane	0.1	U	0.1	0.1	0.5	ug/L
SURROGATES							
2051-24-3	Decachlorobiphenyl	19.4		30 - 135		97%	SPK: 20
877-09-8	Tetrachloro-m-xylene	17.5		25 - 140		87%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/07/15
Project:	410162268.20	Date Received:	01/07/15
Client Sample ID:	PIBLK-PD025701.D	SDG No.:	G1217
Lab Sample ID:	I.BLK-PD025701.D	Matrix:	TCLP
Analytical Method:	SW8081	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Pesticide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD025701.D	1		01/07/15	PD010715

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
58-89-9	gamma-BHC (Lindane)	0.01	U	0.006	0.01	0.05	ug/L
76-44-8	Heptachlor	0.01	U	0.007	0.01	0.05	ug/L
1024-57-3	Heptachlor epoxide	0.01	U	0.007	0.01	0.05	ug/L
72-20-8	Endrin	0.01	U	0.006	0.01	0.05	ug/L
72-43-5	Methoxychlor	0.01	U	0.005	0.01	0.05	ug/L
8001-35-2	Toxaphene	0.1	U	0.1	0.1	0.5	ug/L
57-74-9	Chlordane	0.1	U	0.1	0.1	0.5	ug/L
SURROGATES							
2051-24-3	Decachlorobiphenyl	18.4		10 - 192		92%	SPK: 20
877-09-8	Tetrachloro-m-xylene	18.5		10 - 172		92%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	02/05/15
Project:	410162268.20	Date Received:	02/05/15
Client Sample ID:	PIBLK-PD026107.D	SDG No.:	G1217
Lab Sample ID:	I.BLK-PD026107.D	Matrix:	TCLP
Analytical Method:	SW8081	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Pesticide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD026107.D	1		02/05/15	PD020515

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
58-89-9	gamma-BHC (Lindane)	0.01	U	0.006	0.01	0.05	ug/L
76-44-8	Heptachlor	0.01	U	0.007	0.01	0.05	ug/L
1024-57-3	Heptachlor epoxide	0.01	U	0.007	0.01	0.05	ug/L
72-20-8	Endrin	0.01	U	0.006	0.01	0.05	ug/L
72-43-5	Methoxychlor	0.01	U	0.005	0.01	0.05	ug/L
8001-35-2	Toxaphene	0.1	U	0.1	0.1	0.5	ug/L
57-74-9	Chlordane	0.1	U	0.1	0.1	0.5	ug/L
SURROGATES							
2051-24-3	Decachlorobiphenyl	22.6		10 - 192		113%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.5		10 - 172		103%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	02/05/15
Project:	410162268.20	Date Received:	02/05/15
Client Sample ID:	PIBLK-PD026119.D	SDG No.:	G1217
Lab Sample ID:	I.BLK-PD026119.D	Matrix:	TCLP
Analytical Method:	SW8081	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Pesticide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD026119.D	1		02/05/15	PD020515

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
58-89-9	gamma-BHC (Lindane)	0.01	U	0.006	0.01	0.05	ug/L
76-44-8	Heptachlor	0.01	U	0.007	0.01	0.05	ug/L
1024-57-3	Heptachlor epoxide	0.01	U	0.007	0.01	0.05	ug/L
72-20-8	Endrin	0.01	U	0.006	0.01	0.05	ug/L
72-43-5	Methoxychlor	0.01	U	0.005	0.01	0.05	ug/L
8001-35-2	Toxaphene	0.1	U	0.1	0.1	0.5	ug/L
57-74-9	Chlordane	0.1	U	0.1	0.1	0.5	ug/L
SURROGATES							
2051-24-3	Decachlorobiphenyl	21.9		10 - 192		110%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.6		10 - 172		98%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	02/05/15
Project:	410162268.20	Date Received:	02/05/15
Client Sample ID:	PIBLK-PD026125.D	SDG No.:	G1217
Lab Sample ID:	I.BLK-PD026125.D	Matrix:	TCLP
Analytical Method:	SW8081	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Pesticide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD026125.D	1		02/05/15	PD020515

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
58-89-9	gamma-BHC (Lindane)	0.01	U	0.006	0.01	0.05	ug/L
76-44-8	Heptachlor	0.01	U	0.007	0.01	0.05	ug/L
1024-57-3	Heptachlor epoxide	0.01	U	0.007	0.01	0.05	ug/L
72-20-8	Endrin	0.01	U	0.006	0.01	0.05	ug/L
72-43-5	Methoxychlor	0.01	U	0.005	0.01	0.05	ug/L
8001-35-2	Toxaphene	0.1	U	0.1	0.1	0.5	ug/L
57-74-9	Chlordane	0.1	U	0.1	0.1	0.5	ug/L
SURROGATES							
2051-24-3	Decachlorobiphenyl	22.4		10 - 192		112%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20		10 - 172		100%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	
Project:	410162268.20	Date Received:	
Client Sample ID:	PB81604BS	SDG No.:	G1217
Lab Sample ID:	PB81604BS	Matrix:	TCLP
Analytical Method:	SW8081	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Pesticide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD026116.D	1	02/05/15 08:00	02/05/15 16:02	PB81604

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
58-89-9	gamma-BHC (Lindane)	0.517		0.006	0.01	0.05	ug/L
76-44-8	Heptachlor	0.53		0.007	0.01	0.05	ug/L
1024-57-3	Heptachlor epoxide	0.536		0.007	0.01	0.05	ug/L
72-20-8	Endrin	0.521		0.006	0.01	0.05	ug/L
72-43-5	Methoxychlor	0.547		0.005	0.01	0.05	ug/L
SURROGATES							
2051-24-3	Decachlorobiphenyl	19.2		30 - 135		96%	SPK: 20
877-09-8	Tetrachloro-m-xylene	17.4		25 - 140		87%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	SDG No.:	G1217
Lab Sample ID:	G1217-01MS	Matrix:	TCLP
Analytical Method:	SW8081	% Moisture:	100 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Pesticide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD026123.D	1	02/05/15 08:00	02/05/15 17:39	PB81604

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
58-89-9	gamma-BHC (Lindane)	6.3		0.055	0.1	0.5	ug/L
76-44-8	Heptachlor	6.1		0.069	0.1	0.5	ug/L
1024-57-3	Heptachlor epoxide	6.3		0.067	0.1	0.5	ug/L
72-20-8	Endrin	6.4		0.058	0.1	0.5	ug/L
72-43-5	Methoxychlor	6.5		0.05	0.1	0.5	ug/L
8001-35-2	Toxaphene	1	U	1	1	5	ug/L
57-74-9	Chlordane	1	U	1	1	5	ug/L
SURROGATES							
2051-24-3	Decachlorobiphenyl	21.6		10 - 192		108%	SPK: 20
877-09-8	Tetrachloro-m-xylene	22.3		10 - 172		112%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD	SDG No.:	G1217
Lab Sample ID:	G1217-01MSD	Matrix:	TCLP
Analytical Method:	SW8081	% Moisture:	100 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Pesticide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD026124.D	1	02/05/15 08:00	02/05/15 17:53	PB81604

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
58-89-9	gamma-BHC (Lindane)	6		0.055	0.1	0.5	ug/L
76-44-8	Heptachlor	6.1		0.069	0.1	0.5	ug/L
1024-57-3	Heptachlor epoxide	6.2		0.067	0.1	0.5	ug/L
72-20-8	Endrin	6.3		0.058	0.1	0.5	ug/L
72-43-5	Methoxychlor	6.4		0.05	0.1	0.5	ug/L
8001-35-2	Toxaphene	1	U	1	1	5	ug/L
57-74-9	Chlordane	1	U	1	1	5	ug/L
SURROGATES							
2051-24-3	Decachlorobiphenyl	21.5		10 - 192		108%	SPK: 20
877-09-8	Tetrachloro-m-xylene	22.2		10 - 172		111%	SPK: 20

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CALIBRATION SUMMARY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

RETENTION TIMES OF INITIAL CALIBRATION

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Instrument ID: ECD_D **Calibration Date(s):** 01/07/2015 01/07/2015

Calibration Times: 16:55 17:49

GC Column: ZB-MR2 ID: 0.32 (mm)

LAB FILE ID: RT 100 = PD025704.D RT 075 = PD025705.D

RT 050 = PD025706.D RT 025 = PD025707.D RT 005 = PD025708.D

COMPOUND	RT 100	RT 075	RT 050	RT 025	RT 005	MEAN RT	RT WINDOW FROM	RT WINDOW TO
Decachlorobiphenyl	8.72	8.72	8.72	8.72	8.72	8.72	8.62	8.82
Endrin	6.42	6.42	6.42	6.42	6.42	6.42	6.32	6.52
gamma-BHC (Lindane)	4.43	4.43	4.43	4.43	4.43	4.43	4.33	4.53
Heptachlor	4.93	4.93	4.93	4.93	4.93	4.93	4.83	5.03
Heptachlor epoxide	5.60	5.60	5.60	5.60	5.60	5.60	5.50	5.70
Methoxychlor	7.31	7.31	7.31	7.31	7.31	7.31	7.21	7.41
Tetrachloro-m-xylene	3.78	3.78	3.78	3.78	3.78	3.78	3.68	3.88

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RETENTION TIMES OF INITIAL CALIBRATION

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Instrument ID: ECD_D **Calibration Date(s):** 01/07/2015 01/07/2015

Calibration Times: 16:55 17:49

GC Column: ZB-MR1 ID: 0.32 (mm)

LAB FILE ID: RT 100 = PD025704.D RT 075 = PD025705.D

RT 050 = PD025706.D RT 025 = PD025707.D RT 005 = PD025708.D

COMPOUND	RT 100	RT 075	RT 050	RT 025	RT 005	MEAN RT	RT WINDOW FROM	RT WINDOW TO
Decachlorobiphenyl	8.01	8.01	8.01	8.01	8.01	8.01	7.91	8.11
Endrin	5.83	5.83	5.83	5.83	5.83	5.83	5.73	5.93
gamma-BHC (Lindane)	4.05	4.05	4.05	4.05	4.05	4.05	3.95	4.15
Heptachlor	4.33	4.33	4.33	4.33	4.33	4.33	4.23	4.43
Heptachlor epoxide	5.01	5.01	5.01	5.01	5.01	5.01	4.91	5.11
Methoxychlor	6.74	6.74	6.74	6.74	6.74	6.74	6.64	6.84
Tetrachloro-m-xylene	3.33	3.33	3.33	3.33	3.33	3.33	3.23	3.43

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CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Instrument ID: ECD_D

Calibration Date(s): 01/07/2015 01/07/2015

Calibration Times: 16:55 17:49

GC Column: ZB-MR2 **ID:** 0.32 (mm)

LAB FILE ID: CF 100 = PD025704.D CF 075 = PD025705.D

CF 050 = PD025706.D CF 025 = PD025707.D CF 005 = PD025708.D

COMPOUND	CF 100	CF 075	CF 050	CF 025	CF 005	CF	% RSD
Decachlorobiphenyl	1098790	1061110	1116170	1122330	1264650	1132610	7
Endrin	1110200	1028740	1041940	976711	959315	1023380	6
gamma-BHC (Lindane)	1376090	1267920	1270110	1167260	1117240	1239730	8
Heptachlor	1425510	1323620	1338710	1255040	1250360	1318650	5
Heptachlor epoxide	1201630	1113670	1129320	1057460	1042230	1108860	6
Methoxychlor	569698	543472	562820	556896	555672	557712	2
Tetrachloro-m-xylene	993321	930486	958292	929543	974596	957248	3

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CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Instrument ID: ECD_D

Calibration Date(s): 01/07/2015 01/07/2015

Calibration Times: 16:55 17:49

GC Column: ZB-MR1 **ID:** 0.32 (mm)

LAB FILE ID: CF 100 = PD025704.D CF 075 = PD025705.D

CF 050 = PD025706.D CF 025 = PD025707.D CF 005 = PD025708.D

COMPOUND	CF 100	CF 075	CF 050	CF 025	CF 005	CF	% RSD
Decachlorobiphenyl	3248310	3154700	3298130	3291100	3692700	3336990	6
Endrin	3539180	3388760	3499170	3366820	3425160	3443820	2
gamma-BHC (Lindane)	4592240	4391290	4496880	4319520	4668610	4493710	3
Heptachlor	4437990	4256230	4374280	4188630	4157570	4282940	3
Heptachlor epoxide	3893560	3732180	3840500	3711400	3694100	3774350	2
Methoxychlor	1616640	1574180	1659200	1637070	1646850	1626790	2
Tetrachloro-m-xylene	3226690	3109590	3215880	3161570	3419960	3226740	4

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INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Instrument ID: ECD_D **Date(s) Analyzed:** 01/07/2015 01/07/2015

GC Column: ZB-MR2 **ID:** 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Toxaphene	500	1	6.88	6.78	6.98	35500800
		2	6.96	6.86	7.06	23301300
		3	7.05	6.95	7.15	27848500
		4	7.36	7.26	7.46	54424700
		5	7.71	7.61	7.81	28702400
Chlordane	500	1	4.74	4.64	4.84	39328200
		2	5.20	5.10	5.30	41167600
		3	5.84	5.74	5.94	149759000
		4	5.91	5.81	6.01	179159000
		5	6.69	6.59	6.79	36032600

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INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Instrument ID: ECD_D **Date(s) Analyzed:** 01/07/2015 01/07/2015

GC Column: ZB-MR1 **ID:** 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Toxaphene	500	1	6.64	6.54	6.74	75826400
		2	6.74	6.64	6.84	113431000
		3	6.87	6.77	6.97	208883000
		4	7.16	7.06	7.26	90968300
		5	7.29	7.19	7.39	69709500
Chlordane	500	1	4.18	4.08	4.28	127486000
		2	4.33	4.23	4.43	175848000
		3	5.23	5.13	5.33	679310000
		4	5.29	5.19	5.39	356993000
		5	6.11	6.01	6.21	125625000

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Continuing Calib Date: 02/05/2015 **Initial Calibration Date(s):** 01/07/2015 01/07/2015

Continuing Calib Time: 13:14 **Initial Calibration Time(s):** 17:22

GC Column: ZB-MR2 **ID:** 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
Decachlorobiphenyl	8.72	8.72	8.62	8.82	0.00
Tetrachloro-m-xylene	3.78	3.78	3.68	3.88	0.00
gamma-BHC (Lindane)	4.43	4.43	4.33	4.53	0.00
Heptachlor	4.93	4.93	4.83	5.03	0.00
Heptachlor epoxide	5.60	5.60	5.50	5.70	0.00
Endrin	6.41	6.42	6.32	6.52	0.01
Methoxychlor	7.31	7.31	7.21	7.41	0.00

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Continuing Calib Date: 02/05/2015 **Initial Calibration Date(s):** 01/07/2015 01/07/2015

Continuing Calib Time: 13:14 **Initial Calibration Time(s):** 17:22

GC Column: ZB-MR1 **ID:** 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
Decachlorobiphenyl	8.01	8.01	7.91	8.11	0.00
Tetrachloro-m-xylene	3.33	3.33	3.23	3.43	0.00
gamma-BHC (Lindane)	4.05	4.05	3.95	4.15	0.00
Heptachlor	4.33	4.33	4.23	4.43	0.00
Heptachlor epoxide	5.01	5.01	4.91	5.11	0.00
Endrin	5.83	5.83	5.73	5.93	0.00
Methoxychlor	6.74	6.74	6.64	6.84	0.00

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

GC Column: ZB-MR2 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 01/07/2015 01/07/2015

Client Sample No.: CCAL01 **Date Analyzed:** 02/05/2015

Lab Sample No.: PSTDCCC050 **Data File :** PD026109.D **Time Analyzed:** 13:14

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	8.718	8.619	8.819	53.500	50.000	7.0
Endrin	6.414	6.315	6.515	53.650	50.000	7.3
gamma-BHC (Lindane)	4.433	4.334	4.534	53.820	50.000	7.6
Heptachlor	4.927	4.828	5.028	54.490	50.000	9.0
Heptachlor epoxide	5.602	5.504	5.704	55.280	50.000	10.6
Methoxychlor	7.307	7.208	7.408	55.900	50.000	11.8
Tetrachloro-m-xylene	3.780	3.680	3.880	51.340	50.000	2.7

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

GC Column: ZB-MR1 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 01/07/2015 01/07/2015

Client Sample No.: CCAL01 **Date Analyzed:** 02/05/2015

Lab Sample No.: PSTDCCC050 **Data File :** PD026109.D **Time Analyzed:** 13:14

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	8.005	7.906	8.106	50.350	50.000	0.7
Endrin	5.833	5.734	5.934	51.150	50.000	2.3
gamma-BHC (Lindane)	4.047	3.947	4.147	50.110	50.000	0.2
Heptachlor	4.330	4.230	4.430	52.960	50.000	5.9
Heptachlor epoxide	5.007	4.908	5.108	52.090	50.000	4.2
Methoxychlor	6.744	6.644	6.844	51.560	50.000	3.1
Tetrachloro-m-xylene	3.333	3.233	3.433	50.240	50.000	0.5

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Continuing Calib Date: 02/05/2015 **Initial Calibration Date(s):** 01/07/2015 01/07/2015

Continuing Calib Time: 16:58 **Initial Calibration Time(s):** 17:22

GC Column: ZB-MR2 **ID:** 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
Decachlorobiphenyl	8.72	8.72	8.62	8.82	0.00
Tetrachloro-m-xylene	3.78	3.78	3.68	3.88	0.00
gamma-BHC (Lindane)	4.43	4.43	4.33	4.53	0.00
Heptachlor	4.93	4.93	4.83	5.03	0.00
Heptachlor epoxide	5.60	5.60	5.50	5.70	0.00
Endrin	6.42	6.42	6.32	6.52	0.00
Methoxychlor	7.31	7.31	7.21	7.41	0.00

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Continuing Calib Date: 02/05/2015 **Initial Calibration Date(s):** 01/07/2015 01/07/2015

Continuing Calib Time: 16:58 **Initial Calibration Time(s):** 17:22

GC Column: ZB-MR1 **ID:** 0.32 **(mm)**

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
Decachlorobiphenyl	8.01	8.01	7.91	8.11	0.00
Tetrachloro-m-xylene	3.33	3.33	3.23	3.43	0.00
gamma-BHC (Lindane)	4.05	4.05	3.95	4.15	0.00
Heptachlor	4.33	4.33	4.23	4.43	0.00
Heptachlor epoxide	5.01	5.01	4.91	5.11	0.00
Endrin	5.84	5.83	5.73	5.93	-0.01
Methoxychlor	6.75	6.74	6.64	6.84	-0.01

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

GC Column: ZB-MR2 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 01/07/2015 01/07/2015

Client Sample No.: CCAL02 **Date Analyzed:** 02/05/2015

Lab Sample No.: PSTDCCC050 **Data File :** PD026120.D **Time Analyzed:** 16:58

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	8.720	8.619	8.819	51.780	50.000	3.6
Endrin	6.416	6.315	6.515	51.440	50.000	2.9
gamma-BHC (Lindane)	4.434	4.334	4.534	50.900	50.000	1.8
Heptachlor	4.928	4.828	5.028	51.790	50.000	3.6
Heptachlor epoxide	5.604	5.504	5.704	52.430	50.000	4.9
Methoxychlor	7.308	7.208	7.408	54.140	50.000	8.3
Tetrachloro-m-xylene	3.781	3.680	3.880	48.770	50.000	-2.5

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

GC Column: ZB-MR1 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 01/07/2015 01/07/2015

Client Sample No.: CCAL02 **Date Analyzed:** 02/05/2015

Lab Sample No.: PSTDCCC050 **Data File :** PD026120.D **Time Analyzed:** 16:58

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	8.008	7.906	8.106	49.010	50.000	-2.0
Endrin	5.836	5.734	5.934	50.560	50.000	1.1
gamma-BHC (Lindane)	4.048	3.947	4.147	48.600	50.000	-2.8
Heptachlor	4.332	4.230	4.430	51.410	50.000	2.8
Heptachlor epoxide	5.010	4.908	5.108	50.370	50.000	0.7
Methoxychlor	6.746	6.644	6.844	51.050	50.000	2.1
Tetrachloro-m-xylene	3.334	3.233	3.433	48.520	50.000	-3.0

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Continuing Calib Date: 02/05/2015 **Initial Calibration Date(s):** 01/07/2015 01/07/2015

Continuing Calib Time: 18:21 **Initial Calibration Time(s):** 17:22

GC Column: ZB-MR2 **ID:** 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
Decachlorobiphenyl	8.72	8.72	8.62	8.82	0.00
Tetrachloro-m-xylene	3.78	3.78	3.68	3.88	0.00
gamma-BHC (Lindane)	4.43	4.43	4.33	4.53	0.00
Heptachlor	4.93	4.93	4.83	5.03	0.00
Heptachlor epoxide	5.60	5.60	5.50	5.70	0.00
Endrin	6.42	6.42	6.32	6.52	0.00
Methoxychlor	7.31	7.31	7.21	7.41	0.00

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Continuing Calib Date: 02/05/2015 **Initial Calibration Date(s):** 01/07/2015 01/07/2015

Continuing Calib Time: 18:21 **Initial Calibration Time(s):** 17:22

GC Column: ZB-MR1 **ID:** 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
Decachlorobiphenyl	8.01	8.01	7.91	8.11	0.00
Tetrachloro-m-xylene	3.34	3.33	3.23	3.43	-0.01
gamma-BHC (Lindane)	4.05	4.05	3.95	4.15	0.00
Heptachlor	4.33	4.33	4.23	4.43	0.00
Heptachlor epoxide	5.01	5.01	4.91	5.11	0.00
Endrin	5.84	5.83	5.73	5.93	-0.01
Methoxychlor	6.75	6.74	6.64	6.84	0.00

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

GC Column: ZB-MR2 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 01/07/2015 01/07/2015

Client Sample No.: CCAL03 **Date Analyzed:** 02/05/2015

Lab Sample No.: PSTDCCC050 **Data File :** PD026126.D **Time Analyzed:** 18:21

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	8.718	8.619	8.819	53.900	50.000	7.8
Endrin	6.416	6.315	6.515	53.950	50.000	7.9
gamma-BHC (Lindane)	4.434	4.334	4.534	53.410	50.000	6.8
Heptachlor	4.928	4.828	5.028	54.290	50.000	8.6
Heptachlor epoxide	5.603	5.504	5.704	54.740	50.000	9.5
Methoxychlor	7.308	7.208	7.408	56.480	50.000	13.0
Tetrachloro-m-xylene	3.781	3.680	3.880	50.980	50.000	2.0

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

GC Column: ZB-MR1 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 01/07/2015 01/07/2015

Client Sample No.: CCAL03 **Date Analyzed:** 02/05/2015

Lab Sample No.: PSTDCCC050 **Data File :** PD026126.D **Time Analyzed:** 18:21

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	8.007	7.906	8.106	50.390	50.000	0.8
Endrin	5.836	5.734	5.934	52.440	50.000	4.9
gamma-BHC (Lindane)	4.049	3.947	4.147	50.580	50.000	1.2
Heptachlor	4.332	4.230	4.430	53.830	50.000	7.7
Heptachlor epoxide	5.010	4.908	5.108	52.270	50.000	4.5
Methoxychlor	6.745	6.644	6.844	53.510	50.000	7.0
Tetrachloro-m-xylene	3.335	3.233	3.433	50.740	50.000	1.5

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PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/07/2015 01/07/2015

Client Sample No. (PEM): PEM - PD025702.D Date Analyzed: 01/07/2015

Lab Sample No.(PEM): PEM Time Analyzed: 16:27

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	8.720	8.619	8.819	20.270	20.000	1.4
Tetrachloro-m-xylene	3.781	3.680	3.880	19.730	20.000	-1.4
alpha-BHC	4.158	4.058	4.258	9.120	10.000	-8.8
beta-BHC	4.609	4.508	4.708	10.020	10.000	0.2
gamma-BHC (Lindane)	4.434	4.334	4.534	9.570	10.000	-4.3
Endrin	6.416	6.315	6.515	49.530	50.000	-0.9
4,4'-DDT	6.848	6.747	6.947	110.340	100.000	10.3
Methoxychlor	7.308	7.208	7.408	252.920	250.000	1.2

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 01/07/2015 01/07/2015

Client Sample No. (PEM): PEM - PD025702.D Date Analyzed: 01/07/2015

Lab Sample No.(PEM): PEM Time Analyzed: 16:27

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	8.006	7.906	8.106	19.750	20.000	-1.3
Tetrachloro-m-xylene	3.333	3.233	3.433	19.850	20.000	-0.8
alpha-BHC	3.769	3.669	3.869	9.580	10.000	-4.2
beta-BHC	4.296	4.196	4.396	10.170	10.000	1.7
gamma-BHC (Lindane)	4.047	3.947	4.147	10.060	10.000	0.6
Endrin	5.834	5.734	5.934	50.070	50.000	0.1
4,4'-DDT	6.196	6.096	6.296	109.190	100.000	9.2
Methoxychlor	6.744	6.644	6.844	236.690	250.000	-5.3

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PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/07/2015 01/07/2015

Client Sample No. (PEM): PEM - PD026108.D Date Analyzed: 02/05/2015

Lab Sample No.(PEM): PEM Time Analyzed: 13:00

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	8.718	8.619	8.819	23.530	20.000	17.7
Tetrachloro-m-xylene	3.780	3.680	3.880	21.040	20.000	5.2
alpha-BHC	4.157	4.058	4.258	9.760	10.000	-2.4
beta-BHC	4.607	4.508	4.708	10.620	10.000	6.2
gamma-BHC (Lindane)	4.432	4.334	4.534	10.360	10.000	3.6
Endrin	6.414	6.315	6.515	55.160	50.000	10.3
4,4'-DDT	6.846	6.747	6.947	126.070	100.000	26.1
Methoxychlor	7.307	7.208	7.408	302.950	250.000	21.2

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 01/07/2015 01/07/2015

Client Sample No. (PEM): PEM - PD026108.D Date Analyzed: 02/05/2015

Lab Sample No.(PEM): PEM Time Analyzed: 13:00

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	8.005	7.906	8.106	21.940	20.000	9.7
Tetrachloro-m-xylene	3.332	3.233	3.433	20.650	20.000	3.3
alpha-BHC	3.768	3.669	3.869	10.060	10.000	0.6
beta-BHC	4.295	4.196	4.396	10.670	10.000	6.7
gamma-BHC (Lindane)	4.046	3.947	4.147	10.450	10.000	4.5
Endrin	5.834	5.734	5.934	52.840	50.000	5.7
4,4'-DDT	6.196	6.096	6.296	115.530	100.000	15.5
Methoxychlor	6.743	6.644	6.844	260.280	250.000	4.1

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Analytical Sequence

Client:	GZA GeoEnvironmental, Inc.	SDG No.:	G1217
Project:	410162268.20	Instrument ID:	ECD_D
GC Column:	ZB-MR2 ID: 0.32 (mm)	Inst. Calib. Date(s):	01/07/2015 01/07/2015

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCB RT #	TCX RT #
I.BLK	I.BLK	01/07/2015	16:13	PD025701.D	8.72	3.78
PEM	PEM	01/07/2015	16:27	PD025702.D	8.72	3.78
RESCHK	RESCHK	01/07/2015	16:41	PD025703.D	8.72	3.78
PSTDICC100	PSTDICC100	01/07/2015	16:55	PD025704.D	8.72	3.78
PSTDICC075	PSTDICC075	01/07/2015	17:08	PD025705.D	8.72	3.78
PSTDICC050	PSTDICC050	01/07/2015	17:22	PD025706.D	8.72	3.78
PSTDICC025	PSTDICC025	01/07/2015	17:36	PD025707.D	8.72	3.78
PSTDICC005	PSTDICC005	01/07/2015	17:49	PD025708.D	8.72	3.78
PTOXICC500	PTOXICC500	01/07/2015	18:17	PD025710.D	8.72	3.78
PCHLORICC500	PCHLORICC500	01/07/2015	18:31	PD025711.D	8.72	3.78
I.BLK	I.BLK	02/05/2015	12:47	PD026107.D	8.72	3.78
PEM	PEM	02/05/2015	13:00	PD026108.D	8.72	3.78
PSTDCCC050	PSTDCCC050	02/05/2015	13:14	PD026109.D	8.72	3.78
PB81604BL	PB81604BL	02/05/2015	15:48	PD026115.D	8.72	3.78
PB81604BS	PB81604BS	02/05/2015	16:02	PD026116.D	8.72	3.78
PB81604TB	PB81604TB	02/05/2015	16:16	PD026117.D	8.72	3.78
COMP-CC-2-CC-3-CC-4-CC-5-CC-6	G1217-01	02/05/2015	16:30	PD026118.D	8.72	3.78
I.BLK	I.BLK	02/05/2015	16:44	PD026119.D	8.72	3.78
PSTDCCC050	PSTDCCC050	02/05/2015	16:58	PD026120.D	8.72	3.78
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	G1217-01MS	02/05/2015	17:39	PD026123.D	8.72	3.78
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSI	G1217-01MSD	02/05/2015	17:53	PD026124.D	8.72	3.78
I.BLK	I.BLK	02/05/2015	18:07	PD026125.D	8.72	3.78
PSTDCCC050	PSTDCCC050	02/05/2015	18:21	PD026126.D	8.72	3.78

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Analytical Sequence

Client: GZA GeoEnvironmental, Inc. SDG No.: G1217

Project: 410162268.20 Instrument ID: ECD_D

GC Column: ZB-MR1 ID: 0.32 (mm) Inst. Calib. Date(s): 01/07/2015 01/07/2015

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCB RT #	TCX RT #
I.BLK	I.BLK	01/07/2015	16:13	PD025701.D	8.72	3.78
PEM	PEM	01/07/2015	16:27	PD025702.D	8.72	3.78
RESCHK	RESCHK	01/07/2015	16:41	PD025703.D	8.72	3.78
PSTDICC100	PSTDICC100	01/07/2015	16:55	PD025704.D	8.72	3.78
PSTDICC075	PSTDICC075	01/07/2015	17:08	PD025705.D	8.72	3.78
PSTDICC050	PSTDICC050	01/07/2015	17:22	PD025706.D	8.72	3.78
PSTDICC025	PSTDICC025	01/07/2015	17:36	PD025707.D	8.72	3.78
PSTDICC005	PSTDICC005	01/07/2015	17:49	PD025708.D	8.72	3.78
PTOXICC500	PTOXICC500	01/07/2015	18:17	PD025710.D	8.72	3.78
PCHLORICC500	PCHLORICC500	01/07/2015	18:31	PD025711.D	8.72	3.78
I.BLK	I.BLK	02/05/2015	12:47	PD026107.D	8.72	3.78
PEM	PEM	02/05/2015	13:00	PD026108.D	8.72	3.78
PSTDCCC050	PSTDCCC050	02/05/2015	13:14	PD026109.D	8.72	3.78
PB81604BL	PB81604BL	02/05/2015	15:48	PD026115.D	8.72	3.78
PB81604BS	PB81604BS	02/05/2015	16:02	PD026116.D	8.72	3.78
PB81604TB	PB81604TB	02/05/2015	16:16	PD026117.D	8.72	3.78
COMP-CC-2-CC-3-CC-4-CC-5-CC-6	G1217-01	02/05/2015	16:30	PD026118.D	8.72	3.78
I.BLK	I.BLK	02/05/2015	16:44	PD026119.D	8.72	3.78
PSTDCCC050	PSTDCCC050	02/05/2015	16:58	PD026120.D	8.72	3.78
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	G1217-01MS	02/05/2015	17:39	PD026123.D	8.72	3.78
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSI	G1217-01MSD	02/05/2015	17:53	PD026124.D	8.72	3.78
I.BLK	I.BLK	02/05/2015	18:07	PD026125.D	8.72	3.78
PSTDCCC050	PSTDCCC050	02/05/2015	18:21	PD026126.D	8.72	3.78

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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

COMP-CC-2-CC-3-CC-4-CC-5-C

Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

Lab Sample ID: G1217-01MS Date(s) Analyzed: 02/05/2015 02/05/2015

Instrument ID (1): ECD_D Instrument ID (2): ECD_D

GC Column: (1): ZB-MR2 ID: 0.32 (mm) GC Column:(2): ZB-MR1 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%RPD
Methoxychlor	1	7.31	7.26	7.36	6.5	8
	2	6.75	6.70	6.80	6	
gamma-BHC (Lindane)	1	4.43	4.38	4.48	6.3	13.6
	2	4.05	4.00	4.10	5.5	
Heptachlor	1	4.93	4.88	4.98	6.1	0
	2	4.33	4.28	4.38	6.1	
Heptachlor epoxide	1	5.60	5.55	5.65	6.3	8.3
	2	5.01	4.96	5.06	5.8	
Endrin	1	6.42	6.37	6.47	6.4	1.6
	2	5.84	5.79	5.89	6.3	

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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

COMP-CC-2-CC-3-CC-4-CC-5-C

Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

Lab Sample ID: G1217-01MSD Date(s) Analyzed: 02/05/2015 02/05/2015

Instrument ID (1): ECD_D Instrument ID (2): ECD_D

GC Column: (1): ZB-MR2 ID: 0.32 (mm) GC Column:(2): ZB-MR1 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%RPD
Methoxychlor	1	7.31	7.26	7.36	6.4	6.5
	2	6.75	6.70	6.80	6	
gamma-BHC (Lindane)	1	4.43	4.38	4.48	6	5.1
	2	4.05	4.00	4.10	5.7	
Heptachlor	1	4.93	4.88	4.98	6.1	0
	2	4.33	4.28	4.38	6.1	
Heptachlor epoxide	1	5.60	5.55	5.65	6.2	6.7
	2	5.01	4.96	5.06	5.8	
Endrin	1	6.42	6.37	6.47	6.3	1.6
	2	5.84	5.79	5.89	6.2	

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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB81604BS

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Lab Sample ID: PB81604BS **Date(s) Analyzed:** 02/05/2015 02/05/2015

Instrument ID (1): ECD_D **Instrument ID (2):** ECD_D

GC Column: (1): ZB-MR2 **ID:** 0.32 (mm) **GC Column:(2):** ZB-MR1 **ID:** 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%RPD
Methoxychlor	1	7.31	7.26	7.36	0.547	6.8
	2	6.75	6.70	6.80	0.511	
gamma-BHC (Lindane)	1	4.43	4.38	4.48	0.517	5.8
	2	4.05	4.00	4.10	0.488	
Heptachlor	1	4.93	4.88	4.98	0.53	1.7
	2	4.33	4.28	4.38	0.521	
Heptachlor epoxide	1	5.60	5.55	5.65	0.536	4.8
	2	5.01	4.96	5.06	0.511	
Endrin	1	6.42	6.37	6.47	0.521	1.9
	2	5.84	5.79	5.89	0.511	

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LAB CHRONICLE

OrderID:	G1217	**OrderDate:**	2/4/2015 9:09:07 AM
Client:	GZA GeoEnvironmental, Inc.	**Project:**	410162268.20
Contact:	Clifford Bell	**Location:**	H11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
G1217-01	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6**	**TCLP**			**01/22/15**			**01/22/15**
			TCLP Herbicide	8151A		02/05/15	02/05/15	
			TCLP Pesticide	8081B		02/05/15	02/05/15	

CHEMTECH

Hit Summary Sheet
SW-846

SDG No.: **Order ID:**

Client: **Project ID:**

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :								

Total Concentration:

SAMPLE DATA

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6	SDG No.:	G1217
Lab Sample ID:	G1217-01	Matrix:	TCLP
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PE013054.D	1	02/05/15 08:00	02/05/15 20:00	PB81603

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
94-75-7	2,4-D	5	U	3.5	5	20	ug/L
93-72-1	2,4,5-TP (Silvex)	5	U	1.5	5	20	ug/L
SURROGATES							
19719-28-9	2,4-DCAA	305		43 - 172		61%	SPK: 500

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	
Project:	410162268.20	Date Received:	02/05/15
Client Sample ID:	PB81603TB	SDG No.:	G1217
Lab Sample ID:	PB81603TB	Matrix:	TCLP
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PE013053.D	1	02/05/15 08:00	02/05/15 19:29	PB81603

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
94-75-7	2,4-D	5	U	3.5	5	20	ug/L
93-72-1	2,4,5-TP (Silvex)	5	U	1.5	5	20	ug/L
SURROGATES							
19719-28-9	2,4-DCAA	278		43 - 172		56%	SPK: 500

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

QC SUMMARY

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Surrogate Summary

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: 8151A

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits Low	Limits High
I.BLK-PE012943.D	PIBLK-PE012943.D	2,4-DCAA	1	500	471.99	94		43	172
		2,4-DCAA	2	500	463.99	93		43	172
I.BLK-PE013048.D	PIBLK-PE013048.D	2,4-DCAA	1	500	385.09	77		43	172
		2,4-DCAA	2	500	416.33	83		43	172
PB81603BL	PB81603BL	2,4-DCAA	1	500	278.68	56		43	172
		2,4-DCAA	2	500	330.24	66		43	172
PB81603BS	PB81603BS	2,4-DCAA	1	500	465.82	93		43	172
		2,4-DCAA	2	500	450.36	90		43	172
PB81603TB	PB81603TB	2,4-DCAA	1	500	278.11	56		43	172
		2,4-DCAA	2	500	351.06	70		43	172
G1217-01	COMP-CC-2-CC-3-CC-4-CC-5-CC-	2,4-DCAA	1	500	305.27	61		43	172
		2,4-DCAA	2	500	503.56	101		43	172
G1217-01MS	COMP-CC-2-CC-3-CC-4-CC-5-CC-	2,4-DCAA	1	500	292.81	59		43	172
		2,4-DCAA	2	500	456.66	91		43	172
G1217-01MSD	COMP-CC-2-CC-3-CC-4-CC-5-CC-	2,4-DCAA	1	500	271.62	54		43	172
		2,4-DCAA	2	500	425.74	85		43	172
I.BLK-PE013057.D	PIBLK-PE013057.D	2,4-DCAA	1	500	423.12	85		43	172
		2,4-DCAA	2	500	446.52	89		43	172

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: 8151A **DataFile :** PE013055.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Client Sample ID:	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS**											
G1217-01MS	2,4-D	50	0	52.6	ug/L	105				83	130	
	2,4,5-TP(Silvex)	50	0	33.4	ug/L	67	*			78	127	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: 8151A **DataFile :** PE013056.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Client Sample ID:	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD**											
G1217-01MSD	2,4-D	50	0	37.7	ug/L	75	*	33	*	83	130	20
	2,4,5-TP(Silvex)	50	0	30.5	ug/L	61	*	9		78	127	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: G1217

Client: GZA GeoEnvironmental, Inc.

Analytical Method: 8151A **Datafile :** PE013052.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB81603BS	2,4-D	5	4.6	ug/L	92				83	130	
	2,4,5-TP(Silvex)	5	4.3	ug/L	86				78	127	

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4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB81603BL

Lab Name: CHEMTECH Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

Lab Sample ID: PB81603BL Lab File ID: PE013051.D

Matrix: (soil/water) water Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N Date Extracted: 02/05/2015

Date Analyzed (1): 02/05/2015 Date Analyzed (2): 02/05/2015

Time Analyzed (1): 18:37 Time Analyzed (2): 18:37

Instrument ID (1): ECD_E Instrument ID (2): ECD_E

GC Column (1): ZB-35-HT ID: 0.25 (mm) GC Column (2): ZB-XLB-HT ID: 0.25 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
PB81603BS	PB81603BS	PE013052.D	02/05/2015	02/05/2015
PB81603TB	PB81603TB	PE013053.D	02/05/2015	02/05/2015
COMP-CC-2-CC-3-CC-4-CC-5-CC-6	G1217-01	PE013054.D	02/05/2015	02/05/2015
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	G1217-01MS	PE013055.D	02/05/2015	02/05/2015
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD	G1217-01MSD	PE013056.D	02/05/2015	02/05/2015

COMMENTS:

Form IV Pest

QC SAMPLE DATA

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	
Project:	410162268.20	Date Received:	
Client Sample ID:	PB81603BL	SDG No.:	G1217
Lab Sample ID:	PB81603BL	Matrix:	TCLP
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PE013051.D	1	02/05/15 08:00	02/05/15 18:37	PB81603

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
94-75-7	2,4-D	0.5	U	0.348	0.5	2	ug/L
93-72-1	2,4,5-TP (Silvex)	0.5	U	0.151	0.5	2	ug/L
SURROGATES							
19719-28-9	2,4-DCAA	278		43 - 172		56%	SPK: 500

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	PIBLK-PE012943.D	SDG No.:	G1217
Lab Sample ID:	I.BLK-PE012943.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PE012943.D	1		01/22/15	PE012215

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
94-75-7	2,4-D	0.5	U	0.348	0.5	2	ug/L
93-72-1	2,4,5-TP (Silvex)	0.5	U	0.151	0.5	2	ug/L
SURROGATES							
19719-28-9	2,4-DCAA	471		43 - 172		94%	SPK: 500

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	02/05/15
Project:	410162268.20	Date Received:	02/05/15
Client Sample ID:	PIBLK-PE013048.D	SDG No.:	G1217
Lab Sample ID:	I.BLK-PE013048.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PE013048.D	1		02/05/15	PE020515

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
94-75-7	2,4-D	0.5	U	0.348	0.5	2	ug/L
93-72-1	2,4,5-TP (Silvex)	0.5	U	0.151	0.5	2	ug/L
SURROGATES							
19719-28-9	2,4-DCAA	385		43 - 172		77%	SPK: 500

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	02/05/15
Project:	410162268.20	Date Received:	02/05/15
Client Sample ID:	PIBLK-PE013057.D	SDG No.:	G1217
Lab Sample ID:	I.BLK-PE013057.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PE013057.D	1		02/05/15	PE020515

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
94-75-7	2,4-D	0.5	U	0.348	0.5	2	ug/L
93-72-1	2,4,5-TP (Silvex)	0.5	U	0.151	0.5	2	ug/L
SURROGATES							
19719-28-9	2,4-DCAA	423		43 - 172		85%	SPK: 500

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	
Project:	410162268.20	Date Received:	
Client Sample ID:	PB81603BS	SDG No.:	G1217
Lab Sample ID:	PB81603BS	Matrix:	TCLP
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PE013052.D	1	02/05/15 08:00	02/05/15 19:00	PB81603

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
94-75-7	2,4-D	4.6		0.348	0.5	2	ug/L
93-72-1	2,4,5-TP (Silvex)	4.3		0.151	0.5	2	ug/L
SURROGATES							
19719-28-9	2,4-DCAA	465		43 - 172		93%	SPK: 500

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	SDG No.:	G1217
Lab Sample ID:	G1217-01MS	Matrix:	TCLP
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PE013055.D	1	02/05/15 08:00	02/05/15 20:29	PB81603

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
94-75-7	2,4-D	52.6		3.5	5	20	ug/L
93-72-1	2,4,5-TP (Silvex)	33.4		1.5	5	20	ug/L
SURROGATES							
19719-28-9	2,4-DCAA	292		43 - 172		59%	SPK: 500

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD	SDG No.:	G1217
Lab Sample ID:	G1217-01MSD	Matrix:	TCLP
Analytical Method:	SW8151A	% Moisture:	100 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PE013056.D	1	02/05/15 08:00	02/05/15 20:53	PB81603

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
94-75-7	2,4-D	37.7		3.5	5	20	ug/L
93-72-1	2,4,5-TP (Silvex)	30.5		1.5	5	20	ug/L
SURROGATES							
19719-28-9	2,4-DCAA	271		43 - 172		54%	SPK: 500

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

CALIBRATION SUMMARY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

RETENTION TIMES OF INITIAL CALIBRATION

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Instrument ID: ECD_E **Calibration Date(s):** 01/22/2015 01/22/2015

Calibration Times: 14:59 16:51

GC Column: ZB-35-HT ID: 0.25 (mm)

LAB FILE ID: RT 200 = PE012944.D RT 500 = PE012945.D

RT 750 = PE012946.D RT 1000 = PE012947.D RT 1500 = PE012948.D

COMPOUND	RT 200	RT 500	RT 750	RT 1000	RT 1500	MEAN RT	RT WINDOW FROM	RT WINDOW TO
2,4,5-TP(Silvex)	12.30	12.30	12.30	12.29	12.29	12.30	12.20	12.40
2,4-D	11.48	11.47	11.46	11.46	11.46	11.47	11.37	11.57
2,4-DCAA	9.80	9.80	9.80	9.79	9.79	9.80	9.70	9.90

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RETENTION TIMES OF INITIAL CALIBRATION

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Instrument ID: ECD_E **Calibration Date(s):** 01/22/2015 01/22/2015

Calibration Times: 14:59 16:51

GC Column: ZB-XLB-HT ID: 0.25 (mm)

LAB FILE ID: RT 200 = PE012944.D RT 500 = PE012945.D

RT 750 = PE012946.D RT 1000 = PE012947.D RT 1500 = PE012948.D

COMPOUND	RT 200	RT 500	RT 750	RT 1000	RT 1500	MEAN RT	RT WINDOW FROM	RT WINDOW TO
2,4,5-TP(Silvex)	12.18	12.18	12.17	12.17	12.17	12.17	12.07	12.27
2,4-D	11.10	11.09	11.08	11.08	11.08	11.09	10.99	11.19
2,4-DCAA	9.58	9.57	9.57	9.57	9.56	9.57	9.47	9.67

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CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Instrument ID: ECD_E

Calibration Date(s): 01/22/2015 01/22/2015

Calibration Times: 14:59 16:51

GC Column: ZB-35-HT **ID:** 0.25 (mm)

LAB FILE ID: CF 200 = PE012944.D CF 500 = PE012945.D

CF 750 = PE012946.D CF 1000 = PE012947.D CF 1500 = PE012948.D

COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	3016	2911	2880	2692	2518	2803	7
2,4-D	784	748	726	669	622	710	9
2,4-DCAA	575	545	528	489	459	519	9

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CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Instrument ID: ECD_E

Calibration Date(s): 01/22/2015 01/22/2015

Calibration Times: 14:59 16:51

GC Column: ZB-XLB-HT **ID:** 0.25 (mm)

LAB FILE ID: CF 200 = PE012944.D CF 500 = PE012945.D

CF 750 = PE012946.D CF 1000 = PE012947.D CF 1500 = PE012948.D

COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	2704	2610	2471	2310	2182	2455	9
2,4-D	508	497	473	429	390	459	11
2,4-DCAA	280	272	271	257	243	265	6

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Continuing Calib Date: 02/05/2015 **Initial Calibration Date(s):** 01/22/2015 01/22/2015

Continuing Calib Time: 17:19 **Initial Calibration Time(s):** 15:55

GC Column: ZB-35-HT **ID:** 0.25 **(mm)**

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	9.80	9.80	9.70	9.90	0.00
2,4-D	11.47	11.46	11.36	11.56	-0.01
2,4,5-TP(Silvex)	12.30	12.30	12.20	12.40	0.00

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Continuing Calib Date: 02/05/2015 **Initial Calibration Date(s):** 01/22/2015 01/22/2015

Continuing Calib Time: 17:19 **Initial Calibration Time(s):** 15:55

GC Column: ZB-XLB-HT **ID:** 0.25 **(mm)**

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	9.56	9.57	9.47	9.67	0.01
2,4-D	11.08	11.08	10.98	11.18	0.00
2,4,5-TP(Silvex)	12.17	12.17	12.07	12.27	0.00

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

GC Column: ZB-35-HT **ID:** 0.25 (mm) **Initi. Calib. Date(s):** 01/22/2015 01/22/2015

Client Sample No.: CCAL01 **Date Analyzed:** 02/05/2015

Lab Sample No.: HSTDCCC750 **Data File :** PE013049.D **Time Analyzed:** 17:19

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	12.295	12.196	12.396	624.020	712.500	-12.4
2,4-D	11.467	11.364	11.564	611.290	705.000	-13.3
2,4-DCAA	9.797	9.695	9.895	684.880	750.000	-8.7

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

GC Column: ZB-XLB-HT **ID:** 0.25 (mm) **Initi. Calib. Date(s):** 01/22/2015 01/22/2015

Client Sample No.: CCAL01 **Date Analyzed:** 02/05/2015

Lab Sample No.: HSTDCCC750 **Data File :** PE013049.D **Time Analyzed:** 17:19

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	12.167	12.073	12.273	631.380	712.500	-11.4
2,4-D	11.077	10.984	11.184	613.650	705.000	-13.0
2,4-DCAA	9.561	9.467	9.667	608.820	750.000	-18.8

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Continuing Calib Date: 02/05/2015 **Initial Calibration Date(s):** 01/22/2015 01/22/2015

Continuing Calib Time: 21:49 **Initial Calibration Time(s):** 15:55

GC Column: ZB-35-HT **ID:** 0.25 **(mm)**

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	9.79	9.80	9.70	9.90	0.02
2,4-D	11.46	11.46	11.36	11.56	0.00
2,4,5-TP(Silvex)	12.29	12.30	12.20	12.40	0.02

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

Continuing Calib Date: 02/05/2015 **Initial Calibration Date(s):** 01/22/2015 01/22/2015

Continuing Calib Time: 21:49 **Initial Calibration Time(s):** 15:55

GC Column: ZB-XLB-HT **ID:** 0.25 **(mm)**

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	9.56	9.57	9.47	9.67	0.01
2,4-D	11.07	11.08	10.98	11.18	0.01
2,4,5-TP(Silvex)	12.16	12.17	12.07	12.27	0.01

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

GC Column: ZB-35-HT **ID:** 0.25 (mm) **Initi. Calib. Date(s):** 01/22/2015 01/22/2015

Client Sample No.: CCAL02 **Date Analyzed:** 02/05/2015

Lab Sample No.: HSTDCCC750 **Data File :** PE013058.D **Time Analyzed:** 21:49

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	12.285	12.196	12.396	601.700	712.500	-15.6
2,4-D	11.456	11.364	11.564	598.940	705.000	-15.0
2,4-DCAA	9.785	9.695	9.895	660.590	750.000	-11.9

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CALIBRATION VERIFICATION SUMMARY

Contract: GZAG04

Lab Code: CHEM **Case No.:** G1217 **SAS No.:** G1217 **SDG NO.:** G1217

GC Column: ZB-XLB-HT **ID:** 0.25 (mm) **Initi. Calib. Date(s):** 01/22/2015 01/22/2015

Client Sample No.: CCAL02 **Date Analyzed:** 02/05/2015

Lab Sample No.: HSTDCCC750 **Data File :** PE013058.D **Time Analyzed:** 21:49

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	12.160	12.073	12.273	621.730	712.500	-12.7
2,4-D	11.071	10.984	11.184	619.980	705.000	-12.1
2,4-DCAA	9.555	9.467	9.667	661.800	750.000	-11.8

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Analytical Sequence

Client:	GZA GeoEnvironmental, Inc.	SDG No.:	G1217
Project:	410162268.20	Instrument ID:	ECD_E
GC Column:	ZB-35-HT ID: 0.25 (mm)	Inst. Calib. Date(s):	01/22/2015 01/22/2015

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
I.BLK	I.BLK	01/22/2015	14:31	PE012943.D	9.81	0.00
HSTDICC200	HSTDICC200	01/22/2015	14:59	PE012944.D	9.80	0.00
HSTDICC500	HSTDICC500	01/22/2015	15:27	PE012945.D	9.80	0.00
HSTDICC750	HSTDICC750	01/22/2015	15:55	PE012946.D	9.80	0.00
HSTDICC1000	HSTDICC1000	01/22/2015	16:23	PE012947.D	9.79	0.00
HSTDICC1500	HSTDICC1500	01/22/2015	16:51	PE012948.D	9.79	0.00
I.BLK	I.BLK	02/05/2015	15:31	PE013048.D	9.81	0.00
HSTDCCC750	HSTDCCC750	02/05/2015	17:19	PE013049.D	9.80	0.00
PB81603BL	PB81603BL	02/05/2015	18:37	PE013051.D	9.79	0.00
PB81603BS	PB81603BS	02/05/2015	19:00	PE013052.D	9.79	0.00
PB81603TB	PB81603TB	02/05/2015	19:29	PE013053.D	9.79	0.00
COMP-CC-2-CC-3-CC-4-CC-5-CC-6	G1217-01	02/05/2015	20:00	PE013054.D	9.78	0.00
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	G1217-01MS	02/05/2015	20:29	PE013055.D	9.78	0.00
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD	G1217-01MSD	02/05/2015	20:53	PE013056.D	9.78	0.00
I.BLK	I.BLK	02/05/2015	21:23	PE013057.D	9.80	0.00
HSTDCCC750	HSTDCCC750	02/05/2015	21:49	PE013058.D	9.79	0.00

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Analytical Sequence

Client:	GZA GeoEnvironmental, Inc.	SDG No.:	G1217
Project:	410162268.20	Instrument ID:	ECD_E
GC Column:	ZB-XLB-HT ID: 0.25 (mm)	Inst. Calib. Date(s):	01/22/2015 01/22/2015

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
I.BLK	I.BLK	01/22/2015	14:31	PE012943.D	9.81	0.00
HSTDICC200	HSTDICC200	01/22/2015	14:59	PE012944.D	9.80	0.00
HSTDICC500	HSTDICC500	01/22/2015	15:27	PE012945.D	9.80	0.00
HSTDICC750	HSTDICC750	01/22/2015	15:55	PE012946.D	9.80	0.00
HSTDICC1000	HSTDICC1000	01/22/2015	16:23	PE012947.D	9.79	0.00
HSTDICC1500	HSTDICC1500	01/22/2015	16:51	PE012948.D	9.79	0.00
I.BLK	I.BLK	02/05/2015	15:31	PE013048.D	9.81	0.00
HSTDCCC750	HSTDCCC750	02/05/2015	17:19	PE013049.D	9.80	0.00
PB81603BL	PB81603BL	02/05/2015	18:37	PE013051.D	9.79	0.00
PB81603BS	PB81603BS	02/05/2015	19:00	PE013052.D	9.79	0.00
PB81603TB	PB81603TB	02/05/2015	19:29	PE013053.D	9.79	0.00
COMP-CC-2-CC-3-CC-4-CC-5-CC-6	G1217-01	02/05/2015	20:00	PE013054.D	9.78	0.00
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	G1217-01MS	02/05/2015	20:29	PE013055.D	9.78	0.00
COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSI	G1217-01MSD	02/05/2015	20:53	PE013056.D	9.78	0.00
I.BLK	I.BLK	02/05/2015	21:23	PE013057.D	9.80	0.00
HSTDCCC750	HSTDCCC750	02/05/2015	21:49	PE013058.D	9.79	0.00

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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

COMP-CC-2-CC-3-CC-4-CC-5-C

Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

Lab Sample ID: G1217-01MS Date(s) Analyzed: 02/05/2015 02/05/2015

Instrument ID (1): ECD_E Instrument ID (2): ECD_E

GC Column: (1): ZB-35-HT ID: 0.25 (mm) GC Column:(2): ZB-XLB-HT ID: 0.25 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%RPD
2,4-D	1	11.45	11.40	11.50	52.6	23.1
	2	11.06	11.01	11.11	41.7	
2,4,5-TP(Silvex)	1	12.28	12.23	12.33	33.4	2.7
	2	12.16	12.11	12.21	32.5	

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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

COMP-CC-2-CC-3-CC-4-CC-5-C

Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

Lab Sample ID: G1217-01MSD Date(s) Analyzed: 02/05/2015 02/05/2015

Instrument ID (1): ECD_E Instrument ID (2): ECD_E

GC Column: (1): ZB-35-HT ID: 0.25 (mm) GC Column:(2): ZB-XLB-HT ID: 0.25 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%RPD
2,4-D	1	11.45	11.40	11.50	34.3	9.4
	2	11.06	11.01	11.11	37.7	
2,4,5-TP(Silvex)	1	12.28	12.23	12.33	30.5	4
	2	12.16	12.11	12.21	29.3	

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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB81603BS

Contract: GZAG04

Lab Code: CHEM Case No.: G1217 SAS No.: G1217 SDG NO.: G1217

Lab Sample ID: PB81603BS Date(s) Analyzed: 02/05/2015 02/05/2015

Instrument ID (1): ECD_E Instrument ID (2): ECD_E

GC Column: (1): ZB-35-HT ID: 0.25 (mm) GC Column:(2): ZB-XLB-HT ID: 0.25 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%RPD
2,4-D	1	11.46	11.41	11.51	4.6	14
	2	11.08	11.03	11.13	4	
2,4,5-TP(Silvex)	1	12.29	12.24	12.34	4.2	2.4
	2	12.17	12.12	12.22	4.3	

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LAB CHRONICLE

OrderID:	G1217	**OrderDate:**	2/4/2015 9:09:07 AM
Client:	GZA GeoEnvironmental, Inc.	**Project:**	410162268.20
Contact:	Clifford Bell	**Location:**	H11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
G1217-01	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6**	**TCLP**			**01/22/15**			**01/22/15**
			TCLP ICP Metals	6010B		02/05/15	02/05/15	
			TCLP Mercury	7470A		02/05/15	02/06/15	
G1217-02	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6**	**SOIL**			**01/22/15**			**01/22/15**
			Metals Group5	6010C		02/05/15	02/05/15	

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Hit Summary Sheet
SW-846

SDG No.:	G1217	**Order ID:**	G1217
Client:	GZA GeoEnvironmental, Inc.	**Project ID:**	410162268.20

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6**								
G1217-02	COMP-CC-2-CC-3-CC-4-CC-5-(	SOIL	Molybdenum	2.810	J	0.105	4.39	8.78	mg/Kg

SAMPLE DATA

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6	SDG No.:	G1217
Lab Sample ID:	G1217-02	Matrix:	SOIL
Level (low/med):	low	% Solid:	97.3

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
7439-98-7	Molybdenum	2.81	J	1	0.105	4.39	8.78	mg/Kg	02/05/15 08:00	02/05/15 14:39	SW6010

Color Before:	Gray	Clarity Before:		Texture:	Medium
Color After:	Yellow	Clarity After:		Artifacts:	No
Comments:	Metals Group5				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

METAL CALIBRATION DATA

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Molybdenum	2621.7	2500	104.9	95 - 105	P	02/05/2015	12:39	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Molybdenum	208.05	200	104	70 - 130	P	02/05/2015	13:04	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Molybdenum	5023	5000	100.5	90 - 110	P	02/05/2015	13:30	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLCCV01	Molybdenum	206.7	200	103.4	70 - 130	P	02/05/2015	13:35	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Molybdenum	4973.9	5000	99.5	90 - 110	P	02/05/2015	14:44	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLCCV02	Molybdenum	207.12	200	103.6	70 - 130	P	02/05/2015	14:49	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV03	Molybdenum	5007.2	5000	100.1	90 - 110	P	02/05/2015	15:57	LB74732
CCV04	Molybdenum	4995	5000	99.9	90 - 110	P	02/05/2015	16:58	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLCCV03	Molybdenum	207.23	200	103.6	70 - 130	P	02/05/2015	17:04	LB74732

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Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Molybdenum	205.63	200	102.8	40 - 160	P	02/05/2015	13:15	LB74732

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Molybdenum	200	+/-200	U	100	200	P	02/05/2015	13:09	LB74732

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Molybdenum	200	+/-200	U	100	200	P	02/05/2015	13:40	LB74732
CCB02	Molybdenum	200	+/-200	U	100	200	P	02/05/2015	14:54	LB74732
CCB03	Molybdenum	200	+/-200	U	100	200	P	02/05/2015	16:02	LB74732
CCB04	Molybdenum	200	+/-200	U	100	200	P	02/05/2015	17:09	LB74732

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Instrument: P4

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	LOD mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB81612BL		**SOLID**		**Batch Number:**		**PB81612**		**Prep Date:**	**02/05/2015**	
	Molybdenum	10.0	<10.0	U	5.0	10.0	P	02/05/2015	14:05	LB74732

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Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

ICS Source: EPA **Instrument ID:** P4

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Molybdenum	-0.78			0	0	02/05/2015	13:20	LB74732
ICSAB01	Molybdenum	-1.03			0	0	02/05/2015	13:25	LB74732

METAL QC DATA

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metals
- 5a -
MATRIX SPIKE SUMMARY

client: GZA GeoEnvironmental, Inc. **level:** low **sdg no.:** G1217

contract: GZAG04 **lab code:** CHEM **case no.:** G1217 **sas no.:** G1217

matrix: Solid **sample id:** G1212-01 **client id:** FK-BPM-01-A1A-A2A-A3A-A4AMS

Percent Solids for Sample: 86.9 **Spiked ID:** G1212-01MS **Percent Solids for Spike Sample:** 86.9

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Molybdenum	mg/Kg	76 - 109	21.5		0.407	J	22.7	93		P

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metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: GZA GeoEnvironmental, Inc. **level:** low **sdg no.:** G1217

contract: GZAG04 **lab code:** CHEM **case no.:** G1217 **sas no.:** G1217

matrix: Solid **sample id:** G1212-01 **client id:** FK-BPM-01-A1A-A2A-A3A-A4AMSD

Percent Solids for Sample: 86.9 **Spiked ID:** G1212-01MSD **Percent Solids for Spike Sample:** 86.9

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Molybdenum	mg/Kg	76 - 109	21.9		0.407	J	22.8	94		P

CHEMTECH

Metals
- 5b -

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Matrix: **Level:** LOW **Client ID:**

Sample ID: **Spiked ID:**

Analyte	Units	Acceptance Limit %R	C	Sample Result	C	Spike Added	% Recovery	Qual	M

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: GZA GeoEnvironmental, Inc. **Level:** LOW **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Matrix: Solid **Sample ID:** G1212-01 **Client ID:** FK-BPM-01-A1A-A2A-A3A-A4ADUP

Percent Solids for Sample: 86.9 **Duplicate ID** G1212-01DUP **Percent Solids for Spike Sample:** 86.9

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Molybdenum	mg/Kg	20	0.407	J	0.402	J	1		P

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

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Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: GZA GeoEnvironmental, Inc. **Level:** LOW **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Matrix: Solid **Sample ID:** G1212-01MS **Client ID:** FK-BPM-01-A1A-A2A-A3A-A4AMSD

Percent Solids for Sample: 86.9 **Duplicate ID** G1212-01MSD **Percent Solids for Spike Sample:** 86.9

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Molybdenum	mg/Kg	20	21.5		21.9		2		P

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

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Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB81612BS							
Molybdenum	mg/Kg	20.0	19.7		98.5	92 - 109	P

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Metals

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ICP SERIAL DILUTIONS

SAMPLE NO.

FK-BPM-01-A1A-A2A-A3A-A4AL

Lab Name: Chemtech Consulting Group **Contract:** GZAG04

Lab Code: CHEM **Lb No.:** lb74732 **Lab Sample ID :** G1212-01L **SDG No.:** G1217

Matrix (soil/water): Solid **Level (low/med):** LOW

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Molybdenum	0.407	J	48.6	U	100.0		P

METAL PREPARATION & INSTRUMENT DATA

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Metals

- 10 -

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Instrument ID: P4 **Preparation Method:**

Analyte	Wave- length (nm)	MDL	LOD	PQL	Date:
SOLIDS					
Method:	**6010C**				
Molybdenum	202.03	0.12	5.0	10.0	

Metals
- 11 -
ICP INTERELEMENT CORRECTION FACTORS

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Instrument ID: _____ **Date:** _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For:				

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Metals

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LINEAR RANGES

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Instrument ID: P4 **Date:** 12/06/2012

Analyte	Integration Time (sec)	LDR ug/L
Molybdenum	10	75000

METAL PREPARATION & ANALYICAL SUMMARY

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Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Method:**

Case No.: G1217 **SAS No.:** G1217

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB81612**						
G1212-01DUP	FK-BPM-01-A1A-A2A-A3A-A4ADUP	DUP	SOLID	02/05/2015	2.38	100.0	86.90
G1212-01MS	FK-BPM-01-A1A-A2A-A3A-A4AMS	MS	SOLID	02/05/2015	2.03	100.0	86.90
G1212-01MSD	FK-BPM-01-A1A-A2A-A3A-A4AMSD	MSD	SOLID	02/05/2015	2.02	100.0	86.90
G1217-02	COMP-CC-2-CC-3-CC-4-CC-5-CC-6	SAM	SOLID	02/05/2015	2.34	100.0	97.30
PB81612BL	PB81612BL	MB	SOLID	02/05/2015	2.00	100.0	100.00
PB81612BS	PB81612BS	LCS	SOLID	02/05/2015	2.00	100.0	100.00

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metals
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ANALYSIS RUN LOG

Client: GZA GeoEnvironmental, Inc. **Contract:** GZAG04

Lab code: CHEM **Case no.:** G1217 **Sas no.:** G1217 **Sdg no.:** G1217

Instrument id number: **Method:** **Run number:** LB74732

Start date: 02/05/2015 **End date:** 02/05/2015

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1151	Mo
S1	S1	1	1155	Mo
S2	S2	1	1201	,
S3	S3	1	1208	Mo
S4	S4	1	1214	Mo
S5	S5	1	1219	Mo
ICV01	ICV01	1	1239	Mo
LLICV01	LLICV01	1	1304	Mo
ICB01	ICB01	1	1309	Mo
CRI01	CRI01	1	1315	Mo
ICSA01	ICSA01	1	1320	Mo
ICSAB01	ICSAB01	1	1325	Mo
CCV01	CCV01	1	1330	Mo
LLCCV01	LLCCV01	1	1335	Mo
CCB01	CCB01	1	1340	Mo
PB81612BL	PB81612BL	1	1405	Mo
PB81612BS	PB81612BS	1	1410	Mo
G1212-01DUP	FK-BPM-01-A1A-A2A-A3A-A4	1	1420	Mo
G1212-01L	FK-BPM-01-A1A-A2A-A3A-A4	5	1424	Mo
G1212-01MS	FK-BPM-01-A1A-A2A-A3A-A4	1	1429	Mo
G1212-01MSD	FK-BPM-01-A1A-A2A-A3A-A4	1	1434	Mo
G1217-02	COMP-CC-2-CC-3-CC-4-CC-5-	1	1439	Mo
CCV02	CCV02	1	1444	Mo
LLCCV02	LLCCV02	1	1449	Mo
CCB02	CCB02	1	1454	Mo
CCV03	CCV03	1	1557	Mo
CCB03	CCB03	1	1602	Mo
CCV04	CCV04	1	1658	Mo
LLCCV03	LLCCV03	1	1704	Mo
CCB04	CCB04	1	1709	Mo

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LAB CHRONICLE

OrderID:	G1217	**OrderDate:**	2/4/2015 9:09:07 AM
Client:	GZA GeoEnvironmental, Inc.	**Project:**	410162268.20
Contact:	Clifford Bell	**Location:**	H11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
G1217-01	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6**	**TCLP**			**01/22/15**			**01/22/15**
			TCLP ICP Metals	6010B		02/05/15	02/05/15	
			TCLP Mercury	7470A		02/05/15	02/06/15	
G1217-02	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6**	**SOIL**			**01/22/15**			**01/22/15**
			Metals Group5	6010C		02/05/15	02/05/15	

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Hit Summary Sheet
SW-846

SDG No.: G1217 **Order ID:** G1217

Client: GZA GeoEnvironmental, Inc. **Project ID:** 410162268.20

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6**								
G1217-01	COMP-CC-2-CC-3-CC-4-CC-5-(	TCLP	Barium	158.000	J	40	125	500	ug/L
G1217-01	COMP-CC-2-CC-3-CC-4-CC-5-(	TCLP	Chromium	495.000		11	12.5	50	ug/L
G1217-01	COMP-CC-2-CC-3-CC-4-CC-5-(	TCLP	Lead	17.300	J	15	15.0	60	ug/L

SAMPLE DATA

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6	SDG No.:	G1217
Lab Sample ID:	G1217-01	Matrix:	TCLP
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7440-38-2	Arsenic	25	U	1	25	25.0	100	ug/L	02/05/15 08:00	02/05/15 16:24	SW6010
7440-39-3	Barium	158	J	1	40	125	500	ug/L	02/05/15 08:00	02/05/15 16:24	SW6010
7440-43-9	Cadmium	7.5	U	1	5	7.5	30	ug/L	02/05/15 08:00	02/05/15 16:24	SW6010
7440-47-3	Chromium	495		1	11	12.5	50	ug/L	02/05/15 08:00	02/05/15 16:24	SW6010
7439-92-1	Lead	17.3	J	1	15	15.0	60	ug/L	02/05/15 08:00	02/05/15 16:24	SW6010
7439-97-6	Mercury	1	U	1	1	1.0	2	ug/L	02/05/15 08:00	02/06/15 10:58	SW7470A
7782-49-2	Selenium	50	U	1	48	50.0	100	ug/L	02/05/15 08:00	02/05/15 16:24	SW6010
7440-22-4	Silver	12.5	U	1	12.5	12.5	50	ug/L	02/05/15 08:00	02/05/15 16:24	SW6010

Color Before:	Colorless	Clarity Before:		Texture:	Clear
Color After:	Colorless	Clarity After:		Artifacts:	Clear
Comments:	TCLP-FULL				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

METAL CALIBRATION DATA

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV24	Mercury	3.9633	4.0	99.1	90 - 110	CV	02/06/2015	09:59	LB74735

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV30	Mercury	4.8583	5.0	97.2	90 - 110	CV	02/06/2015	10:03	LB74735
CCV31	Mercury	4.8586	5.0	97.2	90 - 110	CV	02/06/2015	10:28	LB74735
CCV32	Mercury	4.8028	5.0	96.1	90 - 110	CV	02/06/2015	10:54	LB74735
CCV33	Mercury	4.9306	5.0	98.6	90 - 110	CV	02/06/2015	11:15	LB74735

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Arsenic	1009.7	999	101.1	95 - 105	P	02/05/2015	12:39	LB74732
	Barium	518.25	497	104.3	95 - 105	P	02/05/2015	12:39	LB74732
	Cadmium	506.05	496	102	95 - 105	P	02/05/2015	12:39	LB74732
	Chromium	486.17	490	99.2	95 - 105	P	02/05/2015	12:39	LB74732
	Lead	1007.8	1002	100.6	95 - 105	P	02/05/2015	12:39	LB74732
	Selenium	1004.4	1029	97.6	95 - 105	P	02/05/2015	12:39	LB74732
	Silver	477.57	501	95.3	95 - 105	P	02/05/2015	12:39	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Arsenic	21.21	20.0	106.1	70 - 130	P	02/05/2015	13:04	LB74732
	Barium	103.2	100	103.2	70 - 130	P	02/05/2015	13:04	LB74732
	Cadmium	6.07	6.0	101.2	70 - 130	P	02/05/2015	13:04	LB74732
	Chromium	10.46	10.0	104.6	70 - 130	P	02/05/2015	13:04	LB74732
	Lead	15.22	12.0	126.8	70 - 130	P	02/05/2015	13:04	LB74732
	Selenium	17.29	20.0	86.5	70 - 130	P	02/05/2015	13:04	LB74732
	Silver	9.71	10.0	97.1	70 - 130	P	02/05/2015	13:04	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Arsenic	4984.6	5000	99.7	90 - 110	P	02/05/2015	13:30	LB74732
	Barium	10078	10000	100.8	90 - 110	P	02/05/2015	13:30	LB74732
	Cadmium	2482.7	2500	99.3	90 - 110	P	02/05/2015	13:30	LB74732
	Chromium	985.97	1000	98.6	90 - 110	P	02/05/2015	13:30	LB74732
	Lead	4926.9	5000	98.5	90 - 110	P	02/05/2015	13:30	LB74732
	Selenium	4945.4	5000	98.9	90 - 110	P	02/05/2015	13:30	LB74732
	Silver	1225.9	1250	98.1	90 - 110	P	02/05/2015	13:30	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLCCV01	Arsenic	18.4	20.0	92	70 - 130	P	02/05/2015	13:35	LB74732
	Barium	103.28	100	103.3	70 - 130	P	02/05/2015	13:35	LB74732
	Cadmium	6	6.0	100	70 - 130	P	02/05/2015	13:35	LB74732
	Chromium	10.99	10.0	109.9	70 - 130	P	02/05/2015	13:35	LB74732
	Lead	13.65	12.0	113.8	70 - 130	P	02/05/2015	13:35	LB74732
	Selenium	16.41	20.0	82.1	70 - 130	P	02/05/2015	13:35	LB74732
	Silver	8.93	10.0	89.3	70 - 130	P	02/05/2015	13:35	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Arsenic	4941.7	5000	98.8	90 - 110	P	02/05/2015	14:44	LB74732
	Barium	9669.6	10000	96.7	90 - 110	P	02/05/2015	14:44	LB74732
	Cadmium	2454.5	2500	98.2	90 - 110	P	02/05/2015	14:44	LB74732
	Chromium	959.62	1000	96	90 - 110	P	02/05/2015	14:44	LB74732
	Lead	4882.3	5000	97.6	90 - 110	P	02/05/2015	14:44	LB74732
	Selenium	4843.9	5000	96.9	90 - 110	P	02/05/2015	14:44	LB74732
	Silver	1200.8	1250	96.1	90 - 110	P	02/05/2015	14:44	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLCCV02	Arsenic	20.77	20.0	103.9	70 - 130	P	02/05/2015	14:49	LB74732
	Barium	110.04	100	110	70 - 130	P	02/05/2015	14:49	LB74732
	Cadmium	6.02	6.0	100.3	70 - 130	P	02/05/2015	14:49	LB74732
	Chromium	9.81	10.0	98.1	70 - 130	P	02/05/2015	14:49	LB74732
	Lead	14.26	12.0	118.8	70 - 130	P	02/05/2015	14:49	LB74732
	Selenium	16.35	20.0	81.8	70 - 130	P	02/05/2015	14:49	LB74732
	Silver	9.27	10.0	92.7	70 - 130	P	02/05/2015	14:49	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV03	Arsenic	5005.3	5000	100.1	90 - 110	P	02/05/2015	15:57	LB74732
	Barium	10060	10000	100.6	90 - 110	P	02/05/2015	15:57	LB74732
	Cadmium	2450.5	2500	98	90 - 110	P	02/05/2015	15:57	LB74732
	Chromium	954.72	1000	95.5	90 - 110	P	02/05/2015	15:57	LB74732
	Lead	4884.7	5000	97.7	90 - 110	P	02/05/2015	15:57	LB74732
	Selenium	4857.6	5000	97.2	90 - 110	P	02/05/2015	15:57	LB74732
	Silver	1208.8	1250	96.7	90 - 110	P	02/05/2015	15:57	LB74732
CCV04	Arsenic	4948.1	5000	99	90 - 110	P	02/05/2015	16:58	LB74732
	Barium	10032	10000	100.3	90 - 110	P	02/05/2015	16:58	LB74732
	Cadmium	2432.7	2500	97.3	90 - 110	P	02/05/2015	16:58	LB74732
	Chromium	969.05	1000	96.9	90 - 110	P	02/05/2015	16:58	LB74732
	Lead	4869	5000	97.4	90 - 110	P	02/05/2015	16:58	LB74732
	Selenium	4882.9	5000	97.7	90 - 110	P	02/05/2015	16:58	LB74732
	Silver	1223.6	1250	97.9	90 - 110	P	02/05/2015	16:58	LB74732

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLCCV03	Arsenic	22.86	20.0	114.3	70 - 130	P	02/05/2015	17:04	LB74732
	Barium	108.56	100	108.6	70 - 130	P	02/05/2015	17:04	LB74732
	Cadmium	6.27	6.0	104.5	70 - 130	P	02/05/2015	17:04	LB74732
	Chromium	10.24	10.0	102.4	70 - 130	P	02/05/2015	17:04	LB74732
	Lead	12.37	12.0	103.1	70 - 130	P	02/05/2015	17:04	LB74732
	Selenium	16.66	20.0	83.3	70 - 130	P	02/05/2015	17:04	LB74732
	Silver	9.42	10.0	94.2	70 - 130	P	02/05/2015	17:04	LB74732

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Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Arsenic	22.58	20.0	112.9	40 - 160	P	02/05/2015	13:15	LB74732
	Barium	101.67	100	101.7	40 - 160	P	02/05/2015	13:15	LB74732
	Cadmium	5.99	6.0	99.8	40 - 160	P	02/05/2015	13:15	LB74732
	Chromium	10.31	10.0	103.1	40 - 160	P	02/05/2015	13:15	LB74732
	Lead	13.17	12.0	109.8	40 - 160	P	02/05/2015	13:15	LB74732
	Selenium	18.02	20.0	90.1	40 - 160	P	02/05/2015	13:15	LB74732
	Silver	8.9	10.0	89	40 - 160	P	02/05/2015	13:15	LB74732
CRA	Mercury	0.2319	0.2	116	40 - 160	CV	02/06/2015	10:07	LB74735

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB24	Mercury	0.2	+/-0.2	U	0.1	0.2	CV	02/06/2015	10:01	LB74735

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB30	Mercury	0.2	+/-0.2	U	0.1	0.2	CV	02/06/2015	10:05	LB74735
CCB31	Mercury	0.2	+/-0.2	U	0.1	0.2	CV	02/06/2015	10:31	LB74735
CCB32	Mercury	0.2	+/-0.2	U	0.1	0.2	CV	02/06/2015	10:56	LB74735
CCB33	Mercury	0.2	+/-0.2	U	0.1	0.2	CV	02/06/2015	11:17	LB74735

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	20.0	+/-20.0	U	10.0	20.0	P	02/05/2015	13:09	LB74732
	Barium	100	+/-100	U	50.0	100	P	02/05/2015	13:09	LB74732
	Cadmium	6.0	+/-6.0	U	3.0	6.0	P	02/05/2015	13:09	LB74732
	Chromium	10.0	+/-10.0	U	5.0	10.0	P	02/05/2015	13:09	LB74732
	Lead	12.0	+/-12.0	U	6.0	12.0	P	02/05/2015	13:09	LB74732
	Selenium	20.0	+/-20.0	U	10.0	20.0	P	02/05/2015	13:09	LB74732
	Silver	10.0	+/-10.0	U	5.0	10.0	P	02/05/2015	13:09	LB74732

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	20.0	+/-20.0	U	10.0	20.0	P	02/05/2015	13:40	LB74732
	Barium	100	+/-100	U	50.0	100	P	02/05/2015	13:40	LB74732
	Cadmium	6.0	+/-6.0	U	3.0	6.0	P	02/05/2015	13:40	LB74732
	Chromium	10.0	+/-10.0	U	5.0	10.0	P	02/05/2015	13:40	LB74732
	Lead	12.0	+/-12.0	U	6.0	12.0	P	02/05/2015	13:40	LB74732
	Selenium	20.0	+/-20.0	U	10.0	20.0	P	02/05/2015	13:40	LB74732
	Silver	10.0	+/-10.0	U	5.0	10.0	P	02/05/2015	13:40	LB74732
CCB02	Arsenic	20.0	+/-20.0	U	10.0	20.0	P	02/05/2015	14:54	LB74732
	Barium	100	+/-100	U	50.0	100	P	02/05/2015	14:54	LB74732
	Cadmium	6.0	+/-6.0	U	3.0	6.0	P	02/05/2015	14:54	LB74732
	Chromium	10.0	+/-10.0	U	5.0	10.0	P	02/05/2015	14:54	LB74732
	Lead	12.0	+/-12.0	U	6.0	12.0	P	02/05/2015	14:54	LB74732
	Selenium	20.0	+/-20.0	U	10.0	20.0	P	02/05/2015	14:54	LB74732
	Silver	10.0	+/-10.0	U	5.0	10.0	P	02/05/2015	14:54	LB74732
CCB03	Arsenic	20.0	+/-20.0	U	10.0	20.0	P	02/05/2015	16:02	LB74732
	Barium	100	+/-100	U	50.0	100	P	02/05/2015	16:02	LB74732
	Cadmium	6.0	+/-6.0	U	3.0	6.0	P	02/05/2015	16:02	LB74732
	Chromium	10.0	+/-10.0	U	5.0	10.0	P	02/05/2015	16:02	LB74732
	Lead	12.0	+/-12.0	U	6.0	12.0	P	02/05/2015	16:02	LB74732
	Selenium	20.0	+/-20.0	U	10.0	20.0	P	02/05/2015	16:02	LB74732
	Silver	10.0	+/-10.0	U	5.0	10.0	P	02/05/2015	16:02	LB74732
CCB04	Arsenic	20.0	+/-20.0	U	10.0	20.0	P	02/05/2015	17:09	LB74732
	Barium	100	+/-100	U	50.0	100	P	02/05/2015	17:09	LB74732
	Cadmium	6.0	+/-6.0	U	3.0	6.0	P	02/05/2015	17:09	LB74732
	Chromium	10.0	+/-10.0	U	5.0	10.0	P	02/05/2015	17:09	LB74732
	Lead	12.0	+/-12.0	U	6.0	12.0	P	02/05/2015	17:09	LB74732
	Selenium	20.0	+/-20.0	U	10.0	20.0	P	02/05/2015	17:09	LB74732
	Silver	10.0	+/-10.0	U	5.0	10.0	P	02/05/2015	17:09	LB74732

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB81618BL		**WATER**		**Batch Number:**		**PB81618**		**Prep Date:**	**02/05/2015**	
	Mercury	0.2	<0.2	U	0.1	0.2	CV	02/06/2015	10:48	LB74735

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB81618TB		**WATER**		**Batch Number:**		**PB81618**		**Prep Date:**	**02/05/2015**	
	Mercury	2.0	<2.0	U	1.0	2.0	CV	02/06/2015	10:52	LB74735

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB81614BL		**WATER**		**Batch Number:**		**PB81614**		**Prep Date:**	**02/05/2015**	
	Arsenic	100	<100	U	25.0	100	P	02/05/2015	16:08	LB74732
	Barium	500	<500	U	125	500	P	02/05/2015	16:08	LB74732
	Cadmium	30.0	<30.0	U	7.5	30.0	P	02/05/2015	16:08	LB74732
	Chromium	50.0	<50.0	U	12.5	50.0	P	02/05/2015	16:08	LB74732
	Lead	60.0	<60.0	U	15.0	60.0	P	02/05/2015	16:08	LB74732
	Selenium	100	<100	U	50.0	100	P	02/05/2015	16:08	LB74732
	Silver	50.0	<50.0	U	12.5	50.0	P	02/05/2015	16:08	LB74732

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB81614TB		**WATER**		**Batch Number:**		**PB81614**		**Prep Date:**	**02/05/2015**	
	Arsenic	100	<100	U	25.0	100	P	02/05/2015	16:19	LB74732
	Barium	500	<500	U	125	500	P	02/05/2015	16:19	LB74732
	Cadmium	30.0	<30.0	U	7.5	30.0	P	02/05/2015	16:19	LB74732
	Chromium	50.0	<50.0	U	12.5	50.0	P	02/05/2015	16:19	LB74732
	Lead	60.0	<60.0	U	15.0	60.0	P	02/05/2015	16:19	LB74732
	Selenium	100	<100	U	50.0	100	P	02/05/2015	16:19	LB74732
	Silver	50.0	<50.0	U	12.5	50.0	P	02/05/2015	16:19	LB74732

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INTERFERENCE CHECK SAMPLE

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

ICS Source: EPA **Instrument ID:** P4

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Arsenic	4.12			-20	20	02/05/2015	13:20	LB74732
	Barium	6.37	6.0	106.2	-94	106	02/05/2015	13:20	LB74732
	Cadmium	0.31	1.0	31	-5	7	02/05/2015	13:20	LB74732
	Chromium	56.2	52.0	108.1	42	62	02/05/2015	13:20	LB74732
	Lead	3.26			-12	12	02/05/2015	13:20	LB74732
	Selenium	-4.86			-20	20	02/05/2015	13:20	LB74732
	Silver	-2.89			-10	10	02/05/2015	13:20	LB74732
ICSAB01	Arsenic	109	104	104.8	83	125	02/05/2015	13:25	LB74732
	Barium	526	537	98	437	637	02/05/2015	13:25	LB74732
	Cadmium	999	972	102.8	778	1166	02/05/2015	13:25	LB74732
	Chromium	544	542	100.4	434	650	02/05/2015	13:25	LB74732
	Lead	51.8	49.0	105.7	37	61	02/05/2015	13:25	LB74732
	Selenium	47.3	46.0	102.8	26	66	02/05/2015	13:25	LB74732
	Silver	227	201	112.9	161	241	02/05/2015	13:25	LB74732

METAL QC DATA

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metals
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MATRIX SPIKE SUMMARY

client: GZA GeoEnvironmental, Inc. **level:** low **sdg no.:** G1217

contract: GZAG04 **lab code:** CHEM **case no.:** G1217 **sas no.:** G1217

matrix: WATER **sample id:** G1217-01 **client id:** COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS

Percent Solids for Sample: NA **Spiked ID:** G1217-01MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	78 - 117	3760		100	U	4000	94		P
Barium	ug/L	81 - 124	1160		158	J	1000	100		P
Cadmium	ug/L	72 - 121	917		30.0	U	1000	91.7		P
Chromium	ug/L	75 - 117	2230		495		2000	87		P
Lead	ug/L	74 - 119	4600		17.3	J	5000	92		P
Mercury	ug/L	49 - 128	39.3		2.0	U	40.0	98.3		CV
Selenium	ug/L	71 - 107	8420		100	U	10000	84.2		P
Silver	ug/L	77 - 122	329		50.0	U	380	86.6		P

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metals
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MATRIX SPIKE DUPLICATE SUMMARY

client: GZA GeoEnvironmental, Inc. **level:** low **sdg no.:** G1217

contract: GZAG04 **lab code:** CHEM **case no.:** G1217 **sas no.:** G1217

matrix: WATER **sample id:** G1217-01 **client id:** COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD

Percent Solids for Sample: NA **Spiked ID:** G1217-01MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	78 - 117	3780		100	U	4000	94.5		P
Barium	ug/L	81 - 124	1160		158	J	1000	100		P
Cadmium	ug/L	72 - 121	926		30.0	U	1000	92.6		P
Chromium	ug/L	75 - 117	2290		495		2000	90		P
Lead	ug/L	74 - 119	4660		17.3	J	5000	93		P
Mercury	ug/L	49 - 128	38.5		2.0	U	40.0	96.3		CV
Selenium	ug/L	71 - 107	8490		100	U	10000	84.9		P
Silver	ug/L	77 - 122	340		50.0	U	380	89.5		P

CHEMTECH

Metals
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Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Matrix: **Level:** LOW **Client ID:**

Sample ID: **Spiked ID:**

Analyte	Units	Acceptance Limit %R	C	Sample Result	C	Spike Added	% Recovery	Qual	M

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: GZA GeoEnvironmental, Inc. **Level:** LOW **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Matrix: WATER **Sample ID:** G1217-01 **Client ID:** COMP-CC-2-CC-3-CC-4-CC-5-CC-6DUP

Percent Solids for Sample: NA **Duplicate ID** G1217-01DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/L	20	100	U	100	U			P
Barium	ug/L	20	158	J	164	J	4		P
Cadmium	ug/L	20	30.0	U	30.0	U			P
Chromium	ug/L	20	495		491		1		P
Lead	ug/L	20	17.3	J	19	J	9		P
Mercury	ug/L	20	2.0	U	2.0	U			CV
Selenium	ug/L	20	100	U	100	U			P
Silver	ug/L	20	50.0	U	50.0	U			P

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

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Metals

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DUPLICATE SAMPLE SUMMARY

Client: GZA GeoEnvironmental, Inc. **Level:** LOW **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Matrix: WATER **Sample ID:** G1217-01MS **Client ID:** COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD

Percent Solids for Sample: NA **Duplicate ID** G1217-01MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/L	20	3760		3780		1		P
Barium	ug/L	20	1160		1160		0		P
Cadmium	ug/L	20	917		926		1		P
Chromium	ug/L	20	2230		2290		3		P
Lead	ug/L	20	4600		4660		1		P
Mercury	ug/L	20	39.3		38.5		2		CV
Selenium	ug/L	20	8420		8490		1		P
Silver	ug/L	20	329		340		3		P

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

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Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB81614BS							
Arsenic	ug/L	4000	3760		94	82 - 113	P
Barium	ug/L	1000	1000		100	83 - 118	P
Cadmium	ug/L	1000	941		94.1	82 - 119	P
Chromium	ug/L	2000	1830		91.5	83 - 118	P
Lead	ug/L	5000	4680		93.6	83 - 119	P
Selenium	ug/L	10000	9110		91.1	75 - 108	P
Silver	ug/L	380	336		88.4	81 - 126	P

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Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB81618BS							
Mercury	ug/L	4.0	3.89		97.3	67 - 127	CV

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ICP SERIAL DILUTIONS

SAMPLE NO.

COMP-CC-2-CC-3-CC-4-CC-5-CC-6L

Lab Name: Chemtech Consulting Group **Contract:** GZAG04

Lab Code: CHEM **Lb No.:** lb74732 **Lab Sample ID :** G1217-01L **SDG No.:** G1217

Matrix (soil/water): WATER **Level (low/med):** LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	100	U	500	U			P
Barium	158	J	2500	U	100.0		P
Cadmium	30.0	U	150	U			P
Chromium	495		495		0		P
Lead	17.3	J	94.8	J	448		P
Mercury	2.0	U	10.0	U			CV
Selenium	100	U	500	U			P
Silver	50.0	U	250	U			P

METAL PREPARATION & INSTRUMENT DATA

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Metals

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Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Instrument ID: P4 **Preparation Method:**

Analyte	Wave- length (nm)	MDL	LOD	PQL	Date:
LIQUID					
Method:	**6010B**				
Arsenic	189.04	2.5	2.5	10.0	
Barium	493.41	4.0	12.5	50.0	
Cadmium	226.50	0.5	0.75	3.0	
Chromium	267.72	1.1	1.25	5.0	
Lead	220.35	1.5	1.5	6.0	
Selenium	196.02	4.8	5.0	10.0	
Silver	328.07	1.25	1.25	5.0	

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Metals

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Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Instrument ID: CV1 **Preparation Method:**

Analyte	Wave- length (nm)	MDL	LOD	PQL	Date:
LIQUID					
Method: **7470A**					
Mercury	253.70	0.1	0.1	0.2	

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Instrument ID: _____ **Date:** _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Al	Ca	Fe	Mg	Ag
Arsenic	193.759	0.0000000	0.0000000	-0.0001030	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000840	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.0001070	0.0000000	0.0000280	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	-0.0001280	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.0001170	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Instrument ID: _____ **Date:** _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: As	Ba	Be	Cd	Co
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	-0.0002660
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Cr	Cu	K	Mn	Mo
Arsenic	193.759	-0.0011220	0.0000000	0.0000000	0.0000000	0.0015300
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000600
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0002280	0.0000000
Lead	220.353	-0.0003060	0.0000000	0.0000000	0.0001250	-0.0013650
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0006680	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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Metals
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ICP INTERELEMENT CORRECTION FACTORS

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Na	Ni	Pb	Sb	Se
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	-0.0000930	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0002444	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

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ICP INTERELEMENT CORRECTION FACTORS

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Instrument ID: **Date:**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For: Sn	Ti	Tl	V	Zn
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	-0.0040370	0.0000000

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LINEAR RANGES

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Case No.:** G1217 **SAS No.:** G1217

Instrument ID: P4 **Date:** 12/06/2012

Analyte	Integration Time (sec)	LDR ug/L
Arsenic	10	80000
Barium	10	100000
Cadmium	10	9000
Chromium	10	95000
Lead	10	280000
Selenium	10	45000
Silver	10	9000

METAL PREPARATION & ANALYICAL SUMMARY

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SAMPLE PREPARATION SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Method:**

Case No.: G1217 **SAS No.:** G1217

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB81614**						
G1217-01	COMP-CC-2-CC-3-CC-4-CC-5-CC-6	SAM	WATER	02/05/2015	5.0	25.0	
G1217-01DUP	COMP-CC-2-CC-3-CC-4-CC-5-CC-6DUP	DUP	WATER	02/05/2015	5.0	25.0	
G1217-01MS	COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	MS	WATER	02/05/2015	5.0	25.0	
G1217-01MSD	COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD	MSD	WATER	02/05/2015	5.0	25.0	
PB81614BL	PB81614BL	MB	WATER	02/05/2015	5.0	25.0	
PB81614BS	PB81614BS	LCS	WATER	02/05/2015	5.0	25.0	
PB81614TB	PB81614TB	MB	WATER	02/05/2015	5.0	25.0	

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SAMPLE PREPARATION SUMMARY

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Contract: GZAG04 **Lab Code:** CHEM **Method:**

Case No.: G1217 **SAS No.:** G1217

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB81618**						
G1217-01	COMP-CC-2-CC-3-CC-4-CC-5-CC-6	SAM	WATER	02/05/2015	3.0	30.0	
G1217-01DUP	COMP-CC-2-CC-3-CC-4-CC-5-CC-6DUP	DUP	WATER	02/05/2015	3.0	30.0	
G1217-01MS	COMP-CC-2-CC-3-CC-4-CC-5-CC-6MS	MS	WATER	02/05/2015	3.0	30.0	
G1217-01MSD	COMP-CC-2-CC-3-CC-4-CC-5-CC-6MSD	MSD	WATER	02/05/2015	3.0	30.0	
PB81618BL	PB81618BL	MB	WATER	02/05/2015	30.0	30.0	
PB81618BS	PB81618BS	LCS	WATER	02/05/2015	30.0	30.0	
PB81618TB	PB81618TB	MB	WATER	02/05/2015	3.0	30.0	

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ANALYSIS RUN LOG

Client: GZA GeoEnvironmental, Inc. **Contract:** GZAG04

Lab code: CHEM **Case no.:** G1217 **Sas no.:** G1217 **Sdg no.:** G1217

Instrument id number: **Method:** **Run number:** LB74732

Start date: 02/05/2015 **End date:** 02/05/2015

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1151	Ag,As,Ba,Cd,Cr,Pb,Se
S1	S1	1	1155	Ag,As,Ba,Cd,Cr,Pb,Se
S2	S2	1	1201	,
S3	S3	1	1208	Ag,As,Ba,Cd,Cr,Pb,Se
S4	S4	1	1214	Ag,As,Ba,Cd,Cr,Pb,Se
S5	S5	1	1219	Ag,As,Ba,Cd,Cr,Pb,Se
ICV01	ICV01	1	1239	Ag,As,Ba,Cd,Cr,Pb,Se
LLICV01	LLICV01	1	1304	Ag,As,Ba,Cd,Cr,Pb,Se
ICB01	ICB01	1	1309	Ag,As,Ba,Cd,Cr,Pb,Se
CRI01	CRI01	1	1315	Ag,As,Ba,Cd,Cr,Pb,Se
ICSA01	ICSA01	1	1320	Ag,As,Ba,Cd,Cr,Pb,Se
ICSAB01	ICSAB01	1	1325	Ag,As,Ba,Cd,Cr,Pb,Se
CCV01	CCV01	1	1330	Ag,As,Ba,Cd,Cr,Pb,Se
LLCCV01	LLCCV01	1	1335	Ag,As,Ba,Cd,Cr,Pb,Se
CCB01	CCB01	1	1340	Ag,As,Ba,Cd,Cr,Pb,Se
CCV02	CCV02	1	1444	Ag,As,Ba,Cd,Cr,Pb,Se
LLCCV02	LLCCV02	1	1449	Ag,As,Ba,Cd,Cr,Pb,Se
CCB02	CCB02	1	1454	Ag,As,Ba,Cd,Cr,Pb,Se
CCV03	CCV03	1	1557	Ag,As,Ba,Cd,Cr,Pb,Se
CCB03	CCB03	1	1602	Ag,As,Ba,Cd,Cr,Pb,Se
PB81614BL	PB81614BL	1	1608	Ag,As,Ba,Cd,Cr,Pb,Se
PB81614BS	PB81614BS	1	1613	Ag,As,Ba,Cd,Cr,Pb,Se
PB81614TB	PB81614TB	1	1619	Ag,As,Ba,Cd,Cr,Pb,Se
G1217-01	COMP-CC-2-CC-3-CC-4-CC-5-(	1	1624	Ag,As,Ba,Cd,Cr,Pb,Se
G1217-01DUP	COMP-CC-2-CC-3-CC-4-CC-5-(	1	1630	Ag,As,Ba,Cd,Cr,Pb,Se
G1217-01L	COMP-CC-2-CC-3-CC-4-CC-5-(	5	1636	Ag,As,Ba,Cd,Cr,Pb,Se
G1217-01MS	COMP-CC-2-CC-3-CC-4-CC-5-(	1	1641	Ag,As,Ba,Cd,Cr,Pb,Se
G1217-01MSD	COMP-CC-2-CC-3-CC-4-CC-5-(	1	1647	Ag,As,Ba,Cd,Cr,Pb,Se
CCV04	CCV04	1	1658	Ag,As,Ba,Cd,Cr,Pb,Se
LLCCV03	LLCCV03	1	1704	Ag,As,Ba,Cd,Cr,Pb,Se
CCB04	CCB04	1	1709	Ag,As,Ba,Cd,Cr,Pb,Se

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metals
- 14 -
ANALYSIS RUN LOG

Client: GZA GeoEnvironmental, Inc. **Contract:** GZAG04

Lab code: CHEM **Case no.:** G1217 **Sas no.:** G1217 **Sdg no.:** G1217

Instrument id number: **Method:** **Run number:** LB74735

Start date: 02/06/2015 **End date:** 02/06/2015

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	0944	HG
S0.2	S0.2	1	0946	HG
S2.5	S2.5	1	0948	HG
S5	S5	1	0951	HG
S7.5	S7.5	1	0953	HG
S10	S10	1	0955	HG
ICV24	ICV24	1	0959	HG
ICB24	ICB24	1	1001	HG
CCV30	CCV30	1	1003	HG
CCB30	CCB30	1	1005	HG
CRA	CRA	1	1007	HG
CCV31	CCV31	1	1028	HG
CCB31	CCB31	1	1031	HG
PB81618BL	PB81618BL	1	1048	HG
PB81618BS	PB81618BS	1	1050	HG
PB81618TB	PB81618TB	1	1052	HG
CCV32	CCV32	1	1054	HG
CCB32	CCB32	1	1056	HG
G1217-01	COMP-CC-2-CC-3-CC-4-CC-5-	1	1058	HG
G1217-01DUP	COMP-CC-2-CC-3-CC-4-CC-5-	1	1100	HG
G1217-01MS	COMP-CC-2-CC-3-CC-4-CC-5-	1	1102	HG
G1217-01MSD	COMP-CC-2-CC-3-CC-4-CC-5-	1	1105	HG
G1217-01L	COMP-CC-2-CC-3-CC-4-CC-5-	5	1107	HG
CCV33	CCV33	1	1115	HG
CCB33	CCB33	1	1117	HG

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LAB CHRONICLE

OrderID:	G1217	**OrderDate:**	2/4/2015 9:09:07 AM
Client:	GZA GeoEnvironmental, Inc.	**Project:**	410162268.20
Contact:	Clifford Bell	**Location:**	H11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
G1217-01	**COMP-CC-2-CC-3-CC-4-CC-5-CC-6**	**SOIL**			**01/22/15 11:20**			**01/22/15**
			Corrosivity	9045C			02/04/15 13:42	
			Ignitability	1030			02/06/15 09:15	
			Reactive Cyanide	9014		02/05/15	02/05/15 11:25	
			Reactive Sulfide	9034		02/05/15	02/05/15 11:10	

SAMPLE DATA

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Report of Analysis

Client:	GZA GeoEnvironmental, Inc.	Date Collected:	01/22/15 11:20
Project:	410162268.20	Date Received:	01/22/15
Client Sample ID:	COMP-CC-2-CC-3-CC-4-CC-5-CC-6	SDG No.:	G1217
Lab Sample ID:	G1217-01	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	11.4		1	0	0	0	pH		02/04/15 13:42	9045C
Ignitability	NO		1	0	0	0	o C		02/06/15 09:15	1030
Reactive Cyanide	10	U	1	10	10	10	mg/Kg	02/05/15 08:39	02/05/15 11:25	9014
Reactive Sulfide	10	U	1	10	10	10	mg/Kg	02/05/15 08:39	02/05/15 11:10	9034

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

QC RESULT SUMMARY

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Initial and Continuing Calibration Verification

Client:	GZA GeoEnvironmental, Inc.	**SDG No.:**	G1217
Project:	410162268.20	**RunNo.:**	LB74707

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	**ICV**						
Corrosivity		pH	7.04	7	101	90-110	02/04/2015
Sample ID:	**CCV1**						
Corrosivity		pH	2.01	2.00	101	90-110	02/04/2015
Sample ID:	**CCV2**						
Corrosivity		pH	12.02	12.00	100	90-110	02/04/2015

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Preparation Blank Summary

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Project: 410162268.20

Analyte	Units	Result	Acceptance Limits	MDL	RDL	Analysis Date
Sample ID: LB74714BLS						
Reactive Sulfide	mg/Kg	< 10.00	+/-10.00	10.00	10.00	02/05/2015
Sample ID: LB74715BLS						
Reactive Cyanide	mg/Kg	< 10.00	+/-10.00	10.00	10.00	02/05/2015

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Matrix Spike Summary

Client: GZA GeoEnvironmental, Inc.
SDG No.: G1217
Project: 410162268.20
Sample ID: G1217-01
Client ID: COMP-CC-2-CC-3-CC-4-CC-5-CC-6S
Percent Solids for Spike Sample: 100

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Reactive Sulfide	mg/Kg	75-125	210.0		10.00	U	250.00	1	84.0		02/05/2015

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Duplicate Sample Summary

Client: GZA GeoEnvironmental, Inc.
SDG No.: G1217
Project: 410162268.20
Sample ID: G1217-01
Client ID: COMP-CC-2-CC-3-CC-4-CC-5-CC-6D
Percent Solids for Spike Sample: 100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifie	Duplicate Result	Conc. Qualifie	Dilution Factor	RPD/ AD	Qual	Analysis Date
Reactive Cyanide	mg/Kg	+/-20	10.00	U	10.00	U	1	0.0		02/05/2015
Ignitability	o C	+/-20	NO		NO		1	0.0		02/06/2015
Reactive Sulfide	mg/Kg	+/-20	10.00	U	10.00	U	1	0.0		02/05/2015

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Duplicate Sample Summary

Client: GZA GeoEnvironmental, Inc.
SDG No.: G1217
Project: 410162268.20
Sample ID: G1217-01
Client ID: COMP-CC-2-CC-3-CC-4-CC-5-CC-6DUP
Percent Solids for Spike Sample: 100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifie	Duplicate Result	Conc. Qualifie	Dilution Factor	RPD/ AD	Qual	Analysis Date
Corrosivity	pH	+/-20	11.44		11.43		1	0.09		02/04/2015

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Laboratory Control Sample Summary

Client:	GZA GeoEnvironmental, Inc.	**SDG No.:**	G1217
Project:	410162268.20	**Run No.:**	LB74714

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB74714BSS								
Reactive Sulfide	mg/Kg	250.00	214.00		86	1	80-120	02/05/2015

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Laboratory Control Sample Summary

Client:	GZA GeoEnvironmental, Inc.	**SDG No.:**	G1217
Project:	410162268.20	**Run No.:**	LB74715

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB74715BSS								
Reactive Cyanide	mg/Kg	250.00	247.00		99	1	80-120	02/05/2015

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Method Detection Limits

Client: GZA GeoEnvironmental, Inc. **SDG No.:** G1217

Project: 410162268.20

Analyte	Units	MDL	RDL
Method: 1030 Ignitability		**MDL Date:**	01/15/2006
Matrix Category: SOLIDS			
Ignitability	o C	150.0	150.0
Method: 9014 Reactive Cyanide		**MDL Date:**	01/15/2006
Matrix Category: SOLIDS			
Reactive Cyanide	mg/Kg	10.00	10.00
Method: 9034 Reactive Sulfide		**MDL Date:**	01/15/2006
Matrix Category: SOLIDS			
Reactive Sulfide	mg/Kg	10.00	10.00
Method: 9045C Corrosivity		**MDL Date:**	01/15/2006
Matrix Category: SOLID			
Corrosivity	pH	0	0

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. G1217
QUOTE NO.
COC Number 028503

12.1

CLIENT INFORMATION (REPORT TO BE SENT TO:)

COMPANY: GZA GeoEnvironmental
ADDRESS: 104 West 29th Street 10th Fl
CITY: New York STATE: NY ZIP: 10001
ATTENTION: Clifford Bell
PHONE: 347-271-1326 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: 31-32 LIC
PROJECT NO: 41.0162268.2 LOCATION: Long Island City
PROJECT MANAGER: Clifford Bell
e-mail: James.Carey@GZA.Com
PHONE: 347-271-1326 FAX:

CLIENT BILLING INFORMATION

BILL TO: Same As Client PO#:
ADDRESS:
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: _____ DAYS *
PREAPPROVED TAT: ☐ YES ☐ NO
* STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ LEVEL 1: Results only ☐ Others _____
☐ LEVEL 2: Results + QC
☐ LEVEL 3: Results (plus results raw data) + QC
☐ LEVEL 4: Results + QC (all raw data)
☐ EDD Format: _____

ANALYSIS

1 TAL/TCL+30 (No Pest or Herb) 2 Cr+6 3 Cr+3 4 TPH (Geo/DRO) 5 TCLP - Full 6 RCRA 7 8 9

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE: COMP	SAMPLE TYPE: GRAB	SAMPLE COLLECTION: DATE	SAMPLE COLLECTION: TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1. CC-1	" "	CC		X	1/22/15	11:20	1	X	X	X	X	1	1				
2. CC-2						10:50											
3. CC-3						10:40											
4. CC-4						10:10						HOLD	HOLD				
5. CC-5						9:30											
6. CC-6						9:20											
7.																	
8.																	
9.																	
10.																	

← Specify Preservatives
A – HCl B – HNO_3
C – H_2SO_4 D – NaOH
E – ICE F – Other

G1256

Original Documents are included in CSR

Signature
Date 2/10/15

Copy

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	1/22/15 13:30	1.
RELINQUISHED BY: 2.	DATE/TIME:	RECEIVED BY: 2.
RELINQUISHED BY: 3.	DATE/TIME: 1530 1.22.15	RECEIVED FOR LAB BY: 3.

Conditions of bottles or coolers at receipt: ☒ Compliant ☐ Non Compliant
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments: See e-mail about analysis

Cooler Temp. 5°
Ice in Cooler?: yes

Page ___ of ___

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☒ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☒ YES ☐ NO

Revision 8/2007

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street Mountainside NJ 07092 Tel. 908-7898900

Laboratory Certification

State	License No.
New Jersey	20012
New York	11376
Connecticut	PH-0649
Florida	E87935
Louisiana	5035
Maryland	296
Massachusetts	M-NJ503
Pennsylvania	68-548
Rhode Island	LAO00259
Virginia	460220
Texas	T10470448-10-1

Other :

DOD ELAP Certified (L-A-B Accredited), ISO/IEC 17025	L2219
Soil Permit	P330-11-00012
CLP Inorganic Contract	EPW09038
CLP Organic Contract	EPW11030

QA Control Code: A2070148

planYC

NYC Office of Environmental Remediation

"E" Designation Program

Hazardous Materials

Phase II Work Plan
(Short Form)

For

37-26 32nd Street & 37-27 31st Street

Queens, NY 11101

Block 373, Lot(s) 6, 45

OER Project Number (not assigned)

E-Designation E-218

CEQR Number 08DCP021Q

Dutch Kills Rezoning and Related Actions

Prepared for:

31/32 LIC, LLC

100 Ring Road West, Suite 101

Garden City, NY 11530

Foliver73@gmail.com, William@theghg.com

Prepared by:

CA Rich Consultants, Inc.

17 Dupont Street, Plainview, NY 11803

JProscia@carichinc.com

516-576-8844

Introduction

This Supplemental Phase II Investigation Work Plan has been developed for the above referenced site. The site is located within the Dutch Kills section of Queens. The following work scope has been developed in response to Phase I ESA findings, Tank Closure Report, and the Limited Remedial Investigation Report conducted in February, 2015.

Site Location, Current Use, and Proposed Development Plan

The Site is located in the Dutch Kills section of Queens and is identified as Block 373 and Lot(s) 6 and 45. Currently, the Site is used for commercial and light manufacturing and contains a one-story brick building on each lot. The development project consists of two new mixed-use buildings. The redevelopment includes a six-story (along 31st Street) and seven-story (along 32nd Street) mixed use residential building with commercial space on the first floor with a full ventilated parking garage located in the cellar and rear yard/recreational exterior space. The anticipated excavation depth for the buildings cellar is 10 feet below surface grade. The water table is expected at approximately 23 feet below grade surface (bgs). Layout of the proposed site development is presented in Figures 1 A, B, C, D, E, F, G, H, I.

Historical Information

- Pro Test Enterprises provided a tank abandonment letter dated September 24, 1996, NYCFD Certificate # 69151165 for the property at 37-26 32nd Street. The documentation indicated the 550 gallon waste oil tank was abandoned in place by removing lines, cleaning, purging, and backfilling with concrete.
- Environmental Systems Group of Howell, New Jersey performed tank closure activities on September 8, 1998 at 37-27 31st Street. Two, 4,000-gallon carbon-steel underground storage tanks were registered, delisted, and closed-in-place. The tanks were found to only contain water and were emptied. Soil and groundwater samples around the tanks were collected and revealed no indication of impacts. The tanks were filled with 20 cubic yards of concrete slurry, covered, backfilled and the concrete slab restored.

- GZA performed a Phase I Environmental Site Assessment (ESA) dated February 1, 2015. Based on the Phase I ESA the areas of concern identified include:

  37-26 32nd Street:
  1. Storage of petroleum-like fluids and floor sump in area between Garage Bay Entry Doors
  2. Closed-in-Place Waste Oil Underground Storage Tank
  3. Hydraulic lift and unknown location of hydraulic fluid tank

  37-27 31st Street:
  1. Food Cart Manufacturing Area: area in southeast area of space including compressors, drums, and historic aboveground storage tank
  2. Food Cart Manufacturing Area: storage without secondary containment of chemicals and solvents and general operations of sheet metal work using hydraulic machinery and equipment
  3. South Garage Bay Entry Door: Documented Closed-in-place two-4,000 gallon tanks and potential lines and dispenser
  4. Storage without secondary containment of chemicals and solvents in Auto Body Space

- GZA performed a Limited Remedial Investigation Report dated February 13, 2015.

  The above mentioned reports and associated data and tables are included in Appendix A.

Phase II Investigation Work Scope

Geophysical Survey

A geophysical survey will not be performed at the site.

Groundwater and Soil Vapor Summary

An investigation of soil vapor and groundwater is being performed to properly characterize the site for potential environmental impacts from historic on-site/off-site uses, operations, etc. The proposed sampling event will address both RECs and historic fill, as well as to provide general horizontal/vertical characterization across the site for development purposes. The sampling procedures of this investigation will be performed in accordance with the NYSDEC Technical Guidance for Site Investigation and Remediation DER-10.

Four test borings will be completed at the site. Please see attached site plan depicting sample point locations, where groundwater and soil vapor samples will be collected. A minimum of four groundwater samples will be collected. A total of three soil vapor samples will be collected. The depth of groundwater is expected to be encountered at approximately 23 feet bgs and general groundwater flow direction is expected to be south south-west. Each sample point location at the site will be accurately measured to fixed benchmarks (i.e., select properly lines, adjacent structures, etc.).

Monitoring Well Installation and Groundwater Sampling

Four two-inch-diameter permanent groundwater monitoring wells will be installed. Representative groundwater samples will be collected using low-flow sampling techniques. Properly sized screen and silica sand pack will be used for noted site conditions. A representative groundwater sample will be collected from each well with a peristaltic pump and dedicated tubing. Sampling will be conducted in accordance with NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010, and Sampling Guidelines and Protocols, dated March 1991. Groundwater wells will be gauged with a water level meter to record a depth to groundwater reading (1/100 foot), and if necessary, an interface meter to determine the thickness of LNAPL or DNAPL. The well casings will be surveyed by a trained QEP and/or NYS licensed surveyor to facilitate preparation of a groundwater contour map and determine the direction of groundwater flow.

Soil Vapor Sampling

Samples will be collected in accordance with the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH October 2006). Conditions in the field may require adjustment of sampling locations. Groundwater is expected to be encountered at a depth of 23 feet.

Three soil vapor samples will be collected. The vapor implants will be installed with a Geoprobe. The sub-slab soil vapor probe(s) will be installed to a depth of 2 feet beneath the proposed building slab. Sub-slab soil vapor sampling will occur for the duration of two hours.

Samples will be collected in appropriate sized Summa canisters that have been certified clean by the laboratory and samples will be analyzed by using USEPA Method TO-15. Flow rate for both purging and sampling will not exceed 0.2 L/min. 24-hours following soil vapor probe installation, one to three implant volumes shall be purged prior to the collection of any soil-gas samples. A sample log sheet will be maintained summarizing sample identification, date and time of sample collection, sampling depth, identity of samplers, sampling methods and devices, soil vapor purge volumes, volume of the soil vapor extracted, vacuum of canisters before and after the samples are collected, apparent moisture content of the sampling zone, and chain of custody protocols.

As part of the vapor intrusion evaluation, a tracer gas will be used in accordance with NYSDOH protocols to serve as a quality assurance/quality control (QA/QC) device to verify the integrity of the soil vapor probe seal. A container (box, plastic pail, etc.) will serve to keep the tracer gas in contact with the probe during testing. A portable monitoring device will be used to analyze a sample of soil vapor for the tracer gas prior to sampling. If the tracer sample results show a significant presence of the tracer, the probe seals will be adjusted to prevent infiltration. At the conclusion of the sampling round, tracer monitoring will be performed a second time to confirm the integrity of the probe seals.

Figure 2 provides a proposed sample location map.

Sample Analysis

Groundwater and soil vapor samples will be submitted to a NYSDOH Environmental Laboratory Accreditation Program (ELAP)-certified laboratory for Full analysis:

- Volatile Organic Compounds by EPA Method 8260;
- Semi-volatile organic compounds by EPA Method 8270;
- Soil vapor samples will be analyzed for VOCs by using USEPA Method TO-15.

If either LNAPL and/or DNAPL are detected, appropriate samples will be collected for characterization and "finger print analysis" and required regulatory reporting (i.e. NYSDEC spills hotline) will be performed.

Quality Assurance/Quality Control Procedures

QA/QC procedures will be used to provide performance information with regard to accuracy, precision, sensitivity, representation, completeness, and comparability associated with the sampling and analysis for this investigation. Field QA/QC procedures will be used (1) to document that samples are representative of actual conditions at the Site and (2) identify possible cross-contamination from field activities or sample transit. Laboratory QA/QC procedures and analyses will be used to demonstrate whether analytical results have been biased either by interfering compounds in the sample matrix, or by laboratory techniques that may have introduced systematic or random errors to the analytical process. QA/QC samples (field and trip blanks, duplicates, etc.) will be collected and analyzed at an ELAP-certified laboratory.

<u>Investigation Derived Waste</u>

Cuttings may be disposed at the site within the borehole that generated them to within 24 inches of the surface unless:

- Free product or grossly contaminated soil, are present in the cuttings;
- The borehole has penetrated an aquitard, aquiclude or other confining layer; or extends significantly into bedrock;
- Backfilling the borehole with cuttings will create a significant path for vertical movement of contaminants. Soil additives (bentonite) may be added to the cuttings to reduce permeability;
- The soil cannot fit into the borehole.

Those soil cuttings needing to be managed on-site will be containerized in properly labeled DOT approved 55-gallon drums for future off-site disposal at a permitted facility. All boreholes which require drill cuttings disposal would ultimately be filled with bentonite chips (hydrated) and asphalt/concrete capping. Disposable sampling equipment including, spoons, gloves, bags, paper towels, etc. that came in contact with

environmental media will be double bagged and disposed as municipal trash in a facility trash dumpster as non-hazardous trash.

Reporting

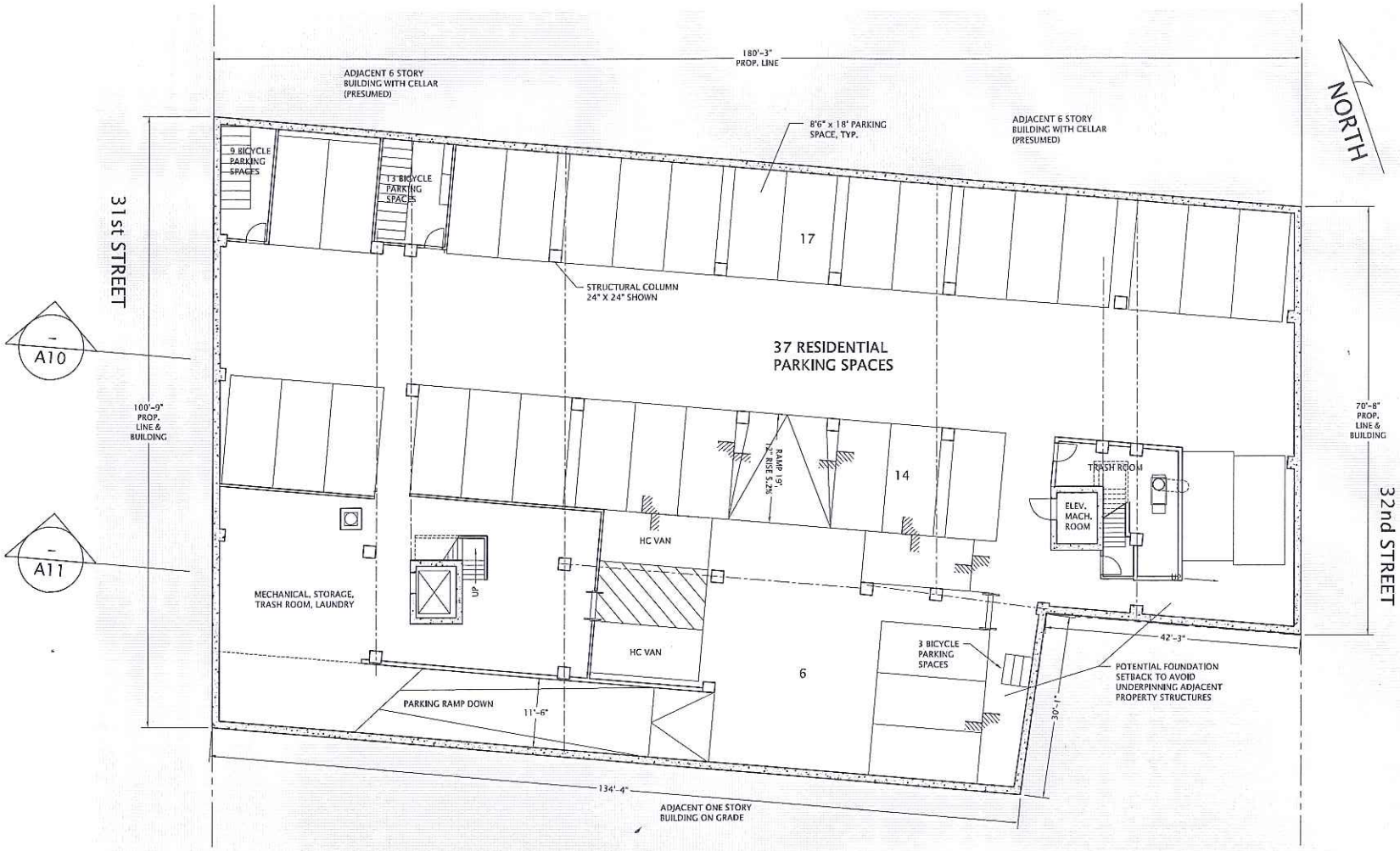
A Phase II Investigation Report (template version) will be prepared following completion of the field activities and receipt of the laboratory data. The report will provide detailed summaries of the investigative findings. Groundwater and soil vapor analytical results will be compared to the NYSDEC Part 703 Groundwater Quality Standards (GQS) (class GA) or Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS), and NYSDOH October 2006 Final Guidance for Evaluating Soil Vapor Intrusion Matrices. The report will include an updated sampling plan, spider diagrams, analytical data tables for all reported constituent compounds (including non-detectable concentrations) and remedial recommendations, as warranted.

Investigation HASP

An OSHA compliant Health and Safety Plan that meets all OSHA HAZWOPER requirements will be implemented during the site work to protect worker safety. The Site Safety Coordinator will ensure full compliance of the HASP in accordance with applicable health and safety laws and regulations. All field personnel involved in investigation activities will participate in training required under OSHA HAZWOPER 29 CFR 1910.120, including 40-hour hazardous waste operator training and annual 8-hour refresher training. Emergency telephone numbers will be posted at the site location before any work begins. A safety meeting will be conducted before each shift begins. Topics to be discussed include task hazards and protective measures (physical, chemical, environmental); emergency procedures; PPE levels and other relevant safety topics including a highlighted route map to the nearest hospital/emergency room. Meetings will be documented in a log book or specific form. Potential on-site chemicals of concern include VOCs, SVOCs, Pesticides/PCBs, and Metals (specifically arsenic, lead, and mercury at a minimum). Information fact sheets and/or summary tables for each contaminant group are included in the HASP. A copy of this HASP will be on-site during each sampling event.

FIGURES

Figure 1A



Gilman
ARCHITECTS

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37-29 31st STREET
LONG ISLAND CITY
NEW YORK

revisions

date	no.	description

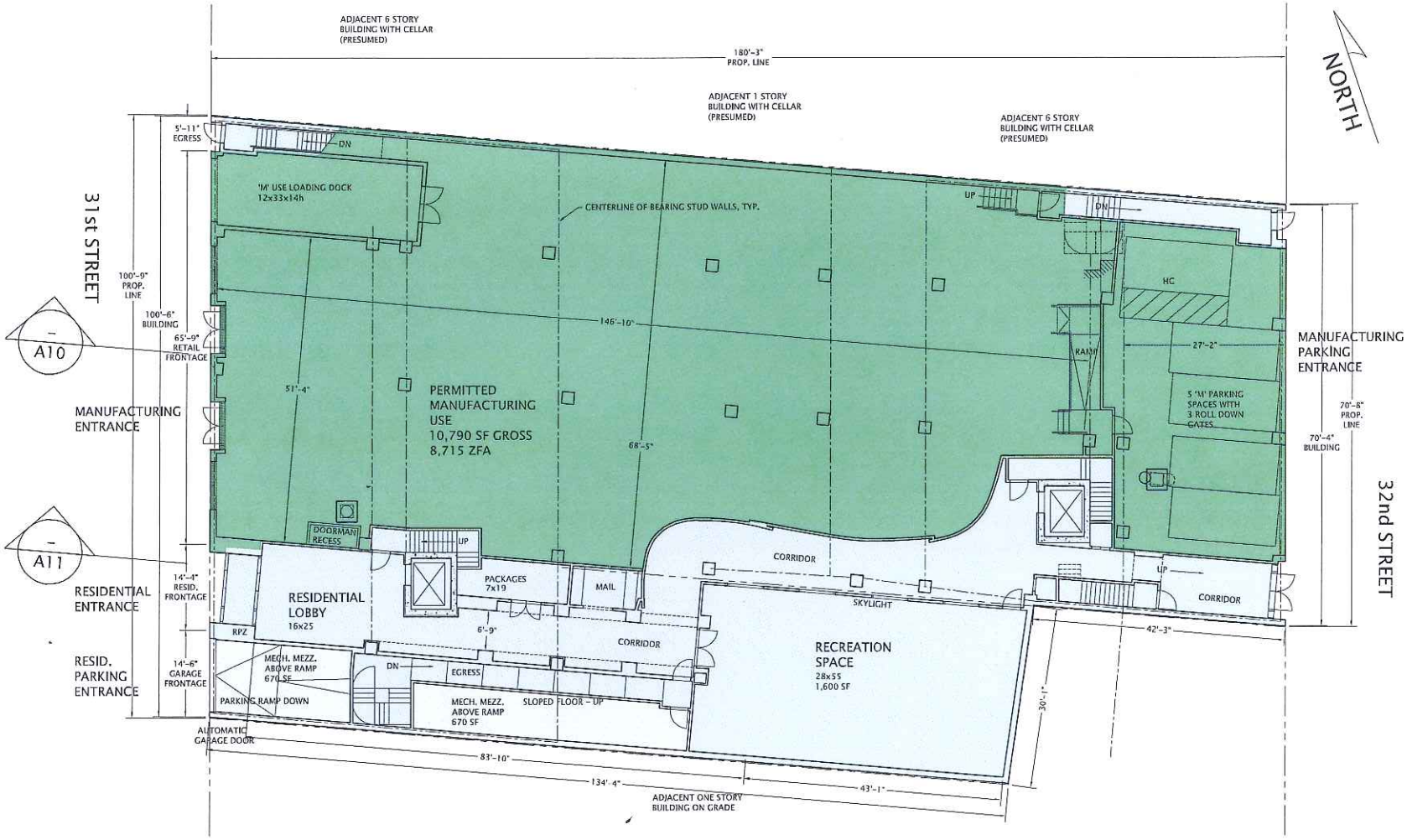
Job #:208
drawing: GANY
date: 6.9.2015
scale: 1/8" = 1'-0"

CELLAR
PLAN

sheet #
A1

(C) 2015 Gilman Architects New York PLLC

Figure 1B



Gilman
ARCHITECTS

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NEW YORK

revisions

date	no.	description

Job #:208
drawing: GANY
date: 6.9.2015
scale: 1/8" = 1'-0"

GROUND FLOOR PLAN

sheet #
A2

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Figure 1C

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37-29 31st STREET
LONG ISLAND CITY
NEW YORK

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date	no.	description

Job #:208
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2nd FLOOR PLAN

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A3

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Figure 1D

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date
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drawing: CANY
date: 6.9.2015
scale: 1/8" = 1'-0"
TYP. RESID
FLOOR PLAN
sheet #
A4
(C) 2015 Gilman Architects New York PLLC
180'-3"
PROP. LINE
60'-3"
REQ'D REAR YARD
EQUIVALENT
59'-0"
61'-0"
APPROXIMATE LOCATION
OF ADJACENT BUILDING
PROPERTY LINE, TYP.
CENTERLINE OF BEARING STUD WALLS, TYP.
NORTH
31st STREET
32nd STREET
100'-9"
PROP.
LINE
100'-6"
BUILDING
70'-8"
PROP.
LINE
70'-4"
BUILDING
30'-0"
REQ. REAR YARD
A10
A11
A 1BR
650 SF
B 1BR
640 SF
C 1BR
575 SF
D 1BR
630 SF
E 1BR
665 SF
F 1BR
595 SF
G 1BR
600 SF
H 1BR
660 SF
I 2BR
890 SF
J 2BR
865 SF
K ST
455 SF
L ST
425 SF
M ST
430 SF
N.ST
445 SF
REFUSE
DN
WD
TC

Figure 1E

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scale: 1/8" = 1'-0"

6th FL 31st ST
7th FL 32nd ST

sheet #
A5

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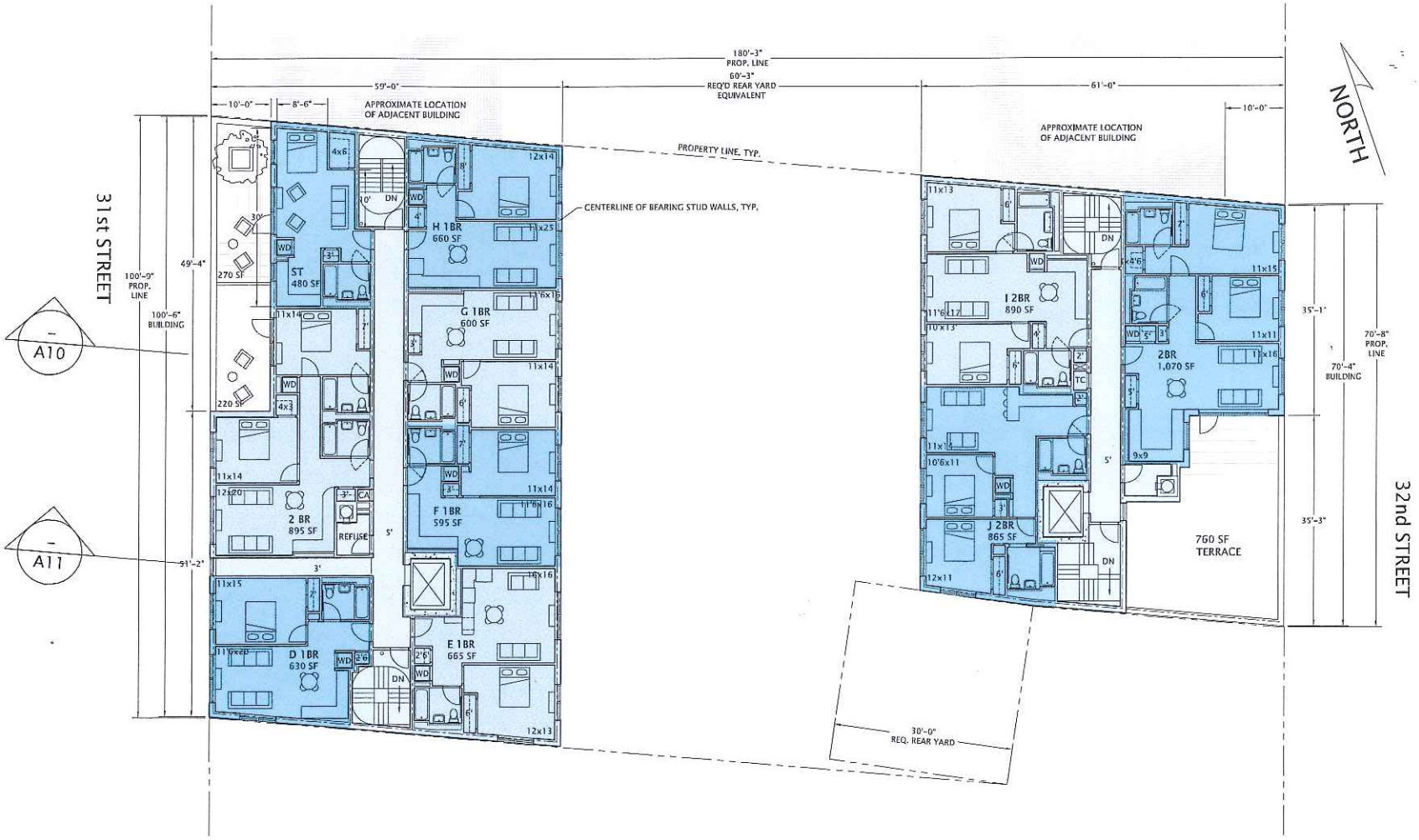
Figure 1F



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Job #:208
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6th FL 31st ST
7th FL 32nd ST

sheet #
A5

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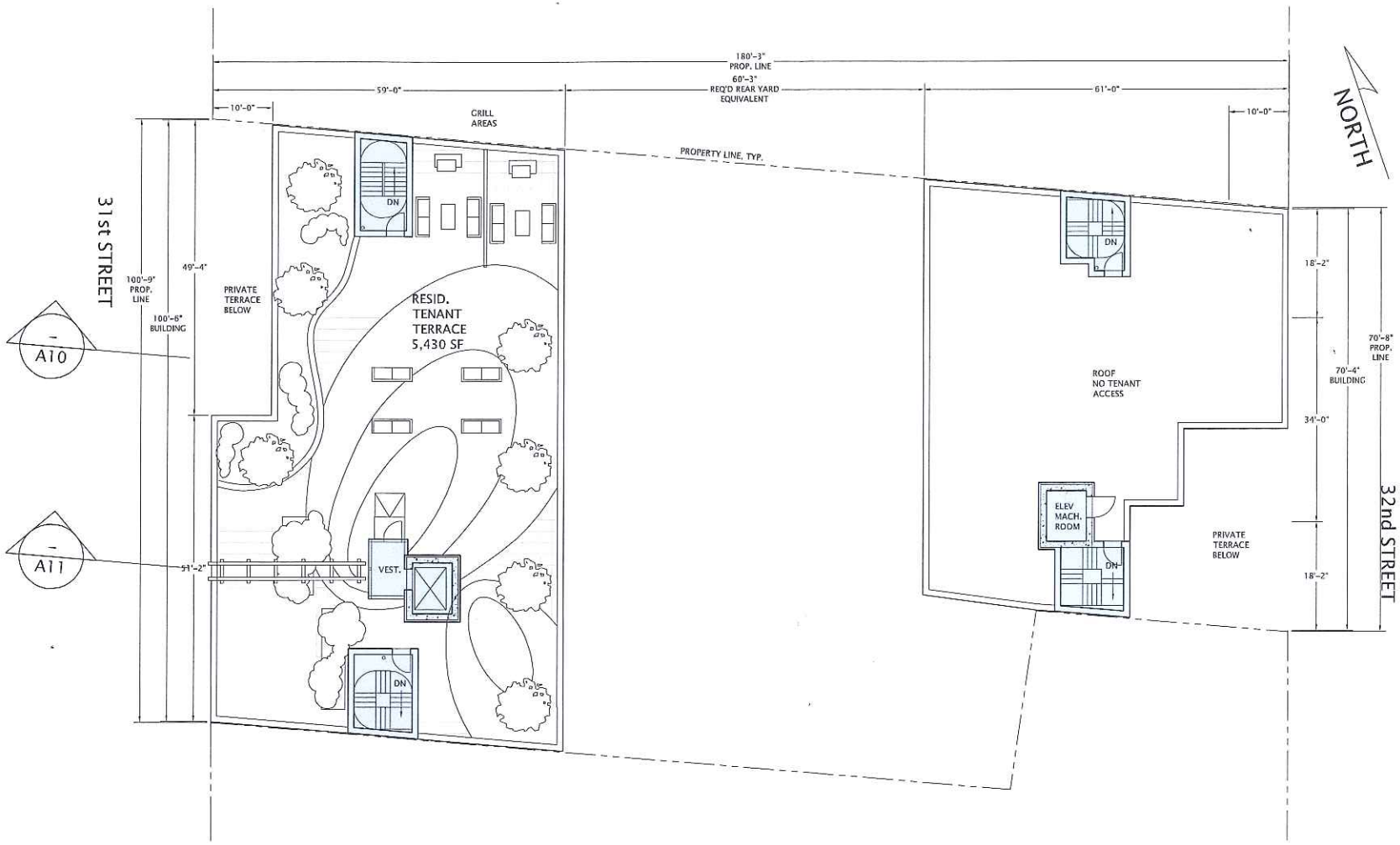
Figure 1G



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date: 6.9.2015
scale: 1/8" = 1'-0"

ROOF TOP
PLANS

sheet #
A6

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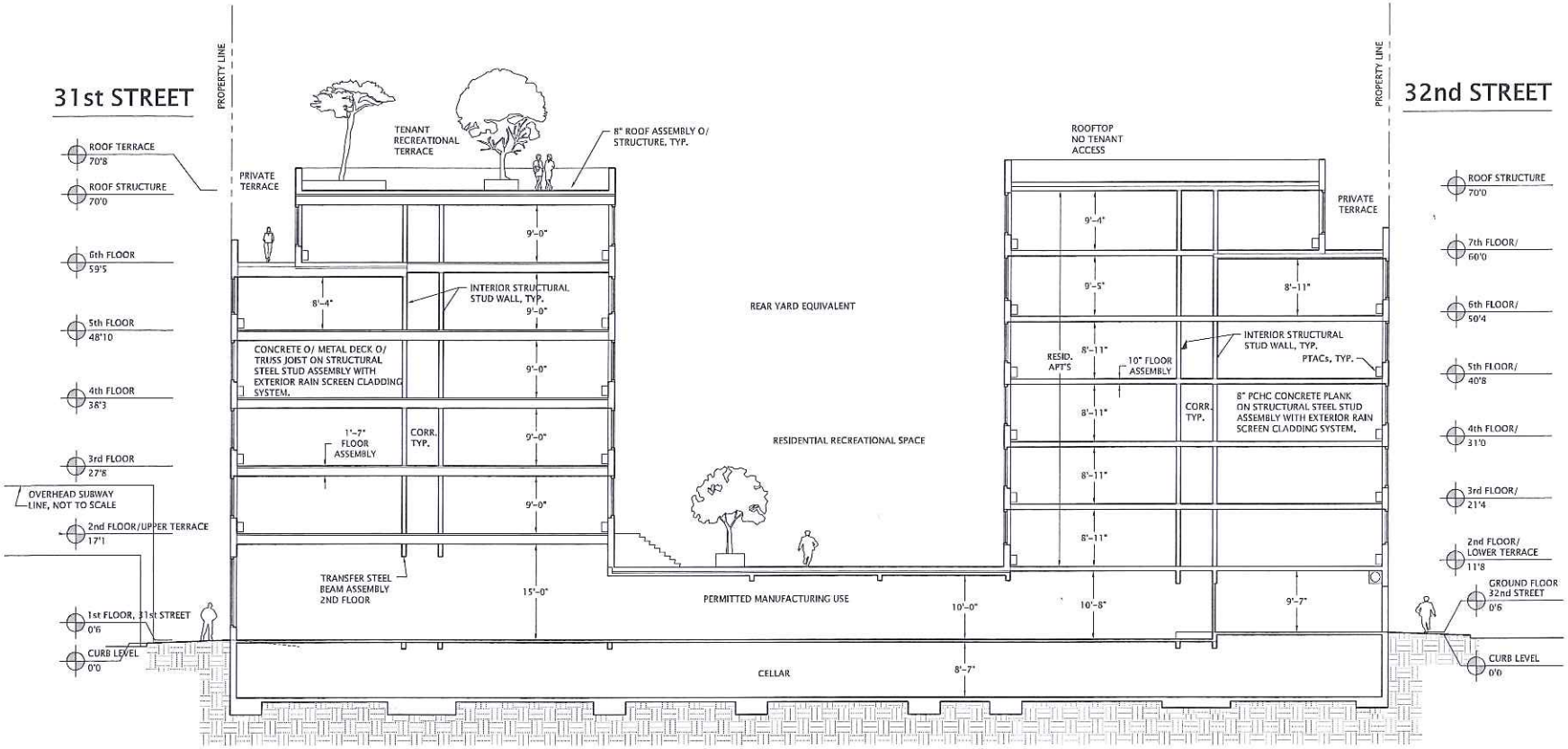
Figure 1H



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date	no.	description

Job #:208
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date: 6.9.2015
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EAST/WEST SECTION

sheet #
A10

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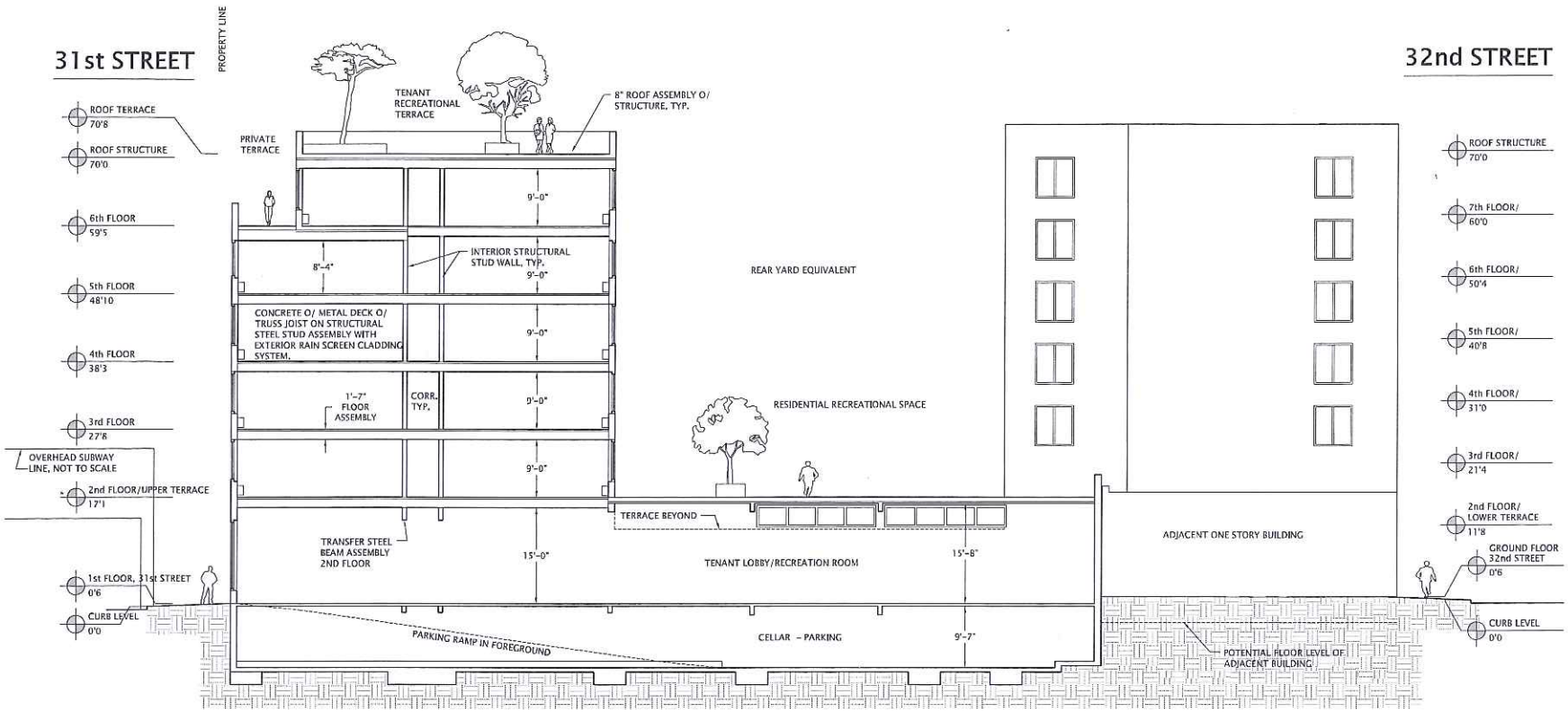
Figure 1I



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date	no.	description

job #:208
drawing: GANY
date: 6.9.2015
scale: 1/8" = 1'-0"

EAST/WEST SECTION

sheet #
A10

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Legend

Proposed Groundwater Monitoring Well Location (4).

Proposed Sub-Slab Vapor Sample Locations (3)

0 10 20 30
Graphic Scale in Feet

CA RICH CONSULTANTS, INC.

Environmental Specialists Since 1982
17 Dupont Street, Plainview, New York 11803

TITLE: Proposed Sample Location Map		DATE: 9/1/2015
		SCALE: As Shown
FIGURE: 2	37–27 31st Street Long Island City, NY	DRAWN BY: J.T.C.
DRAWING NO: 2015–1		APPR. BY: J.E.P.

APPENDIX B

Health and Safety Plan

Health and Safety Plan

37-26 32nd Street & 37-27 31st Street

Queens, New York 11101

September 2015

Prepared for:

31/32 LIC, LLC
100 Ring Road West, Suite 101
Garden City, NY 11530

Prepared by:

CA RICH CONSULTANTS, INC.
17 Dupont Street
Plainview, NY 11803-1614

Health & Safety Plan

REMEDIAL INVESTIGATION

37-26 32nd Street & 37-27 31st Street
Queens, NY 11101
Block 373; Lots 6, 45

1.0 INTRODUCTION

This Health and Safety Plan ("HASP") is developed for utilization during implementation of the Remedial Investigation at the above referenced site located in37-26 32nd Street & 37-27 31st Street in Queens, New York (the Site). The HASP is to be enforced by CA RICH's Project Health and Safety Manager and the on-site Health & Safety Coordinator (HSC) or his/her designee. The on-site HSC will interface with the Project Manager and is vested with the authority to make field decisions including the termination of on-site activities if an imminent health and safety hazard, condition or related concern arises. Information and protocol in the HASP is applicable to all on-site personnel who will be entering the designated work zone.

2.0 POTENTIAL HAZARDS

2.1 Chemical Hazards

CA RICH is currently unaware of any chemical hazards on-site. Soil samples were recently collected from the Site. Low levels of Volatile Organic Compounds (VOCs) were identified below Restricted Residential Soil Cleanup Objectives (SCOs). Low levels of Semi Volatile Organic Compounds (SVOCs) and metals were identified. A few SVOCs and metals were detected above Restricted Residential SCOs. CA RICH will operate as if there is a potential for VOCs, SVOCs, and metals contamination on-site.

VOC and SVOCs are described typically described as "sweet" or "aromatic" smelling and are narcotic in high concentrations. Acute exposure to significant concentrations of these chemicals can cause irritation of the skin, eyes and mucus membrane, headache, dizziness, nausea, and in high enough concentrations, loss of consciousness and death *(Sax, 1984)*. These compounds are suspected to be carcinogenic with chronic exposure.

Physical properties and additional toxicological information for potential contaminants are included in Appendix A.

2.2 Other Health & Safety Risks

Normal physical hazards associated with using drilling and excavation equipment and hand tools as well as hazards associated with adverse climatic conditions (heat & cold) or physical site-related debris represent a certain degree of risk to be assumed by on-site personnel.

Certain provisions in this Plan, specifically the use of personnel protective equipment, may tend to increase the risk of physical injury, as well as susceptibility to cold or heat stress. This is primarily due to restrictions in dexterity, hearing, sight, and normal body heat transfer inherent in the use of protective gear.

3.0 RISK MANAGEMENT

3.1 Work / Exclusion Zones

For each proposed investigation activity a work / exclusion zone will be established. Access to this area will be limited to properly trained, properly protected personnel directly involved with investigation. Enforcement of the work / exclusion zone boundaries is the responsibility of the on-site Health & Safety Coordinator or his/her designee.

3.2 Personnel Protection

Health & Safety regulatory personnel have developed different levels of personnel protection to deal with differing degrees of potential risks of exposure to chemical constituents. The levels are designated as **A, B, C,** and **D** and are ranked according to the amount of personnel protection afforded by each level. Level **A** is the highest level of protection and Level **D** is the lowest level of protection.

The different levels are primarily dependent upon the degree of respiratory protection necessary, in conjunction with appropriate protective clothing. Levels of protection mandate a degree of respiratory protection. However, flexibility exists within the lower levels (B, C, and D) concerning proper protective clothing.

The four levels of protection were developed for utilization in situations which involve suspected or known atmospheric and/or environmental hazards including airborne contamination and skin-affecting substances.

It is anticipated that all of the investigation work will be performed using Level D protection (no respiratory protection with protective clothing requirements limited to long sleeved shirts, long pants or coveralls, work gloves and steel-toe leather work boots).

Level D may be modified by the HSC to include protective clothing or equipment (Saran-coated disposable coveralls or PVC splash suits, safety glasses, hard hat with face shield, and chemically resistant boots) based upon physical hazards, skin contact concerns, and real-time monitoring.

Real-time air monitoring for total airborne organics using either an OVA or an HNU will determine if and when an upgrade from Level D to a higher level of respiratory protection is warranted. Decisions for an upgrade from Level D to higher levels of protection, mitigative actions, and/or suspension of work are the responsibility of the Project Manager and/or the designated on-site Health & Safety Coordinator.

In the event odors are detected, Level C respiratory protection will be employed. Organic vapor cartridges are capable of removing xylenes at a concentration of 1,000 ppm and trimethylbenzenes at a concentration of 250 ppm.

3.2 Air Monitoring

The Health & Safety Coordinator or his/her properly trained assignee will conduct “Real Time” air monitoring for total organic vapors. 'Real-time' monitoring refers to the utilization of instrumentation, which yields immediate measurements. The utilization of real time monitoring helps determine immediate or long-term risks to on-site personnel and the general public, the appropriate level of personnel respiratory protection necessary, and actions to mitigate the recognized hazard.

3.2.1. Organic Vapor

A. Instrumentation

Real-time monitoring for total organic vapor (TOV) utilizes either a photo-ionization detector (PID) or flame ionization detector (FID). The appropriate PID is an intrinsically safe HNU Systems Model PI-101, MiniRae 3,000 or equivalent PID, which is factory calibrated to benzene and is capable of detecting petroleum-related contamination. The appropriate FID is a Foxboro model 128 Organic vapor Analyzer (OVA), which is factory calibrated to methane.

B. Application

Organic vapor monitoring is performed as outlined in the NYSDOH Community Air Monitoring Plan. Specifically, monitoring shall be conducted at the downwind perimeter of the work zone periodically during work activities. If TOV levels exceed 5 milligrams per meter cubed (mg/m^3) above established pre-work background levels, work activities will be halted and monitoring will be continued under the provision of a Vapor Emission Response Plan (outlined in Section 5).

3.3 Worker Training

Personnel working in the contamination area must be trained, fit-tested, and medically-Certified (OSHA 29 CFR 1910. 134).

All personnel working within the work/exclusion area must confirm their participation in an ongoing health surveillance program. The program must consist of an initial "baseline" examination stipulated by OSHA (29 CFR 1910. 134). The examination is designed to screen for evidence of adverse effects of occupational exposure (particularly to toxic substances) and determine personnel fitness with respect to the use of respiratory protection.

Each worker enlisted in the medical surveillance program receives an annual examination similar to the baseline exam to evaluate irregularities or trends in his/her health with respect to potential exposure. Upon termination of employment, contract/subcontract or job completion, each worker/employee must take an 'exit examination' identical to the annual exam. All physicals will be performed by licensed physicians with medical histories to be confidentially maintained by their employer.

Prior to any work, all workers involved with the project should be aware of the potential chemical, physical and biological hazards discussed in this document, as well as the general safety practices outlined below. A safety briefing by the on-site HSC and/or assistant designee shall take place at the outset of work activities.

3.4 General Safety Practices

The following safety practices shall be followed by all project personnel.

1. Avoid unnecessary skin exposure to subsurface materials. Sleeved shirts tucked into long pants (or coveralls), work gloves, and steel-toe leather work boots are required unless modified gear is approved by the HSC. Remove any excess residual soil from clothes prior to leaving the site.

2. No eating, drinking, gum or tobacco chewing, or smoking allowed in designated work areas. Thoroughly wash hands prior to these activities outside the work area. Avoid sitting on the ground during breaks or while eating and drinking. Thoroughly wash all exposed body areas at the end of the workday.

3. Some symptoms of acute exposure include: dizziness, light-headedness, drowsiness, headache, and nose/eye/skin irritation. If these symptoms are experienced or strong odor is detected, leave the work area and immediately report the incident to the on-site HSC.

3.5 Enforcement

Enforcement of the Site Safety Plan will be the responsibility of the HSC or his/her designee. The Coordinator or his/her designee should be on-site on a full-time basis and perform or directly oversee all aspects of Project Health & Safety operations including: air monitoring; environmental mitigation; personnel respiratory and skin protection; general safety practices; documentation; emergency procedures and protocol; and reporting and recordkeeping as described below.

3.6 Reporting & Recordkeeping

Incidents involving injury, symptoms of exposure, discovery of contained (potentially hazardous) materials, or unsafe work practices and/or conditions should be immediately reported to the HSC.

A logbook must be maintained on-site to document all aspects of HASP enforcement. The log is paginated and dated with entries made on a daily basis in waterproof ink, initialed by the HSC or designee. Log entries should include date and time of instrument monitoring, instrument type, measurement method, test results, calibration and maintenance information, as well as appropriate mitigative actions responding to detections. Miscellaneous information to be logged may include weather conditions, reported complaints or symptoms, regulatory inspections, and reasons to upgrade personnel protection above the normal specification (Level D).

4.0 EMERGENCIES

4.1 EMERGENCY RESPONSE SERVICES

(1)	**HOSPITAL** Urgent Medical Care 32-74 Steinway Street Queens, NY 11103	**(718) 721-0101**
(2)	**AMBULANCE**	**911**
(3)	**FIRE DEPARTMENT** **HAZARDOUS MATERIALS**	**911**
(4)	**POLICE DEPARTMENT**	**911**
(5)	**POISON CONTROL CENTER**	**(800) 222-1222**

The preceding list and associated attached map (Figure 1) illustrating the fastest route to the nearest hospital must be conspicuously posted in areas of worker congregation and adjacent to all on-site telephones (if any).

4.2 EMERGENCY PROCEDURES

4.2.1 Contact or Exposure to Suspected Hazardous Materials

In the event of a fire, chemical discharge, medical emergency, workers are instructed to immediately notify the HSC and proper emergency services (posted). Should physical contact with unknown or questionable materials occur, immediately wash the affected body areas with clean water and notify the HSC. Anyone experiencing symptoms of exposure should exit the work area, notify the HSC, and seek medical attention.

4.2.2 Personnel Decontamination, First Aid, and Fire Protection

The first step in the treatment of skin exposure to most chemicals is to rinse the affected area with water. For this reason, adequate amounts of potable water and soap are maintained on-site in a clearly designated and readily-accessible location. Portable emergency eyewash stations and a first aid kit must be made available and maintained in the same locations as the potable water. Fire extinguishers are also to be maintained on-site in designated locations. All on-site personnel are to be made aware of the locations of the above-mentioned on-site Health & Safety accommodations during the initial Health and Safety briefing.

4.2.3 Ingress/egress

Clear paths of ingress/egress to work zones and site entrances/exits must be maintained at all times. Unauthorized personnel are restricted from accessing the site.

5.0 VAPOR EMISSIONS REPONSE PLAN

If the ambient air concentration of organic vapors exceeds 5 mg/m^3 above background at the perimeter of the work area, activities will be halted and monitoring continued. If the organic vapor level decreases below 5 mg/m^3 above background, work activities can resume. If the organic vapor levels are greater than 5 mg/m^3 over background but less than 25 ppm over background at the perimeter of the work area, activities can resume provided:

- The organic vapor level 200 ft. downwind of the work area or half the distance to the nearest residential or commercial structure, whichever is less, is below 5 mg/m^3 over background.

If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown. When work shutdown occurs, downwind air monitoring as directed by the Safety Officer will be implemented to ensure that vapor emission does not impact the nearest residential or commercial structure at levels exceeding those specified in the Major Vapor Emission section.

Major Vapor Emission

If any organic levels greater than 5 mg/m^3 over background are identified 200 feet downwind from the work area or half the distance to the nearest residential or commercial property, whichever is less, all work activities must be halted.

If, following the cessation of the work activities, or as the result of an emergency, organic levels persist above 5 mg/m^3 above background 200 feet downwind or half the distance to the nearest residential or commercial property from the work area, then the air quality must be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 Foot Zone).

If efforts to abate the emission source are unsuccessful and, if organic vapor levels are approaching 5 mg/m^3 above background for more than 30 minutes in the 20 Foot Zone, then the Major Vapor Emission Response Plan shall automatically be placed into effect;

However, the Major Vapor Emission Response Plan shall be immediately placed into effect if organic vapor levels are greater than 10 mg/m^3 above background.

Major Vapor Emission Response Plan

Upon activation, the following activities will be undertaken:

1. All Emergency Response Contacts as listed in the Health & Safety Plan of the Corrective Action Plan will go into effect.

2. The local police authorities will immediately be contacted by the Safety Officer and advised of the situation.

3. Frequent air monitoring will be conducted at 30 minute intervals within the 20 Foot Zone. If two successive readings below action levels are measured, air monitoring may be halted or modified by the Safety Officer.

6.0 HEALTH & SAFETY PLAN REFERENCES

1. American Conference Governmental Industrial Hygienists, 1989; Threshold Limit Values and Biological Exposure Indices, 111 Pp.

2. Geoenvironmental Consultants, Inc.; 1987; Safety & Operations At Hazardous Materials Sites

3. NIOSH Guide To Chemical Hazards, 2002, US Department Of Health And Human Services, Centers For Disease Control

4. US Department Of Labor Occupational Safety & Health Administration, 1989; Hazardous Waste Operations And Emergency Response Interim Final Rule, 29 CFR Part 1910

5. Sax, N. I. Dangerous Properties Of Industrial Materials; © 1984

7.0 KEY PERSONNEL

Responsibility	Name and Phone Number	Task Description
Project Manager	Jessica Proscia (516) 576-8844	Oversee and coordinate all technical aspects for the project
Site Safety Officer	Thomas Brown (516) 576-8844	Coordinate and inspect all health and safety operations from the project site
Client Representative	Fredric Oliver (516) 248-4920	
Project Manager Alternate	Victoria Whelan (516) 576-8844	
Site Safety Officer Alternate	William Fitchett (516) 576-8844	

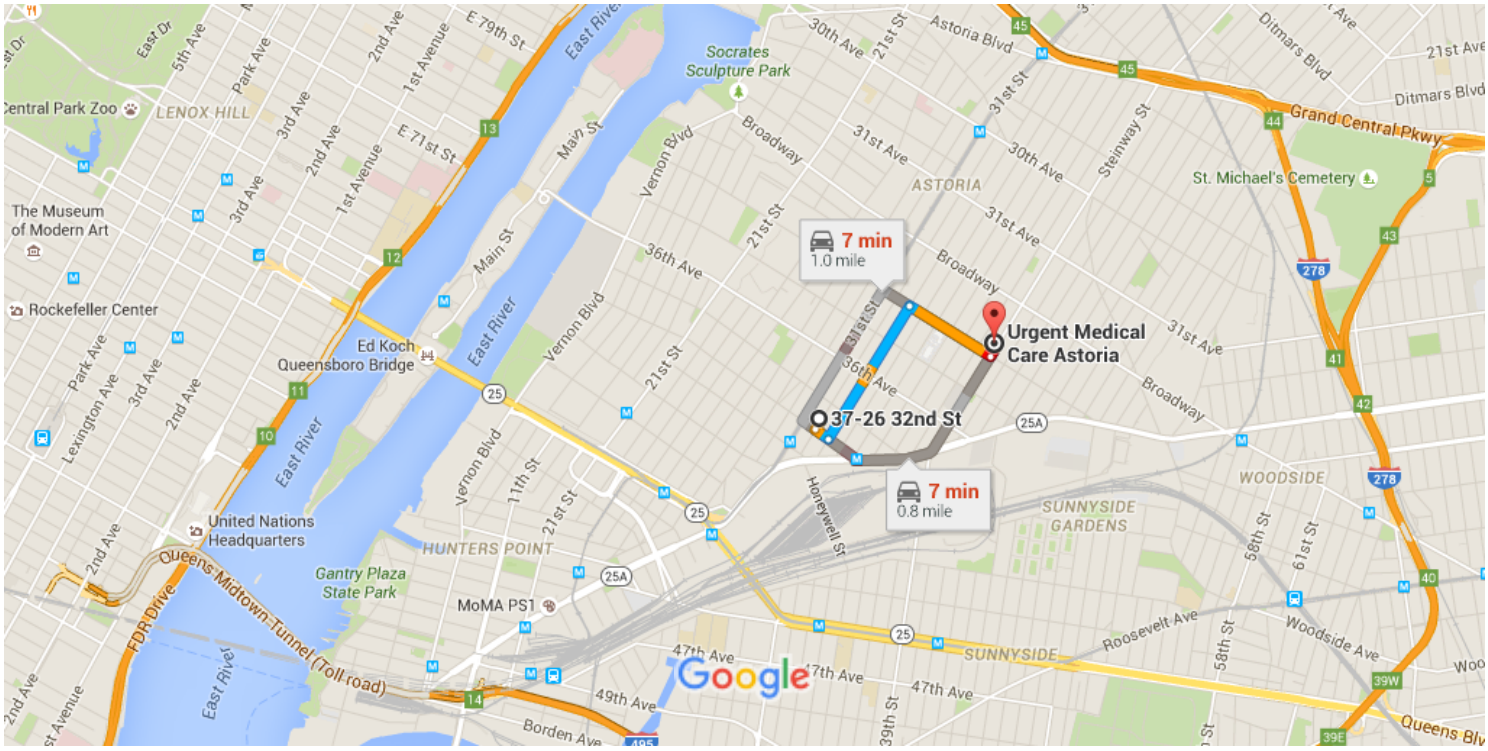
FIGURE

Google Maps

37-26 32nd St, Long Island City, NY 11101 to Urgent Medical Care Astoria

Drive 0.9 mile, 6 min

Figure 1 - Hospital Route



37-26 32nd St

Long Island City, NY 11101

1. Head southwest on 32nd St toward 38th Ave — 197 ft
2. Turn left at the 1st cross street onto 38th Ave — 259 ft
3. Turn left at the 1st cross street onto 33rd St — 0.5 mi
4. Turn right onto 34th Ave — 0.3 mi
5. Turn left onto Steinway St — 203 ft
   Destination will be on the left

Urgent Medical Care Astoria

32-74 Steinway Street, Astoria, NY 11103

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the

Appendix A

Toxicological Information

Fisher Scientific
Part of Thermo Fisher Scientific

Material Safety Data Sheet

Trichloroethylene, stabilized

ACC# 23850

Section 1 - Chemical Product and Company Identification

MSDS Name: Trichloroethylene, stabilized
Product Grade : SQ, ExcelaR, EL
Catalog Numbers: 28455, 28456, 28457, 14715, 41957
Synonyms: Trichloroethylene
Company Identification:

Fisher Scientific
Part of Thermo Fisher Scientific
THERMO ELECTRON LLS INDIA PVT.LTD.
Godrej Coliseum, 101A-101B, Somaiya Hospital Road,
Off Eastern Express Highway, Sion (East), Mumbai-400 022, India

For information, call: 022 – 6680 3001/2, **Call India Toll Free** – 1800 209 7001
Emergency Number: 022-66803004/14
For CHEMTREC assistance, call: 800-424-9300 [International]
For International CHEMTREC assistance, call: 703-527-3887 [International]

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
79-01-6	Trichloroethylene	>99	201-167-4

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless liquid.
Warning! Breathing vapors may cause drowsiness and dizziness. Causes eye and skin irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. May cause cancer based on animal studies. May cause liver damage.
Target Organs: Central nervous system, liver, eyes, skin.

Potential Health Effects

Eye: Causes moderate eye irritation. May result in corneal injury. Contact produces irritation, tearing, and burning pain. Contact with trichloroethylene causes pain but no permanent injury to the eyes. (Doc of TLV)
Skin: Causes mild skin irritation. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. May cause peripheral nervous system function impairment including persistent neuritis, and temporary loss of touch. Damage to the liver and other organs has been observed in workers who have been overexposed.
Ingestion: May cause irritation of the digestive tract. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.
Inhalation: May cause respiratory tract irritation. May cause liver abnormalities. May cause cardiac abnormalities. May cause peripheral nervous system effects. Inhalation overexposure may lead to central nervous system depression, producing effects such as dizziness, headache, confusion, incoordination, nausea, weakness, and loss of consciousness. Extreme exposures may cause other CNS effects including death. The chief symptoms of TCE exposure were found to be abnormal fatigue, irritability, headache, gastric disturbances, and intolerance to alcohol. (Doc to TLV)
Chronic: Possible cancer hazard based on tests with laboratory animals. Chronic inhalation may cause effects similar to those of acute inhalation. Prolonged or repeated skin contact may cause defatting and dermatitis. May cause peripheral nervous system function impairment including persistent neuritis, and temporary loss of touch. Damage to the liver and other organs has been observed in workers who have been overexposed.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid imme diately.
Skin: Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.
Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Possible aspiration hazard. Get medical aid immediately.
Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation.
Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.
Flash Point: None
Autoignition Temperature: 420 deg C (788.00 deg F)
Explosion Limits, Lower:8
Upper: 10.5
NFPA Rating: (estimated) Health: 2; Flammability: 1; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Provide ventilation. Approach spill from upwind. Control runoff and isolate discharged material for proper disposal.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor.
Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Trichloroethylene	50 ppm TWA; 100 ppm STEL	1000 ppm IDLH	100 ppm TWA; 200 ppm Ceiling

OSHA Vacated PELs: Trichloroethylene: 50 ppm TWA; 270 mg/m3 TWA

Personal Protective Equipment
Eyes: Wear chemical splash goggles.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: clear, colorless
Odor: chloroform-like
pH: Not available.
Vapor Pressure: 58 mm Hg @ 20 deg C
Vapor Density: 4.5 (air=1)
Evaporation Rate:0.69 (CCl_4=1)
Viscosity: 0.0055 poise
Boiling Point: 87 deg C
Freezing/Melting Point:-86 deg C
Decomposition Temperature: Not available.
Solubility: Slightly soluble.
Specific Gravity/Density:1.46
Molecular Formula:C_2HCl_3
Molecular Weight:131.39

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Light, confined spaces.
Incompatibilities with Other Materials: Active metals.
Hazardous Decomposition Products: Hydrogen chloride, phosgene, carbon monoxide, carbon dioxide.
Hazardous Polymerization: May occur.

Section 11 - Toxicological Information

RTECS#:
CAS# 79-01-6: KX4550000
LD50/LC50:
CAS# 79-01-6:
Draize test, rabbit, eye: 20 mg/24H Moderate;
Draize test, rabbit, skin: 2 mg/24H Severe;
Inhalation, mouse: LC50 = 8450 ppm/4H;
Inhalation, mouse: LC50 = 220000 mg/m3/20M;
Inhalation, mouse: LC50 = 262000 mg/m3/30M;
Inhalation, mouse: LC50 = 40000 mg/m3/4H;
Inhalation, rat: LC50 = 140700 mg/m3/1H;
Oral, mouse: LD50 = 2402 mg/kg;
Oral, mouse: LD50 = 2400 mg/kg;
Oral, rat: LD50 = 4920 mg/kg;
Skin, rabbit: LD50 = >20 gm/kg;
Skin, rabbit: LD50 = 20 mL/kg;
.

Carcinogenicity:
CAS# 79-01-6:

- **ACGIH:** Not listed.
- **California:** carcinogen, initial date 4/1/88
- **NTP:** Suspect carcinogen
- **IARC:** Group 2A carcinogen

Epidemiology: In six epidemiological studies completed, there was no evidence to suggest that trichloroethylene has increased the incidence of cancer in humans. (Documentation of the TLV, 7th edition)
Teratogenicity: No information available.
Reproductive Effects: Experimental reproductive effects have been observed.
Mutagenicity: Human mutation data has been reported. IARC and the National Toxicology Program (NTP) stated that variability in the mutagencity test results with trichloroethylene may be due to the presence of various stabilizers used in TCEwhich are mutagens (e.g.epoxybutane, epichlorohydrin).See actual entry in RTECS for complete infomation.R68 Mutagen Category 3 (CHIP 2002, UK).
Neurotoxicity: No information available.
Other Studies:

Section 12 - Ecological Information

Ecotoxicity: Fish: Fathead Minnow: 41-67 mg/L; 96 hrs.; LC50Daphnia: Daphnia: 2.2-100 mg/L; 48 hrs.; LC50Mollusk Shrimp: 2 mg/L; 96 hrs.; LC50 Bluegill sunfish, LD50= 44,700 ug/L/96Hr. Fathead minnow, LC50=40.7 mg/L/96Hr.
Environmental: In air, substance is photooxidized and is reported to form phosgene, dichloroacetyl chloride, and formyl chloride. In water, it evaporates rapidly. Potential for

mobility in soil is high.
Physical: No information available.
Other: Bioconcentration potential is low (BCF less than 100).

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series:
CAS# 79-01-6: waste number U228.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	TRICHLOROETHYLENE	TRICHLOROETHYLENE
Hazard Class:	6.1	6.1
UN Number:	UN1710	UN1710
Packing Group:	III	III

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 79-01-6 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
CERCLA Hazardous Substances and corresponding RQs

CAS# 79-01-6: 100 lb final RQ; 45.4 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 79-01-6: immediate, delayed, reactive.

Section 313

This material contains Trichloroethylene (CAS# 79-01-6, >99%),which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR

Clean Air Act:

CAS# 79-01-6 is listed as a hazardous air pollutant (HAP).
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

CAS# 79-01-6 is listed as a Hazardous Substance under the CWA. CAS# 79-01-6 is listed as a Priority Pollutant under the Clean Water Act. CAS# 79-01-6 is listed as a Toxic Pollutant under the Clean Water Act.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 79-01-6 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65

The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:

WARNING: This product contains Trichloroethylene, a chemical known to the state of California to cause cancer.
California No Significant Risk Level: CAS# 79-01-6: 50 æg/day NSRL (oral); 80 æg/day NSRL (inhalation)

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

T

Risk Phrases:

R 36/38 Irritating to eyes and skin.
R 45 May cause cancer.
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 67 Vapours may cause drowsiness and dizziness.

Safety Phrases:

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 53 Avoid exposure - obtain special instructions before use.
S 61 Avoid release to the environment. Refer to special instructions /safety data sheets.

WGK (Water Danger/Protection)

CAS# 79-01-6: 3

Canada - DSL/NDSL

CAS# 79-01-6 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D1B, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 79-01-6 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 2/01/1999
Revision #7 Date: 12/27/2006

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.

Material Safety Data Sheet

Revision Date: 3/1/96

NA = Not Applicable NE = Not Established

Section 1. General Information

Product name: **Farbertite**

HMIS RATING: 2, 1, 0, Personal Protection: Depends upon conditions

Synonym: Coal tar pitch emulsion

Chemical Family: Tar pitch – inorganic solids – water

Manufacturer: **IPA Systems, Inc.**
2745 North Amber Street, Philadelphia, Pa. 19134
Phone: 800-523-3834 • 215-425-6607
Fax: 215-425-6234
E-mail: info@ipasystems.com
Website: www.ipasystems.com

Emergency Phone Number - Chemtrec: 800-424-9300

Section 2. Hazardous Ingredients

	Name:	C.A.S. No.	Approx. Percent	OSHA–PEL TWA	OSHA–PEL Ceiling	ACGIH TLV TWA	ACGIH TLV Ceiling
1.	Coal tar pitch, high temp, including:	65996-93-2	35	0.2 mg/m^3*	NE	0.2 mg/m^3*	NE
	Acenaphthene	83-32-9		NE	NE	NE	NE
	Acenaphthylene	208-96-8		NE	NE	NE	NE
	Anthracene	120-12-7		NE	NE	0.2 mg/m^3*	NE
	Benzo(a)anthracene	56-55-3		NE	NE	A2	NE
	Benzo(a)pyrene	50-32-8		0.2 mg/m^3*	NE	A2	NE
	Benzo(b)fluoranthene	205-99-2		NE	NE	A2	NE
	Benzo(ghi)perylene	191-24-2		NE	NE	NE	NE
	Benzo(k)fluoranthene	207-08-9		NE	NE	NE	NE
	Carbazole	86-74-8		NE	NE	NE	NE
	Chrysene	218-01-9		0.2 mg/m^3*	NE	A2	NE
	Dibenz(a,h)anthracene	53-70-3		NE	NE	NE	NE
	Dibenzofuran	132-64-9		NE	NE	NE	NE
	Fluoranthene	206-44-0		NE	NE	NE	NE
	Fluorene	86-73-7		NE	NE	NE	NE
	Indene	95-13-6		NE	NE	10 ppm	NE
	Indeno(1,2,3-cd)pyrene	193-39-5		NE	NE	NE	NE
	1-Methylnaphthalene	90-12-0		NE	NE	NE	NE
	2-Methylnaphthalene	91-57-6		NE	NE	NE	NE
	Naphthalene	91-20-3		10 ppm	NE	10 ppm	15 ppm
	Phenanthrene	85-01-8		0.2 mg/m^3*	NE	0.2 mg/m^3*	NE
	Pyrene	129-00-0		0.2 mg/m^3*	NE	0.2 mg/m^3*	NE
2.	Kaolin	1332-58-7	15	5 mg/m^3**	NE	2 mg/m^3 RF	NE
3.	Sand (Quartz)	14808-60-7	2	**	NE	0.1 mg/m^3 RF	NE
4.	Water	Not Req'd.	48	NE	NE	NE	NE

(continued on next page)

Material Safety Data Sheet

Revision Date: 3/1/96 NA = Not Applicable NE = Not Established

Section 2. Hazardous Ingredients

(continued from previous page)

Notes on exposure limits:

RF = Respirable Fraction
TD = Total Dust
AF = Asbestos Free
* For benzene- (or cylcohexane-) soluble fraction of coal tar pitch volatiles
** PEL for crystaline quartz (respirable): 10 mg/m^3 / (%SiO_2 + 2)
PEL for quartz (total dust): 30 mg/m^3 / (%SiO_2 + 2)

Section 3. Physical Data

Boiling Point: 212°F (100°C)

Specific Gravity: (H_2O = 1): 1.20

Vapor Pressure (mm Hg.): 17 mm Hg @ 20°C (water)

Percent Volatile by Volume: 48 (est.)

Vapor Density (Air = 1): Above 1.0

Solubility in Water: Negligible

Appearance and Odor: Black liquid, mild odor

Section 4. Fire and Explosion Hazard Data

Flash Point: None

Autoignition Temperature: None

Flammable Limits: LEL = NA UEL = NA

Extinguishing Media: Material will not burn unless water is first evaporated. If engulfed in a fire, use extinguishant suitable for the primary fuel.

Special Fire Fighting Procedures: Wear respirator (pressure demand, self-contained breathing apparatus, MSHA/NIOSH-approved) and full protective gear for working fires. Cool exposed containers with water spray.

Unusual Fire and Explosion Hazards: Combustion products can include oxides of nitrogen, carbon and possibly sulphur.

Material Safety Data Sheet

Section 5. Health Hazard Data

Hazardous Material Identification System (HMIS) Classification:

Health: 2 Flammability: 1 Reactivity: 0 Personal Protection: Depends upon conditions

OSHA PEL: See **Section 2. Hazardous Ingredients** ACGIH TLV: See **Section 2. Hazardous Ingredients**

Carcinogen – NTP Program: Yes Carcinogen – IARC Program: Yes

Coal tar pitch has been determined by IARC to be a human carcinogen. Coal tar pitch and several of its specific ingredients, including benzo(a)pyrene, have been determined by NTP to cause cancer in experimental animals.

Symptoms of Exposure:

Ingestion: May cause gastrointestinal irritation or distress if swallowed.

Skin: Pitch portion of emulsion can cause skin irritation and dermatitus, including acne. Coal tar pitch is a phototoxic substance which, in the presence of ultraviolet light (sunlight), can cause a skin reaction similar to an exaggerated sunburn, frequently causing blisters. However, emulsion form of this material reduces the risk of direct contact with pitch.

Eye contact: Can cause eye irritation or abrasion.

Inhalation: Material is not an inhalation hazard unless spray mist is present; in which case, it can irritate the nose and throat.

Delayed effects: Long-term over-exposure to coal tar pitch can affect skin pigmentation. It can cause growths on the skin or skin cancer. It may cause cancer of the lungs, kidneys or bladder.

Medical Conditions Aggravated by Exposure: NA

Routes of Entry: Ingestion, Skin, Eye Contact, Inhalation of spray mist

Emergency and First Aid Procedures:

Inhalation: If mist particles clog airways, remove them by blowing nose, using vegetable oil to soften dried particles if necessary.

Swallowing: Consult a physician or poison control center at once for instructions.

Eye Contact: Immediately flush well with large amounts of water for 15 minutes. Seek medical attention if irritation persists.

Skin Contact: Remove contaminated clothing. If material adheres to skin, remove it with vegetable oil, then wash thoroughly with soap and water. Hydrocortisone cream may be used for relief of skin irritation. Seek medical attention if irritation persists.

Section 6. Reactivity Data

Stability: Stable

Conditions to Avoid: None

Incompatibility (Materials to Avoid Contact): Strong oxidizers

Hazardous Decomposition or By-Products: No decomposition in normal handling.

Hazardous Polymerization: Will not occur.

Material Safety Data Sheet

Section 7. Procedures for Safe Handling and Use

Spill Response: Follow all precautions given in Section 8 and wear permeation-resistant, elastomeric boots or overshoes. If molten liquid is spilled indoors, ventilate spill area. Stop source of spill or leak if possible. Contain spills by diking with sand, earth, ash or other inert material in order to prevent spillage from entering sewers or open bodies of water. (Significant soil penetration is unlikely because material will solidify at or near soil surface.)

Allow hot material to cool and solidify, then transfer spillage to labeled containers for recovery or disposal.

Report spill immediately to National Response Center if amount released to the environment exceeds 210 pounds, which is based upon the concentration of benzo(b)flouranthene (RQ – 1 lb.) present in this material and listed in 40 CFR Table 302.4.

Waste Disposal Method: Dispose of waste at a permitted facility according to federal, state and local regulations.

Empty containers may contain residues that could burn or produce harmful vapors if heated or ignited. Do not weld on or apply heat or flame to container. Follow federal, state and local regulations in disposing of containers.

Section 8. Control Measures

Eye Protection: Wear splash goggles (ANSI Z87.1a-1991) when pouring or transferring this material. Do not wear contact lenses.

Respiratory Protection: Not required unless spray mist is present. To prevent overexposure to spray mist, wear respirator (MSHA/NIOSH approved) equipped with dust-mist filter.

Skin Protection: Avoid skin contact by wearing elastomeric gloves when handling.

Ventilation: No special ventilation measures are required unless spray mist is present, in which case, provide local or general exhaust ventilation.

Other Protection: Eyewash station and emergency shower (ANSI Z358.1-1990) should be readily available.

Section 9. Special Precautions

Hygienic Practices in Handling and Storage: Wash hands with soap and water after handling and especially before eating or smoking. Wash contaminated clothing before reuse.

Precautions for Repair and Maintenance of Contaminated Equipment: NA

Other Precautions: Store and handle separately from strong oxidizers.

Material Safety Data Sheet

Section 10. Regulatory Information

The following information applies to ground shipments within North America, but may not apply otherwise.

Packaged shipments – Bill of Lading Descriptions:

Up to 5 gallons:
Not D.O.T.-regulated.

Drums:
RQ, Other regulated substances, liquid, NOS, 9, NA3082, PG III
(Tar pitch / CONTAINS benzo(b)flouranthene, benzo(a)pyrene)

All ingredients of this product are listed on the TSCA Inventory in accordance with Section 8(b).

The following ingredients are reportable under SARA Section 313 (40 CFR Part 372, Subpart D):

Name	C.A.S. Number	Concentration, wt. pct.
Polycyclic Aromatic Compound Category	None	1.0

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Lead

Synonyms & Trade Names Lead metal, Plumbum

CAS No. 7439-92-1	**RTECS No.** OF7525000 (/niosh-rtecs/OF72D288.html)	**DOT ID & Guide**
Formula Pb	**Conversion**	**IDLH** 100 mg/m3 (as Pb) See: 7439921 (/niosh/idlh/7439921.html)

Exposure Limits

NIOSH REL *: TWA (8-hour) 0.050 mg/m3 See Appendix C (nengapdxc.html) [*Note: The REL also applies to other lead compounds (as Pb) -- see Appendix C.]

OSHA PEL *: [1910.1025] TWA 0.050 mg/m3 See Appendix C (nengapdxc.html) [*Note: The PEL also applies to other lead compounds (as Pb) -- see Appendix C.]

Measurement Methods

NIOSH 7082 (/niosh/docs/2003-154/pdfs/7082.pdf), 7105 (/niosh/docs/2003-154/pdfs/7105.pdf), 7300 (/niosh/docs/2003-154/pdfs/7300.pdf), 7301 (/niosh/docs/2003-154/pdfs/7301.pdf), 7303 (/niosh/docs/2003-154/pdfs/7303.pdf), 7700 (/niosh/docs/2003-154/pdfs/7700.pdf), 7701 (/niosh/docs/2003-154/pdfs/7701.pdf), 7702 (/niosh/docs/2003-154/pdfs/7702.pdf), 9100 (/niosh/docs/2003-154/pdfs/9100.pdf), 9102 (/niosh/docs/2003-154/pdfs/9102.pdf), 9105 (/niosh/docs/2003-154/pdfs/9105.pdf);
OSHA ID121 (http://www.osha.gov/dts/sltc/methods/inorganic/id121/id121.html) (http://www.cdc.gov/Other/disclaimer.html), ID125G (http://www.osha.gov/dts/sltc/methods/inorganic/id125g/id125g.html) (http://www.cdc.gov/Other/disclaimer.html), ID206 (http://www.osha.gov/dts/sltc/methods/inorganic/id206/id206.html) (http://www.cdc.gov/Other/disclaimer.html)
See: NMAM (/niosh/docs/2003-154/) or OSHA Methods (http://www.osha.gov/dts/sltc/methods/index.html) (http://www.cdc.gov/Other/disclaimer.html)

Physical Description A heavy, ductile, soft, gray solid.

MW:	BP:	MLT:	Sol:	VP:	IP:
207.2	3164°F	621°F	Insoluble	0 mmHg (approx)	NA
Sp.Gr: 11.34	**Fl.P:** NA	**UEL:** NA	**LEL:** NA		

Noncombustible Solid in bulk form.

Incompatibilities & Reactivities Strong oxidizers, hydrogen peroxide, acids

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Enter search terms separated by spaces.

Mercury compounds [except (organo) alkyls] (as Hg)

Synonyms & Trade Names Mercury metal: Colloidal mercury, Metallic mercury, Quicksilver
Synonyms of "other" Hg compounds vary depending upon the specific compound.

CAS No. 7439-97-6 (metal)	**RTECS No.** OV4550000 (metal) (/niosh-rtecs/OV456D70.html)	**DOT ID & Guide** 2809 172 (http://wwwapps.tc.gc.ca/saf-sec-sur/3/erg-gmu/erg/guidepage.aspx?guide=172) (http://www.cdc.gov/Other/disclaimer.html) (metal)
Formula Hg (metal)	**Conversion**	**IDLH** 10 mg/m3 (as Hg) See: 7439976 (/niosh/idlh/7439976.html)
Exposure Limits **NIOSH REL** : Hg Vapor: TWA 0.05 mg/m3 [skin] Other: C 0.1 mg/m3 [skin] **OSHA PEL** † (nengapdxg.html) : TWA 0.1 mg/m3		**Measurement Methods** **NIOSH** 6009 (/niosh/docs/2003-154/pdfs/6009.pdf) ; **OSHA** ID140 (http://www.osha.gov/dts/sltc/methods/inorganic/id140/id140.html) (http://www.cdc.gov/Other/disclaimer.html) See: NMAM (/niosh/docs/2003-154/) or OSHA Methods (http://www.osha.gov/dts/sltc/methods/index.html) (http://www.cdc.gov/Other/disclaimer.html)

Physical Description Metal: Silver-white, heavy, odorless liquid. [Note: "Other" Hg compounds include all inorganic & aryl Hg compounds except (organo) alkyls.]

MW: 200.6	**BP:** 674°F	**FRZ:** -38°F	**Sol:** Insoluble	**VP:** 0.0012 mmHg	**IP:** ?
Sp.Gr: 13.6 (metal)	**Fl.P:** NA	**UEL:** NA	**LEL:** NA		

Metal: Noncombustible Liquid

Incompatibilities & Reactivities Acetylene, ammonia, chlorine dioxide, azides, calcium (amalgam formation), sodium carbide, lithium, rubidium, copper

Exposure Routes inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms irritation eyes, skin; cough, chest pain, dyspnea (breathing difficulty), bronchitis, pneumonitis;

tremor, insomnia, irritability, indecision, headache, lassitude (weakness, exhaustion); stomatitis, salivation; gastrointestinal disturbance, anorexia, weight loss; proteinuria

Target Organs Eyes, skin, respiratory system, central nervous system, kidneys

Personal Protection/Sanitation (See protection codes (protect.html))
Skin: Prevent skin contact
Eyes: No recommendation
Wash skin: When contaminated
Remove: When wet or contaminated
Change: Daily

First Aid (See procedures (firstaid.html))
Eye: Irrigate immediately
Skin: Soap wash promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations

Mercury vapor:

NIOSH

Up to 0.5 mg/m3:
(APF = 10) Any chemical cartridge respirator with cartridge(s) providing protection against the compound of concern†
(APF = 10) Any supplied-air respirator

Up to 1.25 mg/m3:
(APF = 25) Any supplied-air respirator operated in a continuous-flow mode
(APF = 25) Any powered, air-purifying respirator with cartridge(s) providing protection against the compound of concern†(canister)

Up to 2.5 mg/m3:
(APF = 50) Any chemical cartridge respirator with a full facepiece and cartridge(s) providing protection against the compound of concern†
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern†
(APF = 50) Any supplied-air respirator that has a tight-fitting facepiece and is operated in a continuous-flow mode
(APF = 50) Any powered, air-purifying respirator with a tight-fitting facepiece and cartridge(s) providing protection against the compound of concern(canister)
(APF = 50) Any self-contained breathing apparatus with a full facepiece
(APF = 50) Any supplied-air respirator with a full facepiece

Up to 10 mg/m3:
(APF = 1000) Any supplied-air respirator operated in a pressure-demand or other positive-pressure mode

Emergency or planned entry into unknown concentrations or IDLH conditions:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern
Any appropriate escape-type, self-contained breathing apparatus

Other mercury compounds: NIOSH/OSHA

Up to 1 mg/m3:
(APF = 10) Any chemical cartridge respirator with cartridge(s) providing protection against the compound of concern†

(APF = 10) Any supplied-air respirator

Up to 2.5 mg/m3:
(APF = 25) Any supplied-air respirator operated in a continuous-flow mode
(APF = 25) Any powered, air-purifying respirator with cartridge(s) providing protection against the compound of concern†(canister)

Up to 5 mg/m3:
(APF = 50) Any chemical cartridge respirator with a full facepiece and cartridge(s) providing protection against the compound of concern†
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern†
(APF = 50) Any supplied-air respirator that has a tight-fitting facepiece and is operated in a continuous-flow mode
(APF = 50) Any powered, air-purifying respirator with a tight-fitting facepiece and cartridge(s) providing protection against the compound of concern(canister)
(APF = 50) Any self-contained breathing apparatus with a full facepiece
(APF = 50) Any supplied-air respirator with a full facepiece

Up to 10 mg/m3:
(APF = 1000) Any supplied-air respirator operated in a pressure-demand or other positive-pressure mode

Emergency or planned entry into unknown concentrations or IDLH conditions:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern
Any appropriate escape-type, self-contained breathing apparatus

Important additional information about respirator selection (pgintrod.html#mustread)

See also: INTRODUCTION (/niosh/npg/pgintrod.html) See ICSC CARD: 0056 (/niosh/ipcsneng/neng0056.html) See MEDICAL TESTS: 0136 (/niosh/docs/2005-110/nmed0136.html)

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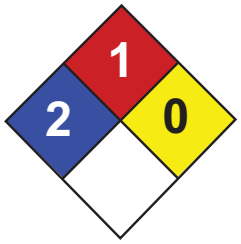

Health	2
Fire	1
Reactivity	0
Personal Protection	E

Material Safety Data Sheet
Copper MSDS

Section 1: Chemical Product and Company Identification

Product Name: Copper

Catalog Codes: SLC4939, SLC2152, SLC3943, SLC1150, SLC2941, SLC4729, SLC1936, SLC3727, SLC5515

CAS#: 7440-50-8

RTECS: GL5325000

TSCA: TSCA 8(b) inventory: Copper

CI#: Not available.

Synonym:

Chemical Name: Not available.

Chemical Formula: Cu

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Copper	7440-50-8	100

Toxicological Data on Ingredients: Copper LD50: Not available. LC50: Not available.

Section 3: Hazards Identification

Potential Acute Health Effects:
Very hazardous in case of ingestion. Hazardous in case of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (irritant).

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to lungs, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact: Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.

Skin Contact:
After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact: Not available.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation: Not available.

Ingestion:
Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Some metallic oxides.

Fire Hazards in Presence of Various Substances: Not available.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Avoid contact with eyes Wear suitable protective clothing In case of insufficient ventilation, wear suitable respiratory equipment If you feel unwell, seek medical attention and show the label when possible.

Storage:
Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 1 (mg/m3) from ACGIH [1990] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid.

Odor: Not available.

Taste: Not available.

Molecular Weight: 63.54 g/mole

Color: Not available.

pH (1% soln/water): Not applicable.

Boiling Point: 2595°C (4703°F)

Melting Point: 1083°C (1981.4°F)

Critical Temperature: Not available.

Specific Gravity: 8.94 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Insoluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Not available.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: No.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:
LD50: Not available. LC50: Not available.

Chronic Effects on Humans: The substance is toxic to lungs, mucous membranes.

Other Toxic Effects on Humans:
Very hazardous in case of ingestion. Hazardous in case of inhalation. Slightly hazardous in case of skin contact (irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Human: passes through the placenta, excreted in maternal milk.

Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Marine Pollutant

Section 15: Other Regulatory Information

Federal and State Regulations:
Pennsylvania RTK: Copper Massachusetts RTK: Copper TSCA 8(b) inventory: Copper CERCLA: Hazardous substances.: Copper

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC): R36- Irritating to eyes.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/09/2005 04:58 PM

Last Updated: 05/21/2013 12:00 PM

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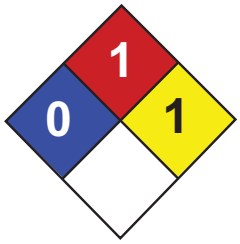

Health	1
Fire	1
Reactivity	1
Personal Protection	E

Material Safety Data Sheet
Zinc Metal MSDS

Section 1: Chemical Product and Company Identification

Product Name: Zinc Metal

Catalog Codes: SLZ1054, SLZ1159, SLZ1267, SLZ1099, SLZ1204

CAS#: 7440-66-6

RTECS: ZG8600000

TSCA: TSCA 8(b) inventory: Zinc Metal

CI#: Not applicable.

Synonym: Zinc Metal Sheets; Zinc Metal Shot; Zinc Metal Strips

Chemical Name: Zinc Metal

Chemical Formula: Zn

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Zinc Metal	7440-66-6	100

Toxicological Data on Ingredients: Zinc Metal LD50: Not available. LC50: Not available.

Section 3: Hazards Identification

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 480°C (896°F)

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances:
Slightly flammable to flammable in presence of open flames and sparks, of heat, of oxidizing materials, of acids, of alkalis, of moisture. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
Flammable solid. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

Special Remarks on Fire Hazards:
Zinc + NaOH causes ignition. Oxidation of zinc by potassium proceeds with incandescence. Residues from zinc dust /acetic acid reduction operations may ignite after long delay if discarded into waste bins with paper. Incandescent reaction when Zinc and Arsenic or Tellurium, or Selenium are combined. When hydrazine mononitrate is heated in contact with zinc, a flamming decomposition occurs at temperatures a little above its melting point. Contact with acids and alkali hydroxides (sodium hydroxide, postasium hydroxide, calcium hydroxide, etc.) results in evolution of hydrogen with sufficient heat of reaction to ignite the hydrogen gas. Zinc foil ignites if traces of moisture are present. It is water reactive and produces flammable gases on contact with water. It may ignite on contact with water or moist air.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Flammable solid that, in contact with water, emits flammable gases. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Cover with dry earth, sand or other non-combustible material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not breathe dust. Keep away from incompatibles such as oxidizing agents, acids, alkalis, moisture.

Storage:
Keep container tightly closed. Keep container in a cool, well-ventilated area. Keep from any possible contact with water. Do not allow water to get into container because of violent reaction.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Lustrous solid. Metal solid.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 65.39 g/mole

Color: Bluish-grey

pH (1% soln/water): Not applicable.

Boiling Point: 907°C (1664.6°F)

Melting Point: 419°C (786.2°F)

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Insoluble in cold water, hot water, methanol, diethyl ether, n-octanol, acetone.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, incompatible materials, moisture

Incompatibility with various substances:
Reactive with oxidizing agents, acids, alkalis. Slightly reactive to reactive with moisture. The product may react violently with water to emit flammable but non toxic gases.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:
Incompatible with acids, halogenated hydrocarbons, NH_4NO_3, barium oxide, $Ba(NO_3)_2$, Cadmium, CS_2, chlorates, Cl_2, CrO_3, F_2, Hydroxylamine, $Pb(N_3)_2$, $MnCl_2$, HNO_3, performic acid, $KClO_3$, KNO_3, N_2O_2, Selenium, $NaClO_3$, Na_2O_2, Sulfur, Te, water, $(NH_4)_2S$, As_2O_3, CS_2, $CaCl_2$, chlorinated rubber, catalytic metals, halocarbons, o-nitroanisole, nitrobenzene, nonmetals, oxidants, paint primer base, pentacarbonoyliron, transition metal halides, seleninyl bromide, HCl, H_2SO_4, (Mg +$Ba(NO_3)_2$ +BaO_2), (ethyl acetoacetate +tribromoneopentyl alcohol. Contact with Alkali Hydroxides(Sodium Hydroxide, Potassium Hydroxide, Calcium Hydroxide, etc) results in evolution of hydrogen. Ammonium nitrate + zinc + water causes a violent reaction with evolution of steam and zinc oxide. May react with water.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals:
LD50: Not available. LC50: Not available.

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: Skin: May cause skin irritation. Dermal exposure to zinc may produce leg pains, fatigue, anorexia and weight loss. Eyes: May cause eye irritation. Ingestion: May be harmul if swallowed. May cause digestive tract irritation with tightness in throat, nausea, vomiting, diarrhea, loss of appetite, malaise, abdominal pain. fever, and chills.
May affect behavior/central nervous system and autonomic nervous system with ataxia, lethargy, staggering gait, mild derrangement in cerebellar function, lightheadness, dizzness, irritability, muscular stiffness, and pain. May also affect blood.
Inhalation: Inhalation of zinc dust or fumes may cause respiratory tract and mucous membrane irritation with cough and chest pain. It can also cause "metal fume fever", a flu-like condition characterized appearance of chills, headached fever, maliase, fatigue, sweating, extreme thirst, aches in the legs and chest, and difficulty in breathing. A sweet taste may also be be present in metal fume fever, as well as a dry throat, aches, nausea, and vomiting, and pale grey cyanosis. The toxicological properties of this substance have not been fully investisgated.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:
New York release reporting list: Zinc Metal Rhode Island RTK hazardous substances: Zinc Metal Pennsylvania RTK: Zinc Metal Florida: Zinc Metal Michigan critical material: Zinc Metal Massachusetts RTK: Zinc Metal New Jersey: Zinc Metal California Director's List of Hazardous Substances: Zinc Metal TSCA 8(b) inventory: Zinc Metal TSCA 12(b) one time export: Zinc Metal SARA 313 toxic chemical notification and release reporting: Zinc Metal CERCLA: Hazardous substances.: Zinc Metal: 1000 lbs. (453.6 kg)

Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not Available

DSCL (EEC):
R15- Contact with water liberates extremely flammable gases. R17- Spontaneously flammable in air. S7/8- Keep container tightly closed and dry.

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 1

Reactivity: 1

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 0

Flammability: 1

Reactivity: 1

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/10/2005 12:18 AM

Last Updated: 05/21/2013 12:00 PM

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APPENDIX C

Soil Boring Geologic Logs

CA RICH Consultants, Inc.

Environmental Specialists
17 Dupont Street, Plainview, NY 11803

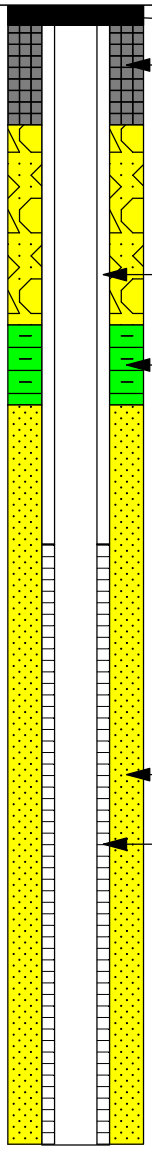
FIELD BORING LOG

BOREHOLE NO.: **MW-1**
TOTAL DEPTH: **30 ft**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	**37-27 31st St.**	DRILLING CO.:	**Aarco**
SITE LOCATION:	**Long Island City, NY**	DRILLER:	**Daybi and Joe**
JOB NO.:	**3132 LIC, LLC**	RIG TYPE:	**Geoprobe**
LOGGED BY:	**Thomas Brown**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Jessica Proscia**	SAMPLING METHODS:	**Soil Sleeves**
DATES DRILLED:	**9/8/2015**	HAMMER WT./DROP	**NA**

▼ Water level in well

DEPTH (Feet)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE NUMBER	Blows per ft.	PID ppm	BORING COMPLETION	WELL DESCRIPTION
0		Brown medium grain sand and fill.					Cover Surface seal
		Brown medium grain sand.					
5							Sch. 40 PVC Pipe
							Bentonite Seal
10							
15				Push			
							No. 2 Sand
20							20 Slot Screen
▼							
25							
30							



NOTES:

CA RICH Consultants, Inc.

Environmental Specialists
17 Dupont Street, Plainview, NY 11803

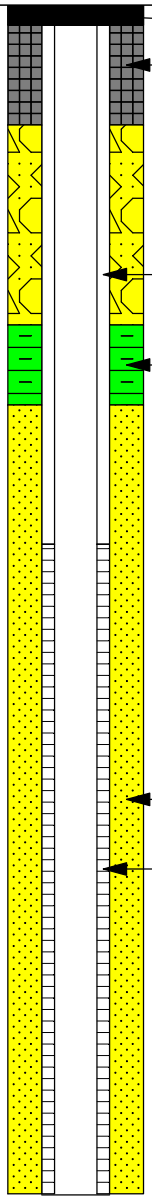
FIELD BORING LOG

BOREHOLE NO.: **MW-2**
TOTAL DEPTH: **30 ft**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	**37-27 31st St.**	DRILLING CO.:	**Aarco**
SITE LOCATION:	**Long Island City, NY**	DRILLER:	**Daybi and Joe**
JOB NO.:	**3132 LIC, LLC**	RIG TYPE:	**Geoprobe**
LOGGED BY:	**Thomas Brown**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Jessica Proscia**	SAMPLING METHODS:	**Soil Sleeves**
DATES DRILLED:	**9/8/2015**	HAMMER WT./DROP	**NA**

▼ Water level in well

DEPTH (Feet)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE NUMBER	Blows per ft.	PID ppm	BORING COMPLETION	WELL DESCRIPTION
0		Brown medium grain sand and fill.					Cover Surface seal
		Brown medium grain sand and fill.					
5							Sch. 40 PVC Pipe
							Bentonite Seal
10							
15				Push			
20							No. 2 Sand 20 Slot Screen
▼							
25							
30							



NOTES:

CA RICH Consultants, Inc.

Environmental Specialists
17 Dupont Street, Plainview, NY 11803

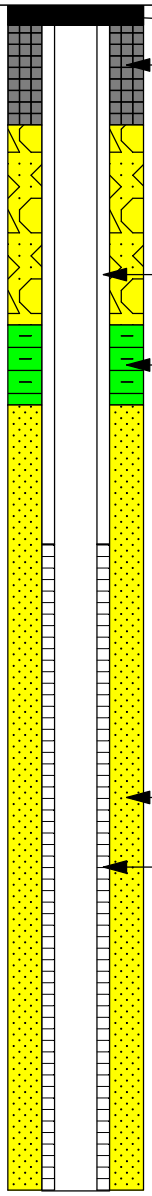
FIELD BORING LOG

BOREHOLE NO.: **MW-3**
TOTAL DEPTH: **30 ft**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	**37-27 31st St.**	DRILLING CO.:	**Aarco**
SITE LOCATION:	**Long Island City, NY**	DRILLER:	**Daybi and Joe**
JOB NO.:	**3132 LIC, LLC**	RIG TYPE:	**Geoprobe**
LOGGED BY:	**Thomas Brown**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Jessica Proscia**	SAMPLING METHODS:	**Soil Sleeves**
DATES DRILLED:	**9/8/2015**	HAMMER WT./DROP	**NA**

▼ Water level in well

DEPTH (Feet)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE NUMBER	Blows per ft.	PID ppm	BORING COMPLETION / WELL DESCRIPTION
0		Brown medium grain sand and fill.				Cover; Surface seal
		Brown medium grain sand.				
5						Sch. 40 PVC Pipe
						Bentonite Seal
10						
15				Push		
20						No. 2 Sand; 20 Slot Screen
▼						
25						
30						



NOTES:

CA RICH Consultants, Inc.

Environmental Specialists
17 Dupont Street, Plainview, NY 11803

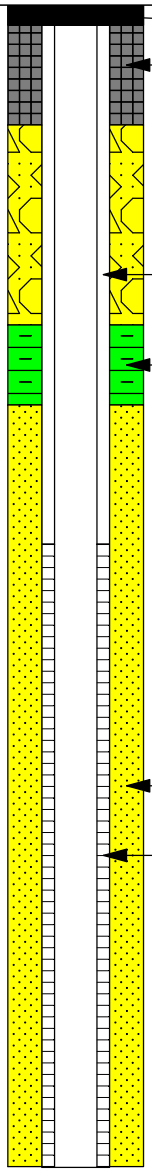
FIELD BORING LOG

BOREHOLE NO.: **MW-4**
TOTAL DEPTH: **30 ft**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	**37-27 31st St.**	DRILLING CO.:	**Aarco**
SITE LOCATION:	**Long Island City, NY**	DRILLER:	**Daybi and Joe**
JOB NO.:	**3132 LIC, LLC**	RIG TYPE:	**Geoprobe**
LOGGED BY:	**Thomas Brown**	METHOD OF DRILLING:	**Direct Push**
PROJECT MANAGER:	**Jessica Proscia**	SAMPLING METHODS:	**Soil Sleeves**
DATES DRILLED:	**9/9/2015**	HAMMER WT./DROP	**NA**

▼ Water level in well

DEPTH (Feet)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE NUMBER	Blows per ft.	PID ppm	BORING COMPLETION	WELL DESCRIPTION
0		Brown medium grain sand and fill.					Cover; Surface seal
		Brown medium grain sand.					
5							Sch. 40 PVC Pipe
							Bentonite Seal
10							
15				Push			
20							No. 2 Sand; 20 Slot Screen
▼							
25							
30							



NOTES:

APPENDIX D

Water Quality Measurment Logs

Water Quality Measurement Log

RICH ENVIRONMENTAL SPECIALISTS

Location: (Site/Facility Name) 31.32LIC
Date: ~~AUG~~ 9/15/15
Sampling Personnel: TB WF
Weather: Sunny 70s
Identify Measuring Point (MP): TOC
Well ID: MW-1
Static Depth to Water (Prior to installing pump) 22.67

Depth to: 13.48 / 28.48 of screen
(Below MP) Top Bottom
Pump Intake at (ft. below MP) 27.50
Well Diameter: 2"
Purging Device: (Pump type)
Purge Start Time: 940 Purge End Time: 1100
Sample Start Time: 1040 Sample End Time: 1100

Clock Time 24 HR	Water Depth Below MP FT	Pump Dial [1]	Purge Rate ml/min	Cum. Volume Purged Liters	Temp. °C	Spec. Conduct.[2] uS/cm	pH	ORP/Eh[3] mv	DO mg/L	Turbidity NTU	Comments
Tolerance	0.33 ft				3%	3%	± 0.1	± 10	± 0.3	10%	
1010	23.70	10.9	200	1.5 gal	23.47	0.000	7.07	121	11.60	177	
1020	23.70	10.9	150	2 gal	23.16	0.000	7.06	133	11.23	179	
1030	23.70	10.9	150	2.5 gal	22.97	0.000	7.05	137	11.14	179	
1040	23.70	10.9	150	3 gal	22.64	0.001	7.02	143	11.02	180	

1. Pump dial setting (Example: hertz, cycles/minute, etc)
2. uSiemens per cm (same as umhos/cm) at 25°C
3. Oxidation reduction potential (stand in for Eh)

RICH ENVIRONMENTAL SPECIALISTS

Water Quality Measurement Log

Location: (Site/Facility Name) LIC
Date: 9/15/15
Sampling Personnel: TB+WP
Weather: Sunny + 70s
Identify Measuring Point (MP):
Well ID: MW-2
Static Depth to Water (Prior to installing pump) 22.81'

Depth to: 14.72 / 29.72 of screen
(Below MP) Top Bottom
Pump Intake at (ft. below MP) 28.56
Well Diameter: 2"
Purging Device: (Pump type) monsoon
Purge Start Time: 1132 Purge End Time: 1250
Sample Start Time: 1240 Sample End Time: 1250

Clock Time 24 HR	Water Depth Below MP FT	Pump Dial [1]	Purge Rate ml/min	Cum. Volume Purged Liters	Temp. °C	Spec. Conduct.[2] uS/cm	pH	ORP/Eh[3] mv	DO mg/L	Turbidity NTU	Comments
Tolerance	0.33 ft				3%	3%	± 0.1	± 10	± 0.3	10%	
1155	22.89	10.3	200	1-gal	17.79	1.24	7.09	85	11.33	491	
1205	22.89	10.6	200	2 gal	17.70	1.15	6.99	45	10.94	184	
1215	22.89	10.6	200	2.5 gal	17.65	1.09	6.92	34	10.57	85.3	
1225	22.89	10.6	200	3-gal	17.74	1.09	6.90	31	10.29	67.3	
1230	22.89	10.7	200	3.5 gal	17.82	1.08	6.90	31	10.11	57.6	
1235	22.89	10.7	200	3.5 gal	15.24	1.09	6.90	30	9.76	53.5	
1240	22.89	10.7	200	4 gal	17.89	1.09	6.91	29	9.93	54.0	

1. Pump dial setting (Example: hertz, cycles/minute, etc)
2. uSiemens per cm (same as umhos/cm) at 25°C
3. Oxidation reduction potential (stand in for Eh)

Water Quality Measurement Log

RICH ENVIRONMENTAL SPECIALISTS

Location: (Site/Facility Name) 3132 LIC
Date: 9/15/15
Sampling Personnel: TBWF
Weather: Sunny
Identify Measuring Point (MP):
Well ID: MW-3
Static Depth to Water (Prior to installing pump) 22.00

Depth to: 14.63 / 29.63 of screen
(Below MP) Top Bottom
Pump Intake at (ft. below MP) 25.5
Well Diameter: 2"
Purging Device: (Pump type) Masoon
Purge Start Time: 1307 Purge End Time: 1420
Sample Start Time: 1410 Sample End Time: 1420

Clock Time 24 HR	Water Depth Below MP FT	Pump Dial [1]	Purge Rate ml/min	Cum. Volume Purged Liters	Temp. °C	Spec. Conduct.[2] uS/cm	pH	ORP/Eh[3] mv	DO mg/L	Turbidity NTU	Comments
Tolerance	0.33 ft				3%	3%	± 0.1	± 10	± 0.3	10%	
1328	22.85'	11.4	200	0.5 gal	18.07	1.31	7.11	54	8.97	0.0	
1330	22.85'	11.4	200	1 gal	17.96	1.30	7.10	-9	8.91	758	
1340	22.85	11.4	200	2 gal	17.95	1.29	7.08	-64	8.64	308	
1350	22.85	11.4	200	2.5 gal	18.05	1.30	7.08	-77	8.31	203	
1400	22.85	11.4	200	3 gal	18.01	1.30	7.07	-83	8.10	141	
1405	22.85	11.4	200	3.5 gal	17.98	1.30	7.07	-85	8.11	130	
1410	22.85	11.4	200	3.5 gal	17.98	1.30	7.06	-86	8.07	120	

1. Pump dial setting (Example: hertz, cycles/minute, etc)
2. uSiemens per cm (same as umhos/cm) at 25°C
3. Oxidation reduction potential (stand in for Eh)

Water Quality Measurement Log

RICH ENVIRONMENTAL SPECIALISTS

Location: (Site/Facility Name) 31.32 LTC
Date: 9/15/15
Sampling Personnel: TB WF
Weather: Sunny 70s
Identify Measuring Point (MP):
Well ID: MW-4
Static Depth to Water (Prior to installing pump) 23.21

Depth to: 14 / 29 of screen
(Below MP) Top Bottom
Pump intake at (ft. below MP) 28 feet
Well Diameter: 2"
Purging Device: (Pump type)
Purge Start Time: 0750 Purge End Time: 905
Sample Start Time: 900 Sample End Time: 905

Clock Time 24 HR	Water Depth Below MP FT	Pump Dial [1]	Purge Rate ml/min	Cum. Volume Purged Liters	Temp. °C	Spec. Conduct.[2] uS/cm	pH	ORP/Eh[3] mv	DO mg/L	Turbidity NTU	Comments
Tolerance	0.33 ft				3%	3%	± 0.1	± 10	± 0.3	10%	
820	23.26'	11.0	225	2 gal	18.18	2.56	6.92	30	11.48	220	
830	23.26'	10.8	225	2.25 gal	18.37	2.59	6.92	7	10.98	185	
840	23.26'	11.1	225	2.5 gal	18.60	2.62	6.92	2	10.56	163	
850	23.26'	10.3	225	3.5 gal	18.81	2.64	6.92	4	10.33	138	
855	23.26'	10.3	225	4 gal	18.86	2.65	6.92	5	10.26	137	
900	23.26'	10.3	225	4.5 gal	18.77	2.64	6.92	5	10.25	144	

1. Pump dial setting (Example: hertz, cycles/minute, etc)
2. uSiemens per cm (same as umhos/cm) at 25°C
3. Oxidation reduction potential (stand in for Eh)

APPENDIX E

Laboratory Data Deliverables for Groundwater and Soil Vapor

ANALYTICAL REPORT

Lab Number:	L1522999
Client:	CA RICH CONSULTANTS, INC. 17 Dupont St Plainview, NY 11803
ATTN:	Thomas Brown
Phone:	(516) 576-8844
Project Name:	3132 LIC
Project Number:	Not Specified
Report Date:	09/28/15

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1522999-01	MW-1	WATER	Not Specified	09/15/15 11:00	09/17/15
L1522999-02	MW-2	WATER	Not Specified	09/15/15 12:50	09/17/15
L1522999-03	MW-3	WATER	Not Specified	09/15/15 14:20	09/17/15
L1522999-04	MW-4	WATER	Not Specified	09/15/15 09:05	09/17/15
L1522999-05	FIELD BLANK	WATER	Not Specified	09/15/15 14:30	09/17/15
L1522999-06	TRIP BLANK	WATER	Not Specified	09/15/15 00:00	09/17/15

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 3132 LIC **Lab Number:** L1522999
Project Number: Not Specified **Report Date:** 09/28/15

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1522999-05: The Field Blank has results for methylene chloride present above the reporting limit. The sample vial was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

L1522999-06: The Trip Blank has results for methylene chloride present above the reporting limit. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

Semivolatile Organics

The WG823671-2/-3 LCS/LCSD recoveries, associated with L1522999-01 through -05, are below the acceptance criteria for benzidine (8%/8%), benzoic acid (LCSD, 9%) and pyridine (LCS, 9%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kara Lindquist

Title: Technical Director/Representative Date: 09/28/15

ORGANICS

VOLATILES

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-01
Client ID: MW-1
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/25/15 14:49
Analyst: PD

Date Collected: 09/15/15 11:00
Date Received: 09/17/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	8.0		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.45	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	0.46	J	ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	1.2		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-01 Date Collected: 09/15/15 11:00

Client ID: MW-1 Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-01 Date Collected: 09/15/15 11:00

Client ID: MW-1 Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	41.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	105		70-130

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-02
Client ID: MW-2
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/25/15 15:19
Analyst: PD

Date Collected: 09/15/15 12:50
Date Received: 09/17/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	6.8		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.55		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	0.34	J	ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	2.3		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-02 Date Collected: 09/15/15 12:50

Client ID: MW-2 Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-02 Date Collected: 09/15/15 12:50

Client ID: MW-2 Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	41.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	104		70-130

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-03
Client ID: MW-3
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/25/15 15:49
Analyst: PD

Date Collected: 09/15/15 14:20
Date Received: 09/17/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	1.4	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.61		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	2.6		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-03 Date Collected: 09/15/15 14:20

Client ID: MW-3 Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-03 Date Collected: 09/15/15 14:20

Client ID: MW-3 Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	41.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	104		70-130

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-04
Client ID: MW-4
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/25/15 16:19
Analyst: PD

Date Collected: 09/15/15 09:05
Date Received: 09/17/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.66		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	1.9		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-04 Date Collected: 09/15/15 09:05

Client ID: MW-4 Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	0.97	J	ug/l	2.5	0.70	1
sec-Butylbenzene	1.9	J	ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	0.97	J	ug/l	2.5	0.70	1
p-Isopropyltoluene	2.0	J	ug/l	2.5	0.70	1
Naphthalene	3.7		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	0.87	J	ug/l	2.5	0.70	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-04 Date Collected: 09/15/15 09:05

Client ID: MW-4 Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trimethylbenzene	1.2	J	ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	41.	1
p-Diethylbenzene	6.0		ug/l	2.0	0.70	1
p-Ethyltoluene	1.2	J	ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	8.9		ug/l	2.0	0.65	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	104		70-130

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-05
Client ID: FIELD BLANK
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/24/15 20:27
Analyst: PD

Date Collected: 09/15/15 14:30
Date Received: 09/17/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	8.1		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.43	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-05 Date Collected: 09/15/15 14:30

Client ID: FIELD BLANK Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-05 Date Collected: 09/15/15 14:30

Client ID: FIELD BLANK Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	41.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1
Ethyl ether	1.0	J	ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	93		70-130

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-06
Client ID: TRIP BLANK
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/26/15 18:18
Analyst: PD

Date Collected: 09/15/15 00:00
Date Received: 09/17/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	2.5		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-06 Date Collected: 09/15/15 00:00

Client ID: TRIP BLANK Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-06 Date Collected: 09/15/15 00:00

Client ID: TRIP BLANK Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	41.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	96		70-130

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/24/15 11:04
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG824654-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.13
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.14
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/24/15 11:04
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG824654-3					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/24/15 11:04
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG824654-3					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	41.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	95		70-130

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/25/15 10:29
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG825047-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.13
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.14
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/25/15 10:29
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG825047-3					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/25/15 10:29
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG825047-3					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	41.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	101		70-130

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/26/15 17:45
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG825445-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.13
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.14
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/26/15 17:45
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG825445-3					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/26/15 17:45
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG825445-3					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	41.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	94		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG824654-1 WG824654-2								
Methylene chloride	100		88		70-130	13		20
1,1-Dichloroethane	102		94		70-130	8		20
Chloroform	96		88		70-130	9		20
Carbon tetrachloride	127		120		63-132	6		20
1,2-Dichloropropane	95		87		70-130	9		20
Dibromochloromethane	80		73		63-130	9		20
1,1,2-Trichloroethane	88		80		70-130	10		20
Tetrachloroethene	85		78		70-130	9		20
Chlorobenzene	87		79		75-130	10		20
Trichlorofluoromethane	85		76		62-150	11		20
1,2-Dichloroethane	92		84		70-130	9		20
1,1,1-Trichloroethane	91		84		67-130	8		20
Bromodichloromethane	89		82		67-130	8		20
trans-1,3-Dichloropropene	**66**	Q	**61**	Q	70-130	8		20
cis-1,3-Dichloropropene	71		**65**	Q	70-130	9		20
1,1-Dichloropropene	91		84		70-130	8		20
Bromoform	82		73		54-136	12		20
1,1,2,2-Tetrachloroethane	90		82		67-130	9		20
Benzene	90		82		70-130	9		20
Toluene	88		80		70-130	10		20
Ethylbenzene	91		83		70-130	9		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG824654-1 WG824654-2								
Chloromethane	74		65		64-130	13		20
Bromomethane	65		63		39-139	3		20
Vinyl chloride	72		63		55-140	13		20
Chloroethane	117		108		55-138	8		20
1,1-Dichloroethene	84		78		61-145	7		20
trans-1,2-Dichloroethene	94		83		70-130	12		20
Trichloroethene	92		85		70-130	8		20
1,2-Dichlorobenzene	87		78		70-130	11		20
1,3-Dichlorobenzene	91		80		70-130	13		20
1,4-Dichlorobenzene	89		80		70-130	11		20
Methyl tert butyl ether	90		84		63-130	7		20
p/m-Xylene	90		82		70-130	9		20
o-Xylene	89		80		70-130	11		20
cis-1,2-Dichloroethene	92		81		70-130	13		20
Dibromomethane	88		79		70-130	11		20
1,2,3-Trichloropropane	88		82		64-130	7		20
Acrylonitrile	92		85		70-130	8		20
Styrene	81		73		70-130	10		20
Dichlorodifluoromethane	60		56		36-147	7		20
Acetone	77		65		58-148	17		20
Carbon disulfide	98		87		51-130	12		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG824654-1 WG824654-2								
2-Butanone	92		84		63-138	9		20
Vinyl acetate	75		**69**	Q	70-130	8		20
4-Methyl-2-pentanone	86		81		59-130	6		20
2-Hexanone	85		80		57-130	6		20
Bromochloromethane	100		94		70-130	6		20
2,2-Dichloropropane	**141**	Q	**134**	Q	63-133	5		20
1,2-Dibromoethane	81		75		70-130	8		20
1,3-Dichloropropane	83		77		70-130	8		20
1,1,1,2-Tetrachloroethane	86		77		64-130	11		20
Bromobenzene	93		84		70-130	10		20
n-Butylbenzene	100		85		53-136	16		20
sec-Butylbenzene	101		87		70-130	15		20
tert-Butylbenzene	97		85		70-130	13		20
o-Chlorotoluene	98		86		70-130	13		20
p-Chlorotoluene	99		89		70-130	11		20
1,2-Dibromo-3-chloropropane	82		77		41-144	6		20
Hexachlorobutadiene	93		81		63-130	14		20
Isopropylbenzene	92		82		70-130	11		20
p-Isopropyltoluene	99		84		70-130	16		20
Naphthalene	81		75		70-130	8		20
n-Propylbenzene	103		92		69-130	11		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG824654-1 WG824654-2								
1,2,3-Trichlorobenzene	79		74		70-130	7		20
1,2,4-Trichlorobenzene	89		79		70-130	12		20
1,3,5-Trimethylbenzene	98		87		64-130	12		20
1,2,4-Trimethylbenzene	98		86		70-130	13		20
1,4-Dioxane	78		71		56-162	9		20
p-Diethylbenzene	93		78		70-130	18		20
p-Ethyltoluene	97		86		70-130	12		20
1,2,4,5-Tetramethylbenzene	95		82		70-130	15		20
Ethyl ether	95		85		59-134	11		20
trans-1,4-Dichloro-2-butene	71		**67**	Q	70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	92		91		70-130
Toluene-d8	95		95		70-130
4-Bromofluorobenzene	105		105		70-130
Dibromofluoromethane	97		99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG825047-1 WG825047-2								
Methylene chloride	91		95		70-130	4		20
1,1-Dichloroethane	88		90		70-130	2		20
Chloroform	94		98		70-130	4		20
Carbon tetrachloride	107		109		63-132	2		20
1,2-Dichloropropane	83		87		70-130	5		20
Dibromochloromethane	103		109		63-130	6		20
1,1,2-Trichloroethane	96		104		70-130	8		20
Tetrachloroethene	102		105		70-130	3		20
Chlorobenzene	98		100		75-130	2		20
Trichlorofluoromethane	111		111		62-150	0		20
1,2-Dichloroethane	91		94		70-130	3		20
1,1,1-Trichloroethane	97		98		67-130	1		20
Bromodichloromethane	92		96		67-130	4		20
trans-1,3-Dichloropropene	91		95		70-130	4		20
cis-1,3-Dichloropropene	90		92		70-130	2		20
1,1-Dichloropropene	89		90		70-130	1		20
Bromoform	103		110		54-136	7		20
1,1,2,2-Tetrachloroethane	94		101		67-130	7		20
Benzene	91		93		70-130	2		20
Toluene	98		100		70-130	2		20
Ethylbenzene	97		100		70-130	3		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG825047-1 WG825047-2								
Chloromethane	**62**	Q	**63**	Q	64-130	2		20
Bromomethane	120		128		39-139	6		20
Vinyl chloride	81		82		55-140	1		20
Chloroethane	107		107		55-138	0		20
1,1-Dichloroethene	93		93		61-145	0		20
trans-1,2-Dichloroethene	91		93		70-130	2		20
Trichloroethene	96		98		70-130	2		20
1,2-Dichlorobenzene	95		97		70-130	2		20
1,3-Dichlorobenzene	96		97		70-130	1		20
1,4-Dichlorobenzene	96		99		70-130	3		20
Methyl tert butyl ether	82		87		63-130	6		20
p/m-Xylene	100		104		70-130	4		20
o-Xylene	98		100		70-130	2		20
cis-1,2-Dichloroethene	90		92		70-130	2		20
Dibromomethane	96		103		70-130	7		20
1,2,3-Trichloropropane	99		106		64-130	7		20
Acrylonitrile	74		82		70-130	10		20
Styrene	97		100		70-130	3		20
Dichlorodifluoromethane	61		61		36-147	0		20
Acetone	86		92		58-148	7		20
Carbon disulfide	90		90		51-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG825047-1 WG825047-2								
2-Butanone	80		88		63-138	10		20
Vinyl acetate	81		87		70-130	7		20
4-Methyl-2-pentanone	71		77		59-130	8		20
2-Hexanone	65		72		57-130	10		20
Bromochloromethane	98		103		70-130	5		20
2,2-Dichloropropane	103		105		63-133	2		20
1,2-Dibromoethane	93		102		70-130	9		20
1,3-Dichloropropane	96		102		70-130	6		20
1,1,1,2-Tetrachloroethane	100		104		64-130	4		20
Bromobenzene	100		103		70-130	3		20
n-Butylbenzene	91		90		53-136	1		20
sec-Butylbenzene	97		97		70-130	0		20
tert-Butylbenzene	98		98		70-130	0		20
o-Chlorotoluene	94		95		70-130	1		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	77		80		41-144	4		20
Hexachlorobutadiene	80		76		63-130	5		20
Isopropylbenzene	100		101		70-130	1		20
p-Isopropyltoluene	97		96		70-130	1		20
Naphthalene	**66**	Q	71		70-130	7		20
n-Propylbenzene	100		101		69-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG825047-1 WG825047-2								
1,2,3-Trichlorobenzene	**69**	Q	70		70-130	1		20
1,2,4-Trichlorobenzene	76		78		70-130	3		20
1,3,5-Trimethylbenzene	100		101		64-130	1		20
1,2,4-Trimethylbenzene	99		100		70-130	1		20
1,4-Dioxane	117		119		56-162	2		20
p-Diethylbenzene	86		87		70-130	1		20
p-Ethyltoluene	96		96		70-130	0		20
1,2,4,5-Tetramethylbenzene	81		81		70-130	0		20
Ethyl ether	85		91		59-134	7		20
trans-1,4-Dichloro-2-butene	**61**	Q	**65**	Q	70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		100		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	101		101		70-130
Dibromofluoromethane	103		103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG825445-1 WG825445-2								
Methylene chloride	109		82		70-130	**28**	Q	20
1,1-Dichloroethane	112		85		70-130	**27**	Q	20
Chloroform	107		81		70-130	**28**	Q	20
Carbon tetrachloride	132		112		63-132	16		20
1,2-Dichloropropane	105		80		70-130	**27**	Q	20
Dibromochloromethane	91		68		63-130	**29**	Q	20
1,1,2-Trichloroethane	99		74		70-130	**29**	Q	20
Tetrachloroethene	92		70		70-130	**27**	Q	20
Chlorobenzene	98		**73**	Q	75-130	**29**	Q	20
Trichlorofluoromethane	82		63		62-150	**26**	Q	20
1,2-Dichloroethane	102		79		70-130	**25**	Q	20
1,1,1-Trichloroethane	97		75		67-130	**26**	Q	20
Bromodichloromethane	99		75		67-130	**28**	Q	20
trans-1,3-Dichloropropene	76		**58**	Q	70-130	**27**	Q	20
cis-1,3-Dichloropropene	80		**62**	Q	70-130	**25**	Q	20
1,1-Dichloropropene	96		73		70-130	**27**	Q	20
Bromoform	94		70		54-136	**29**	Q	20
1,1,2,2-Tetrachloroethane	103		76		67-130	**30**	Q	20
Benzene	98		75		70-130	**27**	Q	20
Toluene	98		74		70-130	**28**	Q	20
Ethylbenzene	102		76		70-130	**29**	Q	20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG825445-1 WG825445-2								
Chloromethane	83		76		64-130	9		20
Bromomethane	90		67		39-139	**29**	Q	20
Vinyl chloride	72		57		55-140	**23**	Q	20
Chloroethane	125		103		55-138	19		20
1,1-Dichloroethene	87		66		61-145	**27**	Q	20
trans-1,2-Dichloroethene	99		75		70-130	**28**	Q	20
Trichloroethene	101		77		70-130	**27**	Q	20
1,2-Dichlorobenzene	98		74		70-130	**28**	Q	20
1,3-Dichlorobenzene	102		77		70-130	**28**	Q	20
1,4-Dichlorobenzene	100		76		70-130	**27**	Q	20
Methyl tert butyl ether	100		76		63-130	**27**	Q	20
p/m-Xylene	100		75		70-130	**29**	Q	20
o-Xylene	100		75		70-130	**29**	Q	20
cis-1,2-Dichloroethene	99		77		70-130	**25**	Q	20
Dibromomethane	98		75		70-130	**27**	Q	20
1,2,3-Trichloropropane	102		77		64-130	**28**	Q	20
Acrylonitrile	104		77		70-130	**30**	Q	20
Styrene	90		70		70-130	**25**	Q	20
Dichlorodifluoromethane	51		39		36-147	**27**	Q	20
Acetone	82		62		58-148	**28**	Q	20
Carbon disulfide	111		78		51-130	**35**	Q	20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG825445-1 WG825445-2								
2-Butanone	100		77		63-138	**26**	Q	20
Vinyl acetate	80		71		70-130	12		20
4-Methyl-2-pentanone	96		72		59-130	**29**	Q	20
2-Hexanone	94		72		57-130	**27**	Q	20
Bromochloromethane	113		86		70-130	**27**	Q	20
2,2-Dichloropropane	**153**	Q	125		63-133	20		20
1,2-Dibromoethane	94		70		70-130	**29**	Q	20
1,3-Dichloropropane	95		71		70-130	**29**	Q	20
1,1,1,2-Tetrachloroethane	96		73		64-130	**27**	Q	20
Bromobenzene	105		79		70-130	**28**	Q	20
n-Butylbenzene	108		78		53-136	**32**	Q	20
sec-Butylbenzene	110		80		70-130	**32**	Q	20
tert-Butylbenzene	107		79		70-130	**30**	Q	20
o-Chlorotoluene	110		82		70-130	**29**	Q	20
p-Chlorotoluene	111		84		70-130	**28**	Q	20
1,2-Dibromo-3-chloropropane	96		72		41-144	**29**	Q	20
Hexachlorobutadiene	97		73		63-130	**28**	Q	20
Isopropylbenzene	101		76		70-130	**28**	Q	20
p-Isopropyltoluene	108		80		70-130	**30**	Q	20
Naphthalene	88		**65**	Q	70-130	**30**	Q	20
n-Propylbenzene	114		85		69-130	**29**	Q	20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG825445-1 WG825445-2								
1,2,3-Trichlorobenzene	86		**62**	Q	70-130	**32**	Q	20
1,2,4-Trichlorobenzene	98		73		70-130	**29**	Q	20
1,3,5-Trimethylbenzene	109		82		64-130	**28**	Q	20
1,2,4-Trimethylbenzene	110		81		70-130	**30**	Q	20
1,4-Dioxane	89		67		56-162	**28**	Q	20
p-Diethylbenzene	103		75		70-130	**31**	Q	20
p-Ethyltoluene	110		81		70-130	**30**	Q	20
1,2,4,5-Tetramethylbenzene	106		76		70-130	**33**	Q	20
Ethyl ether	104		78		59-134	**29**	Q	20
trans-1,4-Dichloro-2-butene	83		**61**	Q	70-130	**31**	Q	20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		97		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	107		107		70-130
Dibromofluoromethane	103		102		70-130

SEMIVOLATILES

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-01
Client ID: MW-1
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/24/15 20:20
Analyst: RC

Date Collected: 09/15/15 11:00
Date Received: 09/17/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.58	1
Isophorone	ND		ug/l	5.0	0.79	1
Nitrobenzene	ND		ug/l	2.0	0.40	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	0.93	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.1	1
Di-n-butylphthalate	ND		ug/l	5.0	0.77	1
Di-n-octylphthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate	ND		ug/l	5.0	0.33	1
Biphenyl	ND		ug/l	2.0	0.24	1
4-Chloroaniline	ND		ug/l	5.0	0.84	1
2-Nitroaniline	ND		ug/l	5.0	0.96	1
3-Nitroaniline	ND		ug/l	5.0	0.67	1
4-Nitroaniline	ND		ug/l	5.0	0.83	1
Dibenzofuran	ND		ug/l	2.0	0.22	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-01 Date Collected: 09/15/15 11:00

Client ID: MW-1 Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acetophenone	ND		ug/l	5.0	0.43	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54	1
2-Chlorophenol	ND		ug/l	2.0	0.58	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.56	1
2,4-Dimethylphenol	ND		ug/l	5.0	0.58	1
2-Nitrophenol	ND		ug/l	10	1.0	1
4-Nitrophenol	ND		ug/l	10	1.1	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4	1
Phenol	ND		ug/l	5.0	0.27	1
2-Methylphenol	ND		ug/l	5.0	0.70	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.68	1
Carbazole	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	93		10-120
4-Terphenyl-d14	99		41-149

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-01
Client ID: MW-1
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 09/25/15 02:59
Analyst: MW

Date Collected: 09/15/15 11:00
Date Received: 09/17/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	0.05	J	ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
2-Methylnaphthalene	0.05	J	ug/l	0.20	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID:	L1522999-01	Date Collected:	09/15/15 11:00
Client ID:	MW-1	Date Received:	09/17/15
Sample Location:	Not Specified	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	113		23-120
2-Fluorobiphenyl	115		15-120
2,4,6-Tribromophenol	109		10-120
4-Terphenyl-d14	104		41-149

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-02
Client ID: MW-2
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/24/15 20:48
Analyst: RC

Date Collected: 09/15/15 12:50
Date Received: 09/17/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.58	1
Isophorone	ND		ug/l	5.0	0.79	1
Nitrobenzene	ND		ug/l	2.0	0.40	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	0.93	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.1	1
Di-n-butylphthalate	ND		ug/l	5.0	0.77	1
Di-n-octylphthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate	ND		ug/l	5.0	0.33	1
Biphenyl	ND		ug/l	2.0	0.24	1
4-Chloroaniline	ND		ug/l	5.0	0.84	1
2-Nitroaniline	ND		ug/l	5.0	0.96	1
3-Nitroaniline	ND		ug/l	5.0	0.67	1
4-Nitroaniline	ND		ug/l	5.0	0.83	1
Dibenzofuran	ND		ug/l	2.0	0.22	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-02 Date Collected: 09/15/15 12:50

Client ID: MW-2 Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acetophenone	ND		ug/l	5.0	0.43	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54	1
2-Chlorophenol	ND		ug/l	2.0	0.58	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.56	1
2,4-Dimethylphenol	ND		ug/l	5.0	0.58	1
2-Nitrophenol	ND		ug/l	10	1.0	1
4-Nitrophenol	ND		ug/l	10	1.1	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4	1
Phenol	ND		ug/l	5.0	0.27	1
2-Methylphenol	ND		ug/l	5.0	0.70	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.68	1
Carbazole	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	96		10-120
4-Terphenyl-d14	92		41-149

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-02
Client ID: MW-2
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 09/25/15 03:24
Analyst: MW

Date Collected: 09/15/15 12:50
Date Received: 09/17/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	0.02	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	0.04	J	ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
2-Methylnaphthalene	ND		ug/l	0.20	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID:	L1522999-02	Date Collected:	09/15/15 12:50
Client ID:	MW-2	Date Received:	09/17/15
Sample Location:	Not Specified	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	93		15-120
2,4,6-Tribromophenol	105		10-120
4-Terphenyl-d14	94		41-149

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-03
Client ID: MW-3
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/23/15 20:46
Analyst: RC

Date Collected: 09/15/15 14:20
Date Received: 09/17/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.58	1
Isophorone	ND		ug/l	5.0	0.79	1
Nitrobenzene	ND		ug/l	2.0	0.40	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	0.93	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.1	1
Di-n-butylphthalate	ND		ug/l	5.0	0.77	1
Di-n-octylphthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate	ND		ug/l	5.0	0.33	1
Biphenyl	ND		ug/l	2.0	0.24	1
4-Chloroaniline	ND		ug/l	5.0	0.84	1
2-Nitroaniline	ND		ug/l	5.0	0.96	1
3-Nitroaniline	ND		ug/l	5.0	0.67	1
4-Nitroaniline	ND		ug/l	5.0	0.83	1
Dibenzofuran	ND		ug/l	2.0	0.22	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-03 Date Collected: 09/15/15 14:20

Client ID: MW-3 Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acetophenone	ND		ug/l	5.0	0.43	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54	1
2-Chlorophenol	ND		ug/l	2.0	0.58	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.56	1
2,4-Dimethylphenol	ND		ug/l	5.0	0.58	1
2-Nitrophenol	ND		ug/l	10	1.0	1
4-Nitrophenol	ND		ug/l	10	1.1	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4	1
Phenol	ND		ug/l	5.0	0.27	1
2-Methylphenol	ND		ug/l	5.0	0.70	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.68	1
Carbazole	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	83		10-120
4-Terphenyl-d14	80		41-149

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-03
Client ID: MW-3
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 09/23/15 16:00
Analyst: MW

Date Collected: 09/15/15 14:20
Date Received: 09/17/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
2-Methylnaphthalene	ND		ug/l	0.20	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID:	L1522999-03	Date Collected:	09/15/15 14:20
Client ID:	MW-3	Date Received:	09/17/15
Sample Location:	Not Specified	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	71		41-149

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-04
Client ID: MW-4
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/23/15 21:13
Analyst: RC

Date Collected: 09/15/15 09:05
Date Received: 09/17/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.58	1
Isophorone	ND		ug/l	5.0	0.79	1
Nitrobenzene	ND		ug/l	2.0	0.40	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	0.93	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.1	1
Di-n-butylphthalate	ND		ug/l	5.0	0.77	1
Di-n-octylphthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate	ND		ug/l	5.0	0.33	1
Biphenyl	0.96	J	ug/l	2.0	0.24	1
4-Chloroaniline	ND		ug/l	5.0	0.84	1
2-Nitroaniline	ND		ug/l	5.0	0.96	1
3-Nitroaniline	ND		ug/l	5.0	0.67	1
4-Nitroaniline	ND		ug/l	5.0	0.83	1
Dibenzofuran	ND		ug/l	2.0	0.22	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-04 Date Collected: 09/15/15 09:05

Client ID: MW-4 Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acetophenone	ND		ug/l	5.0	0.43	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54	1
2-Chlorophenol	ND		ug/l	2.0	0.58	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.56	1
2,4-Dimethylphenol	ND		ug/l	5.0	0.58	1
2-Nitrophenol	ND		ug/l	10	1.0	1
4-Nitrophenol	ND		ug/l	10	1.1	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4	1
Phenol	ND		ug/l	5.0	0.27	1
2-Methylphenol	ND		ug/l	5.0	0.70	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.68	1
Carbazole	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	83		15-120
2,4,6-Tribromophenol	93		10-120
4-Terphenyl-d14	83		41-149

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-04
Client ID: MW-4
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 09/23/15 16:25
Analyst: MW

Date Collected: 09/15/15 09:05
Date Received: 09/17/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	1.7		ug/l	0.20	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.11	J	ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	0.56		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	0.96		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.04	1
Pyrene	0.36		ug/l	0.20	0.04	1
2-Methylnaphthalene	4.4		ug/l	0.20	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID:	L1522999-04	Date Collected:	09/15/15 09:05
Client ID:	MW-4	Date Received:	09/17/15
Sample Location:	Not Specified	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	103		23-120
2-Fluorobiphenyl	93		15-120
2,4,6-Tribromophenol	106		10-120
4-Terphenyl-d14	89		41-149

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-05
Client ID: FIELD BLANK
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/23/15 21:40
Analyst: RC

Date Collected: 09/15/15 14:30
Date Received: 09/17/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.58	1
Isophorone	ND		ug/l	5.0	0.79	1
Nitrobenzene	ND		ug/l	2.0	0.40	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	0.93	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.1	1
Di-n-butylphthalate	ND		ug/l	5.0	0.77	1
Di-n-octylphthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate	ND		ug/l	5.0	0.33	1
Biphenyl	ND		ug/l	2.0	0.24	1
4-Chloroaniline	ND		ug/l	5.0	0.84	1
2-Nitroaniline	ND		ug/l	5.0	0.96	1
3-Nitroaniline	ND		ug/l	5.0	0.67	1
4-Nitroaniline	ND		ug/l	5.0	0.83	1
Dibenzofuran	ND		ug/l	2.0	0.22	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-05 Date Collected: 09/15/15 14:30

Client ID: FIELD BLANK Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acetophenone	2.4	J	ug/l	5.0	0.43	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54	1
2-Chlorophenol	ND		ug/l	2.0	0.58	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.56	1
2,4-Dimethylphenol	ND		ug/l	5.0	0.58	1
2-Nitrophenol	ND		ug/l	10	1.0	1
4-Nitrophenol	ND		ug/l	10	1.1	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4	1
Phenol	ND		ug/l	5.0	0.27	1
2-Methylphenol	ND		ug/l	5.0	0.70	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.68	1
Carbazole	ND		ug/l	2.0	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	90		10-120
4-Terphenyl-d14	87		41-149

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-05
Client ID: FIELD BLANK
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 09/23/15 16:49
Analyst: MW

Date Collected: 09/15/15 14:30
Date Received: 09/17/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
2-Methylnaphthalene	ND		ug/l	0.20	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: 3132 LIC **Lab Number:** L1522999

Project Number: Not Specified **Report Date:** 09/28/15

SAMPLE RESULTS

Lab ID: L1522999-05 Date Collected: 09/15/15 14:30

Client ID: FIELD BLANK Date Received: 09/17/15

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	93		15-120
2,4,6-Tribromophenol	106		10-120
4-Terphenyl-d14	90		41-149

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/23/15 09:27
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG823671-1					
Acenaphthene	ND		ug/l	2.0	0.28
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.21
Benzidine	ND		ug/l	20	5.2
n-Nitrosodimethylamine	ND		ug/l	2.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.40
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.41
2-Chloronaphthalene	ND		ug/l	2.0	0.46
1,2-Dichlorobenzene	ND		ug/l	2.0	0.30
1,3-Dichlorobenzene	ND		ug/l	2.0	0.35
1,4-Dichlorobenzene	ND		ug/l	2.0	0.32
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.48
2,4-Dinitrotoluene	ND		ug/l	5.0	1.0
2,6-Dinitrotoluene	ND		ug/l	5.0	0.89
Azobenzene	ND		ug/l	2.0	0.54
Fluoranthene	ND		ug/l	2.0	0.40
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.36
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.43
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.60
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.60
Hexachlorobutadiene	ND		ug/l	2.0	0.42
Hexachlorocyclopentadiene	ND		ug/l	20	0.58
Hexachloroethane	ND		ug/l	2.0	0.30
Isophorone	ND		ug/l	5.0	0.79
Naphthalene	ND		ug/l	2.0	0.33
Nitrobenzene	ND		ug/l	2.0	0.40
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.34
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	0.93
Butyl benzyl phthalate	ND		ug/l	5.0	1.1

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/23/15 09:27
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG823671-1					
Di-n-butylphthalate	ND		ug/l	5.0	0.77
Di-n-octylphthalate	ND		ug/l	5.0	1.2
Diethyl phthalate	ND		ug/l	5.0	0.39
Dimethyl phthalate	ND		ug/l	5.0	0.33
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.66
Benzo(b)fluoranthene	ND		ug/l	2.0	0.37
Benzo(k)fluoranthene	ND		ug/l	2.0	0.30
Chrysene	ND		ug/l	2.0	0.30
Acenaphthylene	ND		ug/l	2.0	0.37
Anthracene	ND		ug/l	2.0	0.20
Benzo(ghi)perylene	ND		ug/l	2.0	0.57
Fluorene	ND		ug/l	2.0	0.32
Phenanthrene	ND		ug/l	2.0	0.23
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.44
Indeno(1,2,3-cd)Pyrene	ND		ug/l	2.0	0.43
Pyrene	ND		ug/l	2.0	0.52
Biphenyl	ND		ug/l	2.0	0.24
Aniline	ND		ug/l	2.0	0.55
4-Chloroaniline	ND		ug/l	5.0	0.84
2-Nitroaniline	ND		ug/l	5.0	0.96
3-Nitroaniline	ND		ug/l	5.0	0.67
4-Nitroaniline	ND		ug/l	5.0	0.83
Dibenzofuran	ND		ug/l	2.0	0.22
2-Methylnaphthalene	ND		ug/l	2.0	0.36
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.36
Acetophenone	ND		ug/l	5.0	0.43
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.78
P-Chloro-M-Cresol	ND		ug/l	2.0	0.54

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/23/15 09:27
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG823671-1					
2-Chlorophenol	ND		ug/l	2.0	0.58
2,4-Dichlorophenol	ND		ug/l	5.0	0.56
2,4-Dimethylphenol	ND		ug/l	5.0	0.58
2-Nitrophenol	ND		ug/l	10	1.0
4-Nitrophenol	ND		ug/l	10	1.1
2,4-Dinitrophenol	ND		ug/l	20	1.4
4,6-Dinitro-o-cresol	ND		ug/l	10	1.4
Pentachlorophenol	ND		ug/l	10	3.2
Phenol	ND		ug/l	5.0	0.27
2-Methylphenol	ND		ug/l	5.0	0.70
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.72
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.75
Benzoic Acid	ND		ug/l	50	1.0
Benzyl Alcohol	ND		ug/l	2.0	0.68
Carbazole	ND		ug/l	2.0	0.37
Pyridine	ND		ug/l	5.0	0.31
Benzaldehyde	ND		ug/l	5.0	0.99
Caprolactam	ND		ug/l	10	0.39
Atrazine	ND		ug/l	10	0.79
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.59

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/23/15 09:27
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG823671-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	37		21-120
Phenol-d6	24		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	66		10-120
4-Terphenyl-d14	66		41-149

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 09/23/15 10:17
Analyst: MW

Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG823672-1					
Acenaphthene	ND		ug/l	0.20	0.04
2-Chloronaphthalene	ND		ug/l	0.20	0.04
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.04
Naphthalene	ND		ug/l	0.20	0.04
Benzo(a)anthracene	ND		ug/l	0.20	0.02
Benzo(a)pyrene	ND		ug/l	0.20	0.04
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04
Chrysene	ND		ug/l	0.20	0.04
Acenaphthylene	ND		ug/l	0.20	0.04
Anthracene	ND		ug/l	0.20	0.04
Benzo(ghi)perylene	ND		ug/l	0.20	0.04
Fluorene	ND		ug/l	0.20	0.04
Phenanthrene	ND		ug/l	0.20	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.04
Pyrene	ND		ug/l	0.20	0.04
2-Methylnaphthalene	ND		ug/l	0.20	0.05
Pentachlorophenol	ND		ug/l	0.80	0.22
Hexachlorobenzene	ND		ug/l	0.80	0.03
Hexachloroethane	ND		ug/l	0.80	0.03

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 09/23/15 10:17
Analyst: MW

Extraction Method: EPA 3510C
Extraction Date: 09/22/15 11:28

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG823672-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	82		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG823671-2 WG823671-3								
Acenaphthene	82		65		37-111	23		30
1,2,4-Trichlorobenzene	71		56		39-98	24		30
Benzidine	**8**	Q	**8**	Q	10-66	3		30
n-Nitrosodimethylamine	56		42		22-100	29		30
Hexachlorobenzene	87		69		40-140	23		30
Bis(2-chloroethyl)ether	79		57		40-140	**32**	Q	30
2-Chloronaphthalene	84		64		40-140	27		30
1,2-Dichlorobenzene	68		52		40-140	27		30
1,3-Dichlorobenzene	65		51		40-140	24		30
1,4-Dichlorobenzene	66		50		36-97	28		30
3,3'-Dichlorobenzidine	75		57		40-140	27		30
2,4-Dinitrotoluene	90		70		24-96	25		30
2,6-Dinitrotoluene	87		68		40-140	25		30
Azobenzene	78		62		40-140	23		30
Fluoranthene	92		72		40-140	24		30
4-Chlorophenyl phenyl ether	83		67		40-140	21		30
4-Bromophenyl phenyl ether	88		71		40-140	21		30
Bis(2-chloroisopropyl)ether	81		61		40-140	28		30
Bis(2-chloroethoxy)methane	81		62		40-140	27		30
Hexachlorobutadiene	66		52		40-140	24		30
Hexachlorocyclopentadiene	70		62		40-140	12		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG823671-2 WG823671-3								
Hexachloroethane	63		50		40-140	23		30
Isophorone	88		66		40-140	29		30
Naphthalene	75		58		40-140	26		30
Nitrobenzene	85		63		40-140	30		30
NitrosoDiPhenylAmine(NDPA)/DPA	87		68		40-140	25		30
n-Nitrosodi-n-propylamine	89		66		29-132	30		30
Bis(2-Ethylhexyl)phthalate	86		70		40-140	21		30
Butyl benzyl phthalate	86		69		40-140	22		30
Di-n-butylphthalate	92		72		40-140	24		30
Di-n-octylphthalate	86		72		40-140	18		30
Diethyl phthalate	92		72		40-140	24		30
Dimethyl phthalate	86		69		40-140	22		30
Benzo(a)anthracene	90		73		40-140	21		30
Benzo(a)pyrene	79		63		40-140	23		30
Benzo(b)fluoranthene	82		62		40-140	28		30
Benzo(k)fluoranthene	84		69		40-140	20		30
Chrysene	84		66		40-140	24		30
Acenaphthylene	86		66		45-123	26		30
Anthracene	91		71		40-140	25		30
Benzo(ghi)perylene	88		69		40-140	24		30
Fluorene	87		69		40-140	23		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG823671-2 WG823671-3								
Phenanthrene	84		66		40-140	24		30
Dibenzo(a,h)anthracene	78		62		40-140	23		30
Indeno(1,2,3-cd)Pyrene	79		65		40-140	19		30
Pyrene	88		68		26-127	26		30
Biphenyl	84		65		54-104	26		30
Aniline	49		**37**	Q	40-140	28		30
4-Chloroaniline	91		64		40-140	**35**	Q	30
2-Nitroaniline	90		71		52-143	24		30
3-Nitroaniline	73		52		25-145	**34**	Q	30
4-Nitroaniline	79		62		51-143	24		30
Dibenzofuran	84		65		40-140	26		30
2-Methylnaphthalene	83		64		40-140	26		30
1,2,4,5-Tetrachlorobenzene	80		62		2-134	25		30
Acetophenone	91		68		39-129	29		30
2,4,6-Trichlorophenol	95		75		30-130	24		30
P-Chloro-M-Cresol	92		71		23-97	26		30
2-Chlorophenol	85		63		27-123	30		30
2,4-Dichlorophenol	88		70		30-130	23		30
2,4-Dimethylphenol	82		58		30-130	**34**	Q	30
2-Nitrophenol	86		64		30-130	29		30
4-Nitrophenol	43		38		10-80	12		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG823671-2 WG823671-3								
2,4-Dinitrophenol	51		47		20-130	8		30
4,6-Dinitro-o-cresol	74		61		20-164	19		30
Pentachlorophenol	58		48		9-103	19		30
Phenol	40		31		12-110	25		30
2-Methylphenol	78		58		30-130	29		30
3-Methylphenol/4-Methylphenol	76		57		30-130	29		30
2,4,5-Trichlorophenol	91		69		30-130	28		30
Benzoic Acid	11		**9**	Q	10-110	26		30
Benzyl Alcohol	75		58		15-110	26		30
Carbazole	88		70		55-144	23		30
Pyridine	**9**	Q	12		10-66	26		30
Benzaldehyde	96		71		40-140	30		30
Caprolactam	24		19		10-130	23		30
Atrazine	94		73		40-140	25		30
2,3,4,6-Tetrachlorophenol	83		66		54-145	23		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG823671-2 WG823671-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	59		44		21-120
Phenol-d6	38		29		10-120
Nitrobenzene-d5	86		66		23-120
2-Fluorobiphenyl	87		67		15-120
2,4,6-Tribromophenol	91		72		10-120
4-Terphenyl-d14	88		70		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 Batch: WG823672-2 WG823672-3								
Acenaphthene	76		80		37-111	5		40
2-Chloronaphthalene	76		80		40-140	5		40
Fluoranthene	88		92		40-140	4		40
Hexachlorobutadiene	61		65		40-140	6		40
Naphthalene	72		77		40-140	7		40
Benzo(a)anthracene	95		100		40-140	5		40
Benzo(a)pyrene	78		82		40-140	5		40
Benzo(b)fluoranthene	82		86		40-140	5		40
Benzo(k)fluoranthene	83		87		40-140	5		40
Chrysene	83		87		40-140	5		40
Acenaphthylene	84		89		40-140	6		40
Anthracene	85		90		40-140	6		40
Benzo(ghi)perylene	88		92		40-140	4		40
Fluorene	85		90		40-140	6		40
Phenanthrene	79		83		40-140	5		40
Dibenzo(a,h)anthracene	79		83		40-140	5		40
Indeno(1,2,3-cd)Pyrene	82		86		40-140	5		40
Pyrene	86		90		26-127	5		40
2-Methylnaphthalene	79		84		40-140	6		40
Pentachlorophenol	63		72		9-103	13		40
Hexachlorobenzene	84		87		40-140	4		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 Batch: WG823672-2 WG823672-3								
Hexachloroethane	68		73		40-140	7		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	51		54		21-120
Phenol-d6	38		40		10-120
Nitrobenzene-d5	86		90		23-120
2-Fluorobiphenyl	79		82		15-120
2,4,6-Tribromophenol	84		87		10-120
4-Terphenyl-d14	78		80		41-149

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1522999-01A	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-01B	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-01C	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-01D	Amber 1000ml unpreserved	A	8	5.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1522999-01E	Amber 1000ml unpreserved	A	8	5.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1522999-02A	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-02B	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-02C	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-02D	Amber 1000ml unpreserved	A	8	5.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1522999-02E	Amber 1000ml unpreserved	A	8	5.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1522999-03A	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-03B	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-03C	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-03D	Amber 1000ml unpreserved	A	8	5.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1522999-03E	Amber 1000ml unpreserved	A	8	5.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1522999-04A	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-04B	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-04C	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-04D	Amber 1000ml unpreserved	A	8	5.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1522999-04E	Amber 1000ml unpreserved	A	8	5.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1522999-05A	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-05B	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-05C	Amber 1000ml unpreserved	A	8	5.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)

*Values in parentheses indicate holding time in days

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522999
Report Date: 09/28/15

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1522999-06A	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)
L1522999-06B	Vial HCl preserved	A	N/A	5.0	Y	Absent	NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	3132 LIC	**Lab Number:**	L1522999
Project Number:	Not Specified	**Report Date:**	09/28/15

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	3132 LIC	**Lab Number:**	L1522999
Project Number:	Not Specified	**Report Date:**	09/28/15

Data Qualifiers

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name: 3132 LIC **Lab Number:** L1522999
Project Number: Not Specified **Report Date:** 09/28/15

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide) (soil), Methyl methacrylate (soil), Azobenzene.
EPA 8270D: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 9/18/15

ALPHA Job #: L1522999

Client Information
Client: CA Rich Consultants
Address: 17 Dupont St. Plainview NY
Phone: 516 5761884
Fax:
Email: tbrown@carichinc.com

Project Information
Project Name: 3132 LIC
Project Location:
Project #
(Use Project name as Project #) ☐
Project Manager:
ALPHAQuote #:

Turn-Around Time
Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs 8260	SVOCs 8270							Sample Specific Comments	Total Bottle
22999-01	MW-1	9/15/15	1100	GW	TB	X	X								5
02	MW-2	↓	1250	GW	TB	X	X								5
03	MW-3		1420	GW	TB	X	X								5
04	MW-4		905	GW	TB	X	X								5
05	Field Blank		1430	FB	TB	X	X								3
06	Trip Blank		—	TB	TB	X									2

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	B	A											
Preservative	V	A											

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	9-17-15 940	[signature] AAL	9-17-15 940
[signature]	9-17-15 1830	Tom Tobin	9-17-15 1830
Tom Tobin	9/18/15 0810	[signature]	9/18/15 0810

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1522279
Client:	CA RICH CONSULTANTS, INC. 17 Dupont St Plainview, NY 11803
ATTN:	Thomas Brown
Phone:	(516) 576-8844
Project Name:	3132 LIC
Project Number:	Not Specified
Report Date:	09/16/15

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), ME (MA00030), PA (68-02089), VA (460194), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), USFWS (Permit #LE2069641), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1522279-01	SSV-1	SOIL_VAPOR	37-27 31ST STREET	09/08/15 14:51	09/10/15
L1522279-02	SSV-2	SOIL_VAPOR	37-27 31ST STREET	09/08/15 15:10	09/10/15
L1522279-03	SSV-3	SOIL_VAPOR	37-27 31ST STREET	09/08/15 12:00	09/10/15

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 3132 LIC **Lab Number:** L1522279
Project Number: Not Specified **Report Date:** 09/16/15

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on September 4, 2015. The canister certification results are provided as an addendum.

Samples L1522279-01, -02 and -03: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

Sample L1522279-01 The presence of Chlorobenzene could not be determined in this sample due to a non-target compound interfering with the identification and quantification of this compound.

Sample L1522279-02 results for Acetone should be considered estimated due to co-elution with a non-target peak.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 09/16/15

AIR

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

SAMPLE RESULTS

Lab ID: L1522279-01 D
Client ID: SSV-1
Sample Location: 37-27 31ST STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 09/14/15 19:20
Analyst: MB

Date Collected: 09/08/15 14:51
Date Received: 09/10/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	1.68	1.00	--	8.31	4.94	--		5
Chloromethane	ND	1.00	--	ND	2.07	--		5
Freon-114	ND	1.00	--	ND	6.99	--		5
Vinyl chloride	ND	1.00	--	ND	2.56	--		5
1,3-Butadiene	ND	1.00	--	ND	2.21	--		5
Bromomethane	ND	1.00	--	ND	3.88	--		5
Chloroethane	ND	1.00	--	ND	2.64	--		5
Ethanol	14.7	12.5	--	27.7	23.6	--		5
Vinyl bromide	ND	1.00	--	ND	4.37	--		5
Acetone	52.3	5.00	--	124	11.9	--		5
Trichlorofluoromethane	ND	1.00	--	ND	5.62	--		5
Isopropanol	3.10	2.50	--	7.62	6.15	--		5
1,1-Dichloroethene	ND	1.00	--	ND	3.96	--		5
Tertiary butyl Alcohol	6.31	2.50	--	19.1	7.58	--		5
Methylene chloride	ND	2.50	--	ND	8.69	--		5
3-Chloropropene	ND	1.00	--	ND	3.13	--		5
Carbon disulfide	ND	1.00	--	ND	3.11	--		5
Freon-113	ND	1.00	--	ND	7.66	--		5
trans-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
1,1-Dichloroethane	ND	1.00	--	ND	4.05	--		5
Methyl tert butyl ether	ND	1.00	--	ND	3.61	--		5
2-Butanone	10.3	2.50	--	30.4	7.37	--		5
cis-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
Ethyl Acetate	ND	2.50	--	ND	9.01	--		5

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

SAMPLE RESULTS

Lab ID: L1522279-01 D
Client ID: SSV-1
Sample Location: 37-27 31ST STREET

Date Collected: 09/08/15 14:51
Date Received: 09/10/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	11.1	1.00	--	54.2	4.88	--		5
Tetrahydrofuran	ND	2.50	--	ND	7.37	--		5
1,2-Dichloroethane	ND	1.00	--	ND	4.05	--		5
n-Hexane	ND	1.00	--	ND	3.52	--		5
1,1,1-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Benzene	1.28	1.00	--	4.09	3.19	--		5
Carbon tetrachloride	ND	1.00	--	ND	6.29	--		5
Cyclohexane	ND	1.00	--	ND	3.44	--		5
1,2-Dichloropropane	ND	1.00	--	ND	4.62	--		5
Bromodichloromethane	ND	1.00	--	ND	6.70	--		5
1,4-Dioxane	ND	1.00	--	ND	3.60	--		5
Trichloroethene	332	1.00	--	1780	5.37	--		5
2,2,4-Trimethylpentane	ND	1.00	--	ND	4.67	--		5
Heptane	1.26	1.00	--	5.16	4.10	--		5
cis-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
4-Methyl-2-pentanone	4.30	2.50	--	17.6	10.2	--		5
trans-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
1,1,2-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Toluene	11.5	1.00	--	43.3	3.77	--		5
2-Hexanone	1.66	1.00	--	6.80	4.10	--		5
Dibromochloromethane	ND	1.00	--	ND	8.52	--		5
1,2-Dibromoethane	ND	1.00	--	ND	7.69	--		5
Tetrachloroethene	36.9	1.00	--	250	6.78	--		5
Chlorobenzene	ND	1.00	--	ND	4.61	--		5
Ethylbenzene	2.37	1.00	--	10.3	4.34	--		5
p/m-Xylene	8.66	2.00	--	37.6	8.69	--		5
Bromoform	ND	1.00	--	ND	10.3	--		5
Styrene	11.8	1.00	--	50.2	4.26	--		5

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

SAMPLE RESULTS

Lab ID: L1522279-01 D
Client ID: SSV-1
Sample Location: 37-27 31ST STREET

Date Collected: 09/08/15 14:51
Date Received: 09/10/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	1.00	--	ND	6.87	--		5
o-Xylene	3.70	1.00	--	16.1	4.34	--		5
4-Ethyltoluene	1.56	1.00	--	7.67	4.92	--		5
1,3,5-Trimethylbenzene	1.69	1.00	--	8.31	4.92	--		5
1,2,4-Trimethylbenzene	5.96	1.00	--	29.3	4.92	--		5
Benzyl chloride	ND	1.00	--	ND	5.18	--		5
1,3-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,4-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2,4-Trichlorobenzene	ND	1.00	--	ND	7.42	--		5
Hexachlorobutadiene	ND	1.00	--	ND	10.7	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	74		60-140
Bromochloromethane	80		60-140
chlorobenzene-d5	71		60-140

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

SAMPLE RESULTS

Lab ID: L1522279-02 D
Client ID: SSV-2
Sample Location: 37-27 31ST STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 09/14/15 19:51
Analyst: MB

Date Collected: 09/08/15 15:10
Date Received: 09/10/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	9.34	2.00	--	46.2	9.89	--		10
Chloromethane	ND	2.00	--	ND	4.13	--		10
Freon-114	ND	2.00	--	ND	14.0	--		10
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
1,3-Butadiene	ND	2.00	--	ND	4.42	--		10
Bromomethane	ND	2.00	--	ND	7.77	--		10
Chloroethane	ND	2.00	--	ND	5.28	--		10
Ethanol	27.8	25.0	--	52.4	47.1	--		10
Vinyl bromide	ND	2.00	--	ND	8.74	--		10
Acetone	140	10.0	--	333	23.8	--		10
Trichlorofluoromethane	2.75	2.00	--	15.5	11.2	--		10
Isopropanol	6.30	5.00	--	15.5	12.3	--		10
1,1-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Tertiary butyl Alcohol	15.8	5.00	--	47.9	15.2	--		10
Methylene chloride	ND	5.00	--	ND	17.4	--		10
3-Chloropropene	ND	2.00	--	ND	6.26	--		10
Carbon disulfide	5.36	2.00	--	16.7	6.23	--		10
Freon-113	ND	2.00	--	ND	15.3	--		10
trans-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
1,1-Dichloroethane	ND	2.00	--	ND	8.09	--		10
Methyl tert butyl ether	ND	2.00	--	ND	7.21	--		10
2-Butanone	24.4	5.00	--	72.0	14.7	--		10
cis-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Ethyl Acetate	ND	5.00	--	ND	18.0	--		10

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

SAMPLE RESULTS

Lab ID: L1522279-02 D
Client ID: SSV-2
Sample Location: 37-27 31ST STREET

Date Collected: 09/08/15 15:10
Date Received: 09/10/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	3.70	2.00	--	18.1	9.77	--		10
Tetrahydrofuran	ND	5.00	--	ND	14.7	--		10
1,2-Dichloroethane	ND	2.00	--	ND	8.09	--		10
n-Hexane	49.1	2.00	--	173	7.05	--		10
1,1,1-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Benzene	6.56	2.00	--	21.0	6.39	--		10
Carbon tetrachloride	ND	2.00	--	ND	12.6	--		10
Cyclohexane	2.80	2.00	--	9.64	6.88	--		10
1,2-Dichloropropane	ND	2.00	--	ND	9.24	--		10
Bromodichloromethane	ND	2.00	--	ND	13.4	--		10
1,4-Dioxane	ND	2.00	--	ND	7.21	--		10
Trichloroethene	885	2.00	--	4760	10.7	--		10
2,2,4-Trimethylpentane	3.44	2.00	--	16.1	9.34	--		10
Heptane	35.5	2.00	--	145	8.20	--		10
cis-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
4-Methyl-2-pentanone	11.4	5.00	--	46.7	20.5	--		10
trans-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
1,1,2-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Toluene	18.8	2.00	--	70.8	7.54	--		10
2-Hexanone	2.84	2.00	--	11.6	8.20	--		10
Dibromochloromethane	ND	2.00	--	ND	17.0	--		10
1,2-Dibromoethane	ND	2.00	--	ND	15.4	--		10
Tetrachloroethene	8.78	2.00	--	59.5	13.6	--		10
Chlorobenzene	ND	2.00	--	ND	9.21	--		10
Ethylbenzene	3.91	2.00	--	17.0	8.69	--		10
p/m-Xylene	13.5	4.00	--	58.6	17.4	--		10
Bromoform	ND	2.00	--	ND	20.7	--		10
Styrene	11.6	2.00	--	49.4	8.52	--		10

Project Name: 3132 LIC
Project Number: Not Specified
Lab Number: L1522279
Report Date: 09/16/15

SAMPLE RESULTS

Lab ID: L1522279-02 D
Client ID: SSV-2
Sample Location: 37-27 31ST STREET
Date Collected: 09/08/15 15:10
Date Received: 09/10/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	2.00	--	ND	13.7	--		10
o-Xylene	5.69	2.00	--	24.7	8.69	--		10
4-Ethyltoluene	ND	2.00	--	ND	9.83	--		10
1,3,5-Trimethylbenzene	2.19	2.00	--	10.8	9.83	--		10
1,2,4-Trimethylbenzene	6.37	2.00	--	31.3	9.83	--		10
Benzyl chloride	ND	2.00	--	ND	10.4	--		10
1,3-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,4-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2,4-Trichlorobenzene	ND	2.00	--	ND	14.8	--		10
Hexachlorobutadiene	ND	2.00	--	ND	21.3	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	80		60-140

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

SAMPLE RESULTS

Lab ID: L1522279-03 D
Client ID: SSV-3
Sample Location: 37-27 31ST STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 09/14/15 20:23
Analyst: MB

Date Collected: 09/08/15 12:00
Date Received: 09/10/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	8.35	--	ND	41.3	--		41.75
Chloromethane	ND	8.35	--	ND	17.2	--		41.75
Freon-114	ND	8.35	--	ND	58.4	--		41.75
Vinyl chloride	ND	8.35	--	ND	21.3	--		41.75
1,3-Butadiene	ND	8.35	--	ND	18.5	--		41.75
Bromomethane	ND	8.35	--	ND	32.4	--		41.75
Chloroethane	ND	8.35	--	ND	22.0	--		41.75
Ethanol	ND	104	--	ND	196	--		41.75
Vinyl bromide	ND	8.35	--	ND	36.5	--		41.75
Acetone	111	41.8	--	264	99.3	--		41.75
Trichlorofluoromethane	ND	8.35	--	ND	46.9	--		41.75
Isopropanol	ND	20.9	--	ND	51.4	--		41.75
1,1-Dichloroethene	ND	8.35	--	ND	33.1	--		41.75
Tertiary butyl Alcohol	ND	20.9	--	ND	63.4	--		41.75
Methylene chloride	ND	20.9	--	ND	72.6	--		41.75
3-Chloropropene	ND	8.35	--	ND	26.1	--		41.75
Carbon disulfide	ND	8.35	--	ND	26.0	--		41.75
Freon-113	ND	8.35	--	ND	64.0	--		41.75
trans-1,2-Dichloroethene	ND	8.35	--	ND	33.1	--		41.75
1,1-Dichloroethane	ND	8.35	--	ND	33.8	--		41.75
Methyl tert butyl ether	ND	8.35	--	ND	30.1	--		41.75
2-Butanone	ND	20.9	--	ND	61.6	--		41.75
cis-1,2-Dichloroethene	ND	8.35	--	ND	33.1	--		41.75
Ethyl Acetate	ND	20.9	--	ND	75.3	--		41.75

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

SAMPLE RESULTS

Lab ID: L1522279-03 D
Client ID: SSV-3
Sample Location: 37-27 31ST STREET

Date Collected: 09/08/15 12:00
Date Received: 09/10/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	ND	8.35	--	ND	40.8	--		41.75
Tetrahydrofuran	ND	20.9	--	ND	61.6	--		41.75
1,2-Dichloroethane	ND	8.35	--	ND	33.8	--		41.75
n-Hexane	8.48	8.35	--	29.9	29.4	--		41.75
1,1,1-Trichloroethane	ND	8.35	--	ND	45.6	--		41.75
Benzene	ND	8.35	--	ND	26.7	--		41.75
Carbon tetrachloride	ND	8.35	--	ND	52.5	--		41.75
Cyclohexane	ND	8.35	--	ND	28.7	--		41.75
1,2-Dichloropropane	ND	8.35	--	ND	38.6	--		41.75
Bromodichloromethane	ND	8.35	--	ND	55.9	--		41.75
1,4-Dioxane	ND	8.35	--	ND	30.1	--		41.75
Trichloroethene	2320	8.35	--	12500	44.9	--		41.75
2,2,4-Trimethylpentane	ND	8.35	--	ND	39.0	--		41.75
Heptane	ND	8.35	--	ND	34.2	--		41.75
cis-1,3-Dichloropropene	ND	8.35	--	ND	37.9	--		41.75
4-Methyl-2-pentanone	ND	20.9	--	ND	85.7	--		41.75
trans-1,3-Dichloropropene	ND	8.35	--	ND	37.9	--		41.75
1,1,2-Trichloroethane	ND	8.35	--	ND	45.6	--		41.75
Toluene	ND	8.35	--	ND	31.5	--		41.75
2-Hexanone	ND	8.35	--	ND	34.2	--		41.75
Dibromochloromethane	ND	8.35	--	ND	71.1	--		41.75
1,2-Dibromoethane	ND	8.35	--	ND	64.2	--		41.75
Tetrachloroethene	21.0	8.35	--	142	56.6	--		41.75
Chlorobenzene	ND	8.35	--	ND	38.5	--		41.75
Ethylbenzene	ND	8.35	--	ND	36.3	--		41.75
p/m-Xylene	ND	16.7	--	ND	72.5	--		41.75
Bromoform	ND	8.35	--	ND	86.3	--		41.75
Styrene	ND	8.35	--	ND	35.6	--		41.75

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

SAMPLE RESULTS

Lab ID: L1522279-03 D
Client ID: SSV-3
Sample Location: 37-27 31ST STREET

Date Collected: 09/08/15 12:00
Date Received: 09/10/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	8.35	--	ND	57.3	--		41.75
o-Xylene	ND	8.35	--	ND	36.3	--		41.75
4-Ethyltoluene	ND	8.35	--	ND	41.0	--		41.75
1,3,5-Trimethylbenzene	ND	8.35	--	ND	41.0	--		41.75
1,2,4-Trimethylbenzene	ND	8.35	--	ND	41.0	--		41.75
Benzyl chloride	ND	8.35	--	ND	43.2	--		41.75
1,3-Dichlorobenzene	ND	8.35	--	ND	50.2	--		41.75
1,4-Dichlorobenzene	ND	8.35	--	ND	50.2	--		41.75
1,2-Dichlorobenzene	ND	8.35	--	ND	50.2	--		41.75
1,2,4-Trichlorobenzene	ND	8.35	--	ND	62.0	--		41.75
Hexachlorobutadiene	ND	8.35	--	ND	89.1	--		41.75

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	77		60-140

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 09/14/15 13:18

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG821062-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 09/14/15 13:18

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG821062-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 09/14/15 13:18

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG821062-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG821062-3								
Chlorodifluoromethane	88		-		70-130	-		
Propylene	99		-		70-130	-		
Propane	74		-		70-130	-		
Dichlorodifluoromethane	98		-		70-130	-		
Chloromethane	91		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	86		-		70-130	-		
Vinyl chloride	84		-		70-130	-		
1,3-Butadiene	93		-		70-130	-		
Butane	80		-		70-130	-		
Bromomethane	83		-		70-130	-		
Chloroethane	83		-		70-130	-		
Ethyl Alcohol	74		-		70-130	-		
Dichlorofluoromethane	78		-		70-130	-		
Vinyl bromide	80		-		70-130	-		
Acrolein	82		-		70-130	-		
Acetone	92		-		70-130	-		
Acetonitrile	82		-		70-130	-		
Trichlorofluoromethane	90		-		70-130	-		
iso-Propyl Alcohol	87		-		70-130	-		
Acrylonitrile	80		-		70-130	-		
Pentane	77		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG821062-3								
Ethyl ether	80		-		70-130	-		
1,1-Dichloroethene	88		-		70-130	-		
tert-Butyl Alcohol	81		-		70-130	-		
Methylene chloride	88		-		70-130	-		
3-Chloropropene	83		-		70-130	-		
Carbon disulfide	80		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	86		-		70-130	-		
trans-1,2-Dichloroethene	86		-		70-130	-		
1,1-Dichloroethane	88		-		70-130	-		
Methyl tert butyl ether	89		-		70-130	-		
Vinyl acetate	119		-		70-130	-		
2-Butanone	100		-		70-130	-		
cis-1,2-Dichloroethene	104		-		70-130	-		
Ethyl Acetate	101		-		70-130	-		
Chloroform	90		-		70-130	-		
Tetrahydrofuran	92		-		70-130	-		
2,2-Dichloropropane	87		-		70-130	-		
1,2-Dichloroethane	99		-		70-130	-		
n-Hexane	106		-		70-130	-		
Isopropyl Ether	82		-		70-130	-		
Ethyl-Tert-Butyl-Ether	104		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG821062-3								
1,1,1-Trichloroethane	110		-		70-130	-		
1,1-Dichloropropene	103		-		70-130	-		
Benzene	98		-		70-130	-		
Carbon tetrachloride	115		-		70-130	-		
Cyclohexane	108		-		70-130	-		
Tertiary-Amyl Methyl Ether	97		-		70-130	-		
Dibromomethane	100		-		70-130	-		
1,2-Dichloropropane	103		-		70-130	-		
Bromodichloromethane	108		-		70-130	-		
1,4-Dioxane	99		-		70-130	-		
Trichloroethene	103		-		70-130	-		
2,2,4-Trimethylpentane	112		-		70-130	-		
Methyl Methacrylate	119		-		70-130	-		
Heptane	118		-		70-130	-		
cis-1,3-Dichloropropene	112		-		70-130	-		
4-Methyl-2-pentanone	123		-		70-130	-		
trans-1,3-Dichloropropene	101		-		70-130	-		
1,1,2-Trichloroethane	107		-		70-130	-		
Toluene	81		-		70-130	-		
1,3-Dichloropropane	76		-		70-130	-		
2-Hexanone	102		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG821062-3								
Dibromochloromethane	87		-		70-130	-		
1,2-Dibromoethane	84		-		70-130	-		
Butyl Acetate	77		-		70-130	-		
Octane	77		-		70-130	-		
Tetrachloroethene	79		-		70-130	-		
1,1,1,2-Tetrachloroethane	80		-		70-130	-		
Chlorobenzene	82		-		70-130	-		
Ethylbenzene	85		-		70-130	-		
p/m-Xylene	86		-		70-130	-		
Bromoform	86		-		70-130	-		
Styrene	88		-		70-130	-		
1,1,2,2-Tetrachloroethane	83		-		70-130	-		
o-Xylene	87		-		70-130	-		
1,2,3-Trichloropropane	81		-		70-130	-		
Nonane (C9)	95		-		70-130	-		
Isopropylbenzene	80		-		70-130	-		
Bromobenzene	82		-		70-130	-		
o-Chlorotoluene	80		-		70-130	-		
n-Propylbenzene	84		-		70-130	-		
p-Chlorotoluene	81		-		70-130	-		
4-Ethyltoluene	84		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG821062-3								
1,3,5-Trimethylbenzene	86		-		70-130	-		
tert-Butylbenzene	82		-		70-130	-		
1,2,4-Trimethylbenzene	91		-		70-130	-		
Decane (C10)	100		-		70-130	-		
Benzyl chloride	94		-		70-130	-		
1,3-Dichlorobenzene	89		-		70-130	-		
1,4-Dichlorobenzene	88		-		70-130	-		
sec-Butylbenzene	83		-		70-130	-		
p-Isopropyltoluene	80		-		70-130	-		
1,2-Dichlorobenzene	93		-		70-130	-		
n-Butylbenzene	105		-		70-130	-		
1,2-Dibromo-3-chloropropane	110		-		70-130	-		
Undecane	**138**	Q	-		70-130	-		
Dodecane (C12)	**135**	Q	-		70-130	-		
1,2,4-Trichlorobenzene	116		-		70-130	-		
Naphthalene	119		-		70-130	-		
1,2,3-Trichlorobenzene	106		-		70-130	-		
Hexachlorobutadiene	101		-		70-130	-		

Project Name: 3132 LIC

Lab Number: L1522279

Project Number:

Report Date: 09/16/15

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1522279-01	SSV-1	0273	#30 SV	09/04/15	209025		-	-	-	Pass	35.5	30.4	15
L1522279-01	SSV-1	1549	6.0L Can	09/04/15	209025	L1520868-01	Pass	-29.4	-7.7	-	-	-	-
L1522279-02	SSV-2	0235	#30 SV	09/04/15	209025		-	-	-	Pass	36.4	35.3	3
L1522279-02	SSV-2	905	6.0L Can	09/04/15	209025	L1520868-01	Pass	-29.4	-8.2	-	-	-	-
L1522279-03	SSV-3	0404	#30 SV	09/04/15	209025		-	-	-	Pass	35.0	34.9	0
L1522279-03	SSV-3	1641	6.0L Can	09/04/15	209025	L1520868-01	Pass	-28.0	-9.5	-	-	-	-

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1520868

Report Date: 09/16/15

Air Canister Certification Results

Lab ID:	L1520868-01	Date Collected:	08/26/15 18:00
Client ID:	CAN 1586 SHELF 48	Date Received:	08/27/15
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	08/27/15 17:21		
Analyst:	MB		

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1520868

Report Date: 09/16/15

Air Canister Certification Results

Lab ID: L1520868-01
Client ID: CAN 1586 SHELF 48
Sample Location:

Date Collected: 08/26/15 18:00
Date Received: 08/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1520868

Report Date: 09/16/15

Air Canister Certification Results

Lab ID: L1520868-01
Client ID: CAN 1586 SHELF 48
Sample Location:

Date Collected: 08/26/15 18:00
Date Received: 08/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1520868

Report Date: 09/16/15

Air Canister Certification Results

Lab ID: L1520868-01
Client ID: CAN 1586 SHELF 48
Sample Location:

Date Collected: 08/26/15 18:00
Date Received: 08/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name:

Lab Number: L1520868

Project Number: CANISTER QC BAT

Report Date: 09/16/15

Air Canister Certification Results

Lab ID:	L1520868-01	Date Collected:	08/26/15 18:00
Client ID:	CAN 1586 SHELF 48	Date Received:	08/27/15
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	96		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	95		60-140

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1520868

Report Date: 09/16/15

Air Canister Certification Results

Lab ID:	L1520868-01	Date Collected:	08/26/15 18:00
Client ID:	CAN 1586 SHELF 48	Date Received:	08/27/15
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	08/27/15 17:21		
Analyst:	MB		

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1520868

Report Date: 09/16/15

Air Canister Certification Results

Lab ID: L1520868-01
Client ID: CAN 1586 SHELF 48
Sample Location:

Date Collected: 08/26/15 18:00
Date Received: 08/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1520868

Report Date: 09/16/15

Air Canister Certification Results

Lab ID: L1520868-01
Client ID: CAN 1586 SHELF 48
Sample Location:

Date Collected: 08/26/15 18:00
Date Received: 08/27/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	100		60-140

Project Name: 3132 LIC
Project Number: Not Specified

Lab Number: L1522279
Report Date: 09/16/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
N/A	Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1522279-01A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30)
L1522279-02A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30)
L1522279-03A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	3132 LIC	**Lab Number:**	L1522279
Project Number:	Not Specified	**Report Date:**	09/16/15

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

Report Format: Data Usability Report

Project Name: 3132 LIC **Lab Number:** L1522279

Project Number: Not Specified **Report Date:** 09/16/15

Data Qualifiers

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised December 16, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 9/11/15

ALPHA Job #: L1522279

Client Information

Client: CA Rich
Address: 17 Dupont Street Plainview NY
Phone: 516 576 8844
Fax:
Email: tbrown@carichinc.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 3132 LIC
Project Location: 37-27 31st St.
Project #:
Project Manager:
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:

All Columns Below Must Be Filled Out

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
2279-01	SSV-1	9/8/15	1230	1451	30.23	8.85	SV	TB	6L	1549	0273		X						
02	SSV-2	9/8/15	1305	1510	30.19	7.98	SV	TB	6L	905	0235		X						
03	SSV-3	9/9/15	958	1200	28.01	9.36	SV	TB	6L	1641	0404		X						

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
[illegible]	9-10-15 800	[illegible] AAL	9-10-15 800
[illegible]	9-10-15 820	Tom Tobin	9-10-15 1820
Tom Tobin	9-11-15 0030	[illegible]	9/11/15 0030

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No: 101-02 (19-Jun-09)