52-01 QUEENS BOULEVARD

QUEENS, NEW YORK

Remedial Investigation Report

NYC BCP Site Number: 12CVCP066Q
E-Designation Site Number: E-163

Prepared for:

52-01, LLC
11 Middle Neck Road
Suite 204
Great Neck, New York 11021

Prepared by:

Athenica Environmental Services, Inc.
45-09 Greenpoint Avenue
Long Island City, New York 11104
(718) 784-7490

JUNE 2012

REMEDIAL INVESTIGATION REPORT
TABLE OF CONTENTS

FIGURES

1. Site Location Map
2. Site Map
3. Proposed Site Redevelopment Plan
4. Surrounding Area Map
5. Map of Areas of Concern
6. Location of Soil Borings, Test Pits, Wells and Soil Vapor Implants
7. Map of Soil Chemistry Results
8. Map of Groundwater Chemistry Results
9. Map of Soil Vapor Chemistry Results

TABLES

1. Analytical methods summary for all media
2. Soil Analytical Data Summary, March 2007 (showing exceedence of Track 1 SCOs)
3. Soil Analytical Data Summary, May 2012 (Showing exceedence of Track 1 SCOs)
4. Groundwater Analytical Data Summary (showing exceedence of New York State Groundwater Standards)
5. Soil Vapor Analytical Data Summary (showing exceedences of NYS DOH Soil Vapor Intrusion Guidance)

APPENDICES

A. Phase 1 Report (CD-ROM)
B. Health and Safety Plan (CD-ROM)
C. Photographs of Remedial Investigation
D. Geophysical Investigation Report
E. Soil Boring and Test Pit Geologic Logs
F. Construction Details of Temporary Monitoring Wells and Soil Vapor Implants
G. Soil Vapor Sampling Logs
H. Laboratory Data Deliverables for Soil Analytical Data (CD-ROM)
I. Laboratory Data Deliverables for Groundwater Analytical Data (CD-ROM)
J. Laboratory Data Deliverables for Soil Vapor Analytical Data (CD-ROM)

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 BCP	New York City Brownfield 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, William Silveri, 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 52-01 Queens Boulevard Site, (NYC BCP Site No. 12CVCP066Q). 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.

William Silveri

WILLIAM SILVERI JUNE 27, 2012

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 subject property is located at 52-01 Queens Boulevard in the Woodside section of Queens, New York and is identified as Block 1321 and Lot 1 on the New York City Tax Map (the "Site"). **Figure 1** shows the Site location. The Site is 12,000-square feet and is bounded by an automobile repair shop to the north, Queens Boulevard to the south, an automobile repair shop and two residential dwellings to the east, and 52nd Street to the west. A map of the Site boundary is shown in **Figure 2**. Currently, the Site is a vacant lot, without any structures, and is fully enclosed by a perimeter chain link fence.

Summary of Proposed Redevelopment Plan

The proposed future development of the Site consists of a 9-story, mixed-use building, with commercial tenants on the ground floor and market-rate residential units on floors above. Layout of the proposed site development is presented in **Figure 3**. The current zoning designation is R7X/R5-B and is residential with a commercial overlay. The proposed use is consistent with existing zoning for the property.

The proposed redevelopment will entail the construction of a new 9-story building, with a full basement. The basement will extend over the entire footprint of the Site. The proposed use of the basement of the new building will consist mainly of parking, with mechanical equipment rooms and a laundry at the northernmost portion of the basement. These areas will be adequately ventilated as required by the NYC DOB Building Code. The new building will occupy the southern portion of the Site. A setback for ground level parking, which will be above the basement level, will occupy the remainder of the Site. There will be no landscaped areas at the Site.

Excavation of soil for the full basement will extend to an approximate elevation of 85 feet (Borough of Queens Datum), which is 2.75 feet above the U.S. Coast Geodetic Survey Mean Sea Level Datum at Sandy Hook. This elevation corresponds to 10 to 12 feet below the grade of the

south portion of the Site and the adjacent sidewalk of Queens Boulevard. Excavation of soils for the elevator pits will be approximately 4 ½ feet below the bottom of the basement floor slab (i.e. elevation of 80.5 feet). Soils at the northernmost portion of the Site have already been excavated to the approximate top of the basement floor slab, to a depth of approximately 12 feet below grade. Based on the existing grades of the Site, the volume of remaining soils to be excavated is estimated to be approximately 4,000 cubic yards. No excavation is anticipated below the water table, which is at least 20 feet below the proposed basement floor slab and 15.5 feet below the bottom of the elevator pits.

Summary of Past Uses of Site and Areas of Concern

According to Sanborn Fire Insurance maps, the Site is shown to be occupied by a stone yard from1902 to 1932, an asphalt parking lot with no structures in 1951, and a used auto sales lot with a small one-story structure located at the northeast portion of the Site from 1982 to 2006. Knowledgeable sources reported that the Site had been utilized primarily for the sale of used automobiles. Several hydraulic oil lifts were reportedly present in the on-Site structure where minor repairs of automobiles presumably occurred prior to their sale.

The AOCs identified for the Site include:

1. The past use of the Site as a stone yard (majority of the Site), and for automobile repair - related operations
    a. The building formerly present in the northeast portion of the Site was known to house several hydraulic fluid lifts
2. Historic fill at the south, unexcavated portion of the Site.
3. Adjacent off-site current and historic auto repair operations to the north and to the east.

Summary of the Work Performed under the Remedial Investigation

The Remedial Investigation of the Site consisted of two distinct phases of work to characterize the Site in response to its "E" designation for hazardous materials.

The initial subsurface investigation of the Site occurred in 2007 and 2008 to evaluate subsurface soil conditions and groundwater on-Site. Groundwater was not encountered and therefore not retrieved during this investigation. The six (6) surface and subsurface soil samples collected as a part of this investigation via the installation of five (5) borings were deemed to be invalid by OER as their sampling depths could not be confirmed based upon submitted documentation, and therefore are not considered to be a direct component of site character determination. Nevertheless, when analyzed, none of the soil samples had detectable levels above Unrestricted Track 1 Soil Cleanup Objectives (SCOs) of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, or target analyte list (TAL) metals.

A subsequent subsurface investigation occurred in May and June 2012 to evaluate on-site conditions. Specifically, the following activities were undertaken:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Excavated four (4) test pits throughout the entire project Site, and collected twelve (12) soil samples for chemical analysis from the soil borings and test pits to evaluate soil quality;
3. Installed three (3) temporary groundwater monitoring wells throughout the Site and collected three (3) groundwater samples for chemical analysis to evaluate groundwater quality;
4. Installed three (3) soil vapor probes around the Site's perimeter and collected three (3) samples for chemical analysis;
5. Performed a geophysical survey across the entire Site.

Six (6) additional test pits were excavated to characterize soils for off-site disposal. Discrete soil samples from three of these test pits were collected for analysis for VOCs, and results of this analysis are also reported in this RIR. Trace-levels of acetone and toluene were detected within some of these samples, none of which exceeded Track 1/Unrestricted SCOs.

Summary of Environmental Findings

1. Elevation of the Site ranges from approximately 89 to 100 feet (Borough of Queens Datum), which is 2.75 feet above the U.S. Coast Survey Mean Sea Level at Sandy Hook). The elevation of the Site slopes from south to north where excavation of soils for construction of the northernmost foundation wall of the new building had occurred.

2. Depth to perched groundwater ranges from 20 to 31 feet below ground surface (bgs) at the Site. Borings installed to 34 feet bgs have not encountered the water table. Due to subsurface obstructions, deeper borings for installation of permanent groundwater monitoring wells could not be installed by conventional drilling methods. Based on United States Geological Survey (USGS) report titled "Water Table Altitude in Kings and Queens Counties, New York, March 1997", the depth to the water table is likely 40 to 50 feet bgs.

3. Since no permanent groundwater monitoring wells have been installed, the actual direction of groundwater flow is unknown. Based on surface topography and the aforementioned USGS report, the anticipated direction of groundwater flow at the Site is to the southwest, towards the East River.

4. Depth to bedrock is approximately 200 feet bgs at the Site according to available geological information (Bedrock and Engineering Geological Map, 1994, Baskerville, Charles). Bedrock was not encountered during any portion of either site investigation.

5. The stratigraphy of the site, from the surface down, consists of 2 to 4 feet of fill consisting mainly of bricks and stone, underlain by 28 feet of Upper Glacier Aquifer consisting of sand with some silts, pebbles and boulders..

6. Six (6) Soil/fill samples collected from the five (5) borings installed during the initial phase of the RI in 2007 showed no concentrations of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and polychlorinated biphenyls (PCBs) that were above their corresponding Part 375 Unrestricted Use/Track 1 SCOs. The only VOCs detected in the soil were acetone and methylene chloride, both common laboratory contaminants that incidentally were also found in the laboratory blank. Trace concentrations of polycyclic aromatic hydrocarbons (PAHs), a subset of SVOCs, were found in some soil samples. These PAHs included phenanthrene, fluoranthene, pyrene, benzo (a) anthracene, benzo (b) fluoranthene, benzo (k) fluoranthene, benzo (a) pyrene,

and benzo (g,h,i) perylene. Concentrations of these PAHs were well within published values for historic fill and therefore their presence is likely attributable to historic fill.

7. Both grab and composite soil/fill samples collected from all test pits excavated during the subsequent phase of the RI in 2012 found no VOCs or metals above their corresponding Part 375 Unrestricted Use/Track 1SCOs. The only VOCs detected in the soil samples were trace levels of toluene and acetone, and the presence of the latter is likely an artifact arising from laboratory contamination. No detectable concentrations of other VOCs, in particular tetrachloroethene (PCE), trichloroethene (TCE) and cis-1,2-Dichloroethane, were found in the soil samples.

8. Soil vapor samples collected during the 2012 RI did not contain detectable concentrations of carbon tetrachloride and 1,1,2,2-Tetrachloroethane. PCE was detected in all three (3) samples retrieved, at concentrations ranging from 15 to 83 micrograms per cubic meter (µg/m3). TCE was only detected in one (1) of three (3) samples, at a concentration of 1 µg/m3. The highest concentration of PCE was found at soil vapor implant SV-2 located at the easternmost portion of the Site and closest to the off-site and adjacent auto repair facility to the East. Decay products of PCE and TCE were not identified in soil vapor. Low levels of several petroleum-associated compounds (below 25 ug/m3) were also identified in soil vapor. No detectable concentrations of any chlorinated solvents were found in the soil samples collected at the Site, but were found in groundwater which may indicate the presence of an offsite source. Concentrations of chlorinated solvents in the soil vapor were relatively low, which is inconsistent with a significant on-Site source.

9. All three (3) Groundwater samples collected during the 2012 phase of the RI revealed the presence of PCE, TCE and cis-1,2-Dichloroethane in perched groundwater at concentrations well above their Part 703.5 Class GA groundwater standards. Concentrations of PCE in the perched groundwater ranged from 252 to 882 microgram per liter (ug/L). Concentrations of TCE ranged from 2.1 to 10.4 ppb. Concentrations of cis-1,2-Dichloroethane ranged from 1.6 to 11.3 ug/L. The highest concentration of these chlorinated solvents was found at temporary well TW-3 located at the northernmost portion of the Site and closest to the off-site and adjacent auto repair facility to the North.. As both on-site soil and soil vapor quality do not indicate the presence of TCE or PCE in detectable quantities, and given the current/former uses of surrounding properties,

it is strongly believed that the contamination pathway of these chemicals originates from an off-site source. Site and logistical issues impeded the installation and development of permanent groundwater wells during the 2012 remedial investigation. As a result, three (3) perimeter permanent flush-mounted groundwater wells will be installed immediately after full site excavation has been achieved. Samples retrieved from these will be analyzed for the presence of VOCs, SVOCs, unfiltered/filtered metals, pesticides, and PCBs. The data generated from said analysis will be used to further bolster the reasoning that TCE/PCE contamination in groundwater is a result of off-site ingress.

REMEDIAL INVESTIGATION REPORT

1.0 SITE BACKGROUND

52-01, LLC has enrolled in the New York City Brownfield Cleanup Program (NYC BCP) to investigate and remediate a 0.22-acre site located at 52-01 Queens Boulevard in the Woodside section of Queens, New York. Mixed commercial residential use is proposed for the property. The RI work was performed as two separate events, between March 2007 and May - June 2012. 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 52-01 Queens Boulevard in the Woodside section in Queens, New York and is identified as Block 1321 and Lot 1 on the New York City Tax Map. **Figure 1** shows the Site location. The Site is 12,000-square feet and is bounded by an automobile repair shop to the North, Queens Boulevard to the South, an automobile repair shop and two residential dwellings to the East, and 52nd Street to the West. A map of the site boundary is shown in **Figure 2**. Currently, the Site is a vacant lot, without any structures, and is fully enclosed by a chain link perimeter fence.

1.2 Proposed Redevelopment Plan

The proposed future development of the Site consists of a 9-story, mixed-use building, with commercial tenants on the ground floor and market-rate residential units on floors above. Layout of the proposed site development is presented in **Figure 3**. The current zoning designation is R7X/R5-B and is residential with a commercial overlay. The proposed use is consistent with existing zoning for the property.

The proposed redevelopment will entail the construction of a new 9-story building, with a full basement. The basement will extend over the entire footprint of the Site. The proposed use of the basement of the new building will consist mainly of parking, with mechanical equipment rooms and a laundry at the northernmost portion of the basement. These areas will be adequately ventilated as required by the NYC DOB Building Code. The new building will occupy the

southern portion of the Site. A setback for ground level parking, which will be above the basement level, will occupy the remainder of the Site. There will be no landscaped areas at the Site.

Excavation of soil for the full basement will extend to an approximate elevation of 85 feet (Borough of Queens Datum), which is 2.75 feet above the U.S. Coast Geodetic Survey Mean Sea Level Datum at Sandy Hook. This elevation corresponds to 10 to 12 feet below the grade of the south portion of the Site and the adjacent sidewalk of Queens Boulevard. Excavation of soils for the elevator pits will be approximately 4 ½ feet below the bottom of the basement floor slab (i.e. elevation of 80.5 feet). Soils at the northernmost portion of the Site have already been excavated to the approximate top of the basement floor slab, to a depth of approximately 12 feet below grade. Based on the existing grades of the Site, the volume of remaining soils to be excavated is estimated to be approximately 4,000 cubic yards. No excavation is anticipated below the water table, which is at least 20 feet below the proposed basement floor slab and 15.5 feet below the bottom of the elevator pits.

1.3 DESCRIPTION OF SURROUNDING PROPERTY

According to the OER Searchable Property Environmental E-Database (SPEED), there are no sensitive receptors, such as schools, hospitals and day-care facilities within a 500-foot radius of the Site.

Figure 4 shows the surrounding land usage.

2.0 SITE HISTORY

2.1 PAST USES AND OWNERSHIP

According to Sanborn Fire Insurance maps, the Site is shown to be occupied by a stone yard from1902 to 1932, an asphalt parking lot with no structures in 1951, and a used auto sales lot with a small one-story structure located at the northeast portion of the Site from 1982 to 2006. Knowledgeable sources reported that the Site had been utilized primarily for the sale of used automobiles. Several hydraulic oil lifts were reportedly present in the on-Site structure where minor repairs of automobiles presumably occurred prior to their sale.

2.2 PREVIOUS INVESTIGATIONS

Tri-State Engineering, P.C. (Tri-State) performed a subsurface investigation at the Site on October 26, 2005. The subsurface investigation by Tri-State included a geophysical survey consisting of ground penetrating radar (GPR), installation of five direct-push borings to a depth of 12 to 16 feet below ground surface (bgs), collection of a composite soil sample from each boring, and analysis of composite samples for NYSDEC STARS Memo #1 volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). Results of the geophysical survey indicated that soils had been excavated in the reported area of hydraulic lifts. No detectable concentrations of VOCs and SVOCs were found in the soil samples.

In 2007-2008, Athenica conducted what is referred to in this report as the initial subsurface investigation of the Site. Groundwater was not encountered and therefore not retrieved during this investigation. The six (6) surface and subsurface soil samples collected as a part of this investigation via the installation of five (5) borings were deemed to be invalid by OER as their sampling depths could not be confirmed based upon submitted documentation, and therefore are not considered to be a direct component of site character determination. Nevertheless, when analyzed, none of the soil samples had detectable levels above Unrestricted Track 1 Soil Cleanup Objectives (SCOs) of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, or target analyte list (TAL) metals.

In January 2012, Athenica conducted a Phase I Environmental Site Assessment (Phase I ESA) in substantial compliance with the scope and methodologies established by the American Society of Testing and Materials (ASTM) for a Phase I ESA. The Phase I ESA included a

detailed review and analysis of available historical records. The Phase I ESA identified no Recognized Environmental Conditions (RECs) associated with the Site.

2.3 SITE INSPECTION

Mr. William Silveri of Athenica performed a site inspection on January 18, 2012. At the date of the inspection, the Site was vacant. The northernmost portion of the Site had been excavated approximately 10 feet below ground surface (bgs) of the rest of the Site. Various construction and demolition debris and large boulders were present throughout the unexcavated portion of the Site. A perimeter chain link fence surrounded the Site.

2.4 AREAS OF CONCERN

The AOCs identified for this Site include:

The AOCs identified for the Site include:

1. The past use of the Site as a stone yard (majority of the Site), and for automobile repair - related operations

a. The building formerly present in the northeast portion of the Site was known to house several hydraulic fluid lifts

2. Historic fill at the south, unexcavated portion of the Site.

3. Adjacent off-site current and historic auto repair operations to the north and to the east.

Soils at the northernmost portion of the Site have already been excavated and removed from the Site to facilitate for the installation of a new foundation wall along the north boundary of the Site.

A copy of the Phase 1 Report is presented in Appendix A. A map showing areas of concern is presented in **Figure 5**.

3.0 PROJECT MANAGEMENT

3.1 PROJECT ORGANIZATION

The Qualified Environmental Profession (QEP) responsible for preparation of this RIR is William Silveri.

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.

3.3 MATERIALS MANAGEMENT

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

4.0 REMEDIAL INVESTIGATION ACTIVITIES

The Remedial Investigation of the Site consisted of two distinct phases of work to characterize the Site in response to its "E" designation for hazardous materials.

The initial subsurface investigation of the Site occurred in 2007 and 2008 to evaluate subsurface soil conditions and groundwater on-Site. Groundwater was not encountered and therefore not retrieved during this investigation. The six (6) surface and subsurface soil samples collected as a part of this investigation via the installation of five (5) borings were deemed to be invalid by OER as their sampling depths could not be confirmed based upon submitted documentation, and therefore are not considered to be a direct component of site character determination. Nevertheless, when analyzed, none of the soil samples had detectable levels above Unrestricted Track 1 Soil Cleanup Objectives (SCOs) of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, or target analyte list (TAL) metals.

A subsequent subsurface investigation occurred in May and June 2012 to evaluate on-site conditions. Specifically, the following activities were undertaken:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Excavated four (4) test pits throughout the entire project Site, and collected twelve (12) soil samples for chemical analysis from the soil borings and test pits to evaluate soil quality;
3. Installed three (3) temporary groundwater monitoring wells throughout the Site and collected three (3) groundwater samples for chemical analysis to evaluate groundwater quality;
4. Installed three (3) soil vapor probes around the Site's perimeter and collected three (3) samples for chemical analysis;
5. Performed a geophysical survey across the entire Site.

Six (6) additional test pits were excavated to characterize soils for off-site disposal. Discrete soil samples from three of these test pits were collected for analysis for VOCs, and results of this analysis are also reported in this RIR.

4.1 GEOPHYSICAL INVESTIGATION

On March 13, 2007, Nova Geophysical Services (NOVA), a geophysical subcontractor of Athenica, conducted a geophysical investigation across the entire Site to identify and to locate petroleum underground storage tanks (USTs). The geophysical investigation consisted of the performance of a ground penetrating radar (GPR) survey. The GPR survey utilized an instrument with a 350 megahertz (MHz), shielded antenna (MALA RAMAC X3M).

The geophysical investigation identified no anomalies indicative of USTs. Results of the geophysical investigation are presented in Appendix D.

4.2 BORINGS AND MONITORING WELLS

Drilling and Soil Logging

On March 13, 2007, five direct-push borings were installed to initially characterize subsurface soil conditions at the Site in response to its "E" designation for hazardous materials. Each soil borings was installed to a depth of 22 feet bgs. From each of the direct-push soil borings, soil samples were continuously collected from grade to the boring termination depth and screened for evidence of contamination utilizing field observations (odor and/or staining) and a photoionization detector (PID). No evidence of field contamination was found in any of the soils from the borings.

On May 15, 2012, test pits TP-7 through TP-10 were excavated to further characterize subsurface soil conditions at the Site, and yielded a total of twelve (12) soil samples. Test pits TP-7 through TP-10 were excavated to the maximum depth of planned excavation, which corresponds to approximately 15 feet below the original grade of the Site. From each test pit, soil samples were continuously collected from grade to the test pit termination depth and screened in the same manner as the soils from the soil borings. No evidence of field contamination was found in any of the soils from the test pits.

From each test pit, representative soil samples were collected from varying depths and analyzed for VOCs by EPA Method 8260 and Target Analyte List Metals by US EPA Methods 6010C and 7471B.

Test pit and boring logs were prepared by a geologist and are attached in Appendix E. A map showing the location of test pits, soil vapor implants, and monitor wells is shown in **Figure 6**.

Groundwater Monitoring Well Construction

A temporary groundwater monitoring well was installed at each of three locations and consisted of polyethylene tubing and a four-foot steel screen that intersected zones of perched groundwater at the Site.

The temporary monitoring well locations are shown in **Figure 6**. Details of the temporary well construction are presented in Appendix F.

Survey

The locations of test pits, temporary groundwater monitoring well locations, and soil vapor implants were field measured.

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. **Table 1** provides the analytical methods for soil, groundwater, and soil vapor.

Soil Sampling

A total of 18 (6 from 2007 and 12 from 2012) soil samples were collected for chemical analysis during this RI. Data on soil sample collection for chemical analyses, including dates of collection and sample depths, is reported **in Tables 2** and **3**. **Figure 6** shows the location of samples collected in this investigation. Laboratories and analytical methods are shown below.

Soil samples were collected in pre-cleaned, laboratory supplied glassware, stored in a chilled cooler (4º C) and submitted for analysis. Soil samples collected during the initial phase of the RI in March 2007 were submitted to Chemtech for laboratory analysis for TCL VOCs by EPA method 8260, SVOCs by EPA Method 8270, and PCBs by EPA method 8081. Soil samples collected during the subsequent phase of the RI in May 2012 were submitted to Analytical Laboratory Services, Inc. (ALSI) for analysis for TCL VOCs by EPA method 8260, and TAL metals by EPA methods 6010C and 7471B.

Groundwater Sampling

Three (3) groundwater samples were collected for chemical analysis during this RI. Groundwater sample collection data is reported in **Table 4**. **Figure 6** shows the location of groundwater sampling. Laboratories and analytical methods are shown below.

Within each temporary groundwater monitoring well location, a groundwater sample was collected through the utilization of a peristaltic pump. Groundwater samples were collected in pre-cleaned laboratory supplied glassware stored in a chilled cooler (4º C) and submitted to ALSI for analysis for TCL VOCs by EPA method 8260 and for TCL SVOCs by EPA method 8270. It should also be noted that site and logistical issues impeded the installation and development of permanent groundwater wells during the 2012 remedial investigation. As a result, three (3) perimeter permanent flush-mounted groundwater wells will be installed immediately after full site excavation has been achieved. Samples retrieved from these will be analyzed for the presence of VOCs, SVOCs, unfiltered/filtered metals, pesticides, and PCBs. The data generated from said analysis will be used to further bolster the reasoning that TCE/PCE contamination in groundwater is a result of off-site ingress.

Soil Vapor Sampling

Three (3) soil vapor probes were installed and three (3) soil vapor samples were collected for chemical analysis during this RI. Soil vapor sampling locations are shown in **Figure 6**. Soil vapor sample collection data is reported in **Table 5**. Soil vapor sampling logs are included in Appendix G. 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 William Silveri
Chemical Analytical Laboratory	Chemical analytical laboratory(s) used in the RI is NYS ELAP certified and were Chemtech and ALS Analytical Laboratories Inc.
Chemical Analytical Methods	Soil analytical methods: • TAL Metals by EPA Method 6010C (rev. 2007) and EPA Method 7471C; • VOCs by EPA Method 8260C (rev. 2006); • SVOCs by EPA Method 8270D (rev. 2007); • PCBs by EPA Method 8082A (rev. 2000); 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 2** through **5** , respectively. Laboratory data deliverables for all samples evaluated in this RIR are provided in digital form in Appendices H, I and J.

5.0 ENVIRONMENTAL EVALUATION

5.1 GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS

Stratigraphy

Subsurface soils at the site consist of urban fill (brick, stone, concrete in a brown fine medium sand matrix) to approximately 4 feet below grade at the south, unexcavated portion of the Site. A native fine to medium brown sand, with some boulders, underlies the fill. Since the north portion of the Site has been excavated to approximately 10 feet below original grade, the subsurface soils at this portion of the Site consist of the native fine to medium brown sand.

Hydrogeology

Water table was not encountered in any of the test pits or borings installed at the Site. Temporary groundwater monitoring wells encountered a perched layer of groundwater that ranged from 20 to 30 feet bgs. Significant obstructions prevented installation of temporary groundwater monitoring wells to depths below 30 feet bgs utilizing conventional drilling methods. According to USGS report titled "Water Table Altitude in Kings and Queens Counties, New York, March 1997", the anticipated depth to groundwater at the Site likely is between 45 to 55 feet bgs.

5.2 SOIL CHEMISTRY

Soil sample results were compared to the NYSDEC Part 375.6 Unrestricted and Restricted Residential Soil Cleanup Objectives (SCOs). The analytical data for the soil samples are summarized in Tables 2 through 3, and a copy of the laboratory analytical reports are included in Appendix H.

Screening of soil found no evidence of field contamination (i.e. elevated PID readings, odors, staining).

Six (6) Soil/fill samples collected from the five (5) borings installed during the initial phase of the RI in 2007 showed no concentrations of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and polychlorinated biphenyls (PCBs) that were above their corresponding Part 375 Unrestricted Use/Track 1 SCOs. The only VOCs detected in the soil were acetone and methylene chloride, both common laboratory contaminants that

incidentally were also found in the laboratory blank. Trace concentrations of polycyclic aromatic hydrocarbons (PAHs), a subset of SVOCs, were found in some soil samples. These PAHs included phenanthrene, fluoranthene, pyrene, benzo (a) anthracene, benzo (b) fluoranthene, benzo (k) fluoranthene, benzo (a) pyrene, and benzo (g,h,i) perylene. Concentrations of these PAHs were well within published values for historic fill and therefore their presence is likely attributable to historic fill.

Both grab and composite soil/fill samples collected from all test pits excavated during the subsequent phase of the RI in 2012 found no VOCs or metals above their corresponding Part 375 Unrestricted Use/Track 1SCOs. The only VOCs detected in the soil samples were toluene and acetone, and the presence of the latter is likely an artifact arising from laboratory contamination. No detectable concentrations of other VOCs, in particular tetrachloroethene (PCE), trichloroethene (TCE) and cis-1,2-Dichloroethane, were found in the soil samples.

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 2** and **3**. **Figure 7** shows the location and posts the values for soil/fill that exceed the 6NYCRR Part 375-6 Unrestricted/Track 1 and Part Restricted Residential/Track 2 Use Soil Cleanup Objectives (SCOs).

5.3 GROUNDWATER CHEMISTRY

Groundwater sample results were compared to the water quality standards specified in the NYSDEC Groundwater Quality Standards (GQSs). Analytical data for the groundwater samples is summarized in **Table 4**, and a copy of the laboratory analytical report is included in Appendix I.

All three (3) Groundwater samples collected during the 2012 phase of the RI revealed the presence of PCE, TCE and cis-1,2-Dichloroethane in perched groundwater at concentrations well above their Part 703.5 Class GA groundwater standards. Concentrations of PCE in the perched groundwater ranged from 252 to 882 microgram per liter (ug/L). Concentrations of TCE ranged from 2.1 to 10.4 ppb. Concentrations of cis-1,2-Dichloroethane ranged from 1.6 to 11.3 ug/L. The highest concentration of these chlorinated solvents was found at temporary well TW-3 located at the northernmost portion of the Site and closest to the off-site and adjacent auto repair facility to the North. As both on-site soil and soil vapor quality do not indicate the presence of TCE or PCE in detectable quantities, and given the current/former uses of surrounding

properties, it is presumed that the contamination pathway of these chemicals originates from an off-site source.

Data collected during the RI is insufficient to delineate the distribution of contaminants in groundwater at the Site. An additional groundwater investigation involving the installation and development of at least three (3) perimeter permanent flush-mounted groundwater wells will be conducted as the initial part of Site remediation to delineate contaminants in groundwater onsite; particularly to show that TCE/PCE contamination in groundwater is a result of off-site ingress. Samples retrieved from these will be analyzed for the presence of VOCs, SVOCs, unfiltered/filtered metals, pesticides, and PCBs.

A summary table of data for chemical analyses performed on groundwater samples is included in **Table 4**. Exceedences of applicable groundwater standards are shown.

Figure 8 shows the location and posts the values for groundwater that exceed the New York State 6NYCRR Part 703.5 Class GA groundwater standards.

5.4 SOIL VAPOR CHEMISTRY

Soil vapor samples collected during the 2012 RI did not contain detectable concentrations of carbon tetrachloride and 1,1,2,2-Tetrachloroethane. PCE was detected in all three (3) samples retrieved, at concentrations ranging from 15 to 83 micrograms per cubic meter ($\mu g/m^3$). TCE was only detected in one (1) of three (3) samples, at a concentration of 1 $\mu g/m^3$. The highest concentration of PCE was found at soil vapor implant SV-2 located at the easternmost portion of the Site and closest to the off-site and adjacent auto repair facility to the East. Decay products of PCE and TCE were not identified in soil vapor. Low levels of several petroleum-associated compounds (below 25 ug/m3) were also identified in soil vapor. No detectable concentrations of any chlorinated solvents were found in the soil samples collected at the Site, but were found in groundwater which may indicate the presence of an offsite source. Concentrations of chlorinated solvents in the soil vapor were relatively low, which is inconsistent with a significant on-Site source.

Data collected during the RI is 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 4**.

Figure 9 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.

TABLES

Table 1
Analytical Methods Summary Table
52-01 Queens Boulevard
Queens, New York

Matrix	Number of Samples	Date of Sampling	Analytical Methods	Number of Duplicate Samples	Number and type of QA/QC Samples
Soil	6	3/29/2007	VOCs by EPA 8260 SVOCs by EPA 8270 PCBs by EPA 8081	Not Applicable	Not Applicable
Soil	12	5/15/2012; 5/17/2012	VOCs by EPA 8260 TAL Metals by EPA Methods 6010C and 7471B	Not Applicable	Not Applicable
Groundwater	3	4/9/2012	VOCs by EPA 8260 SVOCs by EPA 8270	Not Applicable	1 Trip Blank
Soil Vapor	3	4/9/2012	VOCs by TO-15 Helium	Not Applicable	Not Applicable

Table 2
Summary of Soil Sampling Results - VOCs
52-01 Queens Boulevard
Queens, New York
March 2007

Sample Name Lab Sample Id Sample Depth (ft)* Sample Date	Part 375 Unrestricted Use	Part 375 Restricted Residential Use	B-1 Y2137-01 20-22 3/29/2007 (ppm)	B-2 Y2137-03 20-22 3/29/2007 (ppm)	B-3 Y2137-06 20-22 3/29/2007 (ppm)	B-4 Y2137-08 20-22 3/29/2007 (ppm)	B-5 Y2137-09 20-22 3/29/2007 (ppm)
Volatile Organic Compounds							
Dichlorodifluoromethane	NC	ND	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Chloromethane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Vinyl Chloride	0.02	0.21	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Bromomethane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Chloroethane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Trichlorofluoromethane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Tert butyl alchohol	NC	NC	0.1300 U	0.1400 U	0.1300 U	0.1300 U	0.1300 U
1,1-Dichloroethene	0.33	100	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Acrolein	NC	NC	0.1300 U	0.1400 U	0.1300 U	0.1300 U	0.1300 U
Acrylonitrile	NC	NC	0.1300 U	0.1400 U	0.1300 U	0.1300 U	0.1300 U
Acetone	0.05	100	0.033 JB	0.054 JB	0.057 JB	0.032 JB	0.027 JB
Carbon Disulfide	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Methyl tert-butyl Ether	0.93	100	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Methylene Chloride	0.05	100	0.0610 JB	0.0820 JB	0.0900 JB	0.0530 JB	0.0480 B
trans-1,2-Dichloroethene	0.19	100	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Vinyl Acetate	NC	NC	0.1300 U	0.1400 U	0.1300 U	0.1300 U	0.1300 U
1,1-Dichloroethane	0.27	26	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
2-Butanone (MEK)	0.12	100	0.1300 U	0.1400 U	0.1300 U	0.1300 U	0.1300 U
Carbon Tetrachloride	0.76	2.4	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
2,2-Dichloropropane	NC	N	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
cis-1,2-Dichloroethene	0.25	59	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Bromochloromethane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Chloroform	0.37	10	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,1,1-Trichloroethane	0.68	100	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,1,Dichloropropene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Benzene	0.06	4.8	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,2-Dichloroethane	0.02	3.1	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Trichloroethene	0.47	21	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,2-Dichloropropane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Dibromoethane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Bromodichloromethane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
4-Methyl-2-Pentanone (MIBK)	NC	NC	0.1300 U	0.1400 U	0.1300 U	0.1300 U	0.1300 U
Toluene	0.7	100	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
trans-1,3-Dichloropropene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
cis-1,3-Dichloropropene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,1,2-Trichloroethane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,3-Dichloropropane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
2-Chloroethyl vinyl ether	NC	NC	0.1300 U	0.1400 U	0.1300 U	0.1300 U	0.1300 U
2-Hexanone	NC	NC	0.1300 U	0.1400 U	0.1300 U	0.1300 U	0.1300 U
Dibromochloromethane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,2-Dibromoethane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Tetrachloroethene	1.3	19	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Chlorobenzene	1.1	100	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,1,1,2-Tetrachloroethane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Ethylbenzene	1	41	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
m/p-Xylenes	NC	NC	0.0520 U	0.0540 U	0.0520 U	0.0530 U	0.0540 U
o-Xylene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Styrene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Bromoform	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Isopropylbenzene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,1,2,2-Tetrachloroethane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,2,3-Trichloropropane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Bromobenzene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
n-propylbenzene	3.9	100	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
2-Chlorotoluene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,3,5-Trimethylbenzene	8.4	52	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
4-Chlorotoluene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
tert-Butylbenzene	5.9	100	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,2,4-Trimethylbenzene	3.6	52	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
sec-Butylbenzene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
p-Isopropyltoluene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,3-Dichlorobenzene	2.4	17	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,4-Dichlorobenzene	1.8	9.8	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
n-Butylbenzene	12	100	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,2-Dichlorobenzene	1.1	100	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,2-Dibromo-3-Chloropropane	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,2,4-Trichlorobenzene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Hexachlorobutadiene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
Naphthalene	12	100	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U
1,2,3-Trichlorobenzene	NC	NC	0.0260 U	0.0270 U	0.0260 U	0.0270 U	0.0270 U

Legend

NC - No criterion for evaluation of analytical parameter
ND - Analyte not detected above the indicated reporting detection limit (RDL)
J - Indicates an estimated value detected below the RDL and above the method deection limit (MDL)
B - Indicates the analyte was found in the laboratory blank
Bold shaded values exceed current evaluation criteria (i.e. Part 375 Unrestriced Use Criteria)

Notes

1: Evaluation criteria for soil sampling results initially was NYSDEC TAGM 4046 Values.
2: VOC compounds analyzed by USEPA method SW846 8260B.

Table 2
Summary of Soil Sampling Results -SVOCs
52-01 Queens Boulevard
Queens, New York
March 2007

Sample Name Lab Sample Id Sample Depth (ft)* Sample Date	Part 375 Unrestricted Use	Part 375 Restricted Residential Use	B-1 Y2137-01RE 20-22 3/29/2007 (ppm)		B-2 Y2137-03 20-22 3/29/2007 (ppm)		B-3 Y2137-06RE 20-22 3/29/2007 (ppm)		B-4 Y2137-08 20-22 3/29/2007 (ppm)		B-5 Y2137-09 20-22 3/29/2007 (ppm)	
Semivolatile Organic Compounds												
Phenol	0.33	100	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
bis(2-Chloroethyl)ether	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
2-Chlorophenol	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Benzyl Alcohol	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
2-Methylphenol	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
2-2-oxybis(1-Chloropropane)	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
3+4-Methylphenols	0.33	100	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
N-Nitrosodiphenylamine	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Hexachloroethane	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Nitrobenzene	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Isophorone	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
2-Nitrophenol	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
2,4-Dimethylphenol	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
bis(2-Chloroethoxy)methane	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
2,4-Dinitrophenol	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Benzoic acid	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Naphthalene	12	100	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
4-Chloroaniline	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Hexachlorobutadiene	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
4-Chloro-3-methylphenol	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
2-Methylnaphthalene	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Hexachlorocyclopentadiene	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
2,4,6-Trichlorophenol	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
2,4,5-Trichlorophenol	NC	NC	0.890	ND	0.910	ND	0.890	ND	0.890	ND	0.890	ND
2-Chloronaphthalene	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
2-Nitroaniline	NC	NC	0.890	ND	0.910	ND	0.890	ND	0.890	ND	0.890	ND
Dimethylphthalate	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Acenaphthylene	100	100	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
2,6-Dinitrotoluene	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
3-Nitroaniline	NC	NC	0.890	ND	0.910	ND	0.890	ND	0.890	ND	0.890	ND
Acenaphthene	20	100	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
2,4-Dinitrophenol	NC	NC	0.890	ND	0.910	ND	0.890	ND	0.890	ND	0.890	ND
4-Nitrophenol	NC	NC	0.890	ND	0.910	ND	0.890	ND	0.890	ND	0.890	ND
Dibenzofuran	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
2,4-Dinitrotoluene	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Diethylphthalate	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
4-Chlorophenyl-phenylether	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Fluorene	30	100	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
4-Nitroaniline	NC	NC	0.890	ND	0.910	ND	0.890	ND	0.890	ND	0.890	ND
4,6-Dinitro-2-methylphenol	NC	NC	0.890	ND	0.910	ND	0.890	ND	0.890	ND	0.890	ND
N-Nitrosodiphenylamine	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Azobenzene	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
4-Bromophenyl-phenylether	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Hexachlorobenzene	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Pentachlorophenol	0.8	6.7	0.890	ND	0.910	ND	0.890	ND	0.890	ND	0.890	ND
Phenanthrene	100	100	0.350	ND	0.360	ND	0.250	J	0.350	ND	0.350	ND
Anthracene	100	100	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Di-n-butylphthalate	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Fluoranthene	100	100	0.067	J	0.360	ND	0.350	J	0.350	ND	0.350	ND
Pyrene	100	100	0.085	J	0.360	ND	0.650		0.350	ND	0.350	ND
Butylbenzylphthalate	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
3,3-Dichlorobenzidine	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Benzo(a)anthracene	1	1	0.350	ND	0.360	ND	0.140	J	0.350	ND	0.350	ND
Chrysene	1	3.9	0.350	ND	0.360	ND	0.180	ND	0.350	ND	0.350	ND
bis(2-Ethylhexyl)phthalate	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Di-n-octyl phthalate	NC	NC	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Benzo(b)fluoranthene	1	1	0.048	J	0.360	ND	0.240	J	0.350	ND	0.350	ND
Benzo(k)fluoranethene	0.8	3.9	0.350	ND	0.360	ND	0.094	J	0.350	ND	0.350	ND
Benzo(a) pyrene	1	1	0.350	ND	0.360	ND	0.140	J	0.350	ND	0.350	ND
Indeno (1,2,3,-cd)pyrene	0.5	0.5	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Dibenz(a,h)anthracene	0.33	0.33	0.350	ND	0.360	ND	0.350	ND	0.350	ND	0.350	ND
Benzo(g,h,i)perylene	NC	NC	0.350	ND	0.360	ND	0.083	J	0.350	ND	0.350	ND

Legend
NC - No criterion for evaluation of analytical parameter
ND - Analyte not detected above the indicated reporting detection limit (RDL)
J - Indicates an estimated value detected below the RDL and above the method deection limit (MDL)
B - Indicates the analyte was found in the laboratory blank
Bold shaded values exceed current evaluation criteria (i.e. Part 375 Unrestriced Use Criteria)

Notes
1: Evaluation criteria for soil sampling results initially was NYSDEC TAGM 4046 Values.
2: VOC compounds analyzed by USEPA method SW846 8270B.

Table 2
Summary of Soil Sampling Results -PCBs
52-01 Queens Boulevard
Queens, New York
March 2007

Sample Name **Lab Sample Id** **Sample Depth (ft)*** **Sample Date**	**Part 375 Unrestricted Use**	**Part 375 Restricted Residential Use**	B-6 (10) Y2137-10 10 3/29/2007 (ppm)	
Polychlorinated Biphenyls (PCBs)				
Aroclor-1016	0.1	1	0.018	ND
Aroclor-1221	0.1	1	0.018	ND
Aroclor-1232	0.1	1	0.018	J
Aroclor-1242	0.1	1	0.018	ND
Aroclor-1048	0.1	1	0.018	ND
Aroclor-1254	0.1	1	0.018	ND
Aroclor-1260	0.1	1	0.018	ND

Legend

NC - No criterion for evaluation of analytical parameter
ND - Analyte not detected above the indicated reporting detection limit (RDL)
J - Indicates an estimated value detected below the RDL and above the method deection limit (MDL)
B - Indicates the analyte was found in the laboratory blank
Bold shaded values exceed current evaluation criteria (i.e. Part 375 Unrestriced Use Criteria)

Notes

1: Evaluation criteria for soil sampling results initially was NYSDEC TAGM 4046 Values.
2: VOC compounds analyzed by USEPA method SW846 8082.

Table 3
Summary of Soil Sampling Results - VOCs
52-01 Queens Boulevard
Queens, New York
May 2012

SAMPLE NAME LAB SAMPLE ID TEST PIT LOCATION DEPTH INTERVAL SAMPLE DATE	Part 375 Unrestricted Use (ppm)	Part 375 Restricted Residential (ppm)	G12 9966506008 TP-2 6 feet 5-15-2012 (ppm)	G6 9966506007 TP-3 3 feet 5-15-2012 (ppm)	G18 9966506001 TP-3 9 feet 5-15-2012 (ppm)	G24 9966506002 TP-6 9 feet 5-15-2012 (ppm)	TP-7-5/15/12-(2') 9967721001 TP-7 2 feet 5-15-2012 (ppm)	TP-7-5/15/12-(4') 9967721002 TP-7 4 feet 5-15-2012 (ppm)	TP-8-(4') 9967721003 TP-8 4 feet 5-15-2012 (ppm)	TP-8-(8') 9967721004 TP-8 8 feet 5-15-2012 (ppm)
Volatile Organic Compounds										
Acetone	0.05	100	0.0406	0.0385	0.0143	0.0107 ND	0.0107 ND	0.0089 ND	0.0102 ND	0.0161
Benzene	0.06	4.8	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Bromochloromethane	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Bromodichloromethane	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Bromoform	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Bromomethane	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
2-Butanone (MEK)	0.12	100	0.0121 ND	0.0125 ND	0.011 ND	0.0107 ND	0.0107 ND	0.0089 ND	0.0102 ND	0.0099 ND
Carbon Disulfide	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Carbon Tetrachloride	0.76	2.4	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Chlorobenzene	1.1	100	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Chlorodibromomethane	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Chloroethane	NC	NC	0.0058 ND	0.0054 ND	0.0053 ND	0.0053 ND	0.0053 ND	0.0045 ND	0.0051 ND	0.0049 ND
Chloroform	0.37	49	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Chloromethane	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
1,2,-Dibromo-3-chloropropane	NC	NC	0.0023 ND	0.0022 ND	0.0053 ND	0.0053 ND	0.0053 ND	0.0045 ND	0.0051 ND	0.0049 ND
1,2-Dibromoethane	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
1,2-Dichlorobenzene	1.1	100	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
1,3-Dichlorobenzene	2.4	49	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
1,4-Dichlorobenzene	1.8	13	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
1,1-Dichloroethane	0.27	26	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
1,2-Dichloroethane	0.02	3.1	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
1,1-Dichloroethene	0.33	100	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
cis-1,2-Dichloroethene	0.25	100	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
trans-1,2-Dichloroethene	0.19	100	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
1,2-Dichloropropane	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
cis-1,3-Dichloropropene	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
trans-1,3-Dichloropropene	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Ethylbenzene	1	41	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
2-Hexanone	NC	NC	NA	N/A	N/A	N/A	0.0107 ND	0.0089 ND	0.0102 ND	0.0099 ND
4-Methyl-2-Pentanone (MIBK)	NC	NC	0.0115 ND	0.0108 ND	0.0107 ND	0.0107 ND	0.0107 ND	0.0089 ND	0.0102 ND	0.0099 ND
Methylene Chloride	0.05	100	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Styrene	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
1,1,2,2-Tetrachloroethane	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Tetrachloroethene	1.3	19	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Toluene	0.7	100	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0089	0.0031	0.0034	0.0033
Total Xylenes	0.26	100	0.0073 ND	0.0075 ND	0.0066 ND	0.0064 ND	0.0064 ND	0.0054 ND	0.0061 ND	0.0059 ND
1,1,1-Trichloroethane	0.68	100	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
1,1,2-Trichloroethane	NC	NC	0.0023 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Trichloroethene	0.47	21	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
Vinyl Chloride	0.02	0.9	0.0024 ND	0.0025 ND	0.0022 ND	0.0021 ND	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
o-Xylene	NC	NC	N/A	N/A	N/A	N/A	0.0021 ND	0.0018 ND	0.002 ND	0.002 ND
mp-Xylene	NC	NC	N/A	N/A	N/A	N/A	0.0043 ND	0.0036 ND	0.0041 ND	0.004 ND

Legend
NA - Not Analyzed
NC - No criterion for evaluation of analytical parameter
ND - Analyte Not Detected above the indicated reporting detection limit (RDL)
Bold shaded values exceed evaluation criteria (i.e. Part 375 Unrestricted Use)

Note
1. VOC Compounds Analyzed by USEPA Method 8260
2. For samples G6, G12, G18, and G24, reporting limits for VOCs without Part 375 Criteria were obtained from another set of sampling results (Laboratory Id No. 9966505001 thru -5009)

Table 3
Summary of Soil Sampling Results - VOCs
52-01 Queens Boulevard
Queens, New York
May 2012

SAMPLE NAME LAB SAMPLE ID TEST PIT LOCATION DEPTH INTERVAL SAMPLE DATE	Part 375 Unrestricted Use	Part 375 Restricted Residential	TP-8-(12') 9967721005 TP-8 12 feet 5/15/2012		TP-9-5/16/12-(2') 9967991001 TP-9 2 feet 5-16-2012		TP-9-5/16/12-(6') 9967721002 TP-9 6 feet 5-16-2012		TP-9-5/16/12-(10') 9967721003 TP-9 10 feet 5-16-2012		TP-9-5/16/12-(12') 9967721004 TP-9 12 feet 5-16-2012		TP-10-5/15/12-(2') 9967721006 TP-10 2 feet 5-15-2012		TP-10-5/15/12-(6') 9967721008 TP-10 6 feet 5-15-2012		TP-10-5/15/12-(10') 9967721008 TP-10 10 feet 5-15-2012	
	(ppm)	(ppm)	(ppm)		(ppm)		(ppm)		(ppm)		(ppm)		(ppm)		(ppm)		(ppm)	
Volatile Organic Compounds																		
Acetone	0.05	100	0.0358		0.0106	ND	0.0105	ND	0.0096	ND	0.0098	ND	0.0284		0.0398		0.0106	ND
Benzene	0.06	4.8	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Bromochloromethane	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Bromodichloromethane	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Bromoform	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Bromomethane	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
2-Butanone (MEK)	0.12	100	0.0067	ND	0.0106	ND	0.0105	ND	0.0096	ND	0.0098	ND	0.0092	ND	0.009	ND	0.0106	ND
Carbon Disulfide	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Carbon Tetrachloride	0.76	2.4	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Chlorobenzene	1.1	100	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Chlorodibromomethane	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Chloroethane	NC	NC	0.0033	ND	0.0053	ND	0.0053	ND	0.0048	ND	0.0049	ND	0.0046	ND	0.0045	ND	0.0053	ND
Chloroform	0.37	49	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Chloromethane	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
1,2,-Dibromo-3-chloropropane	NC	NC	0.0033	ND	0.0053	ND	0.0053	ND	0.0048	ND	0.0049	ND	0.0046	ND	0.0045	ND	0.0053	ND
1,2-Dibromoethane	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
1,2-Dichlorobenzene	1.1	100	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
1,3-Dichlorobenzene	2.4	49	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
1,4-Dichlorobenzene	1.8	13	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
1,1-Dichloroethane	0.27	26	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
1,2-Dichloroethane	0.02	3.1	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
1,1-Dichloroethene	0.33	100	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
cis-1,2-Dichloroethene	0.25	100	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
trans-1,2-Dichloroethene	0.19	100	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
1,2-Dichloropropane	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
cis-1,3-Dichloropropene	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
trans-1,3-Dichloropropene	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Ethylbenzene	1	41	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
2-Hexanone	NC	NC	0.0067	ND	0.0106	ND	0.0105	ND	0.0096	ND	0.0098	ND	0.0092	ND	0.009	ND	0.0106	ND
4-Methyl-2-Pentanone (MIBK)	NC	NC	0.0067	ND	0.0106	ND	0.0105	ND	0.0096	ND	0.0098	ND	0.0092	ND	0.009	ND	0.0106	ND
Methylene Chloride	0.05	100	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Styrene	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
1,1,2,2-Tetrachloroethane	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Tetrachloroethene	1.3	19	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Toluene	0.7	100	0.0035		0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.004		0.0034		0.0031	
Total Xylenes	0.26	100	0.004	ND	0.0064	ND	0.0063	ND	0.0058	ND	0.0059	ND	0.0055	ND	0.0054	ND	0.0063	ND
1,1,1-Trichloroethane	0.68	100	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
1,1,2-Trichloroethane	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Trichloroethene	0.47	21	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
Vinyl Chloride	0.02	0.9	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
o-Xylene	NC	NC	0.0013	ND	0.0021	ND	0.0021	ND	0.0019	ND	0.002	ND	0.0018	ND	0.0018	ND	0.0021	ND
mp-Xylene	NC	NC	0.0027	ND	0.0043	ND	0.0042	ND	0.0038	ND	0.0039	ND	0.0037	ND	0.0036	ND	0.0042	ND

Legend

NC - No criterion for evaluation of analytical parameter

ND - Analyte Not Detected above the indicated reporting detection limit (RDL)

Bold shaded values exceed evaluation criteria (i.e. Part 375 Unrestricted Use)

Note

1. VOC Compounds Analyzed by USEPA Method 8260

Table 3
Soil Sampling Results - Metals
52-01 Queens Boulevard
Queens, New York
May 2012

SAMPLE NAME LAB SAMPLE ID TEST PIT LOCATION DEPTH INTERVAL SAMPLE DATE	Part 375 Unrestricted Use (ppm)	Part 375 Restricted Residential (ppm)	TP-7-5/15/12-(2') 9967721001 TP-7 2 feet 5-15-2012 (ppm)		TP-7-5/15/12-(4') 9967721002 TP-7 4 feet 5-15-2012 (ppm)		TP-8-(4') 9967721003 TP-8 4 feet 5-15-2012 (ppm)		TP-8-(8') 9967721004 TP-8 8 feet 5-15-2012 (ppm)		TP-8-(12') 9967721005 TP-8 12 feet 5/15/2012 (ppm)	
Metals												
Aluminum	NC	NC	6210.0		5470.0		4950.0		8010.0		6980.0	
Antimony	NC	NC	2.1	ND	2.0	ND	2.1	ND	2	ND	1.9	ND
Arsenic	13	16	2.1	ND	2.0	ND	2.1	ND	2	ND	1.9	ND
Barium	350	400	33.2		32.8		37.5		51.8		46.8	
Beryllium	7.2	72	1.1	ND	0.99	ND	1.1	ND	0.98	ND	0.96	ND
Cadmium	2.5	4.3	0.53	ND	0.49	ND	0.53	ND	0.49	ND	0.48	ND
Calcium	NC	NC	1050.0		1740.0		3120.0		2330.0		4330.0	
Chromium, Total	30	180	17.0		13.2		12.2		18.2		14.4	
Cobalt	NC	NC	4.1		4.6		4.2		5.0		4.5	
Copper	50	270	9.5		11.2		13.4		20.7		15.0	
Iron	NC	NC	9620.0		12200.0		10200.0		13100.0		11200.0	
Lead	63	400	2.4		3.5		22.8		21.0		23.2	
Magnesium	NC	NC	1550.0		2430.0		2750.0		2690.0		3770.0	
Manganese	1600	2000	237.0		295.0		252.0		264.0		267.0	
Mercury	0.18	0.81	0.05	ND	0.053	ND	0.048	ND	0.051	ND	0.051	ND
Nickel	30	310	7.4		9.8		9.5		11.7		10.7	
Potassium	NC	NC	1300.0		1070.0		851.0		1580.0		1370.0	
Selenium	3.9	180	5.3	ND	4.9	ND	5.3	ND	4.9	ND	4.8	ND
Silver	2	180	0.53	ND	0.49	ND	0.53	ND	0.49	ND	0.48	ND
Sodium	NC	NC	99.6		69.9		66.3		156.0		117.0	
Thallium	NC	NC	3.2	ND	3.0	ND	3.2	ND	2.9	ND	2.9	ND
Vanadium	NC	NC	16.1		18.7		16.1		22.8		22.0	
Zinc	109	10000	17.6		21.3		39.4		44.4		43.0	

Legend

NC - No criterion for evaluation of analytical parameter

ND - Analyte Not Detected above the indicated reporting detection limit (RDL)

Bold shaded values exceed evaluation criteria (i.e. Part 375 Unrestricted Use)

Note

1. Metals Analyzed by USEPA Method 6000/7000 Series

Table 3
Summary of Soil Sampling Results - Metals
52-01 Queens Boulevard
Queens, New York
May 2012

SAMPLE NAME LAB SAMPLE ID TEST PIT LOCATION DEPTH INTERVAL SAMPLE DATE	Part 375 Unrestricted Use (ppm)	Part 375 Restricted Residential (ppm)	TP-9-5/16/12-(2') 9967991001 TP-9 2 feet 5-16-2012 (ppm)		TP-9-5/16/12-(6') 9967721002 TP-9 6 feet 5-16-2012 (ppm)		TP-9-5/16/12-(10') 9967721003 TP-9 10 feet 5-16-2012 (ppm)		TP-9-5/16/12-(12') 9967721004 TP-9 12 feet 5-16-2012 (ppm)		TP-10-5/15/12-(2') 9967721006 TP-10 2 feet 5-15-2012 (ppm)		TP-10-5/15/12-(6') 9967721008 TP-10 6 feet 5-15-2012 (ppm)		TP-10-5/15/12-(10') 9967721008 TP-10 10 feet 5-15-2012 (ppm)	
Metals																
Aluminum	NC	NC	4040.0		4580.0		7000.0		2920.0		5590.0		5850.0		4840.0	
Antimony	NC	NC	2.0	ND	1.9	ND	2.0	ND	2.0	ND	1.9	ND	1.9	ND	2.1	ND
Arsenic	13	16	2.0	ND	1.9	ND	2.0	ND	2.0	ND	1.9	ND	1.9	ND	2.1	ND
Barium	350	400	26.4		29.4		36.8		23.7		43.9		43.0		44.2	
Beryllium	7.2	72	0.98	ND	0.95	ND	1.0	ND	0.98	ND	0.96	ND	0.95	ND	1.0	ND
Cadmium	2.5	4.3	0.49	ND	0.48	ND	0.50	ND	0.49	ND	0.48	ND	0.48	ND	0.52	ND
Calcium	NC	NC	1240.0		1280.0		1360.0		1090.0		3710.0		5080.0		5430.0	
Chromium, Total	30	180	10.9		14.2		12.7		9.4		14		13.7		12.1	
Cobalt	NC	NC	4.0		4.1		4.3		3.4		4.1		4.2		3.8	
Copper	50	270	7.7		9.1		9.9		9.6		16.2		13.2		13.9	
Iron	NC	NC	8600.0		9420.0		11000.0		10800.0		10400.0		10800.0		9560.0	
Lead	63	400	2.8		2.9		2.6		2.3		31.0		25.7		32.2	
Magnesium	NC	NC	1410.0		2110.0		1780.0		1360.0		3050.0		3880.0		3890.0	
Manganese	1600	2000	252.0		242.0		222.0		295.0		236.0		257.0		225.0	
Mercury	0.18	0.81	0.055	ND	0.053	ND	0.051	ND	0.053	ND	0.05	ND	0.051	ND	0.046	ND
Nickel	30	310	8.0		9.1		9.0		10		9.6		9.5		8.8	
Potassium	NC	NC	738.0		1080.0		1410.0		552.0		1060.0		1040.0		910.0	
Selenium	3.9	180	4.9	ND	4.8	ND	5.0	ND	4.9	ND	4.8	ND	4.8	ND	5.2	ND
Silver	2	180	0.49	ND	0.48	ND	0.50	ND	0.49	ND	0.48	ND	0.48	ND	0.52	ND
Sodium	NC	NC	73.6		81.4		139.0		54.5		81.5		92.0		78.8	
Thallium	NC	NC	2.9	ND	2.9	ND	3.0	ND	2.9	ND	2.9	ND	2.9	ND	3.1	ND
Vanadium	NC	NC	14.6		17.1		17.9		13.2		18.4		18.5		16.9	
Zinc	109	10000	14.1		17.3		20.3		15.4		47.4		42.6		50.2	

Legend
NC - No criterion for evaluation of analytical parameter
ND - Analyte Not Detected above the indicated reporting detection limit (RDL)
Bold shaded values exceed evaluation criteria (i.e. Part 375 Unrestricted Use)

Note
1. Metals Analyzed by USEPA Method 6000/7000 Series

Table 4
Summary of Groundwater Sampling Results - VOCs
52-01 Queens Boulevard
Queens, NY
April 2012

SAMPLE NAME LAB SAMPLE ID SAMPLE DATE DATE RECEIVED BY LAB	TOGS GA Standard/ Guidance (ug/L)	TW-1 9961452001 4/9/2012 4/10/2012 (ug/L)		TW-2 9961452005 4/9/2012 4/10/2012 (ug/L)		TW-3 9961452003 4/9/2012 4/10/2012 (ug/L)		Trip Blank 9961452007 4/10/2012 4/10/2012 (ug/L)	
VOLATILE ORGANIC COMPOUNDS									
Acetone	**50**	10.0	ND	10.0	ND	10.0	ND	10	ND
Benzene	**1**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
Bromochloromethane	NC	1.0	ND	1.0	ND	1.0	ND	1.0	ND
Bromodichloromethane	**50**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
Bromoform	**50**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
Bromomethane	**5**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
2-Butanone (Methyl Ethyl Ketone)	**50**	10.0	ND	10.0	ND	10.0	ND	10.0	ND
Carbon Disulfide	NC	1.0	ND	1.0	ND	1.0	ND	1.0	ND
Carbon Tetrachloride	**5**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
Chlorobenzene	**5**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
Chlorodibromomethane	NC	1.0	ND	1.0	ND	1.0	ND	1.0	ND
Chloroethane	**5**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
Chloroform	**7**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
Chloromethane (Methyl Chloride)	**5**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
1,2-Dibromo-3-Chloropropane	**0.04**	7.0	ND	7.0	ND	7.0	ND	7.0	ND
1,2-Dibromoethane (Ethylene Dibromide)	**0.0006**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
1,2-Dichlorobenzene	**3**	10.0	ND	5.0	ND	5.0	ND	1.0	ND
1,3-Dichlorobenzene	**3**	10.0	ND	5.0	ND	5.0	ND	1.0	ND
1,4-Dichlorobenzene	**3**	10.0	ND	5.0	ND	5.0	ND	1.0	ND
1,1-Dichloroethane	**5**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
1,2-Dichloroethane	**0.6**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
1,1-Dichloroethene	**5**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
cis-1,2-Dichloroethene	**5**	4.9		1.6		**11.3**		1.0	ND
trans-1,2-Dichloroethene	**5**	1.0	ND	1	ND	1	ND	1.0	ND
1,2-Dichloropropane	**1**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
cis-1,3-Dichloropropene	**0.4**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
trans-1,3-Dichloropropene	**0.4**	1.0	ND	1	ND	1	ND	1.0	ND
Ethylbenzene	**5**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
2-Hexanone	**50**	5.0	ND	5.0	ND	5.0	ND	5.0	ND
4-Methyl-2-Pentanone (MIBK)	NC	5.0	ND	5.0	ND	5.0	ND	5.0	ND
Methylene Chloride	**5**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
Styrene	**5**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
1,1,2,2-Tetrachloroethane	**5**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
Tetrachloroethene	**5**	**434**		**252**		**882**		1.0	ND
Toluene	**5**	2.1		2.2		2.3		1.0	ND
Xylene (total)	**5**	3.0	ND	3.0	ND	3.0	ND	3.0	ND
1,1,1-Trichloroethane	**5**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
1,1,2-Trichloroethane	**1**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
Trichloroethene	**5**	4.6		2.1		**10.4**		1.0	ND
Vinyl Chloride	**2**	1.0	ND	1	ND	1	ND	1	ND
o-Xylene	**5**	1.0	ND	1.0	ND	1.0	ND	1.0	ND
m/p-Xylenes	**5**	1.0	ND	2.0	ND	2.0	ND	2.0	ND

Legend
NC - No criterion for evaluation of analytical parameter
ND - Analyte not detected at the indicated reporting detection limit (RDL)
Bold shaded values exceed evaluation criteria

Notes
1: Evaluation criteria for groundwater results is New York State Class GA Groundwater. Standard/Guidance Values presented in Technical and Operational Guidance Series 1.1.1.
2: VOC compounds analyzed by USEPA method SW846 8260B.

Table 4
Summary of Groundwater Sampling Results -SVOCs
52-01 Queens Boulevard
Queens, NY
April 2012

SAMPLE NAME LAB SAMPLE ID SAMPLE DATE DATE RECEIVED BY LAB	TOGS GA Standard/ Guidance (ug/L)	TW-1 9961452002 4/9/2012 4/10/2012 (ug/L)		TW-2 9961452006 4/9/2012 4/10/2012 (ug/L)		TW-3 9961452004 4/9/2012 4/10/2012 (ug/L)	
SEMI-VOLATILE ORGANIC COMPOUNDS							
Acenaphthene	**20**	0.094	ND	0.094	ND	0.094	ND
Acenaphthylene	NC	0.094	ND	0.094	ND	0.094	ND
Anthracene	**50**	0.094	ND	0.094	ND	0.094	ND
Benzo(a)anthracene	**0.002**	0.094	ND	0.094	ND	0.094	ND
Benzo(a)pyrene	**0.002**	0.094	ND	0.094	ND	0.094	ND
Benzo(b)fluoranthene	**0.002**	0.094	ND	0.094	ND	0.094	ND
Benzo(g,h,i)perylene	NC	0.094	ND	0.094	ND	0.094	ND
Benzo(k)fluoranthene	**0.002**	0.094	ND	0.094	ND	0.094	ND
4-Bromophenyl-phenylether	NC	2.8	ND	2.8	ND	2.8	ND
Butylbenzylphthalate	**50**	2.8	ND	2.8	ND	2.8	ND
Carbazole	NC	2.8	ND	2.8	ND	2.8	ND
4-Chloro-3-methylphenol	NC	7.5	ND	7.5	ND	7.5	ND
4-Chloroaniline	**5**	2.8	ND	2.8	ND	2.8	ND
bis(2-Chloroethoxy)methane	**5**	2.8	ND	2.8	ND	2.8	ND
bis(2-Chloroisopropyl)ether	**5**	2.8	ND	2.8	ND	2.8	ND
2-Chloronaphthalene	**10**	2.8	ND	2.8	ND	2.8	ND
2-Chlorophenol	NC	7.5	ND	7.5	ND	7.5	ND
4-Chlorophenyl-phenylether	NC	2.8	ND	2.8	ND	2.8	ND
Chrysene	**0.002**	0.094	ND	0.094	ND	0.094	ND
mp-Cresol	NC	7.5	ND	7.5	ND	7.5	ND
o-Cresol	NC	7.5	ND	7.5	ND	7.5	ND
Di-n-butylphthalate	**50**	2.8	ND	8.2		10.8	
Di-n-octyl phthalate	**50**	7.5	ND	7.5	ND	7.5	ND
Dibenzo(a,h)anthracene	NC	0.066	ND	0.066	ND	0.066	ND
Dibenzofuran	NC	2.8	ND	2.8	ND	2.8	ND
3,3-Dichlorobenzidine	NC	15.1	ND	15.1	ND	15.1	ND
2,4-Dichlorophenol	**5**	7.5	ND	7.5	ND	7.5	ND
Diethylphthalate	**50**	7.5	ND	7.5	ND	7.5	ND
2,4-Dimethylphenol	**50**	7.5	ND	7.5	ND	7.5	ND
Dimethylphthalate	**50**	7.5	ND	7.5	ND	7.5	ND
2,4-Dinitrophenol	**10**	15.1	ND	15.1	ND	15.1	ND
2,4-Dinitrotoluene	**5**	2.8	ND	2.8	ND	2.8	ND
2,6-Dinitrotoluene	**5**	2.8	ND	2.8	ND	2.8	ND
bis(2-Ethylhexyl)phthalate	**5**	2.8	ND	2.8	ND	2.8	ND
Fluoranthene	**50**	0.094	ND	0.094	ND	0.094	ND
Fluorene	**50**	0.094	ND	0.094	ND	0.094	ND
Hexachlorobenzene	**0.04**	2.8	ND	2.8	ND	2.8	ND
Hexachlorobutadiene	**0.5**	2.8	ND	2.8	ND	2.8	ND
Hexachlorocyclopentadiene	**5**	7.5	ND	7.5	ND	7.5	ND
Hexachloroethane	**5**	2.8	ND	2.8	ND	2.8	ND
Indeno(1,2,3-cd)pyrene	**0.002**	0.094	ND	0.094	ND	0.094	ND
Isophorone	**50**	2.8	ND	2.8	ND	2.8	ND
2-Methy-4,6-dinitrophenol	NC	7.5	ND	7.5	ND	7.5	ND
2-Methylnaphthalene	NC	1.9	ND	1.9	ND	1.9	ND
Naphthalene	**10**	0.094	ND	0.094	ND	0.1	
2-Nitroaniline	**5**	2.8	ND	2.8	ND	2.8	ND
3-Nitroaniline	**5**	2.8	ND	2.8	ND	2.8	ND
4-Nitroaniline	**5**	2.8	ND	2.8	ND	2.8	ND
Nitrobenzene	**0.4**	2.8	ND	2.8	ND	2.8	ND
2-Nitrophenol	**1**	7.5	ND	7.5	ND	7.5	ND
4-Nitrophenol	**1**	7.5	ND	7.5	ND	7.5	ND
N-Nitroso-di-n-propylamine	NC	2.8	ND	2.8	ND	2.8	ND
N-Nitrosodiphenylamine	NC	2.8	ND	2.8	ND	2.8	ND
Pentachlorophenol	**1**	15.1	ND	15.1	ND	15.1	ND
Phenanthrene	**50**	0.16		0.17		0.094	ND
Phenol	**1**	7.5	ND	7.5	ND	7.5	ND
Pyrene	**50**	0.094	ND	0.094	ND	0.094	ND
1,2,4-Trichlorobenzene	NC	2.8	ND	2.8	ND	2.8	ND
2,4,5-Trichlorophenol	**1**	7.5	ND	7.5	ND	7.5	ND
2,4,6-Trichlorophenol	**1**	7.5	ND	7.5	ND	7.5	ND

Legend
NC - No criterion for evaluation of analytical parameter
ND - Analyte not detected at the indicated reporting detection limit (RDL)
Bold shaded values exceed evaluation criteria

Notes
1: Evaluation criteria for groundwater results is New York State Class GA Groundwater. Standard/Guidance Values presented in Technical and Operational Guidance Series 1.1.1.
2: SVOC compounds analyzed by USEPA method SW846 8270D.

Table 5
Summary of
Soil Vapor Sampling Results
52-01 Queens Boulevard
Queens, NY
April 2012

SAMPLE NAME LAB SAMPLE ID SAMPLE DATE DATE RECEIVED BY LAB UNITS	NYSDOH Guidline Values (ug/M^3)	SV-1 9961493001 4/9/2012 4/10/2012 (ug/M^3)		SV-2 9961493 4/9/2012 4/10/2012 (ug/M^3)		SV-3 9961493003 4/9/2012 4/10/2012 (ug/M^3)	
T0-15 Parameters							
Acetone	NC	82.0		250.0		210.0	
Benzene	NC	2.0		5.0		4.0	
Bromomethene	NC	0.8	ND	4.0	ND	0.8	ND
2-Butanone	NC	8.0		21.0		46.0	
Carbon Tetrachloride	5	1.0	ND	6.0	ND	1.0	ND
Chlorobenzene	NC	0.9	ND	5.0	ND	0.9	ND
Chloroethane	NC	0.5	ND	3.0	ND	0.5	ND
Chloroform	NC	1.0	ND	5.0	ND	1.0	
Chloromethane	NC	0.9		2.0	ND	0.4	ND
Cyclohexane	NC	0.7		3.0	ND	3.0	
1,2-Dibromoethane	NC	2.0	ND	8.0	ND	2.0	ND
1,2-Dichlorobenzene	NC	1.0	ND	6.0	ND	1.0	ND
1,3-Dichlorobenzene	NC	1.0	ND	6.0	ND	6.0	
1,4-Dichlorobenzene	NC	1.0	ND	6.0	ND	1.0	ND
Dichlorodifluoromethane	NC	4.0		5.0	ND	2.0	
1,1-Dichloroethane	NC	0.8	ND	4.0	ND	0.8	ND
1,2-Dichloroethane	NC	0.8	ND	4.0	ND	0.8	ND
1,1-Dichloroethene	NC	0.8	ND	4.0	ND	0.8	ND
cis-1,2-Dichloroethene	NC	2.0		4.0	ND	0.8	ND
cis-1,3-Dichloropropene	NC	0.9	ND	5.0	ND	0.9	ND
trans-1,3-Dichloropropene	NC	0.9	ND	5.0	ND	0.9	ND
Ethylbenzene	NC	1.0		5.0		5.0	
Freon 113	NC	2.0	ND	8.0	ND	2.0	ND
Heptane	NC	1.0		4.0	ND	4.0	
Hexachlorobutadiene	NC	2.0	ND	11.0	ND	2.0	ND
Hexane	NC	4.0		8.0		8.0	
Isopropylbenzene	NC	1.0	ND	5.0	ND	1.0	ND
Methyl Tert Butyl Ether	NC	1.0		4.0	ND	10.0	
4-Methyl-2-Pentanone	NC	1.0		4.0	ND	4.0	
Methylene Chloride	NC	6.0		6.0		2.0	
Styrene	NC	0.8	ND	4.0	ND	0.8	ND
1,1,2,2-Tetrachloroethane	NC	1.0	ND	7.0	ND	1.0	ND
Tetrachloroethene (PCE)	100	15.0		83.0		21.0	
Toluene	NC	6.0		21.0		22.0	
1,2,4-Trichlorobenzene	NC	1.0	ND	7.0	ND	1.0	ND
1,1,1-Trichloroethane	100	1.0	ND	5.0	ND	1.0	ND
1,1,2-Trichloroethane	NC	1.0	ND	5.0	ND	1.0	ND
Trichloroethene (TCE)	5	1.0	ND	5.0	ND	1.0	
Trichlorofluoromethane	NC	1.0		6.0	ND	1.0	
1,2,4-Trimethylbenzene	NC	2.0		10.0		11.0	
1,3,5-Trimethylbenzene	NC	1.0		5.0	ND	3.0	
Vinyl Chloride	NC	0.5	ND	3.0	ND	0.5	ND

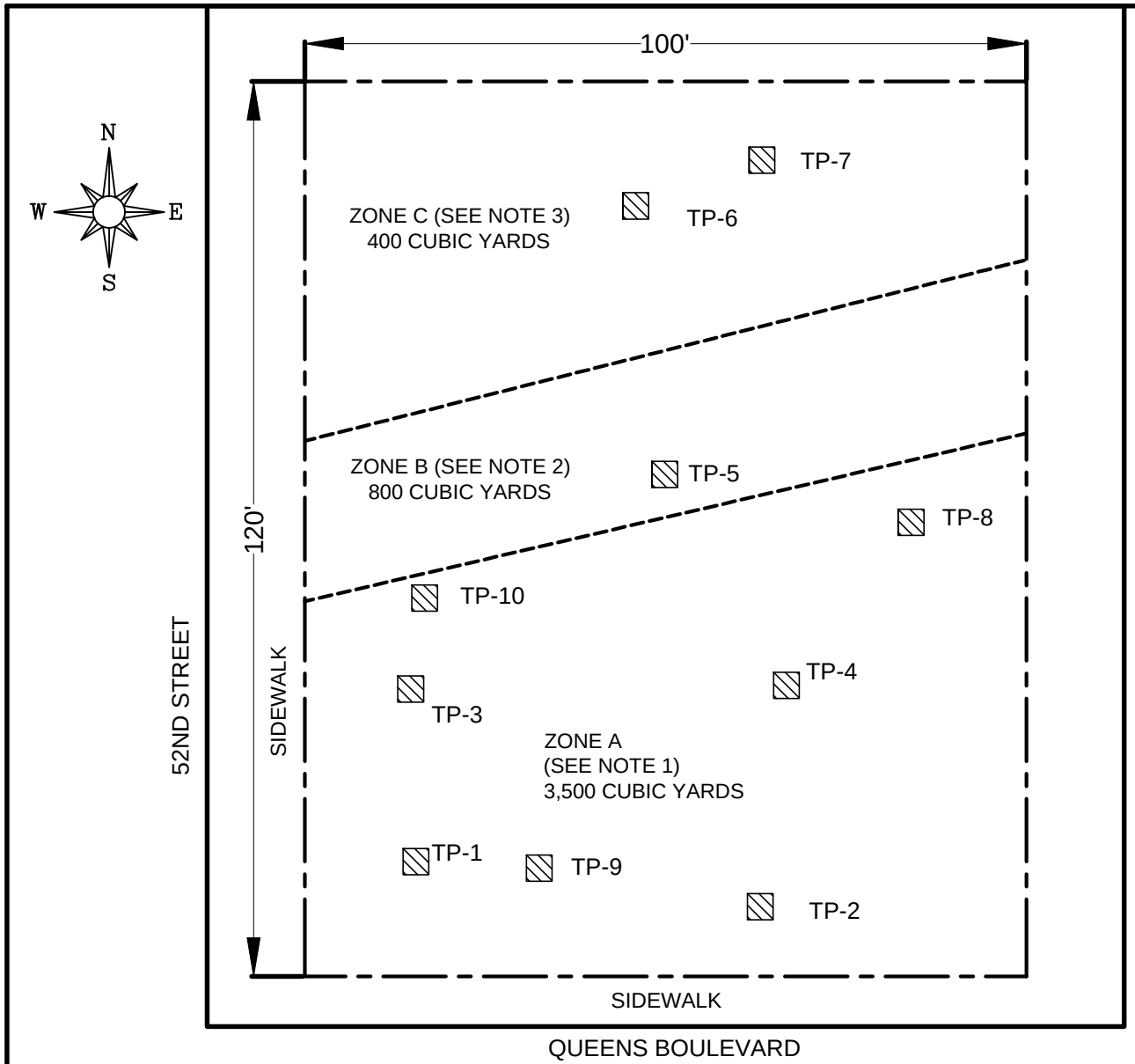
Legend

ug/M^3 - micrograms per cubic meter
NC - No criterion for evaluation of analytical parameter
ND - Analyte not detected above the indicated reporting detection limit (RDL)
Concentrations shaded and bolded are above the evaluation criteria

Note

Evaluation criteria for soil vapor is the sub-slab vapor concentration for the Matrix 1 and Matrix 2 compounds presented in the NYSDOH Soil Vapor Intrusion Guidance document dated October 2006

FIGURES



Test Pit Location	Sample Depth (bgs)	Discrete Sample Number	Composite Sample Number	Analysis
TP-1 thru TP-4	0- 4 feet	G-1 Thru G-5	C-1	Non-VOC Paramaters (see Note 4)
TP-3	3 feet	G-6	N/A	Total VOCs
TP-1	4 - 15 feet	G-7 thru G-11	C-2	Non-VOC Paramaters (see Note 4)
TP-2	4 - 15 feet			
TP-2	6 feet	G-12	N/A	Total VOCs
TP-3 thru TP-4	4 - 15 feet	G-13 thru G-17	C-3	Non-VOC Paramaters (see Note 4)
TP-3	9 feet	G-18	N/A	Total VOCs
T-5	0 -9 feet	G-19 thru G-23	C-4	Non-VOC Paramaters (see Note 4)
T-6	0 - 3 feet			
TP-6	3 feet	G-24	N/A	Total VOCs
TP-7	2 feet	TP-7-5/15/12-(2')	N/A	TAL Metals
	4 feet	TP-7-5/15/12-(4')		
TP-8	4 feet	TP-8-5/15/12-(4')	N/A	TAL Metals
	8 feet	TP-8-5/15/12-(8')		
	12 feet	TP-8-5/15/12-(12')		
TP-9	2 feet	TP-9-5/15/12-(2')	N/A	TAL Metals
	6 feet	TP-9-5/15/12-(6')		
	10 feet	TP-9-5/15/12-(10')		
	12 feet	TP-9-5/15/12-(12')		
TP-10	2 feet	TP-10-5/15/12-(2')	N/A	TAL Metals
	6 feet	TP-10-5/15/12-(6')		
	10 feet	TP-10-5/15/12-(10'		

NOTES:

1. SOILS AT ZONE A WILL BE EXCAVATED TO 15 FEET BGS.
2. SOILS AT ZONE B SLOPE FROM ORIGINAL GRADE OF SITE TO 12 FEET BGS.
3. SOILS AT ZONE C HAVE ALREADY BEEN EXCAVATED TO 12 FEET BELOW ORIGINAL GRADE OF SITE (I.E. ELEVATION OF SIDEWALKS OF SURROUNDING STREETS).
4. OTHER PARAMETERS INCLUDE TPH (QAM METHOD), TOTAL SEMI VOLATILE ORGANICS (NJDEP SOIL CLEAN UP LIST + TCL/TAL), TOTAL METALS (RCRA + Cu, Ni, Zn, Va, Cn, HEX CHROMIUM + TCL/TAL), PCBS, HERBICIDES/PESTICIDES (NJDEP SOIL CLEAN UP LIST + TCL/TAL), AND TCLP METALS.

Legend:

PROPERTY BOUNDARY

TEST PIT LOCATIONS

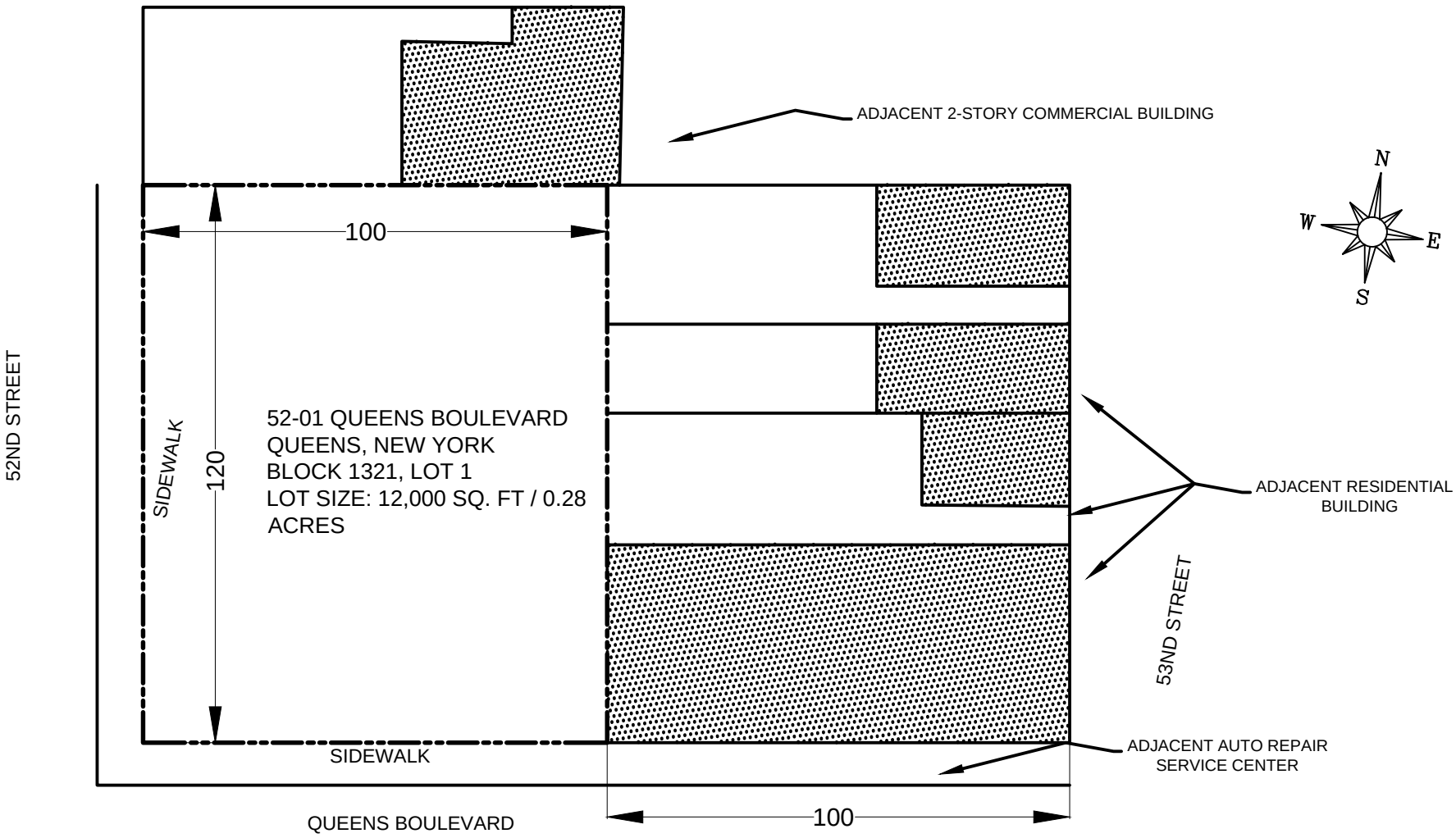
SCALE: 0 23' 46'

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants
45-09 Greenpoint Avenue, Long Island City, N.Y. 11104

DATE: MAY 9, 2012
Drawn by: SHANA HOLBERTON
Checked by: WILLIAM SILVERI
Project No.: 12-0013

Site map: 52-01 QUEENS BOULEVARD
QUEENS, NEW YORK 11377

Figure: 1
Title: WASTE CLASSIFICATION SAMPLING LOCATIONS



Legend:

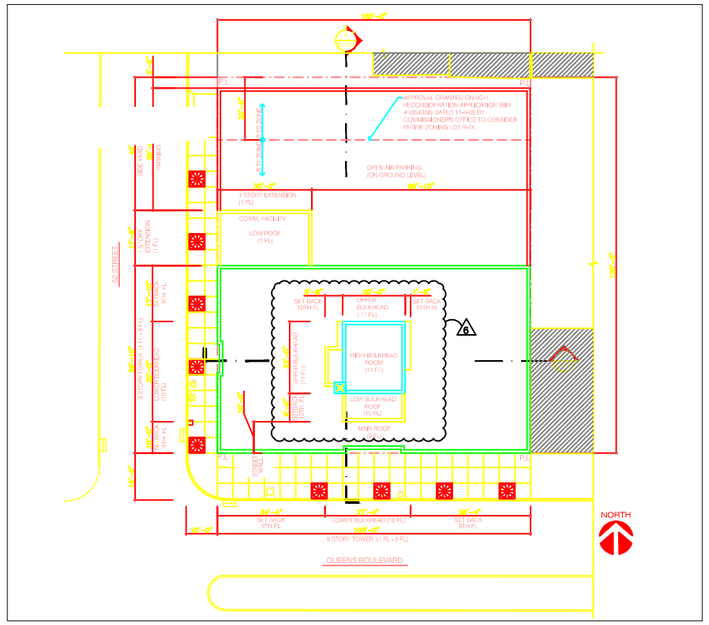
PROPERTY BOUNDARY

SCALE:

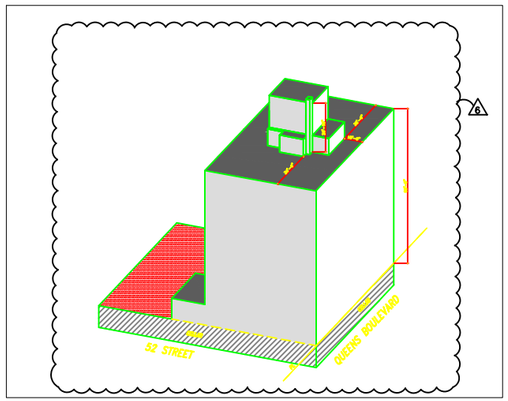
0 29.5' 59'

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants
45-09 Greenpoint Avenue, Long Island City, N.Y. 11104

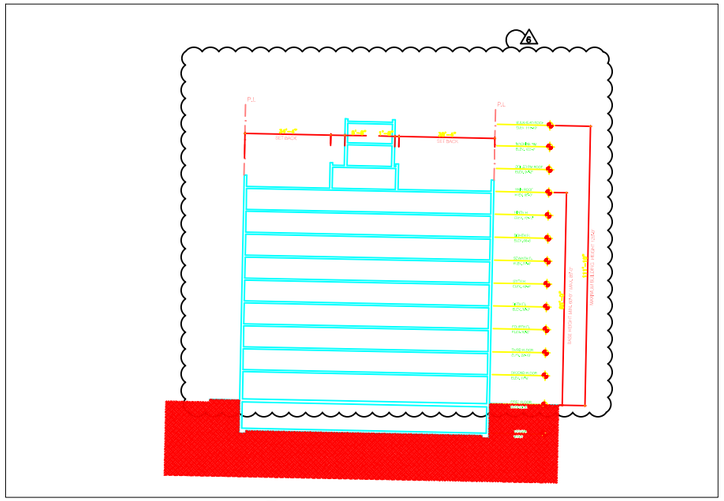
DATE: JUNE 15,2012	Site map: 52-01 QUEENS BOULEVARD QUEENS , NEW YORK
Drawn by: BASIM ALTEMIMI	
Checked by: WILLIAM SILVERI	
Drawing Scale:	Figure: 2
Project No.: 12-0013	Title: REMEDIAL INVESTIGATION REPORT SITE MAP



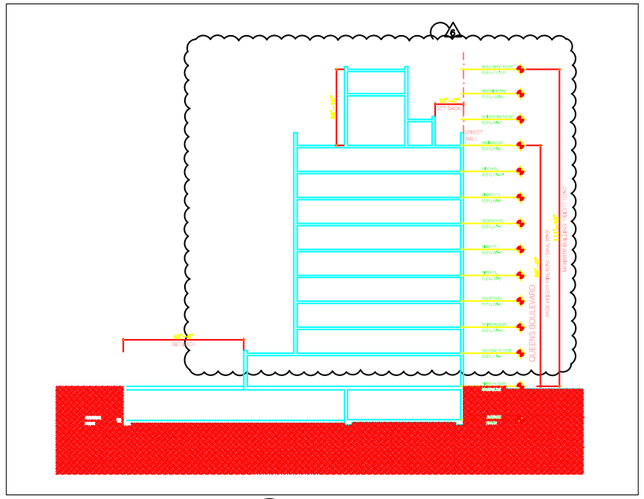
1 ZO-001 PLOT PLAN
SCALE: 1/16"=1'-0"



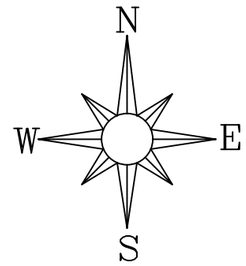
2 ZO-001 AXONOMETRIC DIAGRAM
N.T.S.



3 ZO-001 SECTION #2 AT QUEENS BOULEVARD
SCALE: 1/16"=1'-0"



4 ZO-001 SECTION #1 AT 52 STREET
SCALE: 1/16"=1'-0"



NOTES:

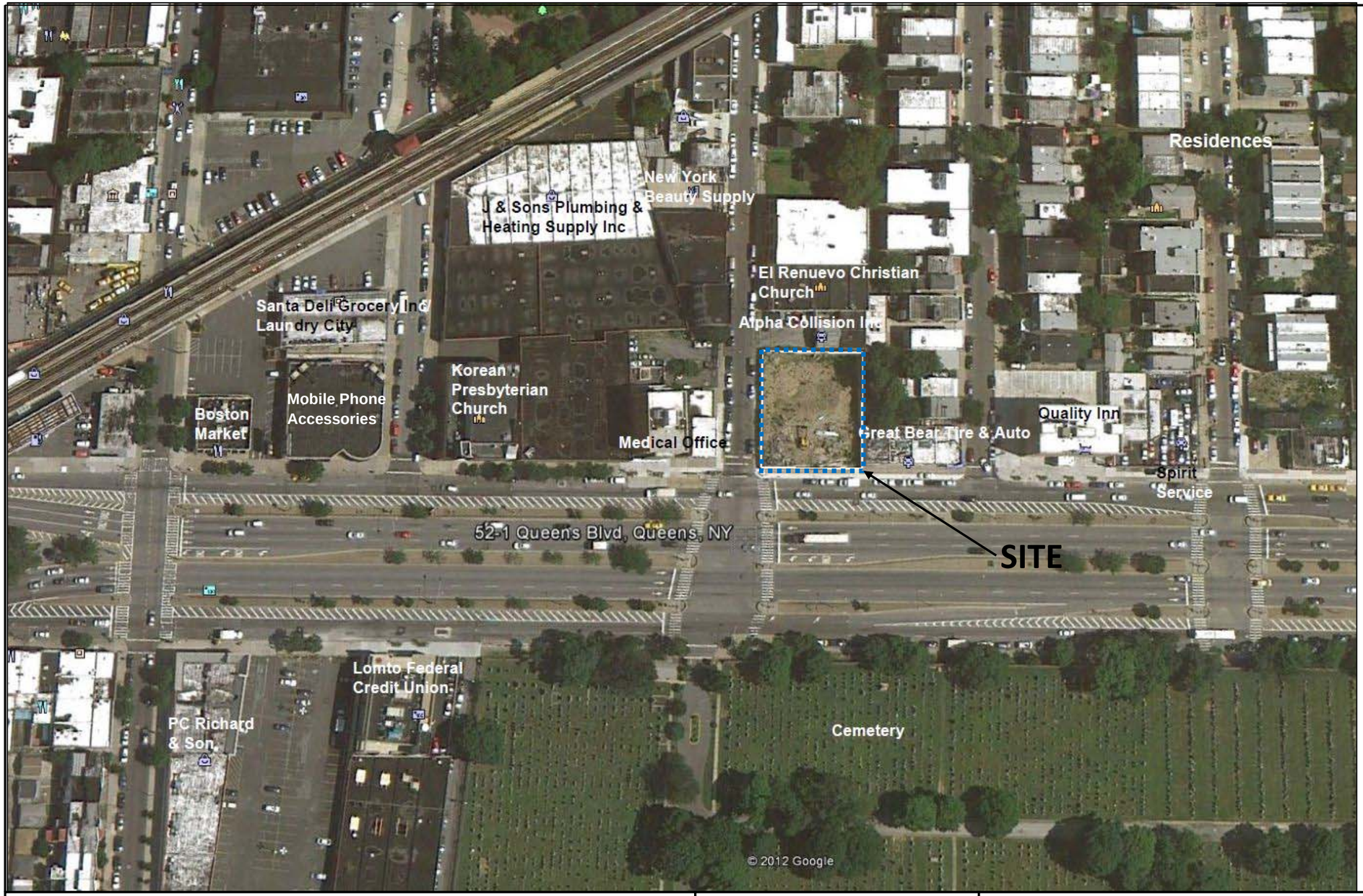
BASE MAP FOR FIGURE BASED ON DRAWING PREPARED BY ERNST ARCHITECT, PLLC DATED JULY 7, 2009

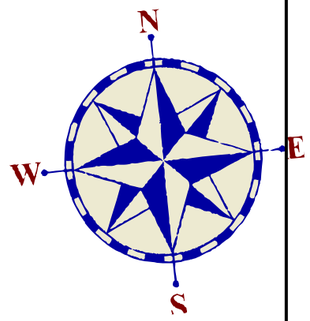
Scale:

SCALE: NTS

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants
45-09 Greenpoint Avenue, Long Island City, N.Y. 11104

Date: MAY 2, 2012	Site map: 52-01 QUEENS BOULEVARD QUEENS, NEW YORK 11377
Drawn by: BASIM ALTEMIMI	
Checked by: WILLIAM SILVERI	
Drawing Scale:	Figure: FIGURE 3
Project No.: 12-0013	Title: REMEDIAL INVESTIGATION REPORT PROPOSED SITE DEVELOPMENT
Sheets in contract :	





ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

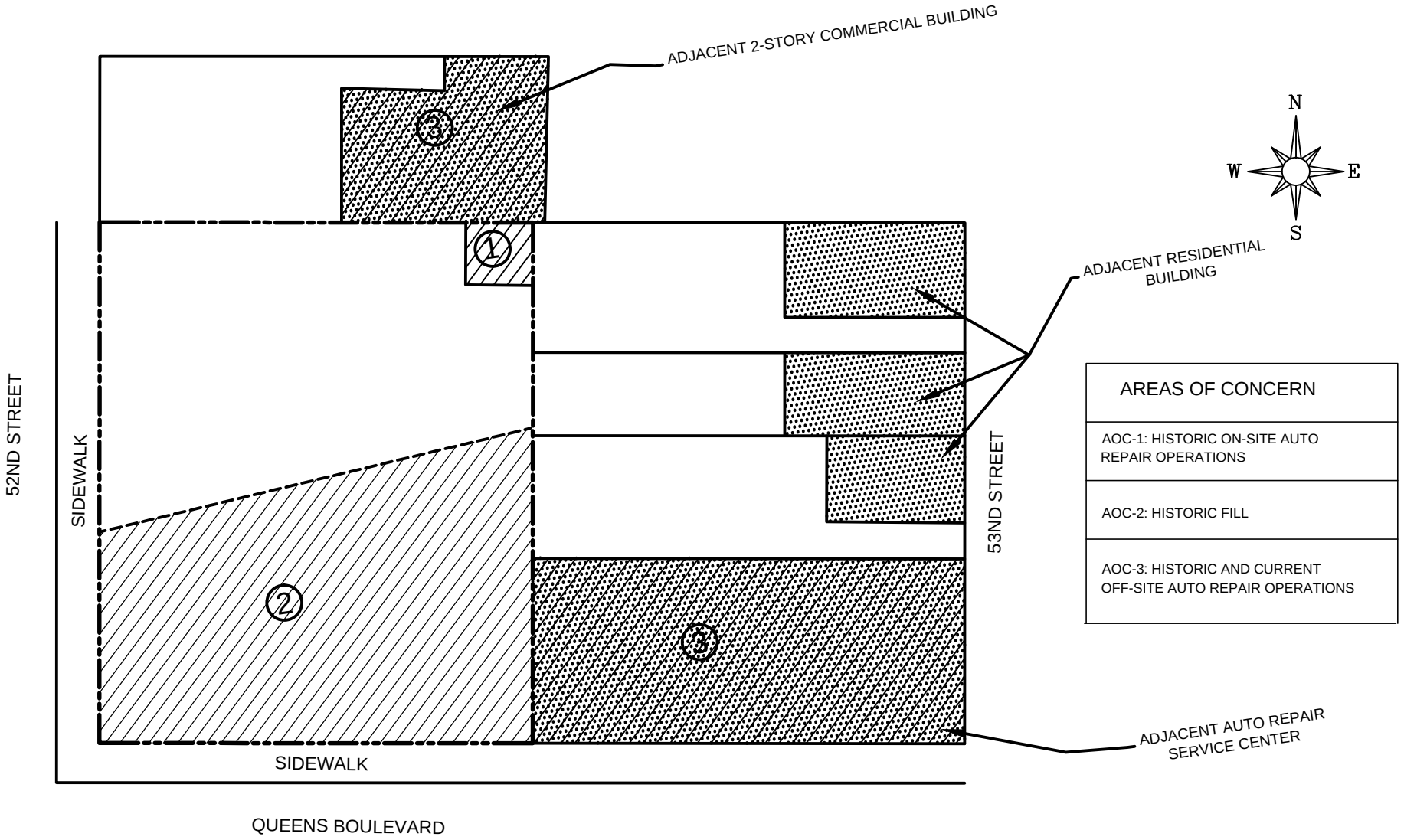
DESIGNER: NAHUM KEDEM

CHECKED BY: WILLIAM SILVERI

SITE MAP: 52-01 Queens Boulevard
Queens, NY 11377

FIGURE: 4

TITLE: REMEDIAL INVESTIGATION REPORT
SURROUNDING AREA MAP



Legend:

PROPERTY BOUNDARY

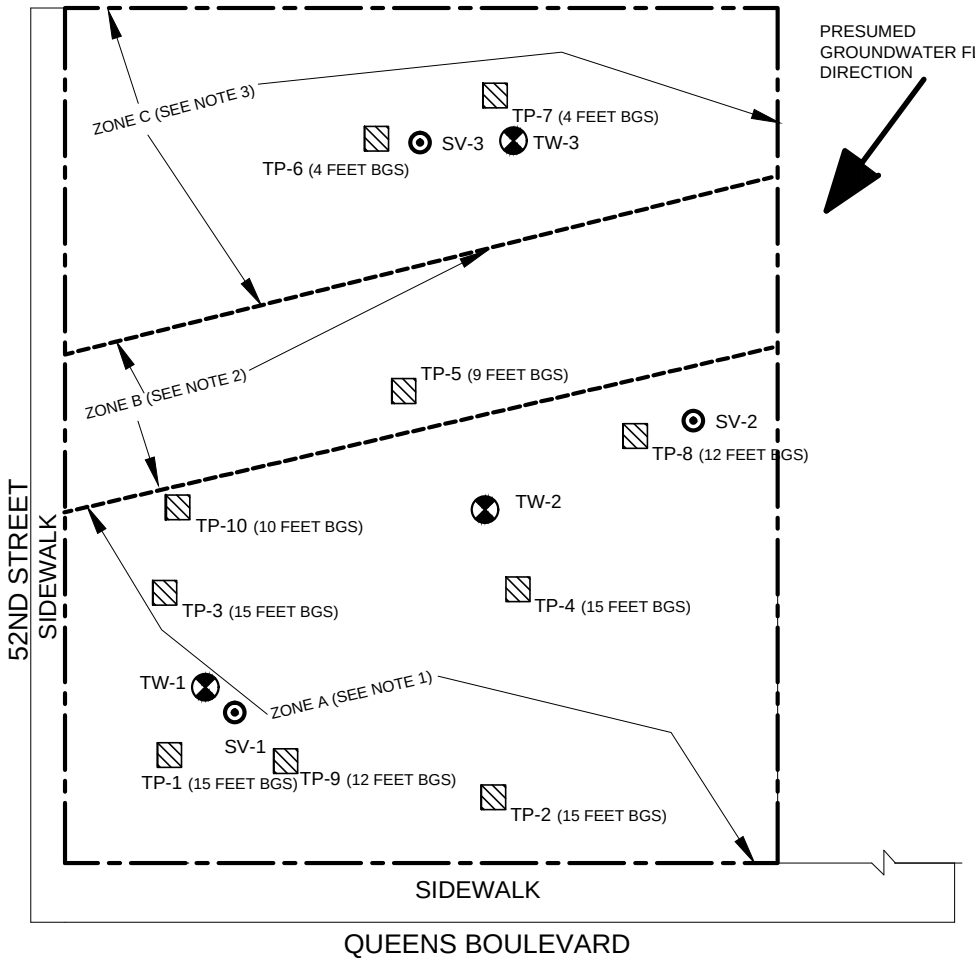
AREA OF CONCERN AND IDENTIFICATION NUMBER

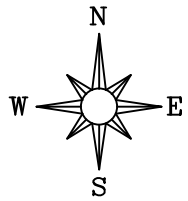
SCALE:

0 29.5' 59'

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants
45-09 Greenpoint Avenue, Long Island City, N.Y. 11104

DATE: JUNE 15,2012	Site map: 52-01 QUEENS BOULEVARD QUEENS , NEW YORK
Drawn by: BASIM ALTEMIMI	
Checked by: WILLIAM SILVERI	
Drawing Scale:	Figure: 5
Project No.: 12-0013	Title: REMEDIAL INVESTIGATION REPORT MAP OF AREAS OF CONCERN





NOTES:

1. SOILS AT ZONE A WILL BE EXCAVATED TO 15 FEET BGS.
2. SOILS AT ZONE B SLOPE FROM ORIGINAL GRADE OF SITE TO 12 FEET BGS.
3. SOILS AT ZONE C HAVE ALREADY BEEN EXCAVATED TO 12 FEET BELOW ORIGINAL GRADE OF SITE (I.E. ELEVATION OF SIDEWALKS OF SURROUNDING STREETS).
4. TEST PIT DIMENSIONS ARE NOT TO SCALE.
5. TEST PIT TP-1 THROUGH TP-6 WERE EXCAVATED TO CHARACTERIZE SOILS FOR OFF-SITE DISPOSAL .
6. TEST PT TP-7 THRU TP-10 WERE EXCAVATED TO DELINEATE THE LATERAL AND VERTICAL EXTENT OF VOC CONTAMINATED SOIL TO THE DEPTH OF PLANNED EXCAVATION.

Legend:

BGS — BELOW GROUND SURFACE

PROPERTY BOUNDARY

TEST PIT LOCATIONS AND DEPTHS INDICATED IN PARENTHESIS

TEMPORARY GROUNDWATER WELL LOCATION

SOIL VAPOR IMPLANT LOCATION

SCALE: 0 18' 36'

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants
45-08 Greenpoint Avenue, Long Island City, N.Y. 11104

DATE: JUNE 18, 2012	Site map: 52-01 QUEENS BOULEVARD QUEENS, NEW YORK 11377
Drawn by: BASIM ALTEMIMI	
Checked by: WILLIAM SILVERI	Figure: 6
Project No.: 12-0013	Title: REMEDIAL INVESTIGATION REPORT LOCATION OF TEST PITS, WELLS AND SOIL VAPOR IMPLANTS.

TP-10			
Compound	Part 375 Unrestricted Use (mg/kg)	Sample Depth (bgs)	Results (mg/kg)
Volatile Organic Compounds			
Acetone *	0.05	2 feet	0.0284
Toluene	0.7	" "	0.004
Metals			
Barium	350		43.9
Copper	50	" "	16.2
Lead	63	" "	31
Manganese	1600	" "	236
Nickel	30	" "	9.6
Zinc	109	" "	47.4
Volatile Organic Compounds			
Acetone *	0.05	6 feet	0.0398
Toluene	0.7	" "	0.0034
Metals			
Barium	350	" "	43
Copper	50	" "	13.2
Lead	63	" "	25.7
Manganese	1600	" "	257
Nickel	30	" "	9.5
Zinc	109	" "	42.6
Volatile Organic Compounds			
Toluene	0.7	10 feet	0.0031
Metals			
Barium	350	" "	44.2
Copper	50	" "	13.9
Lead	63	" "	32
Manganese	1600	" "	225
Nickel	30	" "	8.8
Zinc	109	" "	50.2

Only detected VOCs presented in table. Only detected metals with Part 375 Unrestricted Use values are presented in table.

* presence of compound in sample is likely an artifact arising from laboratory contamination

TP-9			
Compound	Part 375 Unrestricted Use (mg/kg)	Sample Depth (bgs)	Results (mg/kg)
Volatile Organic Compounds			
No VOCs Detected		2 feet	n/a
Metals			
Barium	350	" "	26.4
Copper	50	" "	7.7
Lead	63	" "	2.8
Manganese	1600	" "	252
Nickel	30	" "	8
Zinc	109	" "	14.1
Volatile Organic Compounds			
No VOCs Detected		6 feet	0.0161
Metals			
Barium	350	" "	29.4
Copper	50	" "	9.1
Lead	63	" "	2.9
Manganese	1600	" "	242
Nickel	30	" "	9.1
Zinc	109	" "	17.3
Volatile Organic Compounds			
No VOCs Detected		10 feet	0.0161
Metals			
Barium	350	" "	36.8
Copper	50	" "	9.9
Lead	63	" "	2.6
Manganese	1600	" "	222
Nickel	30	" "	9
Zinc	109	" "	20.3
Volatile Organic Compounds			
No VOCs Detected		12 feet	0.0358
Metals			
Barium	350	" "	23.7
Copper	50	" "	9.6
Lead	63	" "	2.3
Manganese	1600	" "	295
Nickel	30	" "	10
Zinc	109	" "	15.4

Only detected VOCs presented in table. Only detected metals with Part 375 Unrestricted Use values are presented in table.

TP-6			
Compound	Part 375 Unrestricted Use (mg/kg)	Sample Depth (bgs)	Results (mg/kg)
No VOCs Detected		6 feet	n/a

Only detected compounds presented in table

* presence of compound in sample is likely an artifact arising from laboratory contamination

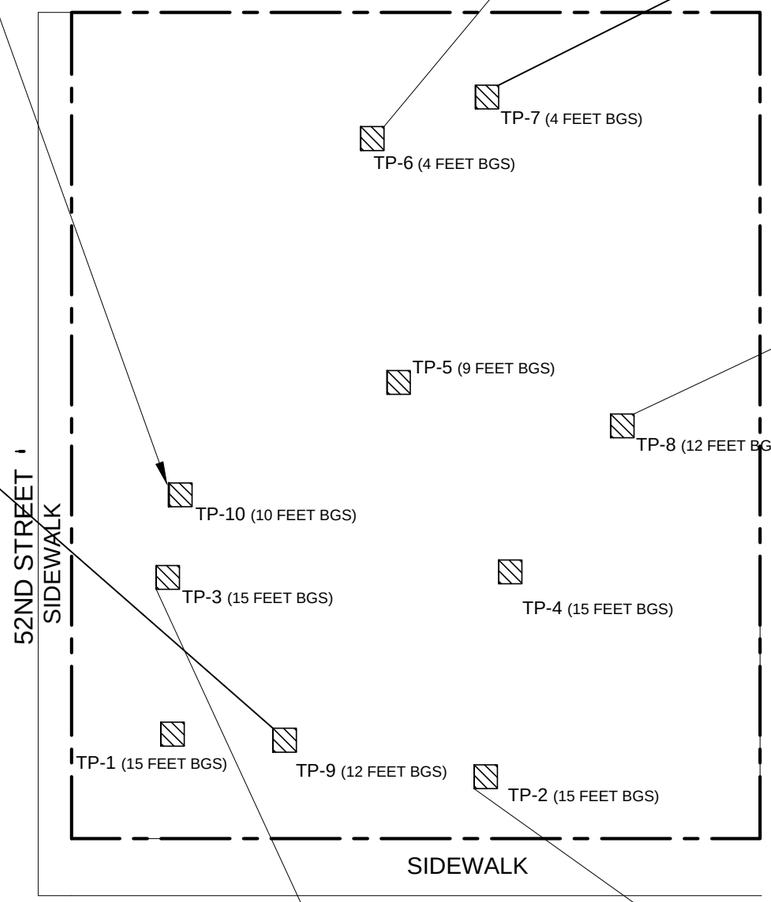
TP-7			
Compound	Part 375 Unrestricted Use (mg/kg)	Sample Depth (bgs)	Results (mg/kg)
Volatile Organic Compounds			
Toluene	0.7	2 feet	0.0089
Metals			
Barium	350	" "	33.2
Copper	50	" "	9.5
Lead	63	" "	2.4
Manganese	1600	" "	237
Nickel	30	" "	7.4
Zinc	109	" "	17.6
Volatile Organic Compounds			
Toluene	0.7	4 feet	0.0031
Metals			
Barium	350	" "	32.8
Copper	50	" "	11.2
Lead	63	" "	3.5
Manganese	1600	" "	295
Nickel	30	" "	9.8
Zinc	109	" "	21.3

Only detected VOCs presented in table. Only detected metals with Part 375 Unrestricted Use values are presented in table.

TP-8			
Compound	Part 375 Unrestricted Use (mg/kg)	Sample Depth (bgs)	Results (mg/kg)
Volatile Organic Compounds			
Toluene	0.7	4 feet	0.0034
Metals			
Barium	350	" "	37.5
Copper	50	" "	13.4
Lead	63	" "	22.8
Manganese	1600	" "	252
Nickel	30	" "	9.5
Zinc	109	" "	39.4
Volatile Organic Compounds			
Acetone *	0.05	8 feet	0.0161
Toluene	0.7	" "	0.0033
Metals			
Barium	350	" "	51.8
Copper	50	" "	20.7
Lead	63	" "	21
Manganese	1600	" "	264
Nickel	30	" "	11.7
Zinc	109	" "	44.4
Volatile Organic Compounds			
Acetone *	0.05	12 feet	0.0358
Toluene	0.7	" "	0.0035
Metals			
Barium	350	" "	46.8
Copper	50	" "	15
Lead	63	" "	23.2
Manganese	1600	" "	267
Nickel	30	" "	10.7
Zinc	109	" "	43

Only detected VOCs presented in table. Only detected metals with Part 375 Unrestricted Use values are presented in table.

* presence of compound in sample is likely an artifact arising from laboratory contamination



TP-3			
Compound	Part 375 Unrestricted Use (mg/kg)	Sample Depth (bgs)	Results (mg/kg)
Acetone *	0.05	3 feet	0.0385
No VOCs Detected		9 feet	n/a

Only detected compounds presented in table

* presence of compound in sample is likely an artifact arising from laboratory contamination

TP-2			
Compound	Part 375 Unrestricted Use (mg/kg)	Sample Depth (bgs)	Results (mg/Kg)
Acetone *	0.05	6 feet	0.0143

Only detected compounds presented in table

* presence of compound in sample is likely an artifact arising from laboratory contamination

N W E S

NOTES:

1. TEST PIT DIMENSIONS ARE NOT TO SCALE.
2. TEST PIT TP-1 THROUGH TP-6 WERE EXCAVATED ONLY RESULTS OF ONLY RESULTS OF DISCRETE SOIL SAMPLE FOR VOCs ARE PRESENTED ON FIGURE TO CHARACTERIZE SOILS FOR OFF-SITE DISPOSAL .
3. TEST PT TP-7 THRU TP-10 WERE EXCAVATED TO DELINEATE THE LATERAL AND VERTICAL EXTENT OF VOC AND METAL.CONTAMINATED SOIL TO THE DEPTH OF PLANNED EXCAVATION.

Legend:

BGS BELOW GROUND SURFACE

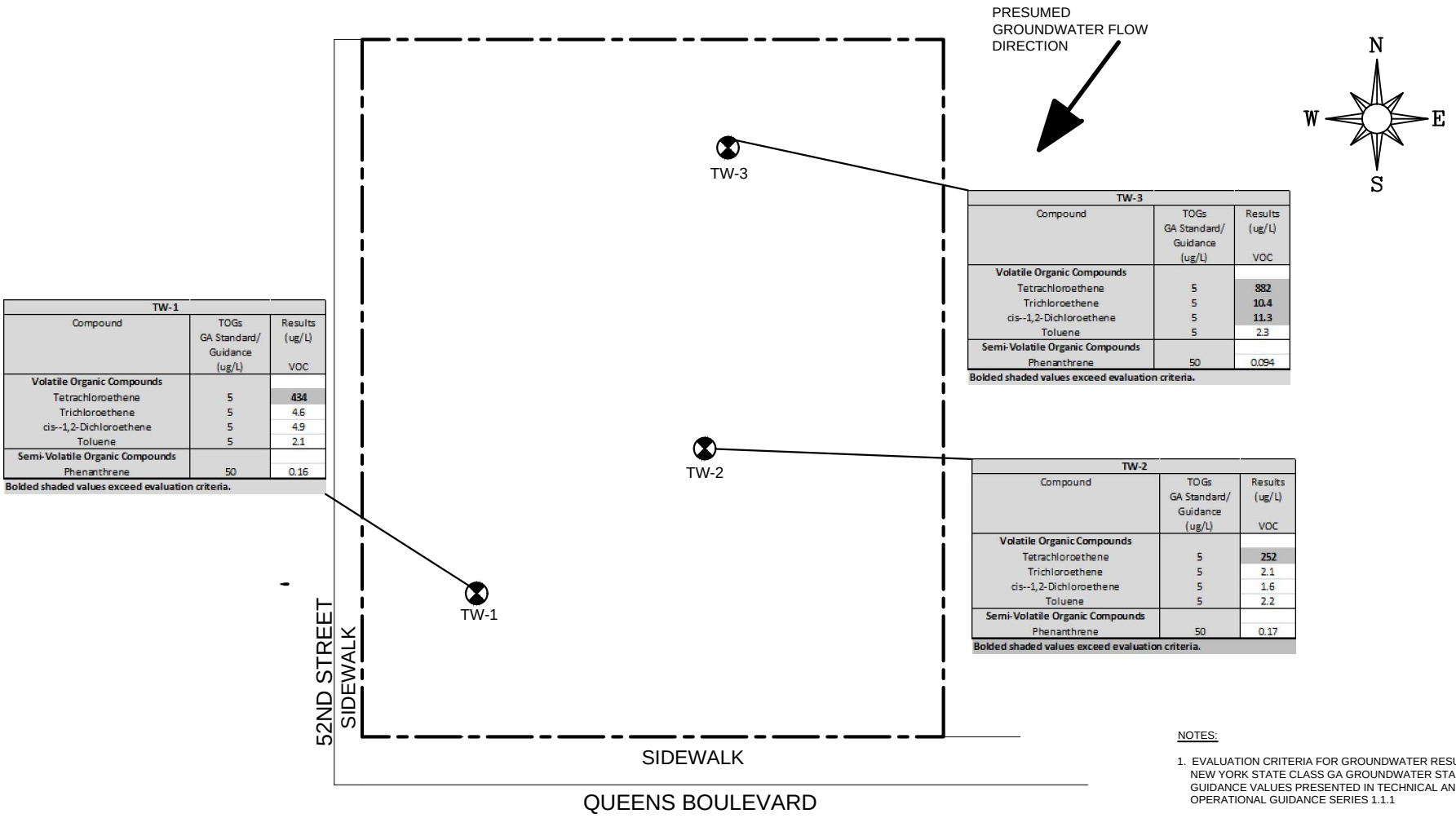
PROPERTY BOUNDARY

TEST PIT LOCATIONS AND DEPTHS INDICATED IN PARENTHESIS

SCALE: 0 23.5' 47'

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants
45-09 Greenpoint Avenue, Long Island City, N.Y. 11104

DATE: JUNE 18, 2012	Site map: 52-01 QUEENS BOULEVARD QUEENS, NEW YORK 11377
Drawn by: BASIM ALTEMIMI	
Checked by: WILLIAM SILVERI	
Project No.: 12-0013	Figure: 7
	Title: REMEDIAL INVESTIGATION REPORT MAP OF SOIL CHEMISTRY RESULTS-VOCs AND METALS



TW-1		
Compound	TOGs GA Standard/ Guidance (ug/L)	Results (ug/L) VOC
Volatile Organic Compounds		
Tetrachloroethene	5	**434**
Trichloroethene	5	4.6
cis--1,2-Dichloroethene	5	4.9
Toluene	5	2.1
Semi-Volatile Organic Compounds		
Phenanthrene	50	0.16

Bolded shaded values exceed evaluation criteria.

TW-3		
Compound	TOGs GA Standard/ Guidance (ug/L)	Results (ug/L) VOC
Volatile Organic Compounds		
Tetrachloroethene	5	**882**
Trichloroethene	5	**10.4**
cis--1,2-Dichloroethene	5	**11.3**
Toluene	5	2.3
Semi-Volatile Organic Compounds		
Phenanthrene	50	0.094

Bolded shaded values exceed evaluation criteria.

TW-2		
Compound	TOGs GA Standard/ Guidance (ug/L)	Results (ug/L) VOC
Volatile Organic Compounds		
Tetrachloroethene	5	**252**
Trichloroethene	5	2.1
cis--1,2-Dichloroethene	5	1.6
Toluene	5	2.2
Semi-Volatile Organic Compounds		
Phenanthrene	50	0.17

Bolded shaded values exceed evaluation criteria.

NOTES:

1. EVALUATION CRITERIA FOR GROUNDWATER RESULTS IS NEW YORK STATE CLASS GA GROUNDWATER STANDARDS/ GUIDANCE VALUES PRESENTED IN TECHNICAL AND OPERATIONAL GUIDANCE SERIES 1.1.1

Legend:

BGS BELOW GROUND SURFACE

PROPERTY BOUNDARY

TEMPORARY GROUNDWATER WELL LOCATION

SCALE: 0 18' 36'

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants
45-09 Greenpoint Avenue, Long Island City, N.Y. 11104

DATE: JUNE 18, 2012

Drawn by: BASIM ALTEMIMI

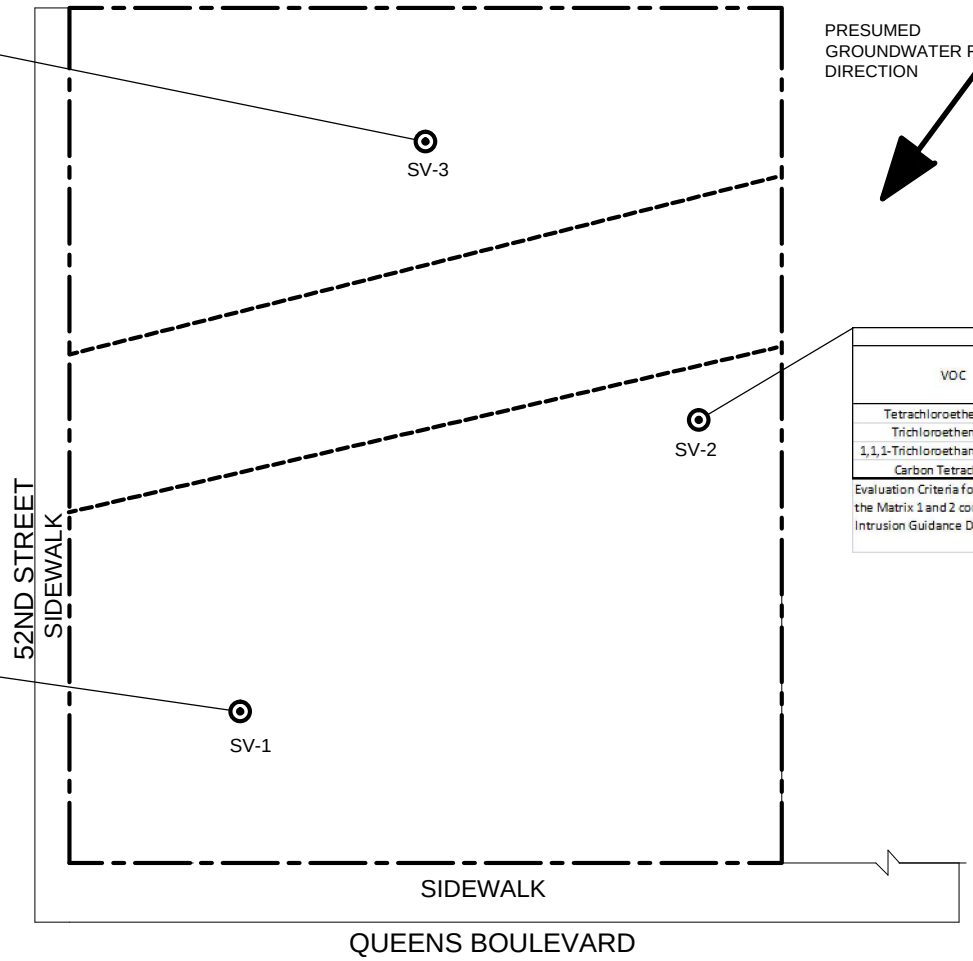
Checked by: WILLIAM SILVERI

Project No.: 12-0013

Site map: 52-01 QUEENS BOULEVARD
QUEENS, NEW YORK 11377

Figure: 8

Title: REMEDIAL INVESTIGATION REPORT
MAP OF GROUNDWATER CHEMISTRY
RESULTS-VOC AND SVOC.



SV-3		
VOC	NYSDOH Guidance Value (ug/M³)	Results (micrograms/M³)
Tetrachloroethene (PCE)	100	21
Trichloroethene (TCE)	5	1
1,1,1-Trichloroethane (1,1,1-TCA)	100	ND
Carbon Tetrachloride	5	ND

Evaluation Criteria for soil vapor is the sub-slab vapor concentratin for the Matrix 1 and 2 compounds presented in the NYSDOH Soil Vapor Intrusion Guidance Document

SV-2		
VOC	NYSDOH Guidance Value (ug/M³)	Results (micrograms/M³)
Tetrachloroethene (PCE)	100	83
Trichloroethene (TCE)	5	ND
1,1,1-Trichloroethane (1,1,1-TCA)	100	ND
Carbon Tetrachloride	5	ND

Evaluation Criteria for soil vapor is the sub-slab vapor concentratin for the Matrix 1 and 2 compounds presented in the NYSDOH Soil Vapor Intrusion Guidance Document

SV-1		
VOC	NYSDOH Guidance Value (ug/M³)	Results (micrograms/M³)
Tetrachloroethene (PCE)	100	15
Trichloroethene (TCE)	5	ND
1,1,1-Trichloroethane (1,1,1-TCA)	100	ND
Carbon Tetrachloride	5	ND

Evaluation Criteria for soil vapor is the sub-slab vapor concentratin for the Matrix 1 and 2 compounds presented in the NYSDOH Soil Vapor Intrusion Guidance Document

NOTES:

1. EVALUATION CRITERIA FOR SOIL VAPOR IS THE SUB-SLAB VAPOR CONCENTRATION FOR THE MATRIX 1 AND MATRIX 2 COMPOUNDS PRESENTED IN THE NYSDOH SOIL VAPOR INTRUSION DOCUMENT DATED OCTOBER 2006.

Legend:

BGS BELOW GROUND SURFACE

PROPERTY BOUNDARY

SOIL VAPOR IMPLANT LOCATION

SCALE: 0 18' 36'

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants
45-09 Greenpoint Avenue, Long Island City, N.Y. 11104

DATE: JUNE 18, 2012

Drawn by: BASIM ALTEMIMI

Checked by: WILLIAM SILVERI

Project No.: 12-0013

Site map: 52-01 QUEENS BOULEVARD
QUEENS, NEW YORK 11377

Figure: 9
Title: REMEDIAL INVESTIGATION REPORT
MAP OF SOIL VAPOR RESULTS
NYSDOH MATRIX1 AND 2 COMPOUNDS

APPENDIX A

PHASE I ESA REPORT (CD-ROM)

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

PHASE I
ENVIRONMENTAL SITE ASSESSMENT

52-01 QUEENS BOULEVARD
QUEENS, NY 11377

ATHENICA PROJECT NUMBER
12-0031

PREPARED FOR:

ALMA Bank
28-31st Street
Astoria, NY 11102

January 20, 2012

45-09 Greenpoint Avenue · LIC, NY 11104 · Tel: (718) 784-7490 · Fax: (718) 784-4085 · www.athenica.com

PHASE I ENVIRONMENTAL SITE ASSESSMENT
52-01 Queens Boulevard
Queens, NY 11377

TABLE OF CONTENTS

TABLE OF CONTENTS

GENERAL INFORMATION

Project Information:
52-01 Queens Boulevard
Project Number:
12-0031

Consultant Information:
Athenica Environmental Services Inc.
45-09 Greenpoint Avenue
Long Island City, NY 11104
Phone: 718-784-7490
Fax: 718-784-4085
E-mail Address: wsilveri@athenica.com
Inspection Date:
Report Date: 01/20/2012

Site Information:
52-01 Queens Boulevard
52-01 Queens Boulevard
Queens, NY 11377
Latitude, Longitude: 40.742900, -73.912500
Site Access Contact:

Client Information:
ALMA Bank
Mr. John Kouzilos
28-31st Street
Astoria, NY 11102

Site Assessor: William Silveri
William V. Silveri
Project Manager

Senior Reviewer:
Spiro Dongaris
President

Certification:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR Part 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Spiro Dongaris - President

EXECUTIVE SUMMARY

On January 18, 2012, Athenica Environmental Services, Inc. (Athenica) conducted a Phase I Environmental Site Assessment (ESA) of the property located at 52-01 Queens Boulevard in the Borough of Queens, New York, herein referred to as "the Site". This assessment was conducted in substantial compliance with the American Society for Testing and Materials (ASTM) Practice Designation E1527-05: Standard Practice for ESAs: Phase I ESA Process.

The purpose of this ESA is to identify, to the extent feasible, recognized environmental conditions (RECs) in connection with the Site. The Phase I ESA was performed at the request of ALMA Bank as part of their environmental due diligence prior to issuing a loan.

The Site consists of a 12,000 square foot vacant lot that is fully enclosed by a perimeter fence. The dimensions of the Site is approximately 100 by 120 feet. The northernmost portion of the Site has been excavated to approximately 10 feet below grade surface (bgs). Various construction and demolition (C&D) debris and large boulders are present throughout the Site. Bags of refuse at the Site were also present at the Site. Athenica observed no petroleum staining of soils or petroleum odors in the immediate vicinity of these bags of refuse.

The adjacent property to the North consists of an automobile repair shop. The adjacent property to the East consists of an automobile repair shop. The adjacent property to the South, across Queens Boulevard from the Site, consists of a cemetery. The adjacent property to the West consists of a two-story building occupied by the Veterans of Foreign Wars.

This assessment has revealed no evidence of RECs in connection with the Site. The Site has an E zoning designation for hazardous materials, noise, and air quality. However, Athenica conducted several subsurface investigations at the Site in an effort to characterize subsurface conditions at the Site to the satisfaction of the New York City Department of Environmental Protection (DEP). Based on the results and findings of Athenica's subsurface investigations, Athenica concluded that the past use of the Site and past and current uses of adjacent properties have caused no adverse impact to subsurface conditions at the Site. In its review of Athenica's Phase II report, the DEP concurred with Athenica's conclusions. Thus, the Site's E zoning designation for hazardous materials is considered to be a historic REC. The E zoning designation for noise and air quality relate to the future development of the Site, and will be addressed as part of new building construction.

Based on the findings of the Phase I ESA, Athenica recommends no further action other than submission of the necessary documentation to the City of New York (i.e. Office of Environmental Remediation, OER) for its removal of the E zoning designation for the Site.

On-Site REC

Hazard	Acceptable	Acceptable, Requires O/M	Fail	Fail, Possible Remedy Required	Phase II Recommended
PCBs	X				
UST/AST/LUST	X				
Spills	X				
Other Petroleum Issues	X				
Hazardous Substance/Waste	X				
Asbestos	X				
Lead-Based Paint	X				
Radon	X				
Other	X				

Off-Site REC

Hazard	Acceptable	Acceptable, Requires O/M	Fail	Fail, Possible Remedy Required	Phase II Recommended
PCBs	X				
UST/AST/LUST	X				
Spills	X				

Hazard	Acceptable	Acceptable, Requires O/M	Fail	Fail, Possible Remedy Required	Phase II Recommended
Other Petroleum Issues	X				
Hazardous Substance/Waste	X				
Other	X				

1.0 INTRODUCTION

On January 18, 2012, Athenica Environmental Services, Inc. (Athenica) conducted a Phase I Environmental Site Assessment (ESA) of the property located at 52-01 Queens Boulevard in the Borough of Queens, New York, herein referred to as "the Site". The location of the Site is shown on Figure 1 in Appendix A. This assessment was conducted in substantial compliance with the American Society for Testing and Materials (ASTM) Practice Designation E1527-05: Standard Practice for ESAs: Phase I ESA Process.

1.1 Purpose

The purpose of this ESA is to identify, to the extent feasible, RECs in connection with the Site.

1.2 Scope-of-Services

This Phase I ESA was conducted utilizing a standard of good residential and customary practice that was consistent with the ASTM Standard Practice E 1527-05. Any significant scope-of-work additions, deletions or deviations to ASTM Practice E 1527-05 are included in appropriate sections of this report. In accordance with the above-referenced agreement, Athenica performed walk-through observations of the Site, noted the use of adjacent properties, and conducted a search of readily available historical and regulatory records. More specifically, the scope of services included the following:

- Site and Adjacent Property Observations
  Visual observations of the Site, structures, and surrounding properties were made to identify potential sources or indications of chemical and/or petroleum impacts such as underground storage tanks (USTs), aboveground storage tanks (ASTs), potential sources of polychlorinated biphenyls (PCBs), chemicals and hazardous materials, and areas with surface stains or distressed vegetation. In addition, the immediately adjacent properties were observed, without being entered, for possible sources of impacts or environmental impairment that could migrate to the site via surface water runoff, groundwater transport, or other pathways. Photographs documenting Site and adjacent property observations are included in Appendix B.
- Geological Information
  Published geological and groundwater information for the Site was obtained from Environmental Data Resources, Inc. (EDR). An electronic copy of the EDR report is included in Appendix C.
- Historical Review
  Reviews of historical Sanborn Fire Insurance maps, City Directories and historical aerial photographs were conducted for the Site and adjacent properties to evaluate previous land use. Copies of the available historical Sanborn Fire Insurance maps, City Directories and historical aerial photographs are included in Appendix D, E and F, respectively.
- Federal, State, Tribal and Local Regulatory Review
  A Federal, State, Tribal and Local regulatory database review was completed and supplied to Athenica by EDR. A complete listing of all of the databases included in the review is available in Section 4.0 of this report. A copy of the full EDR database report in included in Appendix C.
- Interviews
  Interviews were conducted with persons familiar with the Site regarding possible past or present use of potentially hazardous materials at the Site, and other issues of potential interest relative to potential environmental conditions.
- Local Building and Tax Information Records Review
  Local building and tax information records were obtained from New York City via the Internet and reviewed to identify potential environmental issues of concern. Copies of the local records obtained from New York City agencies are included in Appendix G.
- Prior Report Review
  Athenica reviewed a prior Phase I ESA, focused Phase II ESA and supplemental groundwater investigation for the Site as well as documentation from the New York City Department of Environmental Protection (DEP). Copies of these prior reports, excluding Appendices, is included in Appendix H.

Please note that the scope of work for this Phase I ESA does NOT include collection of samples or materials for testing, including testing of soil or groundwater, lead-based paint, lead in drinking water, asbestos containing material (ACM), etc.

1.3 Assumptions, Limitations and Exceptions

Athenica has prepared this Phase I ESA using reasonable efforts in each phase of its work to identify RECs associated with hazardous substances or petroleum products at the Site. The scope-of-work for this Phase I ESA was consistent with the ASTM Practice E 1527-05. Findings within this report are based on information collected from observations made on the day of the Site investigation and from reasonably ascertainable information obtained from governing public agencies and referenced sources.

Athenica's professional services have been performed, our findings obtained, and our recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. This statement is in lieu of other statements either expressed or implied. Athenica is not responsible for the independent conclusions, opinions, or recommendations made by others based on the records review, site observations, field exploration, and laboratory test data presented in this report.

This report is intended for the sole use of the Client. It should be noted that environmental evaluations are inherently limited in the sense that conclusions are drawn and recommendations developed from information obtained from limited research and Site evaluations. For these types of evaluations, it is often necessary to use information prepared by others, and Athenica cannot be responsible for the accuracy of such information. Additionally, the passage of time may result in a change in the environmental characteristics at this Site and surrounding properties. This report does not warrant against future operations or conditions, nor does it warrant operations or conditions present of a type or at a location not investigated. This report is not a regulatory compliance audit and is not intended to satisfy the requirements of any state, federal, or local real estate transfer laws.

Subsurface conditions were not field investigated, as this was outside the scope of this study, and may differ from the conditions implied by the surficial observations. This study is not intended to assess or otherwise determine if soil impacts, waste emplacement, or groundwater impacts exist. These data are accessible only by subsurface material and groundwater sampling through the completion of soil borings and the installation of monitoring wells. The scope of work, in accordance with our agreement, did not include these activities.

It must be noted that no evaluation, no matter how thorough, can absolutely rule out the existence of hazardous materials at a given Site. This assessment has been based on prior Site history and observable conditions. Existing hazardous materials and hazardous substances can escape detection using these methods. Therefore, if a higher level of confidence is required than can be defined by the Phase I scope of work, additional evaluation would, of course, be required.

Our conclusions regarding the potential environmental impact of nearby, off-site facilities on the Site are based on readily available information from the environmental databases listed and the presumed groundwater flow direction based on surface topography. A detailed file review of each facility was beyond the scope of work. Actual groundwater conditions, including direction of flow, can only be determined through the installation of monitoring wells.

Athenica does not warrant the correctness, completeness, currentness, merchantability, or fitness of any information related to records review provided in this report. Such information is not the product of an independent review conducted by Athenica, but is only publicly available environmental information maintained by federal, state, and local government agencies.

Deviations from ASTM Standard Practice E 1527-05 are described in Section 10.

1.4 Special Terms and Conditions (User Reliance)

This report may be relied upon by the undersigned or by any purchaser or assignee. In addition, the report may be relied upon by any rating agency involved in rating securities secured by, or representing an interest in, the Property Note. This report may be used in connection with materials offering for sale the Property Note, or an interest in the Property Note, and in presentations to any rating agency. With respect to the foregoing, the report speaks only as of the origination date of the report unless specifically updated through a supplemental report.

Athenica makes no other representation to any third party except that it has used the degree of care and skill ordinarily exercised by environmental consultants in the preparation of the report and in the assembling of data and information related thereto. No other warranties are made to any third party, either express or implied. Athenica's liability to any third party authorized to use or rely on this report with respect to any acts or omissions shall be limited to a maximum of no more than our contract price.

2.0 SITE DESCRIPTION

2.1 Location and Legal Description

The Site is located at 52-01 Queens Boulevard in the Borough of Queens, New York. It is defined on the Borough of Queens Tax Assessors Map as Block 1321, Lot 1.

2.2 Site and Vicinity General Characteristics

The Site is located within a primarily mixed-used area of Queens, New York. The Site is zoned as R5B with a commercial overlay. The neighborhood is a mixture of commercial uses, such as automobile repairs shops along Queens Boulevard, and residential buildings.

2.3 Current Use of the Property

The Site consists of a 12,000-square-foot vacant lot that is fully enclosed by a perimeter fence. The northernmost portion of the Site has been excavated to approximately 10 feet below ground surface. Various construction and demolition (C&D) debris, along with large boulders, are present on the Site. In addition, bags of refuse also are present on the ground. Athenica observed no petroleum staining or petroleum odors in the immediate vicinity of these bags.

2.4 Description of Site Improvements

According to historic Sanborn maps, the former on-Site building at the Site was built after 1982, and was demolished sometime after 2006.

2.5 Current Use of Adjoining Properties

Direction	Address	Description
North	43-27 52nd Street	Automobile Repair Shop
South	None (across Queens Boulevard)	Cemetery
East	52-19 Queens Boulevard	Automobile Repair Shop
West	51-29 Queens Boulevard, across 52nd Street	Office building (Veterans of Foreign Wars)

3.0 USER PROVIDED INFORMATION

The following section summarizes information (if any) provided by personal communication with the occupants or workers in the on-Site building with regard to the Phase I ESA.

3.1 Title Records

Athenica reviewed available title records from the New York City Department of Buildings (NYCDOB). No certificates of occupancy were available for the Site. A title records search using the Automated City Register Information System (ACRIS) was completed. ACRIS indicated several owners dating back to 1974. The history of ownership for the Site since 1974 is summarized below.

- Prior to July 24, 1974: Florence Mcnamara
- July 24, 1974 to April 2, 1993: Dominick Fasolino
- April 2, 1993 to August 14, 1995: Dominick Fasolino R
- August 14, 1995 to August 29, 1995: John Marison
- August 29, 1995 to May 21, 1996: William Fasolino
- May 21, 1996 to February 27, 2006: Ari Etynger
- February 27, 2006 to June 8, 2007: 52-01 Queens Blvd Woodside, LLC

3.2 Environmental Liens or Activity and Use Limitations

Activity and use limitations (AULs) are one indication of a past or present release of a hazardous substance of petroleum products. AULs are an explicit recognition by a federal, tribal, state, or local regulatory agency that residual levels of hazardous substances or petroleum products may be present on a property, and that unrestricted use of the property might not be acceptable.

The Site contact and a search of NYCDOB records indicate that the Site has an "E" designation for hazardous materials. According to the New York City Department of City Planning website, an "E" designation is a zoning map designation notifying the potential for hazardous material contamination, noise, or air quality impacts for a particular tax lot. An "E" designation is not a notice of a building violation, and is generally established for a particular tax lot in response to a zoning change. Prior subsurface investigations by Athenica indicated no adverse impact to subsurface conditions at the Site (see Section 4.5).

3.3 Specialized Knowledge

The user was not aware of any specialized knowledge or experience that was material to RECs in connection with the Site.

3.4 Valuation Reduction for Environmental Issues

No evidence of a valuation reduction for environmental issues was discovered.

3.5 Owner, Property Manager, and Occupant Information

The current owner and manager of the property is Mr. Demetri Tsilogiannis. Currently, the Site is vacant.

3.6 Reason for Performing Phase I

The Phase I ESA was performed at the request of ALMA Bank as part of their typical environmental due diligence prior to issuing a loan.

4.0 RECORDS REVIEW

A review of databases and files from federal, state and local environmental regulatory agencies was conducted to identify use, generation, storage, treatment or disposal of hazardous materials and chemicals, or release incidents of such materials, that may impact the site. EDR provided the federal and state environmental database information to Athenica.

Federal, state, tribal and local database records were reviewed for the Site and those properties surrounding the Site. Information on the improper storage, handling, and/or disposal of hazardous substances, wastes, or petroleum products, on or adjacent to the Site, is provided within these records. Following is a summary of the listings identified within applicable search radius. The potential for the facilities identified by the database review to environmentally impact the Site was evaluated solely on the distance and presumed topographic orientation (with respect to groundwater flow) of each facility relative to the Site (i.e. upgradient, downgradient, cross-gradient). Furthermore, each facility's presumed topographic elevation orientation was determined solely by a review of available USGS quadrangle topographic maps. No attempt was made to verify the actual groundwater flow direction or to access regulatory agency files regarding the identified facilities, as this was beyond the scope of work for this project.

There are 20 orphan sites (sites with inadequate information to be mapped) listed on the regulatory database report. By cross-referencing the street names and other information identified in the database report, Athenica determined that only one of these orphan sites are located within ASTM minimum search distances of the subject property. This site, located at Roosevelt Avenue over the Conrail railroad tracks is listed on the RCRA non Generator database and is further discussed in this subsection. The remaining orphan sites are not located within the ASTM minimum search distance of the subject property.

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		1	0	0	0	0	NR	0
Proposed NPL		1	0	0	0	0	NR	0
NPL LIENS		TP	NR	NR	NR	NR	NR	0
DELISTED NPL		1	0	0	0	0	NR	0
CERCLIS		0.5	0	0	0	NR	NR	0
CERCLIS-NFRAP		0.5	0	0	0	NR	NR	0
CORRACTS		1	0	0	0	1	NR	1
RCRA-TSDF		0.5	0	0	0	NR	NR	0
RCRA-LQG		0.25	0	0	NR	NR	NR	0
RCRA-SQG		0.25	2	0	NR	NR	NR	2
RCRA-CESQG		0.25	0	0	NR	NR	NR	0
US ENG CONTROLS		0.5	0	0	0	NR	NR	0
US INST CONTROL		0.5	0	0	0	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
NY SHWS		1	0	0	0	1	NR	1
NY VAPOR REOPENED		1	0	0	0	1	NR	1
NY SWF/LF		0.5	0	0	0	NR	NR	0
NY LTANKS		0.5	1	20	28	NR	NR	49
NY HIST LTANKS		0.5	1	14	22	NR	NR	37
NY UST		0.25	3	23	NR	NR	NR	26
NY MOSF UST		0.5	0	0	0	NR	NR	0
NY AST		0.25	3	41	NR	NR	NR	44
NY MOSF AST		0.5	0	0	0	NR	NR	0
NY CBS		0.25	0	0	NR	NR	NR	0
NY INST CONTROL		0.5	0	0	0	NR	NR	0
NY ENG CONTROLS		0.5	0	0	0	NR	NR	0
NY VCP		0.5	0	0	0	NR	NR	0
NY ERP		0.5	0	0	0	NR	NR	0
NY BROWNFIELDS		0.5	0	1	0	NR	NR	1
US BROWNFIELDS		0.5	0	0	0	NR	NR	0
ODI		0.5	0	0	0	NR	NR	0
NY SWTIRE		0.5	0	0	0	NR	NR	0
NY SWRCY		0.5	0	0	0	NR	NR	0
US CDL		TP	NR	NR	NR	NR	NR	0

NY DEL SHWS		1	0	0	0	0	NR	0
LIENS 2		TP	NR	NR	NR	NR	NR	0
LUCIS		0.5	0	0	0	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
NY SPILLS		0.125	10	NR	NR	NR	NR	10
RCRA-NonGen		0.25	4	14	NR	NR	NR	18
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
NY HSWDS		0.5	0	0	0	NR	NR	0
NY MANIFEST		0.25	4	11	NR	NR	NR	15
NY DRYCLEANERS		0.25	0	2	NR	NR	NR	2
NY SPDES		TP	NR	NR	NR	NR	NR	0
NY E DESIGNATION		0.125	16	NR	NR	NR	NR	16
NY RES DECL		0.125	0	NR	NR	NR	NR	0
Manufactured Gas Plants		1	0	0	0	0	NR	0
EDR Historical Auto Stations		0.25	0	0	NR	NR	NR	0
EDR Historical Cleaners		0.25	0	0	NR	NR	NR	0

4.1 Federal Environmental Records

National Priorities List (NPL), Proposed NPL, NPL Liens and Delisted NPL

The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. Sites on the Proposed NPL have been proposed for listing through the issuance of a proposed rule in the Federal Register. The United States Environmental Protection Agency (US EPA) then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing. Sites that have established criteria that US EPA uses to delete sites from the NPL are listed on the Delisted NPL.

Neither the Site nor properties within a one-mile radius of the Site are listed on the NPL, Proposed NPL, NPL Liens, and Delisted NPL databases.

Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) and No Further Remedial Action Planned (CERCLIS NFRAP) Lists

CERCLIS contains data on potentially hazardous waste sites that have been reported to the US EPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the CERCLA. CERCLIS contains sites which are either proposed to or on the NPL and sites which are in the screening and assessment phase for possible inclusion on the NPL. CERCLIS NFRAP are archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of US EPA's knowledge, assessment at a site has been completed and that US EPA has determined no further steps will be taken to list this site on the NPL, unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.
Neither the Site nor properties within a ½ -mile radius of the Site are listed on the CERCLIS and CERCLIS NFRAP databases.

RCRA Corrective Action Report (CORRACTS), Treatment, Storage and/or Disposal Facilities (TSDF), Large Quantity Generator (LQGs), and Small Quantity Generators (SQG)

RCRA program identifies and tracks hazardous wastes from the point of generation to the point of disposal. The RCRA database tracks those facilities that treat, store, and/or dispose of hazardous materials as defined by RCRA TSDF. The RCRA CORRACTS database identifies TSDF that have conducted, or are currently conducting, corrective action(s) as regulated under RCRA. The RCRA Generators database tracks large (LQG) and small quantity generators (SQG) of hazardous waste.

No properties on the TSDF database are identified within a ½-mile radius of the Site. There is one property on the RCRA CORRACTS database identified within a ½-mile radius of the Site. This property was located downgradient with respect to the presumed groundwater flow direction of the Site and therefore is not considered to be a REC.

No properties on the LQG database are identified within a 1/4-mile radius of the Site.

There are two properties on the SQG database identified within a 1/4-mile radius of the Site. These properties are located downgradient with respect to the presumed groundwater flow direction of the Site and therefore are not considered to be a REC.

RCRA Conditionally Exempt Small Quantity Generators (RCRA-CESQG)
RCRA-CESQG is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) MN of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the RCRA-CESQG. These generators generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Neither the Site nor properties within 1/4 mile radius of the Site are listed on the RCRA-CESQG database.

United States Institutional / Engineering Control Registries (US INST / ENG CONTROLS)
US INST CONTROLS is a listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on Site. Deed restrictions are generally required as part of the institutional controls. US ENG CONTROLS are a listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Neither the Site nor properties within a ½-mile radius of the Site are listed on the US Institutional/Engineering Controls database.

Emergency Response Notification System (ERNS)
The ERNS database records and stores information on reported releases of oil and hazardous substances.
The Site is not listed on the ERNS database.

4.2 State and Tribal Environmental Records

State Hazardous Waste Sites (SHWS)
SHWS are referred to as the State Superfund Program and are sites in the cleanup program from inactive hazardous waste sites, including hazardous substance sites.
There is one property on the SHWS database identified within a 1-mile radius of the Site. This property is located downgradient with respect to the presumed groundwater flow direction of the Site and therefore is not considered to be a REC

Vapor Intrusion Legacy Site (Vapor Reopened)
The Vapor Intrusion Legacy Site database identifies previously investigated and/or remediated sites that have been reopened by the NYSDEC due to concerns for vapor intrusion. "Vapor intrusion" refers to the process by which volatile chemicals move from a subsurface source into the indoor air of overlying or adjacent buildings. The subsurface source can either be contaminated groundwater or contaminated soil which releases vapors into the pore spaces in the soil. Improvements in analytical techniques and knowledge gained from site investigations in New York and other states has led to an increased awareness of soil vapor as a medium of concern and of the potential for exposures from the soil vapor intrusion pathway. Based on this additional information, New York is currently re-evaluating previous assumptions and decisions regarding the potential for soil vapor intrusion exposures at sites. As a result, all past, current, and future contaminated sites will be evaluated to determine whether these sites have the potential for exposures related to soil vapor intrusion.

There is one property on the Vapor Intrusion Legacy Site database identified within a one-mile radius of the Site. This property was located downgradient with respect to the presumed groundwater flow direction of the Site and therefore is not considered to be a REC

Solid Waste Facility (SWF) / State Landfill (SL)
SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Neither the Site nor properties within a ½-mile radius of the Site are listed on the SWF/SL database.

Leaking Storage Tank Incident Reports (LTANKS)
These records contain an inventory of reported leaking storage tank incidents reported from April 1, 1986 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills.

There are 49 properties on the LTANK database identified within a ½-mile radius of the Site. Of these properties 47 were located downgradient or cross-gradient with respect to the presumed groundwater flow direction of the Site and therefore are not considered to be a REC. The two upgradient properties with respect to the presumed groundwater flow direction are further discussed below.

- A tank test failure was reported at 4128 55th Street located approximately 1,060 feet to the northeast of the Site and is listed in the LTANKS database as Spill Number 0009435. Corrective action was implemented, and the NYSDEC closed the spill on December 20, 2005,
- A tank test failure was reported at 41-20 55th Street located approximately 1,090 feet to the northeast of the Site and is listed in the LTANKS database as Spill Number 0105622. Corrective action was implemented, and the NYSDEC closed the spill on July 11, 2006

Due to their distance, implementation of remediation, and closed status with the NYSDEC, none of these properties on the LTANKS database, including the closest and upgradient properties described above, are considered to be a REC.

Historic Leaking Storage Tank Incident Reports (HIST LTANKS)
These records contain an inventory of reported leaking storage tank incidents reported from April 1, 1986 through the end of 2002. The causes of the incidents are tank test failures, tank failures, or tank overfills. In 2002, the NYSDEC stopped providing updated on this database, and, instead, reported leaking tank incidents on the LTANK database.

There are 37 properties on the HIST LTANKS database identified within a ½-mile radius of the Site. These properties were located downgradient or cross-gradient with respect to the presumed groundwater flow direction of the Site and therefore are not considered to be a REC.

Underground Storage Tank (UST)
The UST database contains registered USTs from facilities that have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCA). The data comes from the NYSDEC Petroleum Bulk Storage (PBS) database.

There are 26 properties on the UST database identified within a 1/4-mile radius of the Site. These properties were located downgradient with respect to the presumed groundwater flow direction of the Site and therefore are not considered to be a REC

Major Oil Storage Facility Underground Storage Tanks (MOSF UST)
The MOSF UST database contains registered facilities that have petroleum storage capacities in excess of 400,000 gallons. The data is derived from the NYSDEC.

Neither the Site nor any properties within a ½-mile radius of the Site are listed on the MOSF UST database.

Aboveground Storage Tanks (ASTs)
The AST database contains registered ASTs from facilities that have petroleum storage capacities in excess of 1,000 gallons and less than 400,000 gallons. The data is derived from the NYSDEC.

There are 44 properties on the AST database identified within a 1/4-mile radius of the Site. Of these, 40 are located downgradient or distant cross-gradient location with respect to the presumed groundwater flow direction of the Site and therefore are not considered to be an REC. The adjacent property to the east is listed on the AST database; however, this property is not listed on any database for spills or violations. The remaining properties on the AST database that are located greater than 1/8-mile radius of the Site. Due to their distance and/or regulatory status, these upgradient properties on the AST database are not considered to be a REC.

Major Oil Storage Facility Aboveground Storage Tanks (MOSF AST)
The MOSF AST database contains registered facilities that have petroleum storage capacities in excess of 400,000 gallons.

Neither the Site nor any properties within a ½-mile radius of the Site are listed on the MOSF AST database.

Chemical Bulk Storage (CBS) Database
The CBS database contains facilities that store hazardous substances listed in 6NYCRR Part 597 in aboveground storage tanks with capacities of 185 gallons or greater or USTs of any size. The data is derived from the NYSDEC.

Neither the Site nor any properties within a 1/4-mile radius of the Site are listed on the CBS database.

State Institutional/Engineering Control Registries (INST/ENG CONTROLS)
The INST/ENG CONTROLS is a database of properties that have institutional or engineering controls in place. The data is derived from the NYSDEC.

Neither the Site nor properties within a ½-mile radius of the Site are listed on the INST/ENG CONTROLS database.

Voluntary Cleanup Agreements (VCP)
The VCP database lists properties that were investigated and/or remediated under the State's Voluntary Cleanup Program (VCP). The VCP was a voluntary remedial program established to address the environmental, legal, and financial barriers that hinder the redevelopment and reuse of contaminated properties. The VCP was developed to enhance private sector cleanup of contaminated properties by allowing parties to remediate properties using private rather than public funds and to reduce the need for development of undeveloped parcels ("greenfields").

Neither the Site nor properties within a ½-mile radius of the Site are listed on the VCP database.

Environmental Restoration Program (ERP) Listing and Brownfield (BROWNFIELDS) Site List
The ERP and BROWNFIELD databases list properties in New York State's ERP and Brownfield programs. Under the Environmental Restorage Program, New York State provides grants to municipalities to reimburse up to 90 percent of the eligible on-site costs and 100 percent of the off-site costs for site investigation and remediation activities. Once remediated, the property may then be reused for commercial, industrial, residential, or public uses. A brownfield is any real estate property where redevelopment or re-use may be complicated by the present or potential presence of hazardous waste, petroleum, pollutants, or contamination. The data for this database is derived from the NYSDEC.

Neither the Site nor properties within a ½-mile radius of the Site are listed on the ERP database.

There is one property on BROWNFIELDS database identified within a ½-mile radius of the Site. This property is located downgradient with respect to the presumed groundwater flow direction of the Site and therefore is not considered to be a REC.

4.3 Additional Environmental Records and Other Ascertainable / EDR Proprietary Records

Local Brownfield Lists (US BROWNFIELDS)
This database is a listing of brownfields properties addressed by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Neither the Site nor properties within a ½-mile radius of the Site are listed on this database.

Local Lists of Landfill/Solid Waste Disposal Sites: Open Dump Inventory (ODI), Registered Waste Tire Storage & Facility List (SWTIRE), and Solid Waste Registered Recycling Facility List (SWRCY)

This database is a listing of properties listed on the following: the Open Dump Inventory (ODI), Solid Waste Tire Storage & Facility List (SWTIRE), and Solid Waste Registered Registered Recycling Facility List (SWRCY).

Neither the Site nor properties within a ½-mile radius of the Site are listed on the ODI, SWTIRE, and SWRCY databases.

Local Lists of Hazardous Waste Contaminated Sites: US Clandestine Drug Labs and Delisted Registry Sites

This database is a listing of properties identified on the Clandestine Drug Labs (CDL) and/or the Delisted Registry Sites (DEL SHWS) listings. The CDL listing contains addresses of some locations where law enforcement agencies reported chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. The DEL SHWS listing is a database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

The Site is not listed on the CDL database. Neither the Site nor properties within a ½-mile radius of the Site are listed on the DEL SHWS database.

Local Land Records (LIENS 2 and LUCIS)

This database includes properties on the CERCLA Lien Information and/or Land Use Control Information System (LUCIS) listings. A federal CERCLA lien can exist by operation of law at any site or property at which US EPA has spent Superfund monies. LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

The Site is not listed on the LIENS 2 database, and neither the Site nor properties within a ½-mile radius of the Site are listed on the LUCIS database.

Hazardous Materials Incident Reporting System (HMIRS)

HMIRS contains hazardous material spill incidents reported to the Department of Transportation (DOT).

The Site is not listed on the HMIRS database.

New York State Spills (NY Spills)

The NY Spills database is a listing of spills reported to the NYSDEC, as required by Article 12 of the Navigation Law, 6 NYCRR. This database includes spills active as of April 1, 1986 as well as spills occurring since this date.

There are 10 properties on the SPILLS database identified within a 1/8-mile radius of the Site. Of these, 9 are located downgradient or distant cross-gradient location with respect to the presumed groundwater flow direction of the Site and therefore are not a REC. The remaining property on the SPILLS database that is located upgradient with respect to the presumed groundwater flow direction of the Site and is further discussed below:

- Spill number S103274464 was reported approximately 400 feet north of the Site at 43rd Avenue, between 51st Street and 52nd Street5-35 47th Avenue on May 18, 1998. The spill was cleaned up, and the NYSDEC closed the spill on May 18, 1998.

Due to its distance, implementation of corrective action, and closed status, this spills is not considered to be an REC.

RCRA Non Generators (RCRA-NonGen)

RCRA-NonGen is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Action (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generated, transported, stored, treated, and/or disposed of hazardous waste as defined by RCRA. Non-Generators do not presently generate hazardous waste.

There are 18 RCRA-NonGen facilities and one orphan Site listed on this database identified within 1/4-mile radius of the Site. Of these, 16 are located downgradient or a distant cross-gradient location with respect to the presumed groundwater flow direction of the Site and therefore are not considered to be an REC. The two upgradient facilities are not located adjacent to or within the immediate vicinity of the Site or appear on any regulatory database for spills or violations. Thus, these two upgradient facilities are not considered to be a REC.

Toxic Release Inventory System (TRIS)

This database is a listing of facilities which release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313. Information for the TRIS database is provided and maintained by the US EPA.

The Site is not listed on the TRIS database.

Toxic Substances Control Act (TSCA)
This database is a listing of manufacturers and importers of chemical substances on the TSCA chemical substances inventory lists and includes data on production volumes of these substances by plant location.

The Site is not listed on the TSCA database.

PCB Activity Database System (PADS)
This database identifies generators, transporters, commercial storers and/or brokers of PCBs who are required to notify the US EPA of such activities.

The Site is not listed on the PADS database.

Facility Index System/Facility Registry System (FINDS)
The FINDS database contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: Permit Compliance System (PCS), Aerometric Information Retrieval System (AIRS), Enforcement Docket (DOCKET) used to manage and track information on civil judicial enforcement cases for environmental statutes, Federal Underground Injection Control (FURS), Criminal Docket (C-DOCKET) used to track criminal enforcement actions for environmental statues, Federal Facilities Information System (FFIS), State Environmental Laws and Statutes (STATE), and PCB Activity Data System (PADS).

The Site is not listed on the FINDS database.

RCRA Administrative Action Tracking System (RAATS)
The RAATS database contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the US EPA. For administrative actions after September 30, 1995, data entry in the RAATS database was discontinued due to decrease in agency resources.

The Site is not listed on the RAATS database.

Hazardous Substance Waste Disposal Site (HSWDS) Inventory
The HWDS database is a listing of known or suspected hazardous substance waste disposal sites and includes sites that were delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-registry sites that the US EPA had prepared a Preliminary Assessment (PA) or Site Investigation (SI) report.

Neither the Site nor properties within a ½-mile radius of the Site are listed on this database.

Facility and Manifest Data (MANIFEST)
This database is a listing of facilities that generate a manifest. A manifest is a document that lists and tracks hazardous waste from the generator through transporters to a Treatment, Storage, Disposal (TSD) facility. The information for this database is provided by the NYSDEC.

There are 16 MANIFEST properties identified within 1/4-mile radius of the Site. These properties are downgradient with respect to the presumed groundwater flow direction of the Site and therefore are not considered to be a REC.

New York Drycleaners (NY Drycleaners)
The NY Drycleaners is a listing of registered drycleaners. The data is derived from the NYSDEC.

There are two NY Drycleaner facilities identified within 1/4-mile radius of the Site. These properties are located downgradient with respect to presumed groundwater flow direction of the Site and therefore are not considered to be a REC.

State Pollutant Discharge Elimination System (SPDES)
New York State has a program approved by the US EPA for the control of wastewater and stormwater discharges in accordance with the Clean Water Act and is referred to as the State Pollutant Discharge Elimination System (SPDES). This program broader in scope than required by the US EPA in that SPDES controls point source discharges to groundwaters as well as surface waters. This database is listing of SPDES properties.

The Site is not listed on the SPDES database.

E DESIGNATION
The E DESIGNATION database is a listing of properties in New York City that have a "E" zoning designation. An "E" designation is a zoning map designation notifying the potential for hazardous material contamination, noise, or air quality impacts for a particular tax lot. The information for this database is derived from the New York City Department of Environmental Planning.

There are 16 "E" Designation properties identified within a 1/8th-mile radius of the Site. Of these, 8properties are located downgradient or distant cross-gradient location with respect to the presumed groundwater flow direction of the Site and are not considered to be a REC.

The Site is listed on the E Designation database for hazardous materials, air quality and noise. As indicated by prior testing results in response to its E Designation, subsurface conditions have not been adversely impacted by past historic use of the Site and/or adjacent properties. For this reason, the Site's listing on the E Designation database is considered to be a historic REC (see Section 4.5, Prior Reports).

The east adjacent property at 52-19 Queens Boulevard is listed on the E Designation database for hazardous materials (aka UST testing protocol). The results of previous testing at the Site have revealed no impacted to subsurface conditions at the Site. For this reason, the listing of the east adjacent property on the E Designation database is not considered to be a REC (see Section 4.5). The other properties on the E designation database were not located in the immediate vicinity of the Site and therefore are not considered to be a REC.

Restrictive Declaration (RES DECL)
The RES DECL database lists properties with a restrictive declaration. A restrictive declaration is a covenant running with the land that binds the present and future owners of the property. As a condition of special permits, the City Planning Commission may require an applicant to sign and record a restrictive declaration that places specialized conditions on the future use and development of the property. Certain restrictive declarations are indicated by the letter "D" on zone maps. The data for this database is derived from the New York City Department of Planning

Neither the Site nor properties within a 1/8-mile radius of the Site are listed on the RES DECL database.

Manufactured Gas Plants
The Manufactured Gas Plants database includes records of coal gas plants compiled by EDR's researchers. Manufactured gas plants were used in the United States from the 1800s to the 1950s to produce a gas that was distributed and used as a fuel. The plants typically utilized coal to produce gas and generated a significant amount of waste. Many of the waste byproducts from manufactured gas plants included coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds that are potentially hazardous to human health and the environment. The waste byproducts from manufactured gas plants were often disposed of at the facility and acted as a source of soil and groundwater contamination for the surrounding area.

Neither the Site nor properties within a one-mile radius of the Site are listed on this database.

EDR Historical Auto Stations and Cleaners
The EDR Historical Auto Stations and Cleaners database is listing of potential gasoline filling stations, auto repair stations, dry cleaners, laundries, and Laundromats based on the findings of EDR researchers.

Neither the Site nor properties within a 1/4-mile radius of the Site are listed on this database.

4.4 Historical Use Information

The Site history was researched by a review of information from the following sources:

- Sanborn Fire Insurance maps
- City Directories, and
- Historical aerial photographs

4.4.1 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps were provided by EDR for the years 1902, 1914, 1932, 1951, 198, 1982, 1986, 1988, 1989, 1991through 1994, 1996, 1999, and 2001 through 2006. The following table describe characteristics of the Site and adjoining properties and identify notable environmental concerns in the vicinity of the Site for each individual year of Sanborn Fire Insurance map coverage. Copies of the Sanborn Fire Insurance Maps are included in Appendix D.

Summary

Date(s)	Site Comments	Surrounding Area Comments
1902	The Site consists of five separate tax lots occupied by a marble works company.	The adjacent property to the north is a vacant tax lot. The adjacent property to the east is a residential dwelling. The adjacent property to the west, across 52nd Street (Hancock Avenue at the time) is occupied by a greenhouse. The surrounding area generally consists of residential dwellings.
1914	The Site now consists of one tax lot occupied by a stone yard and associated buildings.	A florist occupies the west adjacent property, across 52nd Street. The Calvary Cemetery occupies the adjacent property to the south, across Queens Boulevard. There are no other significant changes in the use of adjacent properties or the surrounding area since the previous Sanborn map year.
1932	There is no change in the use of the Site since the previous Sanborn Map year other than there are now different associated buildings for the stone yard.	A pair of residential dwellings occupy the north portion of the east adjacent property. The remaineder of the east adjacent property is now vacant. A small stone cutting shop occupied the north adjacent property. A two-story store occupies the west adjacent property, across 52nd Street from the Site. The general surrounding area now consists of dwellings and commercial uses, such as garages.
1951	There is no change in the use of the Site since the previous Sanborn Map year.	An automobile repair and spray painting shop now occupies the southern most portion of the east adjacent property. There no other significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.
1981	The Site is now occupied by a parking lot. No structures are present on the Site.	There are no significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.
1982	The Site consists of a one-story structure occupied by a used auto sales company.	There are no significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.
1986	There is no change in the use of the Site since the previous Sanborn Map year.	A small auto repair shop occupies a portion of the north adjacent property. There are no significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.
1988	There is no change in the use of the Site since the previous Sanborn Map year.	There are no significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.
1989	There is no change in the use of the Site since the previous Sanborn Map year.	There are no significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.
1991	There is no change in the use of the Site since the previous Sanborn Map year.	There are no significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.

Date(s)	Site Comments	Surrounding Area Comments
1992	There is no change in the use of the Site since the previous Sanborn Map year.	There are no significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.
1993	There is no change in the use of the Site since the previous Sanborn Map year.	The occupant of the southernmost portion of the east adjacent property is an auto repair shop (no longer spray painting). There are no other significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.
1994	There is no change in the use of the Site since the previous Sanborn Map year.	There are no significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.
1996	There is no change in the use of the Site since the previous Sanborn Map year.	There are no significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.
1999	There is no change in the use of the Site since the previous Sanborn Map year.	There are no significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.
2001	There is no change in the use of the Site since the previous Sanborn Map year.	The north adjacent property is now vacant. There are no other significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.
2002-2006	There is no change in the use of the Site since the previous Sanborn Map year.	There are no significant changes in the use of the adjacent properties or the surrounding area since the previous Sanborn map year.

As indicated by the previous table, the Site was occupied by a stone yard and a lot for the sale of used cars. The occupants of adjacent properties generally consisted of auto repair shops, a greenhouse and florist, and a cemetery. The past use of the Site did not exhibit environmental concerns that would represent a REC. The use of the upgradient and east adjacent property for auto repair or spray painting would represent a historic REC (see Section 4.5).

4.4.2 City Directory

EDR's City Directory Abstract is a screening report designed to assist the environmental professional in evaluating potential liability on a target property resulting from past activities. The Site is listed in the EDR's historical city directory in 1950. The north adjacent property is listed in the EDR's historical directory in 1945. The occupants of the Site address in 1950 is a construction general contractor. The occupant of the north adjacent property is a branch office. A copy of the City Directory Abstract is included in Appendix E.

As previously indicated by the City Directory, the past occupants of the Site and north adjacent property do not exhibit environmental concerns that would represent a REC.

4.4.3 Other Historical Information

Historical Aerial Photographs

Available historical aerial photographs from the City of New York, historical aerial photos were reviewed for this Environmental Site Assessment. Copies of available historical aerial photographs are included in Appendix F of this report. A summary of the historical aerial photographs is provided below.

Summary

Date(s)	Site Comments	Surrounding Area Comments
1924	The Site is developed with several small miscellaneous structures	The surrounding city blocks are shown to be developed.
1951	The Site is developed with several small miscellaneous structures	The surrounding city blocks are shown to be developed.
1996	The Site is shown to be developed with a one-story building.	The surrounding city blocks are shown to be developed.
2006	The Site is shown to be developed with a one-story building.	The surrounding city blocks are shown to be developed.
2008	The Site is shown to be developed with a one-story building.	The surrounding city blocks are shown to be developed.
2010	The Site appears to have undergone excavation.	The surrounding city blocks are shown to be developed.

Topographic Maps

Available topographic maps dated [YEARS AVAILABLE], from [SOURCE OF MAPS] were reviewed for this Environmental Site Assessment. Copies of selected maps are included in Appendix F of this report. A summary of topographic maps are provided below.

Historical topographic maps for the subject property and surrounding area were not readily available or practically reviewable.

4.5 Prior Reports

Athenica reviewed the below listed reports and work plan prepared by Athenica and documentation from the New York City Department of Environmental Protection (DEP). The prior reports and documentation by Athenica relate to the Site's E zoning designation for hazardous materials and efforts by Athenica to characterize and, if warranted, to remediate the Site to the satisfaction of the City of New York for the removal of the E zoning designation. Copies of Athenica's reports, excluding any appendices, are presented in Appendix H.

Phase I Environmental Site Assessment (Athenica, February 13, 2007):
Athenica conducted a Phase I ESA of the Site on behalf of the current owner, Mr. George Tsilogiannis, in February 2007. The Phase I ESA was conducted in general accordance with the current ASTM standard. The Phase ESA I Report revealed that the Site was historically occupied by a stone cutting facility, used car dealerships and an auto repair facility. According to the prior Phase I ESA, the following RECs were identified for the Site.

- Past use of the Site as a stone yard, an incinerator, and automobile repair,
- The Site's "E" designation for Hazardous materials, and
- Past and current use of surrounding properties for automobile repair.

Based on the findings of this Phase I Report, a focused Phase II Site Investigation was recommended to assess whether the Site soils and groundwater have been impacted by former past use of the Site and current and historical use of the surrounding properties.

Phase II Focused Subsurface Site Investigation Work Plan (Athenica, March 15, 2007):
Based on the findings of the Phase I ESA, Athenica prepared a work plan for the investigation of the Site and submitted the work plan to the DEP for its review and approval. The work plan proposed the installation of five (5) soil borings to groundwater or to the proposed construction depth at 15 feet below ground surface (bgs), whichever was shallower. Representative soil samples would be analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides and polychlorinated biphenyls (PCBs) and Target Analyte List (TAL) metals.

Phase II Site Investigation (Athenica, April 24, 2007):
Athenica performed a Phase II investigation in general accordance with its Work Plan dated March 15, 2007 and consisted of conducting a geophysical survey across the entire Site to identify petroleum underground storage tanks (USTs), advancing five (5) borings to 20 feet bgs, and collecting 10 soil samples for laboratory analysis (i.e. two soil samples per boring) for VOCs, SVOCs, pesticides/PCBs, and metals. Since groundwater was not encountered at the termination depth of the borings, no sampling of groundwater was performed. Analysis of soil samples did not reveal

concentrations of chemicals that were above the evaluation criteria at the time (i.e. NYSDEC's TAGM 4046). The findings of the Phase II Investigation were presented in Athenica's report dated April 24, 2007 and was subsequently submitted to the DEP for its review.

Groundwater Investigation (Athenica, March 6, 2008):
In response to DEP's comments of the Athenica's Phase II report, Athenica performed a groundwater investigation to determine if groundwater was present at a depth of 30 feet bgs or shallower at the Site, and, if present at this depth, to evaluate groundwater quality. Athenica installed three borings to 30 feet bgs and found no groundwater at this depth. The findings of the groundwater investigation was presented in Athenica's report dated March 6, 2008 and was subsequently submitted to the DEP for its review.

DEP correspondence dated April 18, 2008:
In its letter dated April 18, 2008, the DEP concluded that the Site has been characterized to its satisfaction with respect to hazardous materials and indicated that the "E" designation for Site would be removed on completion of work relating to noise and air.

4.6 Physical Setting Source

4.6.1 Topography

According to the United States Geological Society (USGS) Topographic Quadrangle for Brooklyn, the elevation of the Site is 100 feet above mean sea level (amsl).

4.6.2 Soils

The soils in the area of the Site are classified as Urban Land. This classification refers to soils that have been altered by urban development such as buildings and streets, where at least 50 percent of the surface is covered with asphalt, concrete or other impervious building material. Typically, these soils have not been mixed with other materials, and characteristics can only be determined by on-site subsurface investigation.

4.6.3 Geology

According to the EDR report, the following is the dominant composition of the bedrock for the Site:

Era: Mesozoic
Series: Cretaceous
System: Upper Cretaceous
Category: Stratified Sequence

4.6.4 Hydrology

The movement and direction of groundwater flow is influenced by many factors including, but not limited to, the aquifer's hydraulic characteristics, surface and bedrock topography, the presence of surface water bodies and the influence of pumping wells. Preliminary estimates of groundwater flow direction usually consider surface topography and the presence of nearby surface water bodies. Based on topography, the inferred groundwater flow direction for the Site is to the southwest towards the East River.

Local groundwater depth and flow direction can be influenced by additional factors (e.g., underground structures, seasonal fluctuations, soil and bedrock geology, and production wells), which are beyond the scope of this investigation. Groundwater flow direction data in Queens, New York is not available.

4.6.5 Flood Zones and Wetlands

A regulatory agency database obtained from EDR was reviewed and included available Flood Insurance Rate Maps (FIRMS) obtained from the Federal Emergency Management Agency (FEMA). The Site lies outside the 100-year and 500-year flood zones. The National wetland inventory does not indicate any wetlands on the Site.

5.0 SITE RECONNAISSANCE

Athenica's representative William Silveri conducted the Site reconnaissance on January 18, 2012. The Site reconnaissance consisted of observing conditions throughout accessible areas of the on-Site building, and around the perimeter of the Site. Photographs documenting conditions of the Site and surrounding area are included in Appendix B.

5.1 Interior & Exterior Description

The Site consists of a 100 by 120 foot vacant lot that is fully enclosed by a perimeter fence. The northernmost portion of the Site has been excavated to approximately 10 feet below grade surface (bgs). Boulders and various construction debris, such as fragments of brick and concrete, is present at the Site. Bags of refuse are also present throughout the Site. Athenica observed no evidence of petroleum staining of soils or odors in the immediate vicinity of the bags of refuse.

The north-adjacent property at 43-27 52nd Street consists of a one-story auto repair facility. The east-adjacent property at 52-19 Queens Boulevard consists of a one-story auto repair facility. The south adjacent property, across Queens Boulevard from the Site, is a cemetery. The west adjacent property at 51-29 Queens Boulevard, across 52nd Street from the Site, is a three-story building occupied by the Veterans of Foreign Wars.

5.2 Methodology and Limiting Conditions

The Site reconnaissance consisted of visual and/or physical observations of the Site and improvements; adjoining sites as viewed from the Site; and, the surrounding area based on visual observations made during the trip to and from the Site. Unimproved portions of the Site (if any) were observed along the perimeter and in a general grid pattern in safely accessible areas. Building exteriors (if any) were observed along the perimeter from the ground, unless described otherwise. Building interiors were observed as they were made safely accessible, unless described otherwise.

5.3 Hazardous Substance Use/Storage

Athenica did not find any evidence of hazardous substance use or storage at the Site.

5.4 Underground and Aboveground Storage Tanks

Athenica observed no evidence of any UST or AST at the Site or adjacent properties.

5.5 Other Petroleum Products

Athenica did not observe any other petroleum based chemicals at the Site at the time of the Site inspection.

5.6 Polychlorinated Biphenyls (PCBs)

PCBs are toxic coolants or lubricating oils used in some electrical transformers, light ballasts, electrical panels or other similar equipment. Athenica observed no potential PCB containing equipment or items at the Site.

5.7 Waste Generation, Storage and Disposal

The Site is a vacant lot and therefore generates no waste. Athenica observed bags of refuse on the ground across the Site. No evidence of petroleum staining of soils or odors were observed in the immediate vicinity of the bags of refuse.

5.8 Septic Systems

Athenica did not observe evidence of any on-Site septic system at the Site.

5.9 Storm Water Management/Surface Areas

Athenica did not observe any evidence of surface water, surface impoundments or retention ponds at the Site.

5.10 Wells

Athenica did not observe evidence of production wells or monitoring wells at the Site or in the vicinity of the Site.

6.0 INTERVIEWS

6.1 Interview Summary

Athenica interviewed the owner representative, Mr. Demetri Tsilogiannis. Other than the Site's E designation for hazardous materials, Mr. Tsilogiannis was not aware of any environmental cleanup liens or activity use limitations in place at the Site (see Section 4.5 for prior reports and documentation pertaining to Site's E designation).

7.0 ADDITIONAL SERVICES

7.1 Wetlands

Athenica did not observe any indicators of wetlands at the Site or on adjacent properties. According to the fresh water wetland map provided by the local municipality, wetlands do not exist at the Site. The EDR report also does not indicate the presence of wetlands on the Site.

7.2 Suspect Asbestos-Containing Material (ACM)

Athenica conducted a limited survey of the Site to identify building materials that potential could contain asbestos (i.e. suspect asbestos-containing materials or ACMs). Athenica observed no suspect ACMs at the Site.

7.3 Radon

The USEPA defines radon as a colorless, odorless, radioactive gas that comes from the natural decay of uranium that is found in nearly all soils. It typically moves through the ground to the air above and into homes and other buildings through cracks and openings in the foundation.

The NYSDOH maintains a database of radon test results on a local and county level. The average radon level for this area of Queens in living areas and basements are < 0.620 PicoCuries per liter (pCi/L) and 0.970 pCi/L, respectively. These values are well below the USEPA "action guideline" of 4.0 pCi/L in residential dwellings. The USEPA has not designated a recommended action level for radon in buildings. Athenica concludes that radon gas does not represent an environmental concern for the Site, and no further investigation is recommended. Athenica did not perform testing for radon gas at the Site as a part of this assessment.

7.4 Lead Based Paint

Athenica conducted a visual survey to identify any damage (i.e., peeling, flaking, and blistering) to painted surfaces within any on-site building. Since there are no on-Site structures, there is no significant concerns for lead based paint at the Site.

7.5 Mold Observation

Athenica provided a limited visual observation at the time of the Phase I ESA walk through for the presence of mold for the Site. Since there are no on-Site structures, there are no significant concerns for mold at the Site.

8.0 FINDINGS AND OPINIONS

The following summarizes known or suspected environmental conditions in connection with the Site based on information collected during the ESA. For each condition, Athenica provides an opinion of the impact on the Site based on an evaluation of the results of record reviews, site reconnaissance and interviews as discussed in this report. Athenica also provides a conclusion and rationale regarding whether or not an environmental condition is a recognized environmental condition.

No evidence of suspected or known RECs were revealed during the completion of this Phase I Environmental Site Assessment.

9.0 CONCLUSIONS

Athenica Environmental Services has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527 of {Property Address} in the Borough of {Property City}, New York (Block {Block}, Lots {Lot}). Any exceptions to, or deletions from, this practice are described in Section 10 of this report. Based on the findings of the Phase I ESA, this assessment has revealed no evidence of RECs in connection with the Site and concludes that no further evaluation of the Site is warranted with respect to soil and groundwater conditions at the Site. Removal of the "E" designation for the Site will require submittal of additional documentation to the City of New York indicating that the new construction will satisfy the city's requirements for air quality and noise.

10.0 DEVIATIONS AND DATA GAPS

The following data gaps apply to the performance of this Phase I ESA:

- File searches of the NYSDEC and USEPA records requires a written Freedom of Information Act (FOIA) request to obtain access to screen for the presence of, and gain access to, environmental records. Such information was deemed not to be reasonably ascertainable within the time constraints of this Phase I ESA.
- File Search of the Fire Department of New York City was not conducted due to time constraints of this Phase I ESA.

Appendix A

Site Location Map

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

SITE LOCATION MAP

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR:
DATE: 01/19/2012
DRAWN BY: William Silveri
PROJ. #: 12-0031

Appendix B.

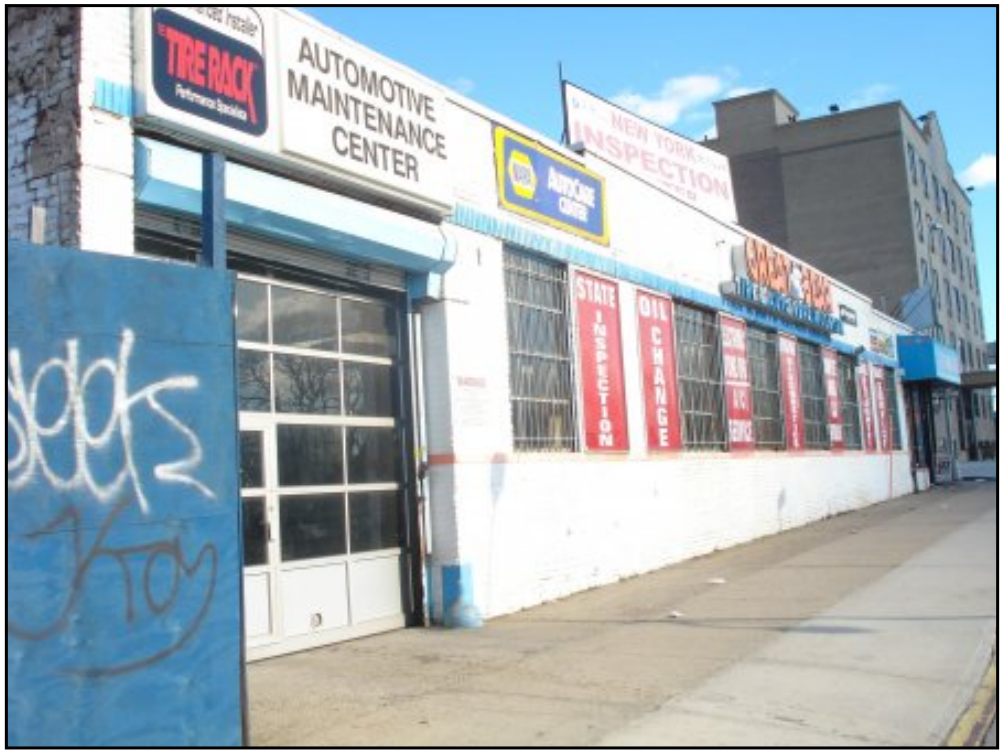
Site Photographs

Project Site as viewed from southwest (corner of 52nd Street and Queens Boulevard).

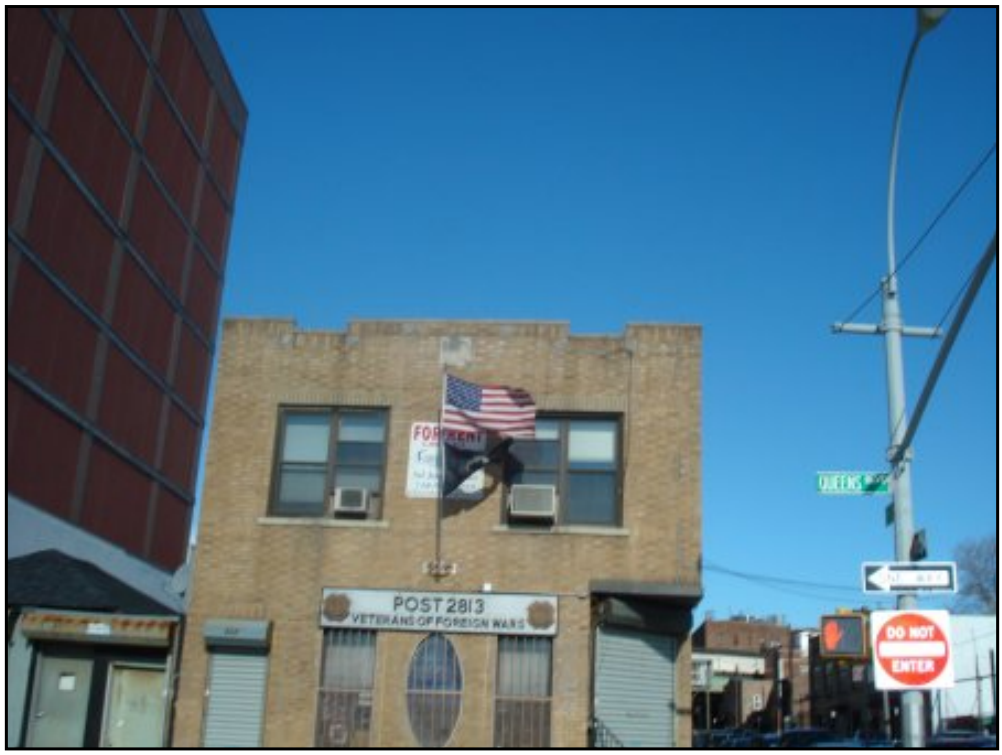
The Site consists of a vacant lot in which the northernmost portion appears to have been excavated.

Bags of refuse are present on the Site.

Boulders and other debris are located at the Site.



An auto repair facility occupies the east adjacent property.



A VFW building occupies the west-adjacent property, across 52nd Street from the Site.

An auto repair facility occupies the adjacent property to the north.

Appendix C.

EDR Regulatory Database Report

No documents have been associated with this appendix.

Appendix D.

Historical Sanborn Maps

The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

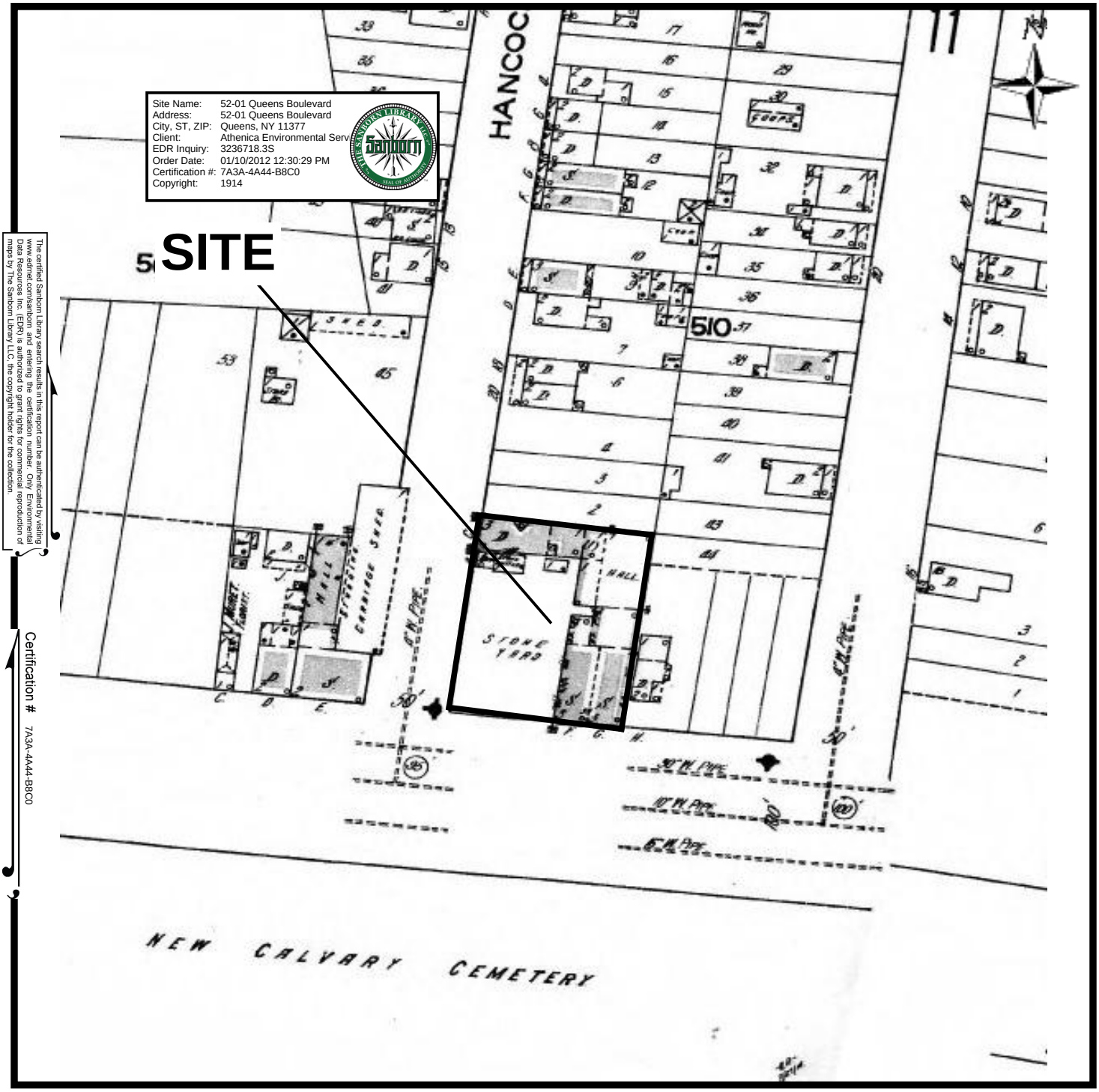
Certification # 7A3A-4A44-B8C0

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1902 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

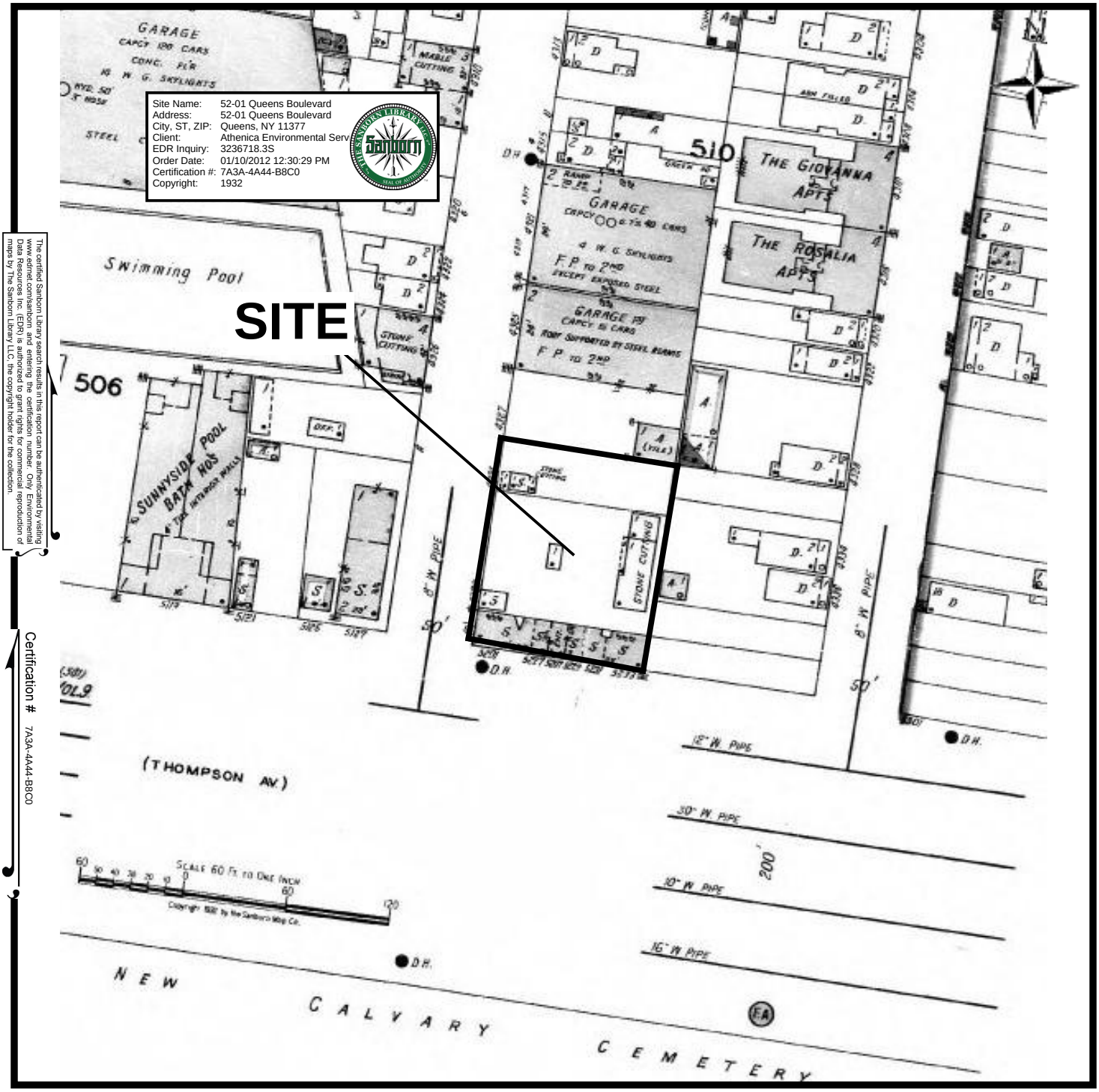
Certification # 7A3A-4A44-B8C0

1914 Sanborn Map

52-01 Queens Boulevard
Queens, NY

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**

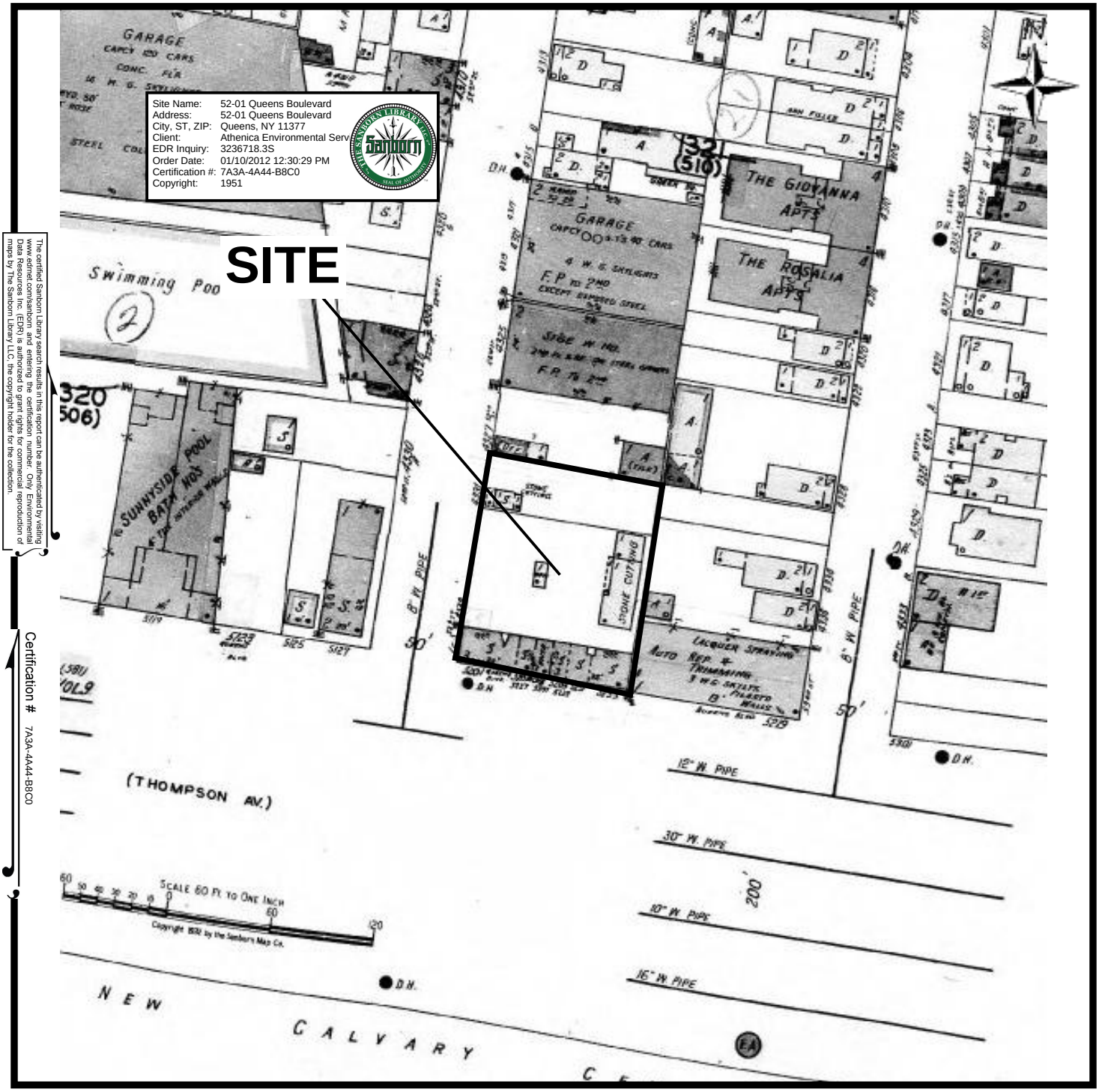


ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1932 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

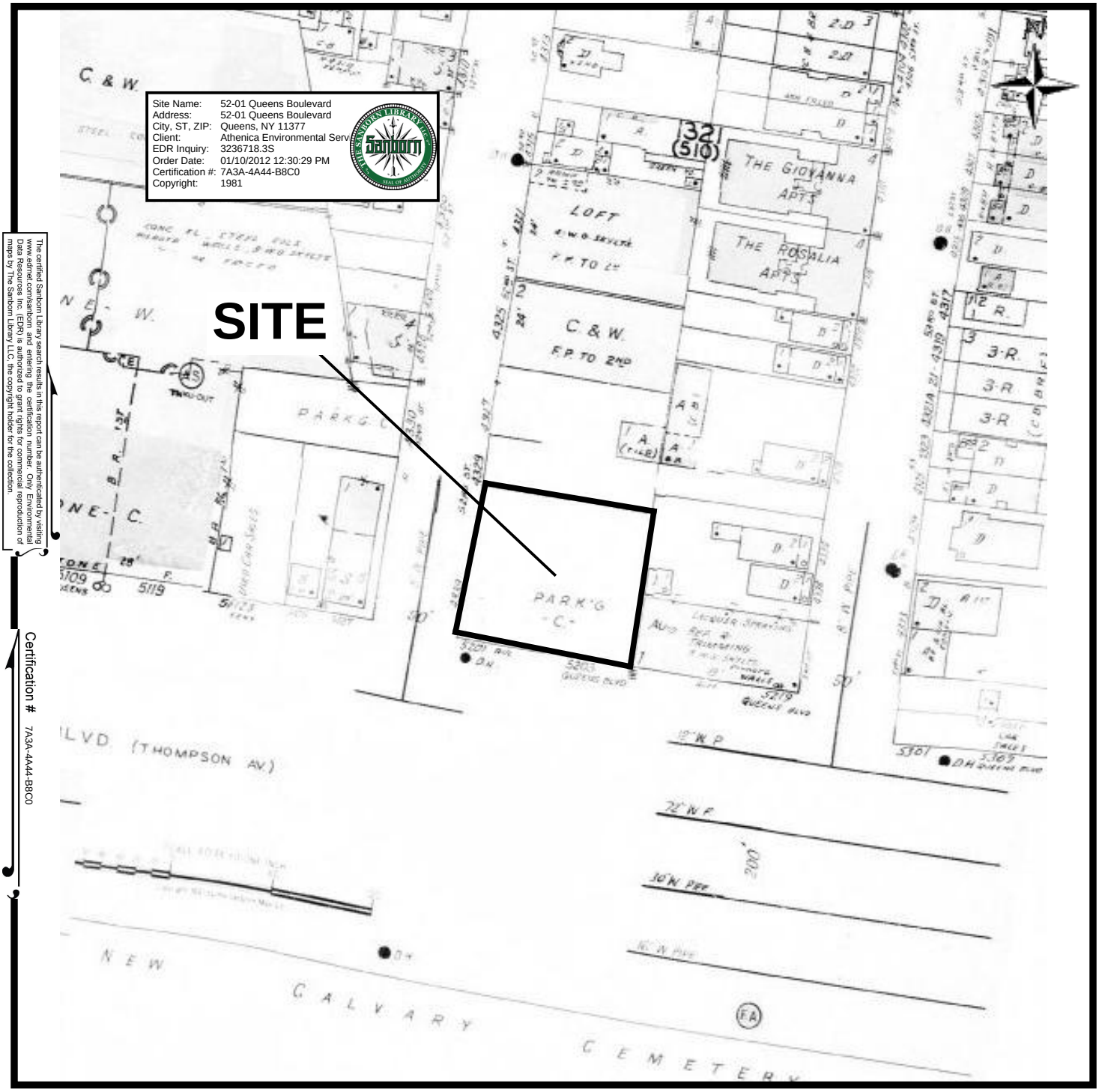
Certification # 7A3A-4A44-B8C0

1951 Sanborn Map

52-01 Queens Boulevard
Queens, NY

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

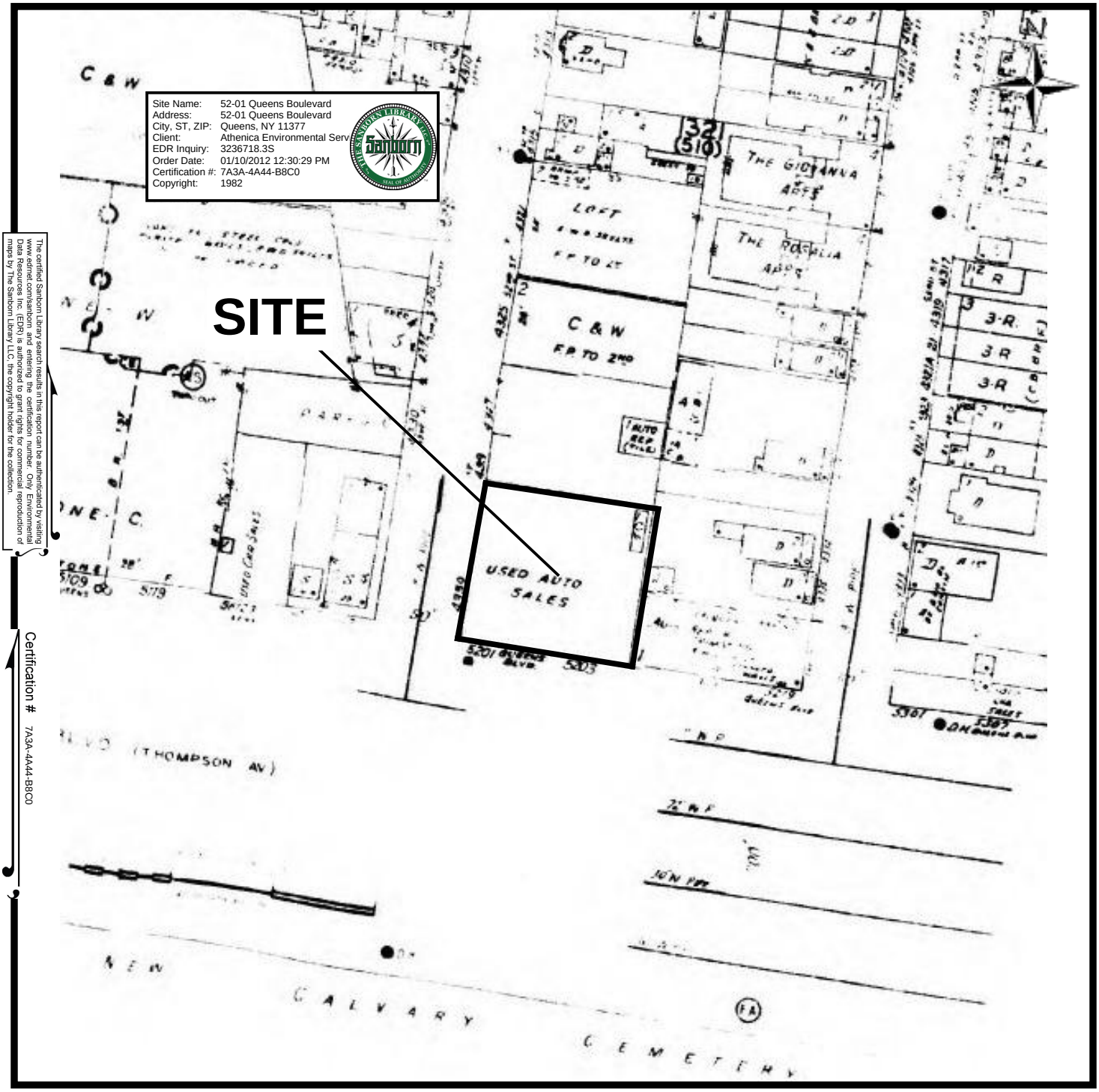
Certification # 7A3A-4A44-B8C0

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1981 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

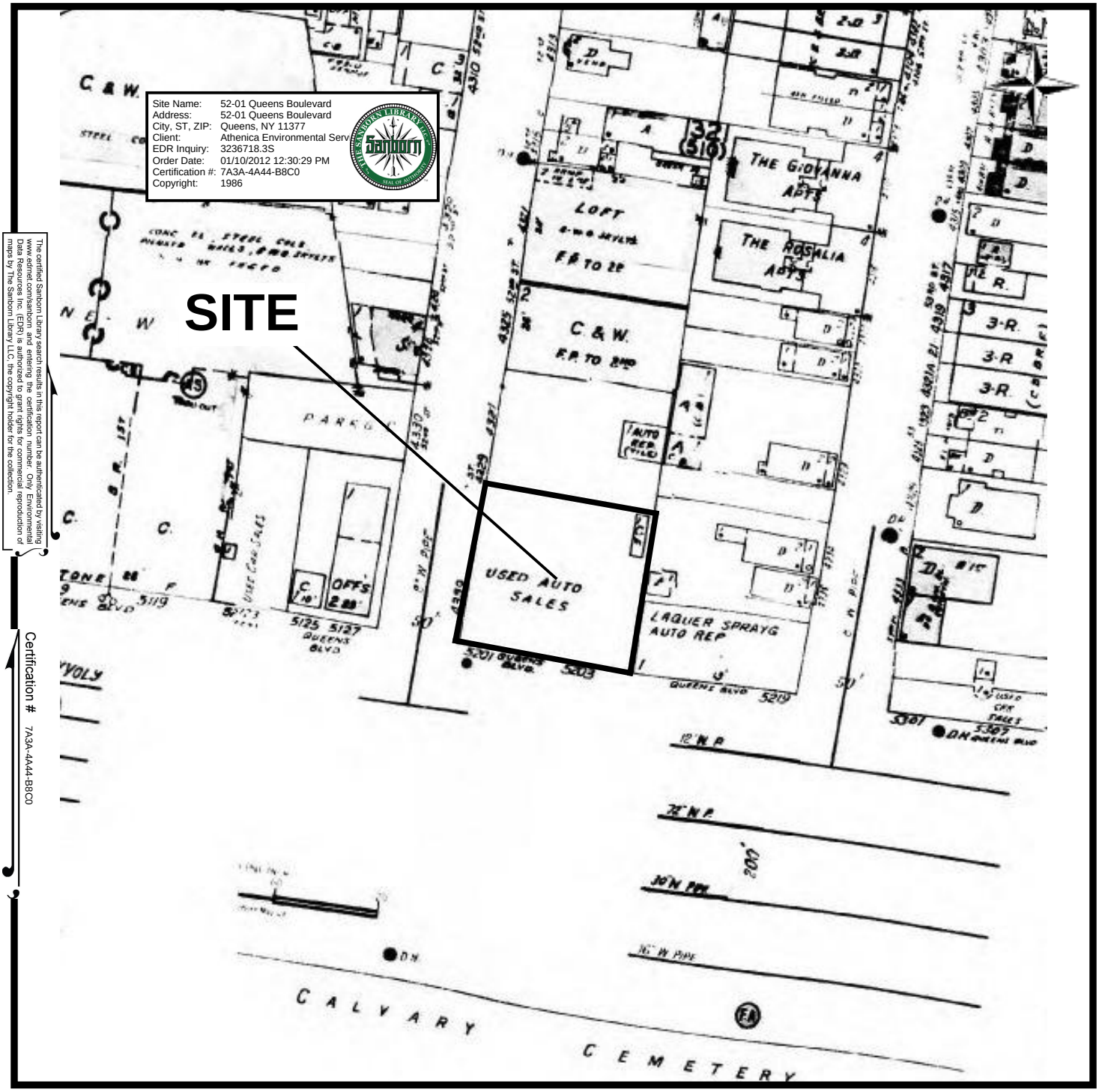
Certification # 7A3A-4A44-B8C0

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1982 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

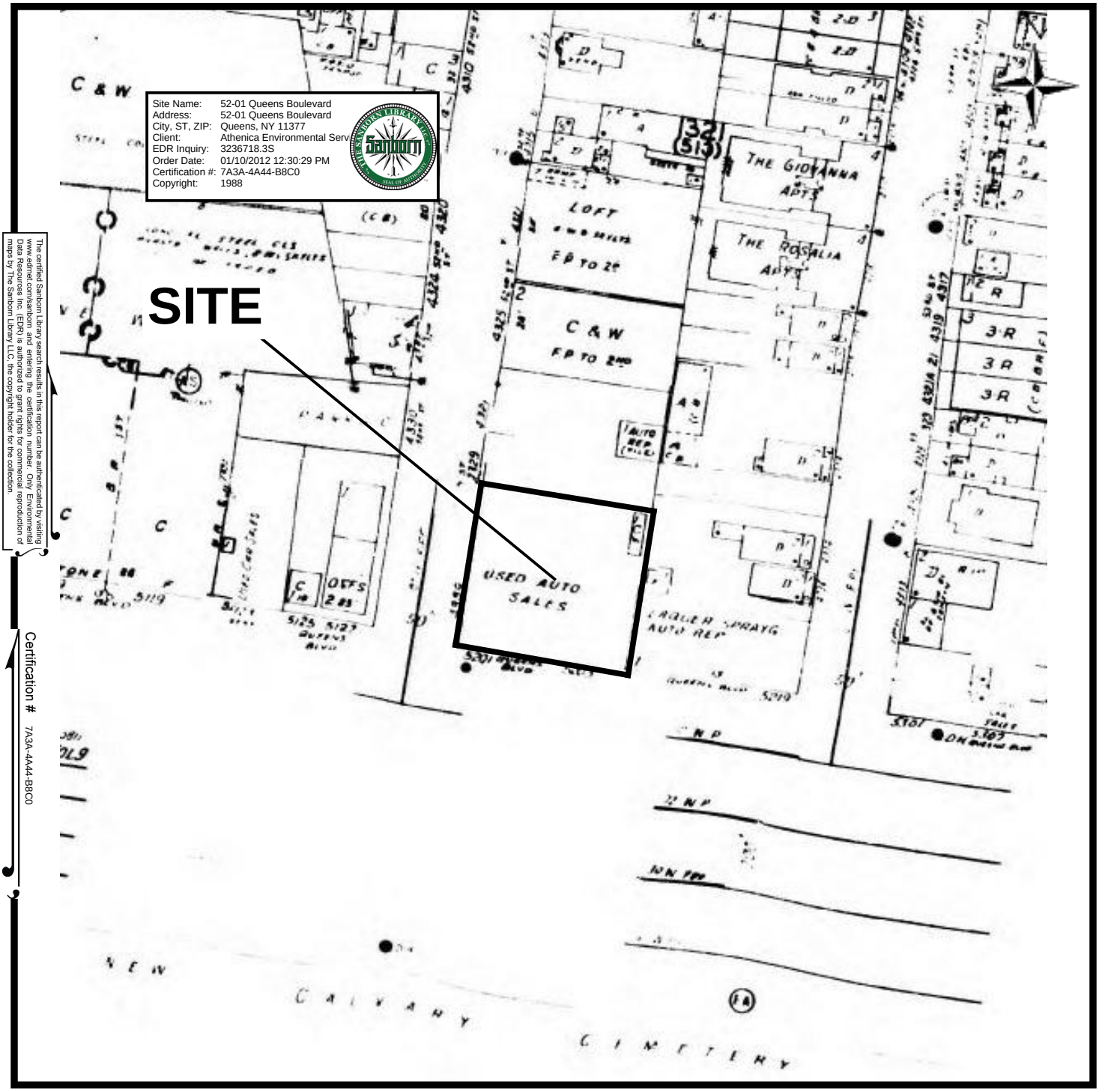
Certification # 7A3A-4A44-B8C0

1986 Sanborn Map

52-01 Queens Boulevard
Queens, NY

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

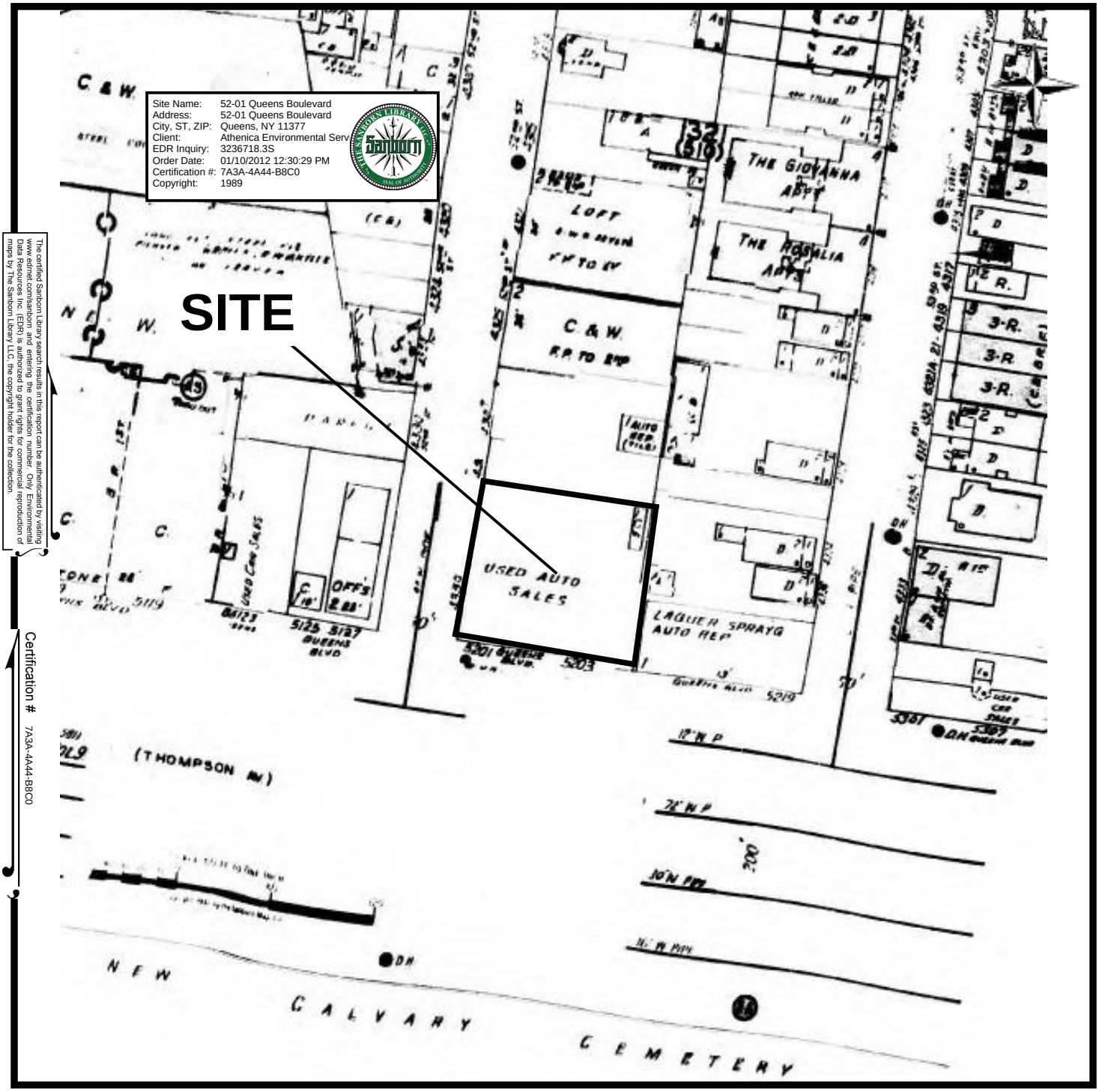
Certification # 7A3A-4A44-B8C0

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1988 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

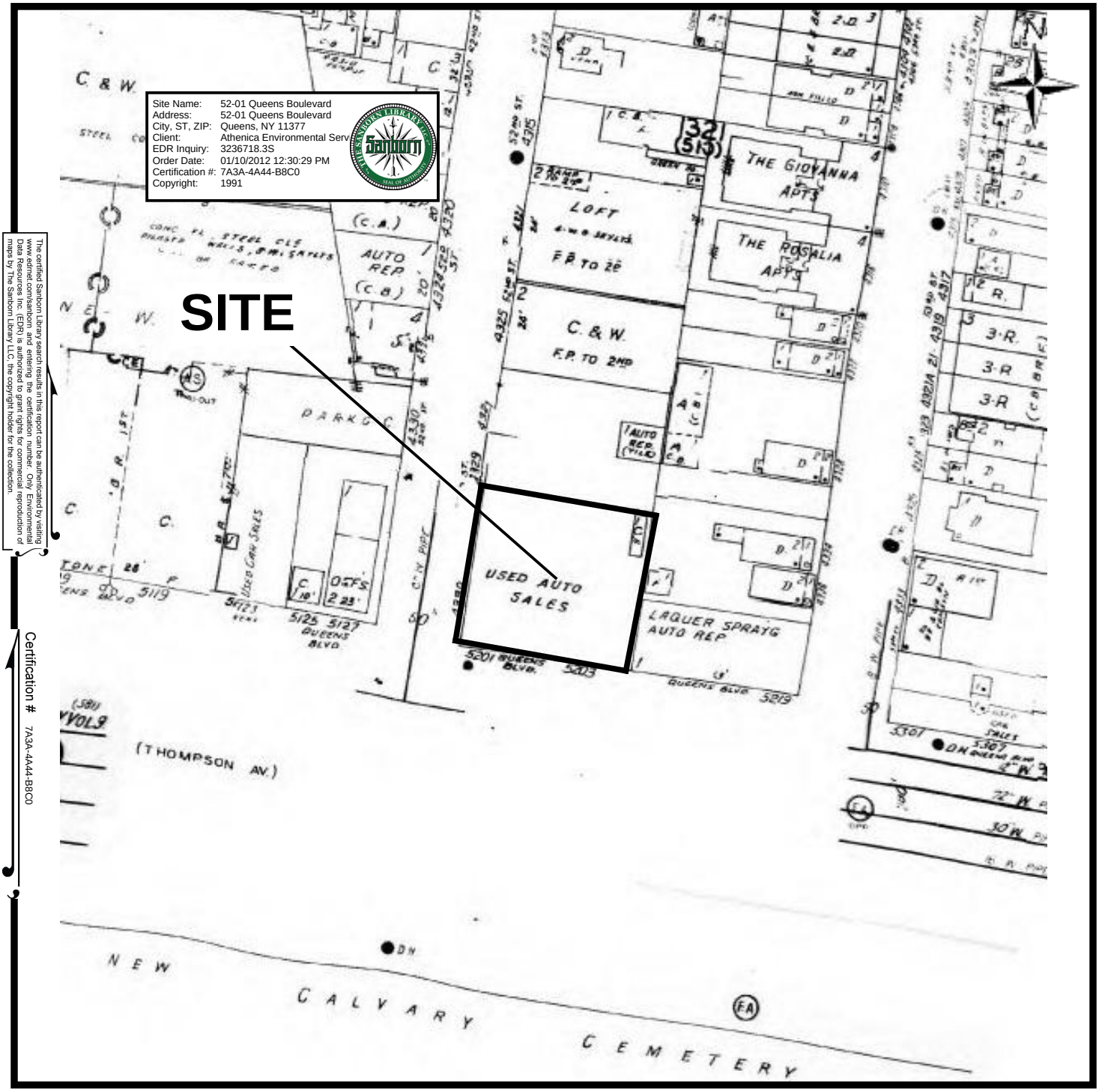
Certification # 7A3A-4A44-B8C0

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1989 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**

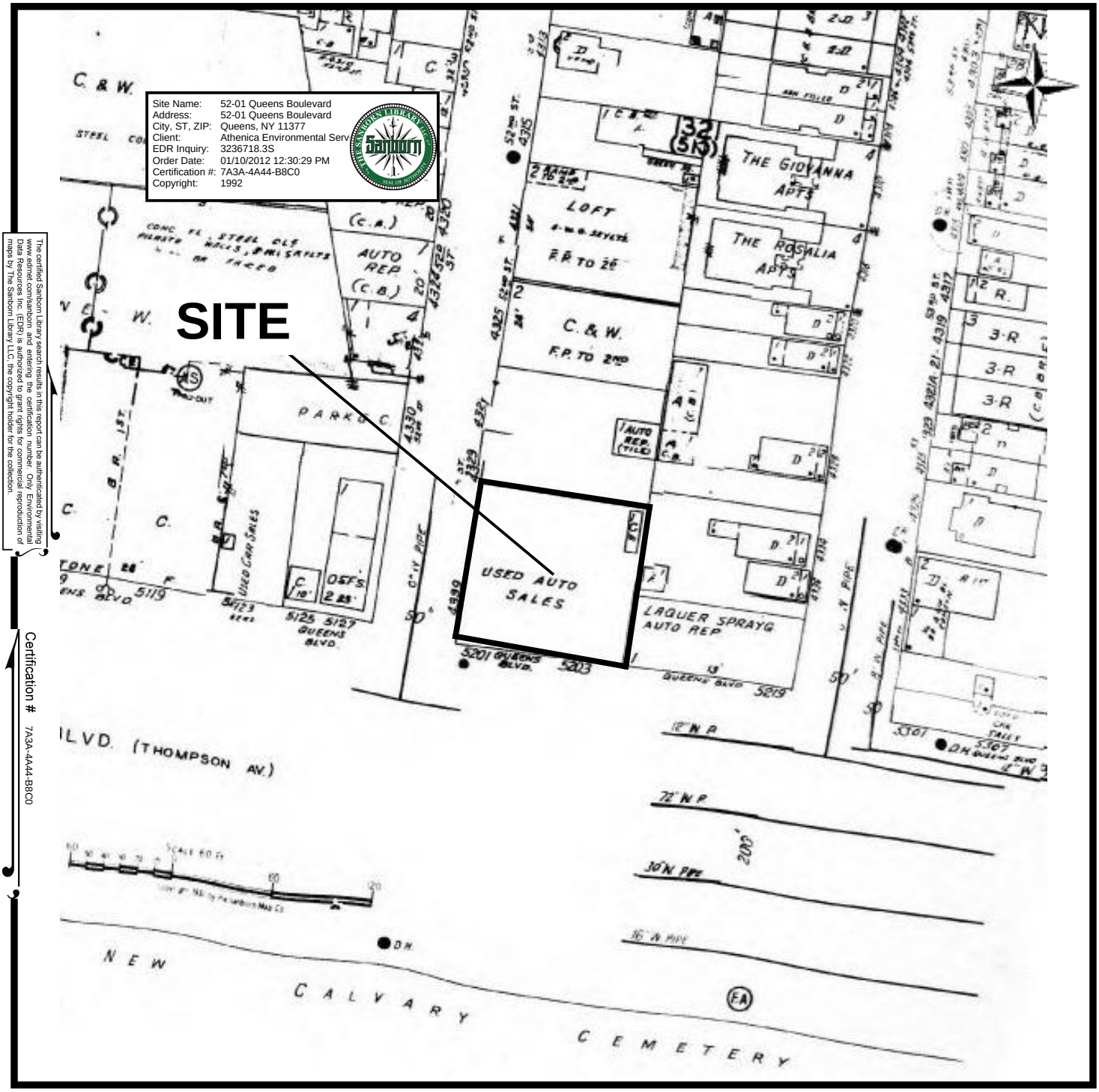


ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1991 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

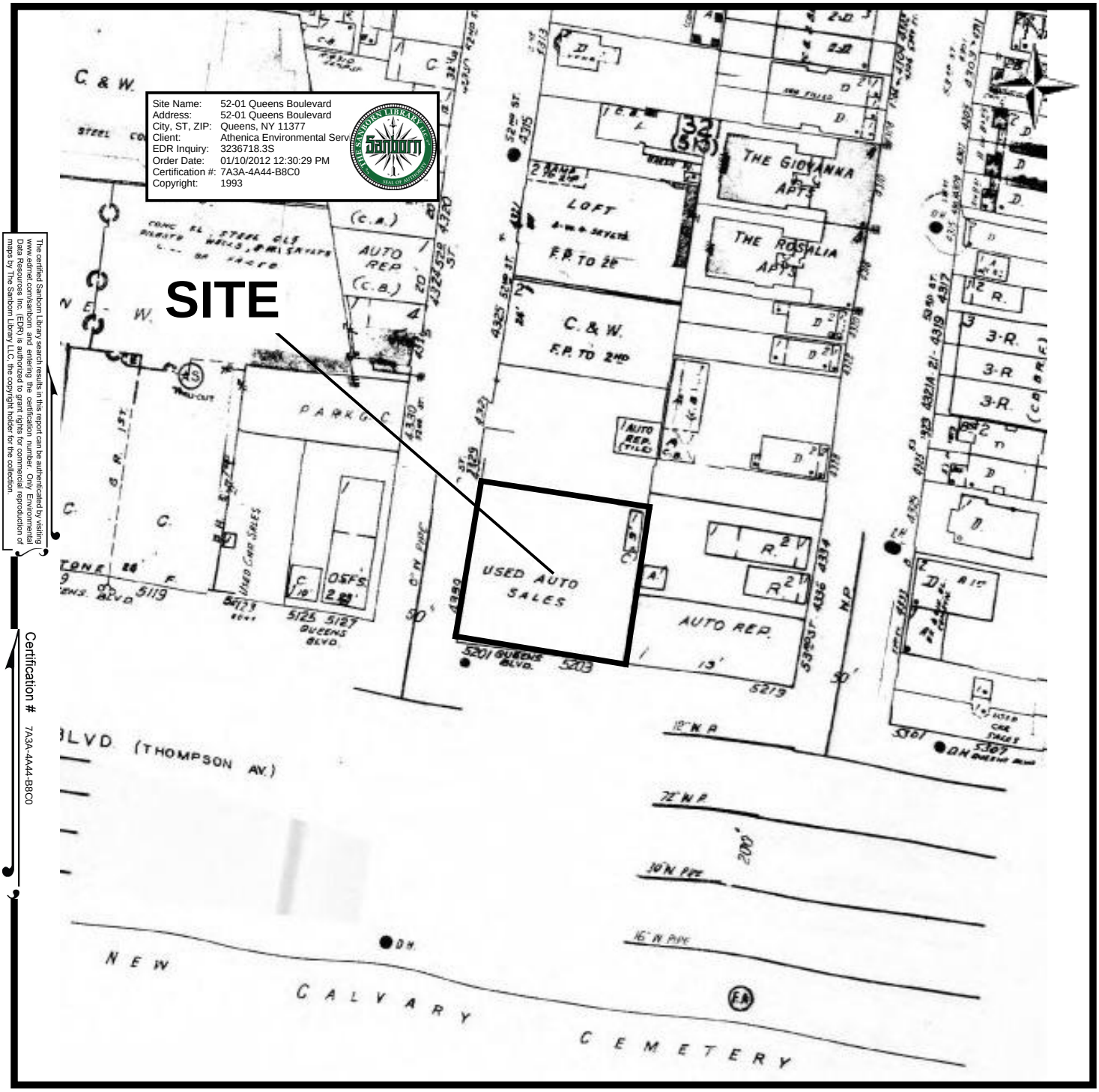
Certification # 7A3A-4A44-B8C0

1992 Sanborn Map

52-01 Queens Boulevard
Queens, NY

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

PREPARED FOR: ALMA Bank
PROJ. MGR: **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

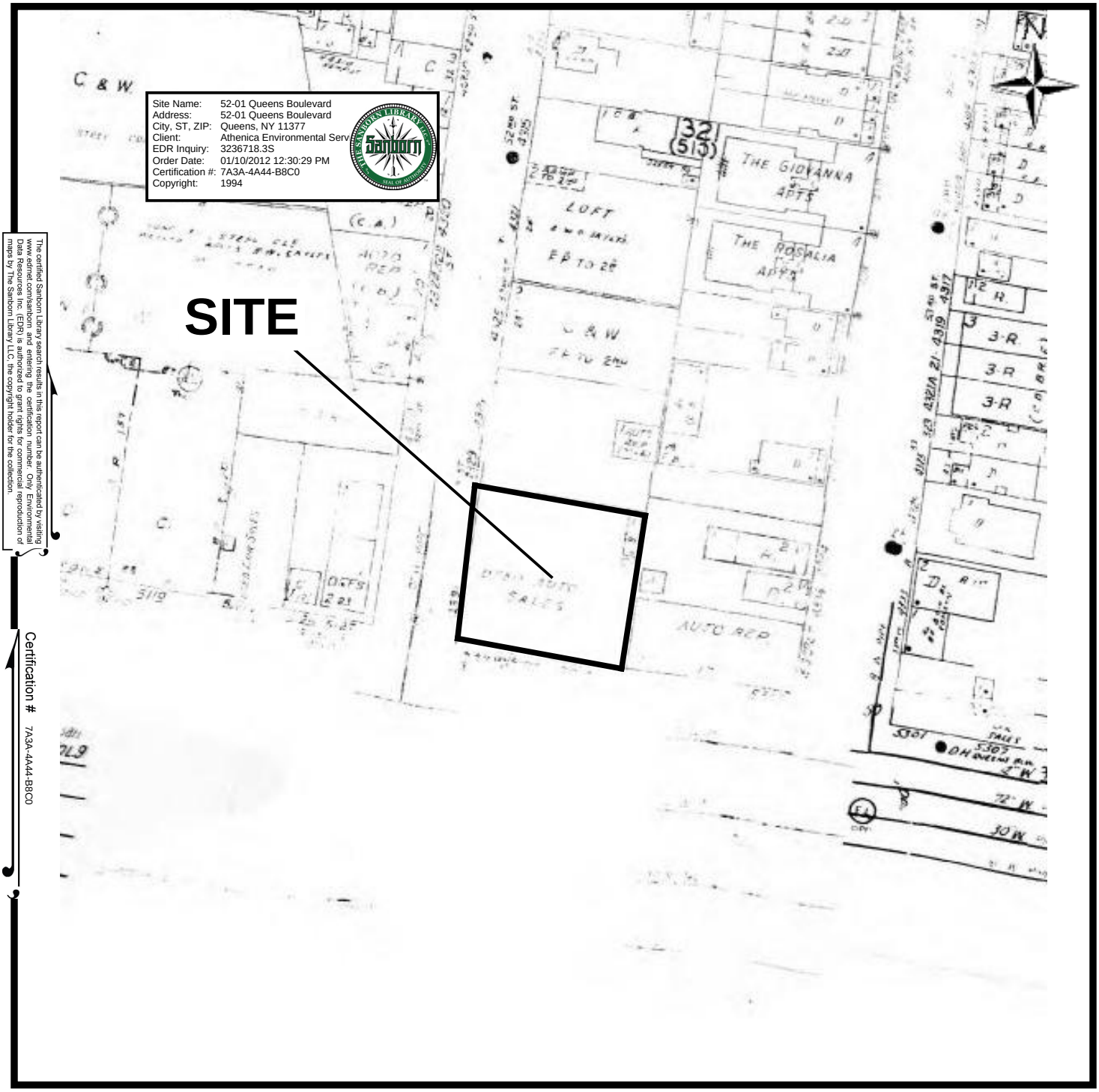
Certification # 7A3A-4A44-B8C0

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1993 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

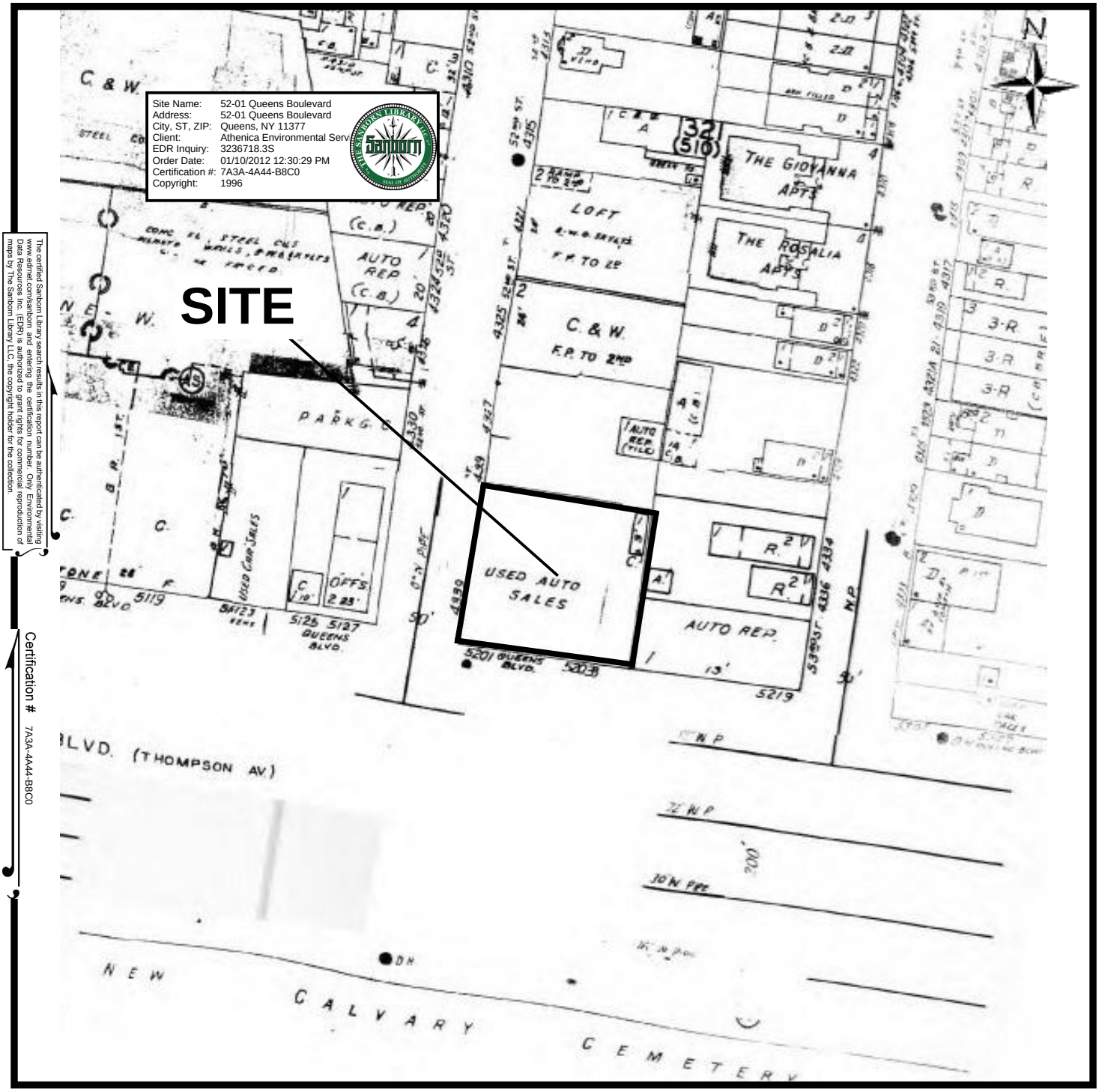
Certification # 7A3A-4A44-B8C0

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1994 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**

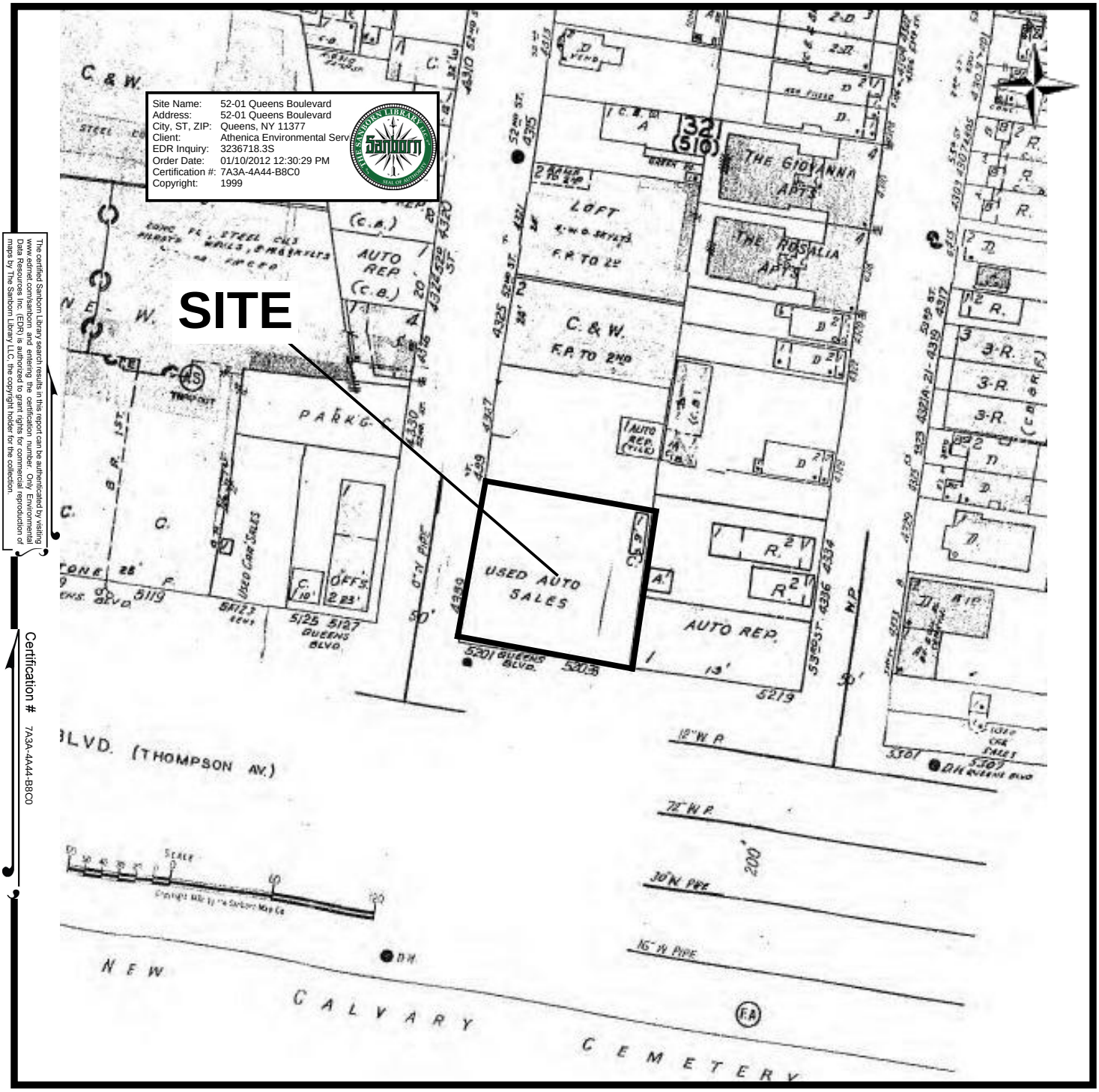


ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1996 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**

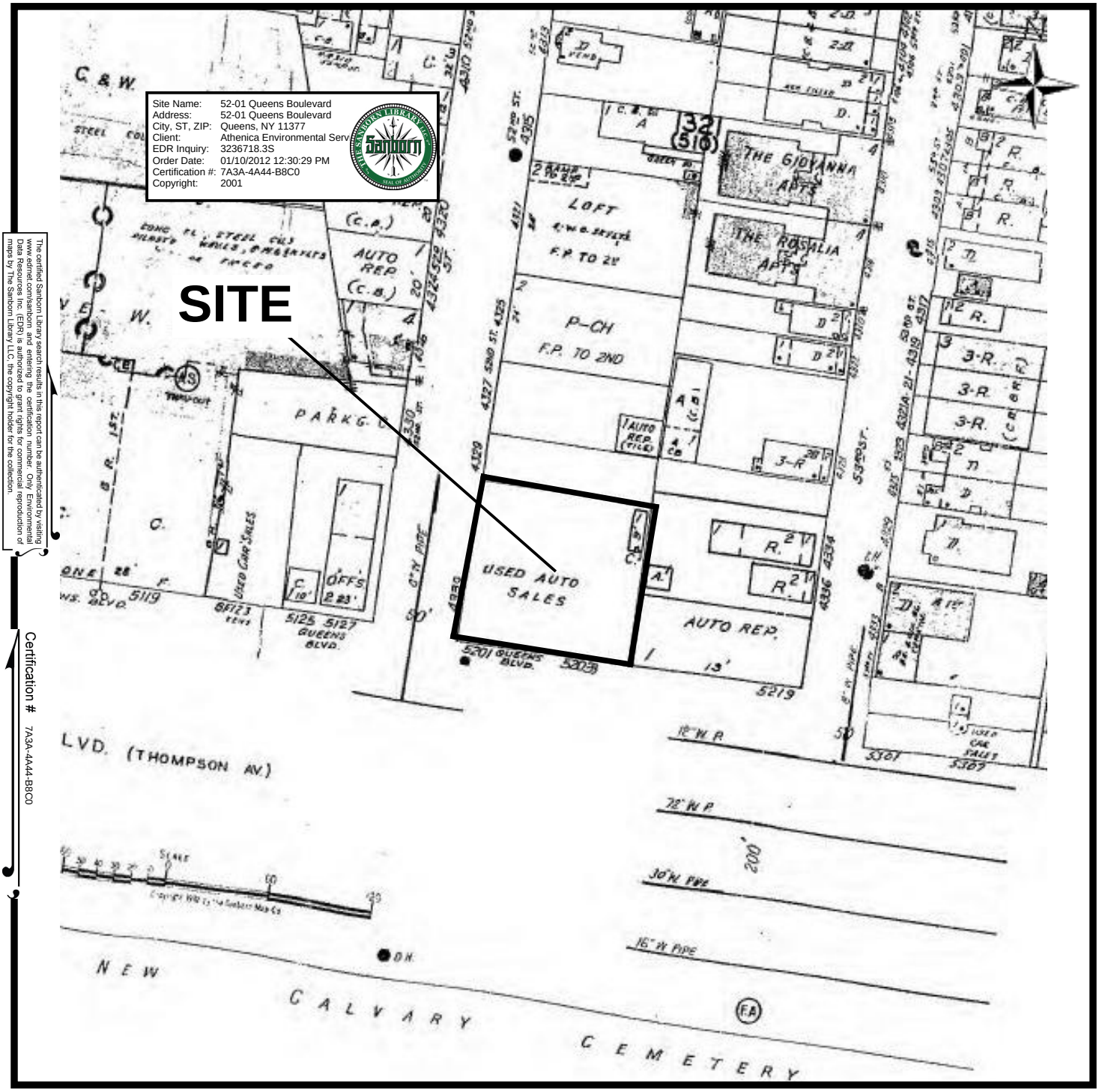


ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1999 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

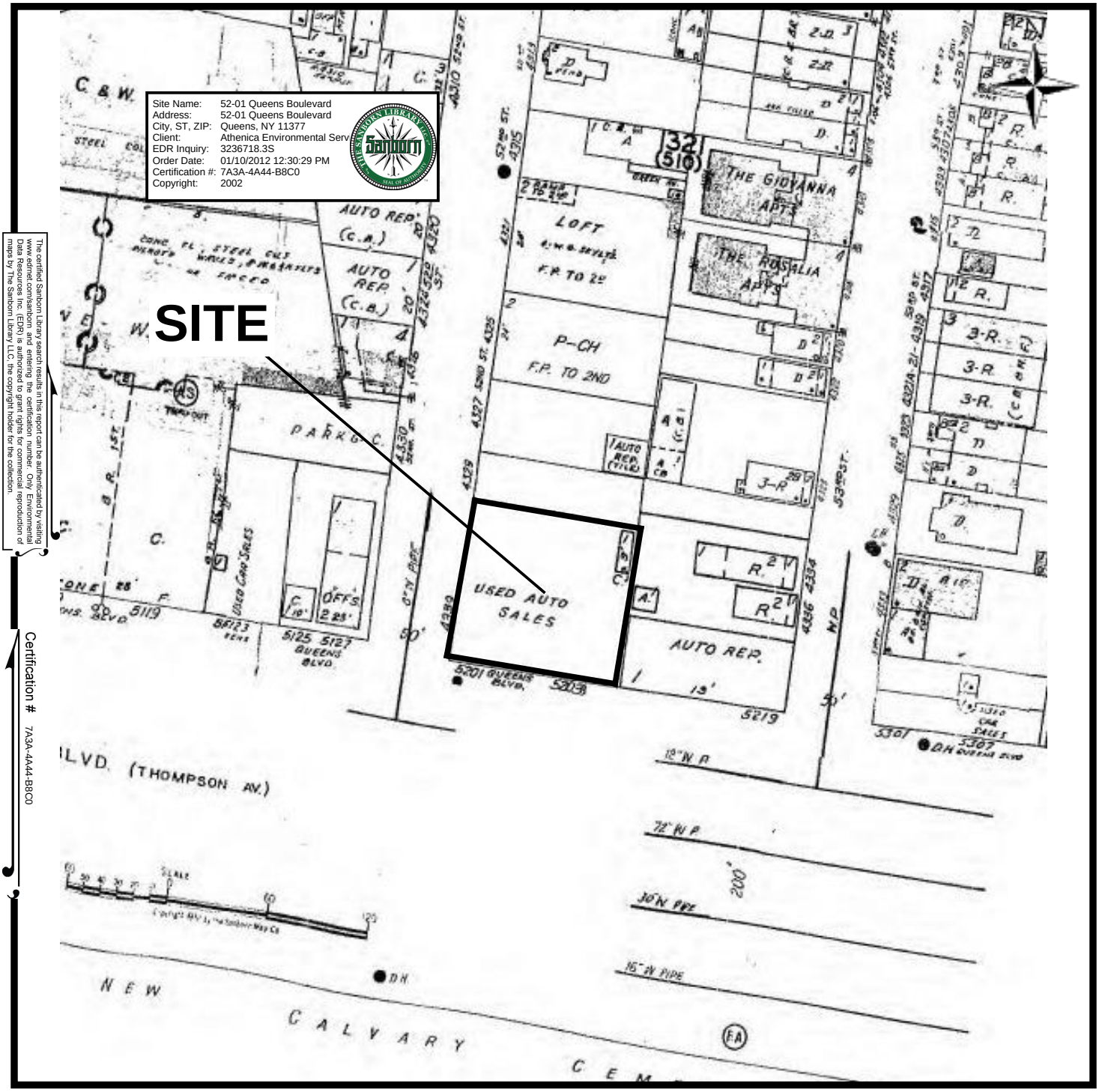
Certification # 7A3A-4A44-B8C0

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

2001 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

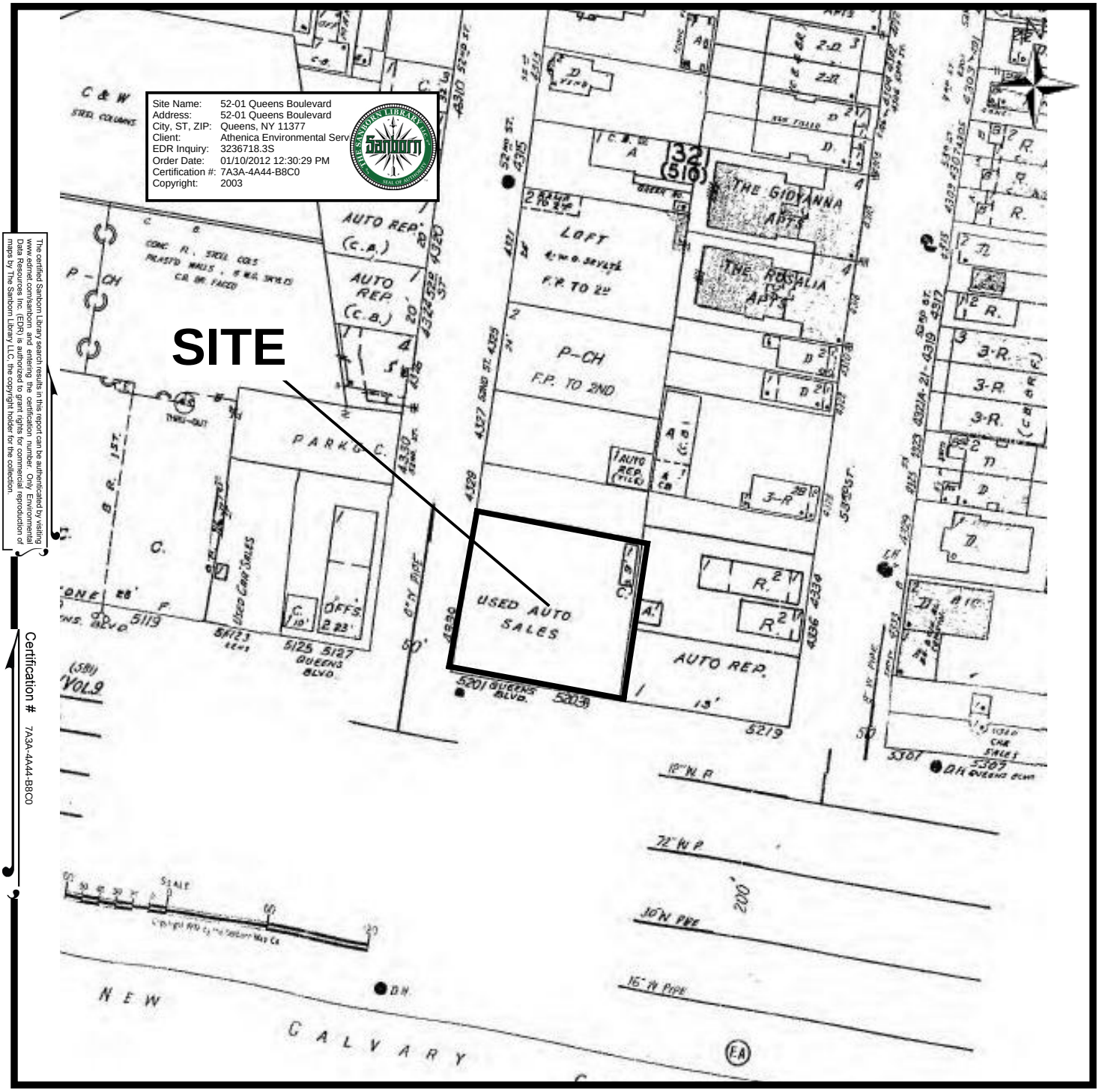
Certification # 7A3A-4A44-B8C0

2002 Sanborn Map

52-01 Queens Boulevard
Queens, NY

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

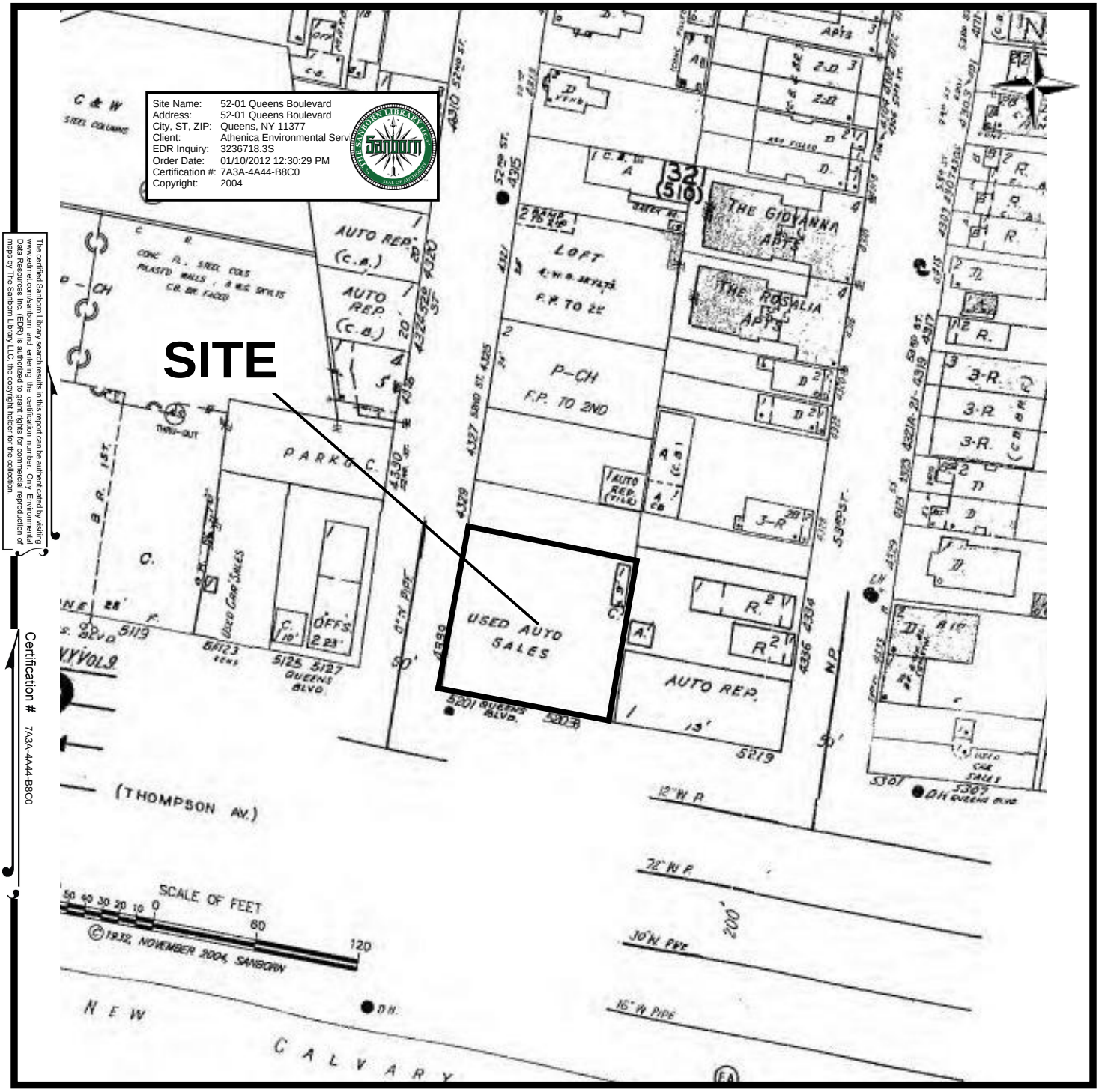
Certification # 7A3A-4A44-B8C0

2003 Sanborn Map

52-01 Queens Boulevard
Queens, NY

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

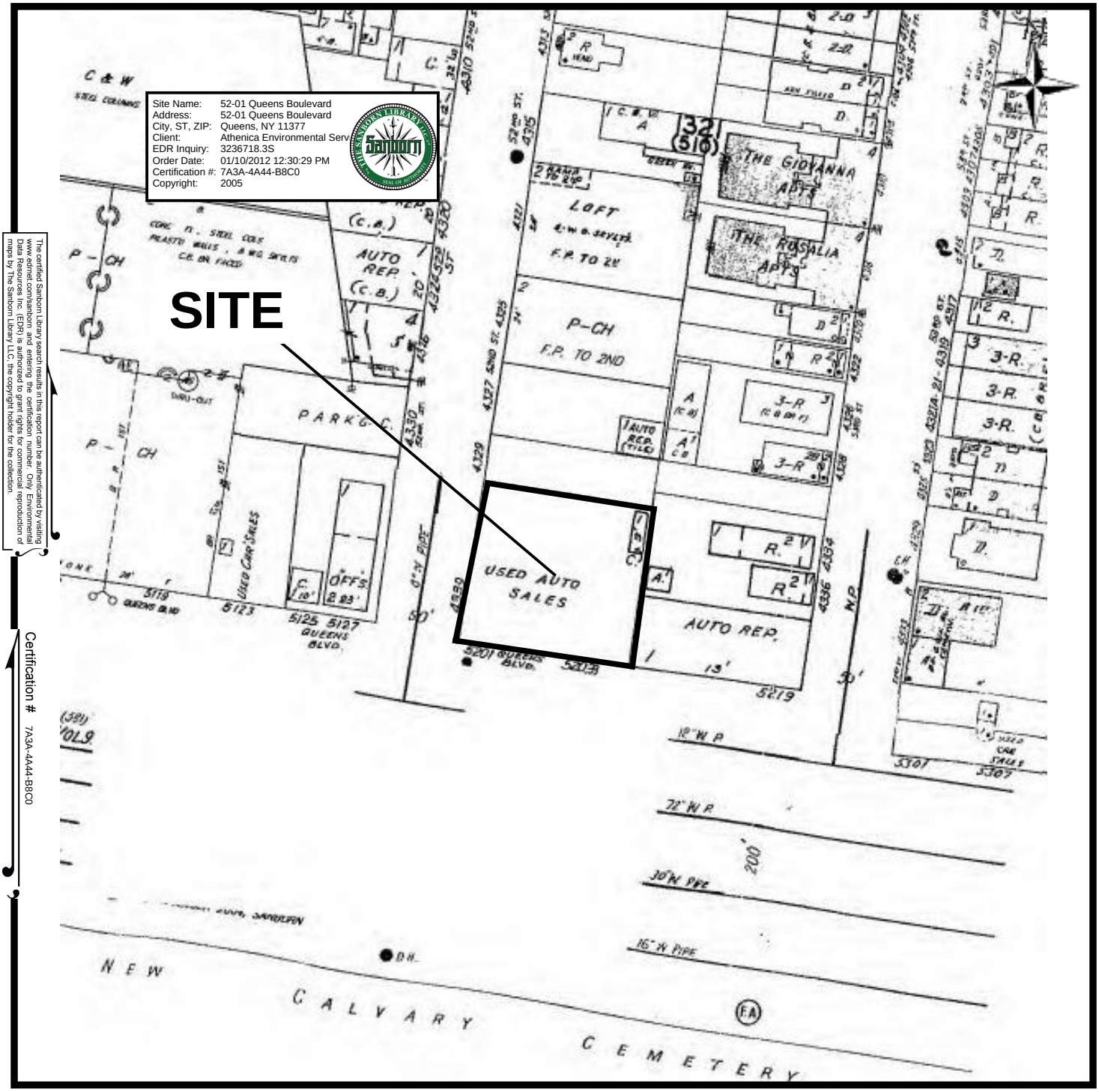
Certification # 7A3A-4A44-B8C0

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

2004 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

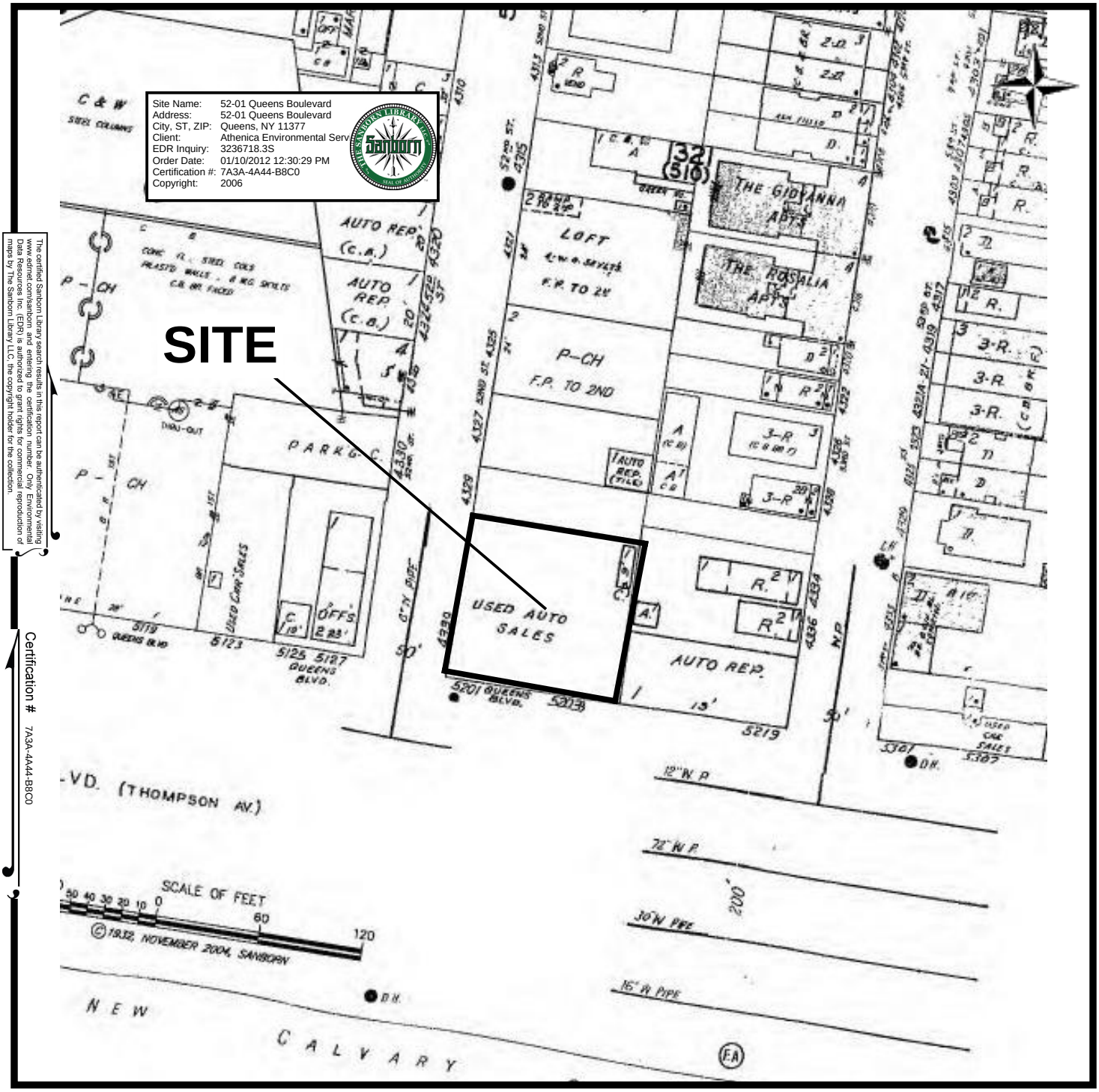
Certification # 7A3A-4A44-B8C0

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

2005 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # 7A3A-4A44-B8C0

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

2006 Sanborn Map

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: William Silveri **DATE: 01/18/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**

Appendix E.

Historical City Directory

No documents have been associated with this appendix.

Appendix F.

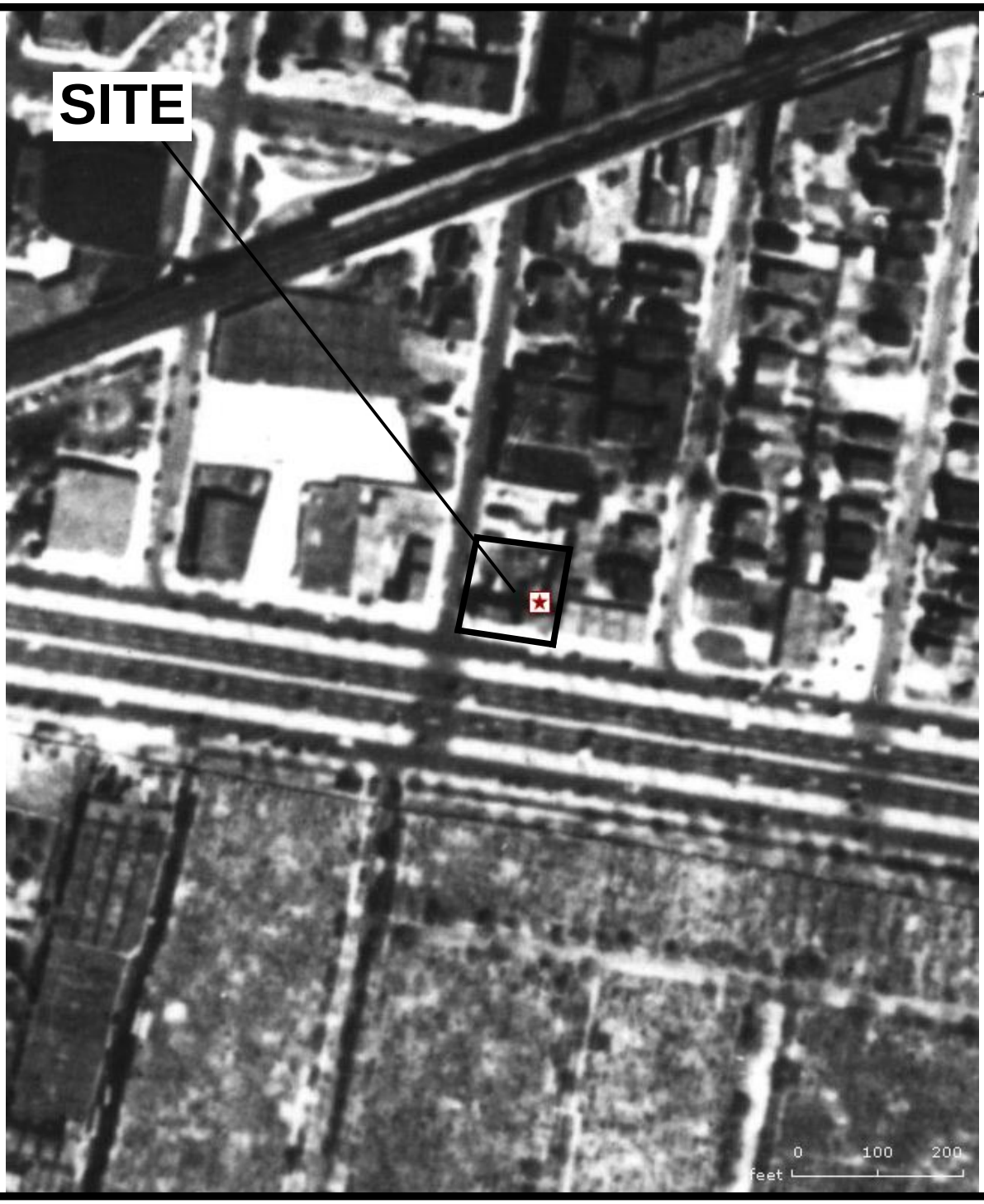
Historical Aerial Photographs & Other Historical Information

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1924 Aerial Photo

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: Spiro Dongaris **DATE: 01/20/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**



ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1951 Aerial Photo

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: Spiro Dongaris **DATE: 01/20/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

1996 Aerial Photo

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: Spiro Dongaris **DATE: 01/20/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**

N

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

2006 Aerial Photo

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: Spiro Dongaris **DATE: 01/20/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

2008 Aerial Photo

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: Spiro Dongaris **DATE: 01/20/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

2010 Aerial Photo

52-01 Queens Boulevard
Queens, NY

PREPARED FOR: ALMA Bank
PROJ. MGR: Spiro Dongaris **DATE: 01/20/2012**
DRAWN BY: William Silveri **PROJ. #: 12-0031**

Appendix G.

Local Records

NYC Buildings

NYC.gov always open

CLICK HERE TO SIGN UP FOR BUILDINGS NEWS

NYC Department of Buildings

Property Profile Overview

52-01 QUEENS BOULEVARD QUEENS 11377 BIN# 4852785

QUEENS BOULEVARD 52-01 - 52-01

Health Area	: 910	Tax Block	: 1321
Census Tract	: 253.02	Tax Lot	: 1
Community Board	: 402	Condo	: NO
		Vacant	: YES

View DCP Addresses... Browse Block

View Zoning Documents | View Challenge Results | View Certificates of Occupancy

Cross Street(s):	52 STREET, 53 STREET		
DOB Special Place Name:			
DOB Building Remarks:	52-01 QUEENS BLVD=TENT LOT 1		
Landmark Status:		**Special Status:**	N/A
Local Law:	NO	**Loft Law:**	NO
SRO Restricted:	NO	**TA Restricted:**	NO
UB Restricted:	NO		
Little 'E' Restricted:	HAZMAT/NOISE/AIR	**Grandfathered Sign:**	NO
Legal Adult Use:	NO	**City Owned:**	NO
Additional BINs for Building:	NONE		

Special District: UNKNOWN

This property is not located in an area that may be affected by Tidal Wetlands, Freshwater Wetlands, or Coastal Erosion Hazard Area. Click here for more information

Department of Finance Building Classification: D6-ELEVATOR APT

Please Note: The Department of Finance's building classification information shows a building's tax status, which may not be the same as the legal use of the structure. To determine the legal use of a structure, research the records of the Department of Buildings.

	Total	Open
Complaints	0	0
Violations-DOB	0	0
Violations-ECB (DOB)	0	0
Jobs/Filings	5	
ARA / LAA Jobs	0	
Total Jobs	5	
Total Actions	0	

OR Enter Action Type:

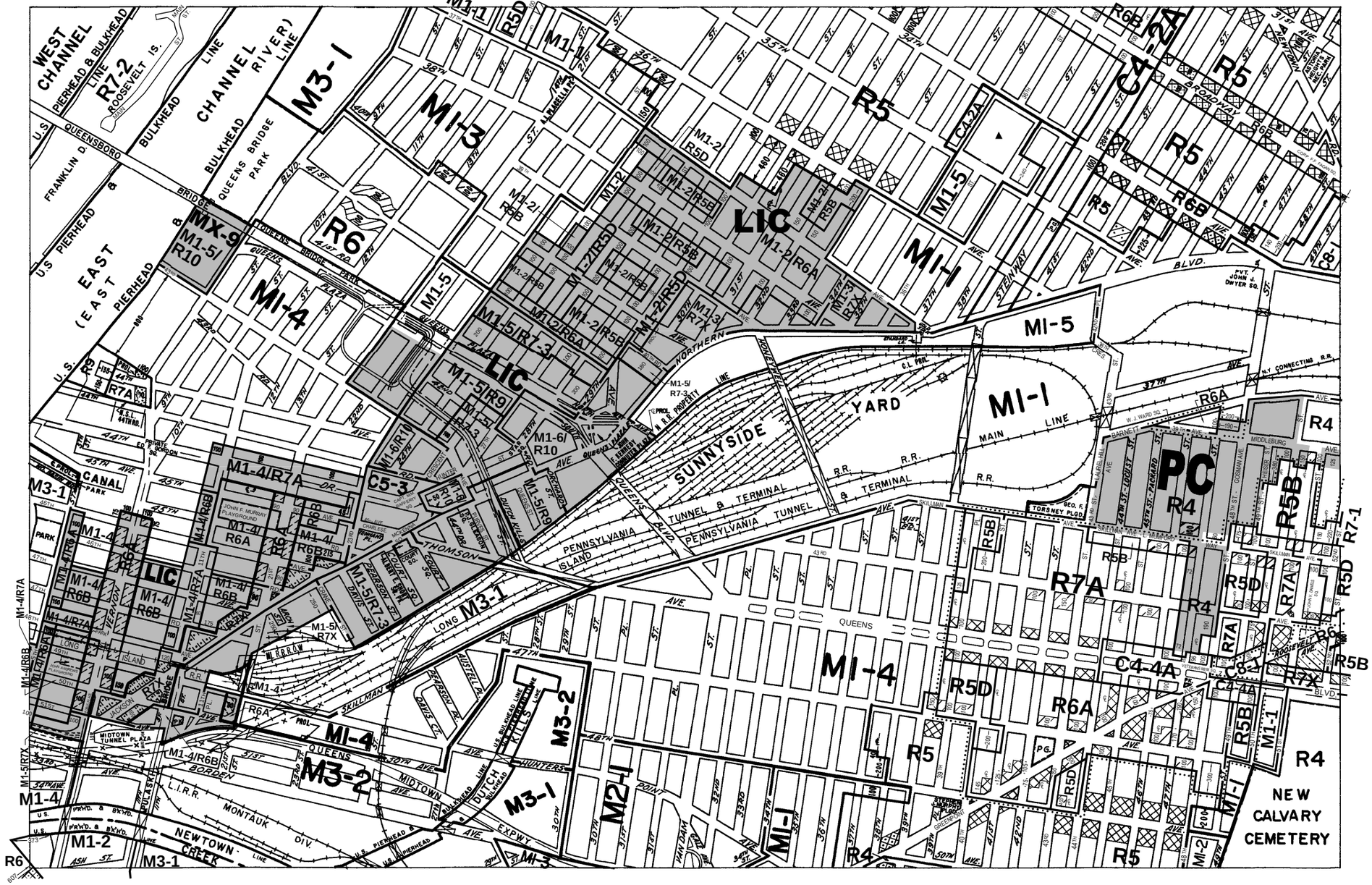
OR Select from List:

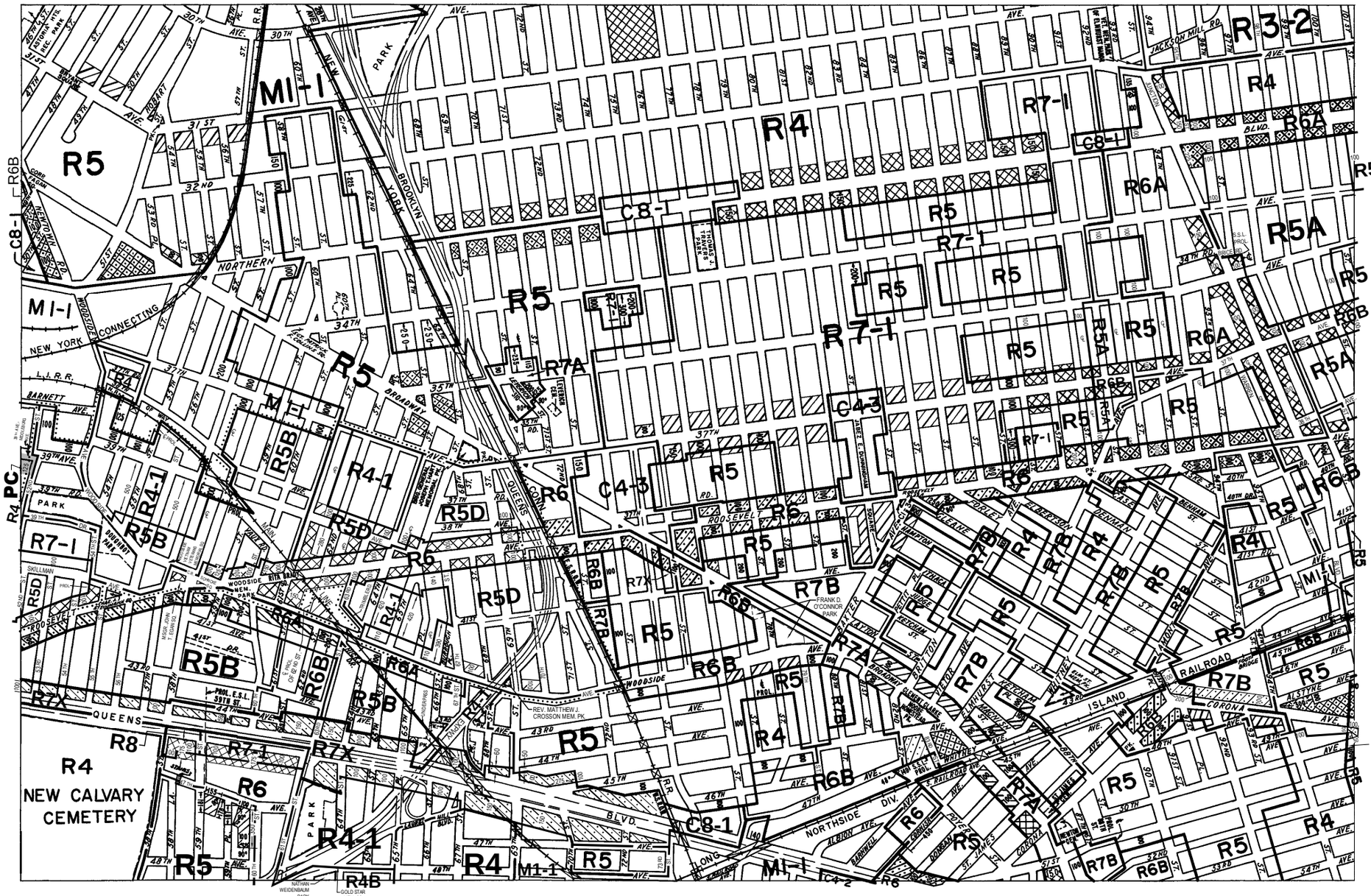
Select...

AND Show Actions

- Elevator Records
- Electrical Applications
- Permits In-Process / Issued
- Illuminated Signs Annual Permits
- Plumbing Inspections
- Open Plumbing Jobs / Work Types
- Facades
- Marquee Annual Permits
- Boiler Records
- DEP Boiler Information
- Crane Information
- After Hours Variance Permits

If you have any questions please review these Frequently Asked Questions, the Glossary, or call the 311 Citizen Service Center by dialing 311 or (212) NEW YORK outside of New York City.


WEST CHANNEL
EAST (EAST PIERHEAD & BULKHEAD) CHANNEL
RIVER LINE
PIERHEAD & BULKHEAD LINE
BULKHEAD LINE
ROOSEVELT IS.
QUEENSBORO BRIDGE
QUEENS BRIDGE PARK
QUEENS BRIDGE PARK BLVD.
FRANKLIN D. ROOSEVELT
U.S. PIERHEAD & BULKHEAD LINE
U.S. PIERHEAD LINE
CANAL
LONG ISLAND
NEWTOWN CREEK
L.I.R.R. MONTAUK DIV.
SUNNYSIDE YARD
MAIN LINE
TUNNEL & TERMINAL
PENNSYLVANIA
R.R.
QUEENS PLAZA
QUEENSBORO PLAZA
NORTHERN BLVD.
QUEENS BLVD.
SKILLMAN AVE.
THOMSON AVE.
BORDEN AVE.
MIDTOWN TUNNEL PLAZA
HUNTERS POINT
JACKSON AVE.
VERNON BLVD.
JOHN F. MURRAY PLAYGROUND
PUBLIC SCHOOL 92
PUBLIC SCHOOL 78
PUBLIC SCHOOL 151
PUBLIC SCHOOL 150
PUBLIC SCHOOL 1
PUBLIC SCHOOL 2
PUBLIC SCHOOL 11
PUBLIC SCHOOL 12
PUBLIC SCHOOL 13
PUBLIC SCHOOL 14
PUBLIC SCHOOL 15
PUBLIC SCHOOL 16
PUBLIC SCHOOL 17
PUBLIC SCHOOL 18
PUBLIC SCHOOL 19
PUBLIC SCHOOL 20
PUBLIC SCHOOL 21
PUBLIC SCHOOL 22
PUBLIC SCHOOL 23
PUBLIC SCHOOL



600 0 600 1200 1800 FEET

C1-1 C1-2 C1-3 C1-4 C1-5 C2-1 C2-2 C2-3 C2-4 C2-5

NOTE: Where no dimensions for zoning district boundaries appear on the zoning maps, such dimensions are determined in Article VII, Chapter 6 (Location of District Boundaries) of the Zoning Resolution.

ZONING MAP

THE NEW YORK CITY PLANNING COMMISSION

Major Zoning Classifications:

The number(s) and/or letter(s) that follows an R, C or M District designation indicates use, bulk and other controls as described in the text of the Zoning Resolution.

R – RESIDENTIAL DISTRICT

C – COMMERCIAL DISTRICT

M – MANUFACTURING DISTRICT

SPECIAL PURPOSE DISTRICT
The letter(s) within the shaded area designates the special purpose district as described in the text of the Zoning Resolution.

AREA(S) REZONED

Effective Date(s) of Rezoning:

07–28–2011 C 110207 ZMQ

Special Requirements:

For a list of lots subject to CEQR environmental requirements, see APPENDIX C.

For a list of lots subject to "D" restrictive declarations, see APPENDIX D.

For Inclusionary Housing designated areas on this map, see APPENDIX F.

N

MAP KEY

9a	9c	10a
9b	**9d**	10b
13a	13c	14a

© Copyrighted by the City of New York

ZONING MAP **9d**

NOTE: Zoning information as shown on this map is subject to change. For the most up-to-date zoning information for this map, visit the Zoning section of the Department of City Planning website: **www.nyc.gov/planning** or contact the Zoning Information Desk at (212) 720-3291.

New York City Department of Finance
Office of the City Register

HELP
[Click help for additional instructions]
Selecting a help option will open new window

Current Search Criteria:

Borough: QUEENS
Block: 1321
Lot: 1
Date Range: To Current Date
Document Class: DEEDS AND OTHER CONVEYANCES

Search Results By Parcel Identifier

Records 1 - 10 << previous next >> Max Rows 10 [Search Options] [New BBL Search] [Edit Current Search] [View Tax Map] **[Print Index]**

View	Reel/Pg/File	CRFN	Lot	Partial	Recorded / Filed	Document Type	Pages	Party1	Party2	Party 3/ Other	More Party 1/2 Names	Corrected/ Remarks	Doc Amount
DET IMG		2008000107953	1	ENTIRE LOT	3/17/2008 4:21:52 PM	DEED	4	A. LONG LLC	52-01 LLC				3,000,000
DET IMG		2007000299670	1	ENTIRE LOT	6/8/2007 5:28:22 PM	DEED	4	52-01 QUEENS BLVD. WOODSIDE, LLC	52-01 LLC		✓		5,000,000
DET IMG		2006000111745	1	ENTIRE LOT	2/27/2006 3:22:09 PM	DEED	5	ETTINGER, ARI	52-01 QUEENS BLVD. WOODSIDE,LLC		✓		3,500,000
DET IMG		2006000111743	1	ENTIRE LOT	2/27/2006 3:22:07 PM	DEED	5	GOLDENBERG, FORTUNA	GOLDENBERG, FORTUNA		✓		0
DET IMG	6460/379		1	ENTIRE LOT	7/2/2002	DEED	4	ETYNGER, ARI	GOLDENBERG, FORTUNA		✓		0
DET IMG	4345/1100		1	ENTIRE LOT	5/21/1996	DEED	4	FASOLINO, WILLIAM (EXEC/OF)	ETYNGER, ARI		✓		0
DET IMG	4181/2227		1	ENTIRE LOT	8/29/1995	DEED	2	FASOLINO, DOMENIC R. (EXEC/OF)	MARINO, JOHN		✓		0
DET IMG	4174/1701		1	ENTIRE LOT	8/16/1995	DEED	2	FASOLINO, DOMENIC R. (EX/OF)	MARINO, JOHN		✓		0
DET IMG	4173/907		1	ENTIRE LOT	8/14/1995	DEED	4	FASOLINO, DOMENIC R (EX/OF)	MARINO, JOHN		✓		0
DET IMG	3538/2179		1	ENTIRE LOT	4/2/1993	DEED	2	FASOLINO, DOMINICK	FASOLINO, ANTHONY		✓		0

Search Options | New Parcel Identifier Search | Edit Current Search | View Tax Map

New York City Department of Finance
Office of the City Register

HELP

[Click help for additional instructions] Selecting a help option will open new window

Current Search Criteria:

Borough: QUEENS
Block: 1321
Lot: 1
Date Range: To Current Date
Document Class: DEEDS AND OTHER CONVEYANCES

Search Results By Parcel Identifier

Records 11 - 11 << previous next >> Max Rows 10 [Search Options] [New BBL Search] [Edit Current Search] [View Tax Map] [**Print Index**]

View	Reel/Pg/File	CRFN	Lot	Partial	Recorded / Filed	Document Type	Pages	Party1	Party2	Party 3/ Other	More Party 1/2 Names	Corrected/ Remarks	Doc Amount
DET IMG	773/724		1	ENTIRE LOT	7/24/1974	DEED	2	MCNAMARA FLORENCE	OWEN MCNAMARA JR		✓		0

Search Options | New Parcel Identifier Search | Edit Current Search | View Tax Map

Appendix H.

Freedom of Information Act (FOIA) Request and Responses

No documents have been associated with this appendix.

Appendix I.

Prior Report Review

ATHENICA
ENVIRONMENTAL SERVICES INC.
45-09 Greenpoint Avenue
Long Island City, N.Y. 11104
Tel (718) 784-7490
Fax (718)784-4085

PHASE I
ENVIRONMENTAL SITE ASSESSMENT

COMMERCIAL PROPERTY
52-01 QUEENS BOULEVARD
QUEENS, NEW YORK 11377

ATHENICA PROJECT NUMBER
07-0032

DATED

FEBRUARY 13, 2007

PREPARED FOR:

MR. GEORGE TSILOGIANNIS
11 MIDDLE NECK ROAD, SUITE 204
GREAT NECK, NEW YORK 11021
516-829-0100 (PHONE)
516-829-0909 (FAX)

PHASE I ENVIRONMENTAL ASSESSMENT

GENERAL INFORMATION

Project Information
Commercial Property
52-01 Queens Boulevard
Queens, New York 11377

Site Access Contacts:
Mr. David Alani, Massey Knakal Realty
Mr. Demetri Tsilogiannis, the broker

Consultant Information:
Athenica Environmental Services, Inc.
45-09 Greenpoint Avenue
Long Island City, New York 11106
Telephone: 718-784-7490
Fax: 718-784-4085
Email: sdongaris@athenica.com

Client Information:
Mr. George Tsilogiannis
George Tsilogiannis
11 Middle Neck Road, Suite 204
Great Neck, New York 11021
Telephone: 516-829-0100
Fax: 516-829-0909

Reconnaissance Date: January 29, 2007
Environmental Professional: Levent Eskicakit, P.G., E.P.

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §12.10 part 40 CFR 312. I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject property.

Levent Eskicakit, P.G., E.P.
Environmental Professional

Results Summary & Recommendation

Phase I Assessment Results (check applicable result for each hazard)

Hazard	Acceptable	Acceptable, Requires O&M	Fail	Fail, Possible Remedy Req'd	Phase II Recommended
On-Site REC					
PCBs	X				
UST/AST/LUST			X		X
Other Petroleum Issues			X		X
Hazardous Substance/Waste	X				
Asbestos	X				
Lead-Based Paint	X				
Radon	X				
Other	X				
Off-Site REC					
PCBs	X				
UST/AST/LUST	X				
Other Petroleum Issues			X		X
Hazardous Substance/Waste	X				
Other	X				

Comments:

Athenica Environmental Services, Inc. (AES) has performed this Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Standard Practice E 1527-05. Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report. This assessment has revealed following evidence of recognized environmental conditions in connection with the Site.

- The historical usage of the Site as a stone yard, an incinerator and an automobile repair & sales facility and historical presence of underground storage tanks (USTs) and hydraulic lifts at the Site.
- The Site is listed as little"E" facility for HAZMAT.
- Historical and current usage of the surrounding properties as automobile repair & sales and light manufacturing facilities may represent a recognized environmental condition to the Site.

Based on the results of this assessment, AES recommends that an Environmental Work Plan should be submitted to NYC DEP for approval to conduct a Focused Subsurface Site Investigation at the Site. The Investigation will be performed at the Site to assess whether the Site soils and groundwater have been impacted by historical usage of the Site and current and historical usage of the surrounding properties.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

ATHENICA Environmental Services, Inc. (AES) performed a Phase I Environmental Assessment (ESA) of the property located at 52-01 Queens Boulevard, Queens County, New York. The Site contains one (1) one-story metal frame commercial building with a paved parking lot. The Site area is primarily characterized by commercial, industrial and residential properties.

The main objective of the ESA was to identify the presence or likely presence, use, or release on the Site of hazardous substances or petroleum products as defined in ASTM Practice E 1527-05 as a *recognized environmental condition*. Below is a summary of the findings and conclusions of this report:

According to the New York City Department of Buildings (DOB), historical Sanborn maps and historical resources, the Site was occupied by number of commercial buildings prior to 1980s. According to these sources, the Site has been listed as stone manufacturing facility from 1900 to 1940's. These sources also indicated that the Site was listed as an incinerator and an automobile service & sales facility until 2000 and contained hydraulic lifts and underground storage tanks (USTs). No additional information was provided for the removal of USTs and hydraulic lifts. Additionally, according to the New York City Department of Building (NYC DOB) records the Site is listed as little "E" for HAZMAT/NOISE/AIR by the New York City Department of Environmental Protection (NYCDEP). Based on historical usage of the Site as an incinerator, an automobile repairs & sales facility, AES concludes it is possible that the Site soils and groundwater may have been impacted.

The Site is located in an urban area. At the time of the Site visit, properties to the north, east, and west of the Site contained primarily automobile repair facilities, commercial offices, light manufacturing facilities and warehouse buildings. One facility located adjacent to the Site (52-19 Queens Boulevard) is identified in regulatory agency databases as a small quantity generator (SQG) and an Above Ground Storage (AST) facility for waste oil. No other adjacent properties are listed within the regulatory database.

A review of the regulatory databases did not identify the Site being listed with any of the federal or state database. A review of the surrounding properties revealed twenty-one (21) RCRIS-SQG/LQG facility listings, one (1) state hazardous waste site (SHWS), total of forty-eight (48) LUST facility listings, and thirty-seven (37) historical LTANKS, and twenty-three (23) registered UST facilities listing identified within the specified search distances. Based on its distance and hydraulic proximity, the spills occurred at Beyond Signs Inc., an industrial facility located approximately 200 feet west of the Site, had multiple spills that impacted soil and groundwater with open violations may represent a recognized environmental condition to the Site. None of the remaining properties listed within the federal and state database, represent no environmental concern for the Site.

AES did not observe any evidence of hazardous material storage or hazardous waste generation at the Site.

AES observed no electrical or hydraulic equipment that has the potential presence of polychlorinated biphenyls (PCBs) at the Site.

Conclusions and Recommendations:

This assessment has revealed following evidence of recognized environmental conditions in connection with the Site.

1. The historical usage of the Site as a stone yard, an incinerator and an automobile repair & sales facility with hydraulic lifts and USTs.

2. The Site is listed as little"E" facility for HAZMAT.

3. Historical and current usage of the surrounding properties as automobile repair & sales and light manufacturing facilities.

Based on the results of this assessment, AES recommends that an Environmental Work Plan should be submitted to NYC DEP for approval to conduct a Focused Subsurface Site Investigation at the Site. The Investigation will be performed at the Site to assess whether the Site soils and groundwater have been impacted by historical usage of the Site and current and historical usage of the surrounding properties. Upon completion of this investigation, a closure letter will be submitted to the NYCDEP.

1.0 INTRODUCTION

On January 29, 2007, AES conducted a Phase I Environmental Site Assessment (ESA) of the property located at 52-01 Queens Boulevard, Queens County, New York, hereinafter referred to as "the Site". This assessment was conducted in substantial compliance with the American Society for Testing and Materials (ASTM) Practice Designation E1527-05: *Standard Practice for ESAs: Phase I ESA Process.*

1.1 Purpose

The purpose of this ESA was to identify *recognized environmental conditions* in connection with the Site at the time of the site reconnaissance.

1.2 Scope-of-Services

This Phase I ESA was conducted utilizing a standard of good commercial and customary practice that was consistent with the ASTM Standard Practice E 1527-05. Any significant scope-of-work additions, deletions or deviations to ASTM Practice E 1527-05 are noted below or in the corresponding sections of this report. In accordance with the above-referenced agreement, AES performed walk-through observations of the Site, noted the use of adjacent properties, and conducted a search of readily available historical and regulatory records. More specifically, the scope of services included the following:

- **Site and Adjacent Property Observations**
  Visual observations of the site, structures, and surrounding properties were made to identify potential sources or indications of chemical and/or petroleum impacts such as underground storage tanks (USTs), aboveground storage tanks (ASTs), potential sources of polychlorinated biphenyls (PCBs), chemicals and hazardous materials, and areas with surface stains or distressed vegetation. In addition, the immediately adjacent properties were observed, without being entered, for possible sources of impacts or environmental impairment that could migrate to the site via surface water runoff, groundwater transport, or other pathways.

- **Geological Information**
  Published geological and groundwater information for the site was obtained from the EDR.

- **Historical Review**
  Reviews of historical Sanborn fire insurance maps (Sanborn maps), for the site and adjacent properties were conducted to evaluate previous land use.

- **Federal and State Regulatory Review**
  The following regulatory databases were reviewed to identify use, generation, storage, treatment, or disposal of hazardous materials, or releases of such materials that may impact the Site: United

States Environmental Protection Agency's (USEPA) National Priorities List (NPL); Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS); Resource Conservation and Recovery Information System-Treatment, Storage, and Disposal facilities (RCRIS-TSD) and Corrective Action Facilities (CORRACTS); RCRIS-Large Quantity Generators (RCRIS-LQG); RCRIS-Small Quantity Generators (RCRIS-SQG); Emergency Response Notification System (ERNS); Permitted Solid Waste/Inventory Facilities (SWF), Leaking Underground Storage Tank (LTANK); Registered Underground Storage Tank (UST); and State Superfund Registry (SHWS).

- **Interviews**
  Interviews were conducted with persons familiar with the site regarding possible past or present use of potentially hazardous materials at the site, and other issues of potential interest relative to potential environmental conditions.

- **Prior Environmental Reports**
  No Preliminary Assessment/Site Investigation reports were provided for review.

Please note that the scope of work for this Phase I ESA does NOT include collection of samples or materials for testing, including testing of soil or groundwater, lead-based paint, lead in drinking water, asbestos containing material (ACM), etc.

1.3 Assumptions, Limitations and Exceptions

AES has prepared this Phase I Environmental Site Assessment using reasonable efforts in each phase of its work to identify *recognized environmental conditions* associated with hazardous substances or petroleum products at the Site. The scope-of-work for this Phase I ESA was consistent with the ASTM Practice E 1527-05. Findings within this report are based on information collected from observations made on the day of the site investigation and from reasonably ascertainable information obtained from governing public agencies and referenced sources.

AES's professional services have been performed, our findings obtained, and our recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. This statement is in lieu of other statements either expressed or implied. AES is not responsible for the independent conclusions, opinions, or recommendations made by others based on the records review, site observations, field exploration, and laboratory test data presented in this report.

This report is intended for the sole use of the Client. It should be noted that environmental evaluations are inherently limited in the sense that conclusions are drawn and recommendations developed from information obtained from limited research and Site evaluations. For these types of evaluations, it is often necessary to use information prepared by others, and AES cannot be responsible for the accuracy of such information. Additionally, the passage of time may result in a change in the environmental characteristics at this Site and surrounding properties. This report does not warrant against future

operations or conditions, nor does it warrant operations or conditions present of a type or at a location not investigated. This report is not a regulatory compliance audit and is not intended to satisfy the requirements of any state, federal, or local real estate transfer laws.

Subsurface conditions were not field investigated, as this was outside the scope of this study, and may differ from the conditions implied by the surficial observations. This study is not intended to assess or otherwise determine if soil impacts, waste emplacement, or groundwater impacts exist. These data are accessible only by subsurface material and groundwater sampling through the completion of soil borings and the installation of monitoring wells. The scope of work, in accordance with our agreement, did not include these activities.

It must be noted that no evaluation, no matter how thorough, can absolutely rule out the existence of hazardous materials at a given Site. This assessment has been based on prior Site history and observable conditions. Although the results of this study suggest that hazardous materials are unlikely to exist at the Site and that no further study is needed, existing hazardous materials and hazardous substances can escape detection using these methods. Therefore, if a higher level of confidence is required than can be defined by the Phase I scope of work, additional evaluation would, of course, be required.

Our conclusions regarding the potential environmental impact of nearby, off-site facilities on the Site are based on readily available information from the environmental databases listed and the assumed groundwater flow direction. A detailed file review of each facility was beyond the scope of work. Actual groundwater conditions, including direction of flow, can only be determined through the installation of monitoring wells.

AES does not warrant the correctness, completeness, currentness, merchantability, or fitness of any information related to records review provided in this report. Such information is not the product of an independent review conducted by AES, but is only publicly available environmental information maintained by federal, state, and local government agencies.

Deviations from ASTM Standard Practice E 1527-05 are listed as follows:

- File searches of the New York State Department of Environmental Conservation (NYSDEC) and U.S. Environmental Protection Agency (USEPA) records requires a written Freedom of Information Act (FOIA) request to obtain access to screen for the presence of, and gain access to, environmental records. Such information was deemed not to be reasonably ascertainable within the time constraints of this Phase I ESA.

1.4 Special Terms and Conditions (User Reliance)

This report may be relied upon by the undersigned or by any purchaser or assignee. In addition, the report may be relied upon by any rating agency involved in rating securities secured by, or representing an interest in, the Property Note. This report may be used in connection with materials offering for sale the Property Note, or an interest in the Property Note, and in presentations to any rating agency. With

respect to the foregoing, the report speaks only as of the origination date of the report unless specifically updated through a supplemental report.

AES makes no other representation to any third party except that it has used the degree of care and skill ordinarily exercised by environmental consultants in the preparation of the report and in the assembling of data and information related thereto. No other warranties are made to any third party, either express or implied. AES's liability to any third party authorized to use or rely on this report with respect to any acts or omissions shall be limited to a maximum of no more than our contract price.

2.0 SITE DESCRIPTION

2.1 Location and Description

The Site is located at 52-01 Queens Boulevard, Queens County, New York. A Site Plan is provided in Appendix. The Site is occupied by one (1) one-story metal frame commercial building with a asphalt paved parking lot. The Site is located within the Queen County, New York. According to the NYC Department of Building (DOB) records, the site is listed as Block: 1321, and Lot: 1 and zoned as little "E" for HAZMAT/NOISE/AIR. The conditions reported are as observed and evaluated on the day of the survey.

2.2 Surrounding Area General Characteristics

The Site is located within a commercial area of Queens County, New York.

2.3 Current Use of the Site

The Site contains one (1) one-story metal frame commercial building with an asphalt paved parking lot. Currently, the Site building is unoccupied. The Site is surrounded by auto-repair facilities to the east and north and commercial properties to the west.

2.4 Description of Site Improvements

Currently, the Site consists of one (1) one-story metal frame commercial building with an asphalt paved parking lot. The Site building contains an office space and a bathroom. Currently, the Site building is unoccupied and not heated. An evidence of a former hydraulic lift area was observed along the northern portion of the Site adjacent to the Site building during the Site inspection. The Site is provided with municipal water and municipal sewer services. New York City provides the water and sanitary sewer for the Site.

2.5 Current Use of Adjoining Properties

All of the surrounding properties are zoned for commercial, automobile-repair service, retail and light manufacturing to the north, west and east of the Site. The Site is bordered to the Queens Boulevard and the Calvary cemetery to the south.

Based on a review of municipal records, historical Sanborn maps, and city directories, surrounding properties were historically occupied by commercial auto-repair, light manufacturing properties and residential buildings.

3.0 USER PROVIDED INFORMATION

The following section summarizes information (if any) provided by personal communication with the occupants or workers in the building with regard to the Phase I ESA.

3.1 Title Records

The Site contact provided no title records information.

3.2 Environmental Liens or Activity and Use Limitations

The Site contact and his assistants provided no information regarding property environmental liens or activity and use limitations. The search of NYS DEC and NYC DOB records indicated that there are no environmental liens or activities performed at the Site.

3.3 Specialized Knowledge

3.4 Valuation Reduction for Environmental Issues

The Site building is currently not occupied. No waste is generated from the Site building that is managed or improperly disposed.

4.0 RECORDS REVIEW

A. PHYSICAL SETTING SOURCES

4.1.1 TOPOGRAPHY

According to the USGS Quadrangle Brooklyn, New York Topographic Maps, the elevation of the Site is approximately 99 feet above mean sea level.

4.1.2 Soils

The soils in the area of the Site are classified as Urban Land. Urban Land refers to soils that have been altered by urban development such as buildings and streets, where at least 25 percent of the surface is covered with asphalt, concrete or other impervious building material. Typically, these soils have been mixed with other materials such as brick and concrete, and characteristics can only be determined by on-site subsurface investigation.

4.1.3 Geology

According to the US Department of Agriculture (USDA) Soil Conservation Service (SCS) data STATSGO the following is the dominant soil composition of the target property:

Era:	Mesozoic	System:	Cretaceous
Series:	Upper Cretaceous	Category:	Stratified Sequence

Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

4.1.4 Hydrology

Groundwater beneath the Site area is unknown. The movement and direction of groundwater flow is influenced by many factors including, but not limited to, the aquifer's hydraulic characteristics, surface and bedrock topography, the presence of surface water bodies and the influence of pumping wells. Preliminary estimates of groundwater flow direction usually consider surface topography and the presence of nearby surface water bodies.

Local groundwater depth and flow direction can be influenced by additional factors (e.g., underground structures, seasonal fluctuations, soil and bedrock geology, and production wells), which are beyond the scope of this investigation. Groundwater flow direction in the Queens County, New York is not available.

4.1.5 Flood Zones

According to a regulatory agency database obtained from EDR, Inc. (EDR), which included a review of the Flood Insurance Rate Maps (FIRMS) with the Federal Emergency Management Agency (FEMA) for Queens County, New York, the Site is not located within a 100 or 500 year flood zone.

4.2 Standard Environmental Records

A review of databases and files from federal, state and local environmental regulatory agencies was conducted to identify use, generation, storage, treatment or disposal of hazardous materials and chemicals, or release incidents of such materials, that may impact the site. EDR provided the federal and state environmental database information to AES.

The potential for the facilities identified by the database review to environmentally impact the site was evaluated solely on the distance and presumed topographic orientation (with respect to groundwater flow) of each facility relative to the site. Furthermore, each facility's presumed topographic orientation was determined solely by a review of available USGS quadrangle topographic maps. No attempt was made to verify the actual groundwater flow or to access regulatory agency files regarding the identified facilities, as this was beyond the scope of work for this project.

Federal, state, and local database records were reviewed for the Site and those properties surrounding the Site. Information on the improper storage, handling, and/or disposal of hazardous substances, wastes, or petroleum products, on or adjacent to the Site, is provided within these records. Following is a summary of the listings identified within applicable search radius.

Federal List	Surrounding Area Search Radius	No. of Sites Within Search Radius
National Priorities List (NPL or Federal Superfund Listing)	1 mile	0
Proposed NPL	1 mile	0
Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)	½ mile	0
CERCLIS-NFRAP (No Further Remedial Action Planned)	¼ mile	0
RCRIS Corrective Action Reports (CORRACTS)	1 mile	1
Resource Conservation and Recovery Information	½ mile	0

Federal List	Surrounding Area Search Radius	No. of Sites Within Search Radius
System – Treatment, Storage or Disposal Facilities (RCRIS-TSD)		
RCRA registered large quantity generators of hazardous waste (LQG)	¼ mile	2
RCRA registered small quantity generators of hazardous waste (SQG)	¼ mile	19
NY State and Brownfield Voluntary Cleanup Program (VCP)	Site	No

State List	Surrounding Area Search Radius	No. of Sites Within Search Radius
State Hazardous Waste Site (SHWS)	1 mile	0
State Landfill	1 mile	1
Leaking Storage Tank Incident Reports (LUST)	½ mile	48
Registered Underground Storage Tanks (USTs)	¼ mile	23
Drycleaners	¼	2
NY Spills	0.5 mile	11

4.2.1 FEDERAL FINDINGS

National Priorities List (NPL)

The National Priority List is an Environmental Protection Agency (EPA) compilation pursuant to CERCLA 42 USC 9605 (a)(8)(B) of properties with the highest priority of cleanup pursuant to EPA's Hazard Ranking System.

Findings: Neither the Site nor other properties within a one-mile radius.

Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List

The CERCLIS List is a compilation of known and suspected uncontrolled or abandoned hazardous waste sites which are, or were, under investigation by USEPA but have not been elevated to the status of a Superfund (NPL) site.

Findings: There are no sites listed as CERCLIS facility.

Resource Conservation and Recovery Information System (RCRIS)

The Resource Conservation and Recovery Act (RCRA) program identifies and tracks hazardous wastes from the point of generation to the point of disposal. The RCRIS database tracks those facilities that

treat, store, and/or dispose of hazardous materials as defined by RCRA (referred to as TSD facilities). The RCRIS CORRACTS database identifies TSD facilities that have conducted, or are currently conducting, corrective action(s) as regulated under RCRA. The RCRIS Generators database tracks large and small quantity generators of hazardous waste. The RCRA Administrative Action Tracking System (RAATS) database, which maintains records of enforcement actions issued under RCRA for major violators, is included in the regulatory research report.

Findings: There are twenty-one (21) small and large quantity generators (RCRIS-SQG/LQG) within 0.25 miles of the site. AES concludes that these facilities are unlikely to have negatively impacted the Site.

Emergency Response Notification System (ERNS)

The ERNS list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. Notification requirements for such releases or spills are codified in 40 CFR Parts 302 & 355.

Findings: Site not listed

4.2.2 STATE LISTS FINDINGS

State Hazardous Waste Sites (SHWS)

SHWS are known or inactive contaminated sites in New York and are classified as sites with contaminants present at levels, which exceed the applicable cleanup criteria for groundwater and/or soil standards.

Findings: Site is not listed. There is one SHWS facility located within 1 mile of the site. Based on distance and the information provided in the database report, AES concludes that this facility does not represent a potential environmental concern to the Site.

Solid Waste Facilities/Landfill Sites (SWF/LF)

The SWF/LF typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Department of Environmental Conservation.

Findings: No findings reported within one mile of the site.

Leaking Storage Tank Incident Reports (LUST)

The LUST Incident reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Protection.

Findings: Forty-eight (48) LUST site was identified within 0.5 miles of the site. Based on distance and the information provided in the database report, Beyond Signs Inc. an industrial facility located approximately 200 feet west of the Site, had multiple spills that impacted soil and groundwater with open violations may represent a recognized environmental condition to the Site. None of the remaining properties listed within the federal and state database, represent environmental concern for the Site.

Underground Storage Tanks (USTs)

The UST database contains registered USTs. These USTs are regulated under Subtitle I of the RCRA. The data come from the Department of Environmental Protection UST Data.

Findings: Twenty-three (23) UST sites were identified within 0.25 mile of the Site. Based on distance and the information provided in the database report, AES concludes that these facilities do not represent a potential environmental concern to the Site.

Registered Recycling Facility List (SWRCY)

The data come from the Department of Environmental Conservation.

Findings: No findings reported within 1.0 mile of the site.

NY Spills and VCP

Data collected on spills reported to NYS DEC.

Findings: Eleven (11) NY Spills sites and two drycleaners facilities were identified within 0.25 mile of the Site. Based on distance and the information provided in the database report, AES concludes that these facilities do not represent a potential environmental concern to the Site. Further, a review of the regulatory databases did not identify any Site on the State and Brownfield Voluntary Cleanup Program (VCP) facility listings and Facility Index System (FINDS) facility listing, VCP and as well as, on the State registered NY Release Facility listing.

4.3 Historical Use Information

The following summarizes the findings of the research presented below pertaining to historical Site and surrounding area uses.

4.3.1 Property Tax Files

AES reviewed available records on the NYC DOB Queens County, New York Tax Assessment website. No historical information was available for the site.

4.3.2 Land Title Records

The acquisition of land title records was not required by the scope of work for the ESA.

4.3.3 Historical USGS Topographic Quadrangles

Insofar as adequate historical information was obtained from EDR report.

4.3.4 City Directories

City directories for the Site and surrounding area were obtained from EDR were reviewed as part of this assessment. The review of city directories identified that the Site has been occupied by light industrial and commercial listings from 1900 to 2000's. According to these sources, the Site was used as commercial auto repair and sales facility from 1980's to 2000's.

4.3.6 Zoning/Land Use Records

AES attempted to review available historical zoning/land use records for information regarding past uses of the Site and surrounding area. No historical use information was available for the Site.

4.3.7 Prior Reports

AES was provided with following environmental report:

A Phase II Environmental Assessment, by Tri-State Engineering, P.C, dated November 15, 2005.
According to the Tri-State report, a total of four soil borings were advanced at the Site. The analytical results of soil samples indicated that none of the tested chemical compounds were detected above the laboratory methods detection limits and no further investigation was recommended.

4.3.8 Interviews

AES interviewed Mr. David Alani of Massey Knakal Realty Services, and Mr. Demetri Tsilogiannis, the site brokers at the time of the Site inspection. They indicated that indicated that no known obvious environmentally sensitive conditions are located at the Site.

5.0 SITE RECONNAISSANCE

AES's Senior Environmental Engineer, Levent Eskicakit, P.G., E.P., conducted the on-site investigation on January 29, 2007. The Site inspection consisted of a walk throughout the building, and around the perimeter. Photographs of the Site, as observed during the Site visit, are included in Appendix A.

5.1 Methodology and Limiting Conditions

The Site reconnaissance consisted of visual and/or physical observations of the Site and improvements; adjoining sites as viewed from the Site; and, the surrounding area based on visual observations made during the trip to and from the Site. Unimproved portions of the Site (if any) were observed along the perimeter and in a general grid pattern in safely accessible areas. Building exteriors (if any) were observed along the perimeter from the ground, unless described otherwise. Building interiors were observed as they were made safely accessible, unless described otherwise.

5.2 General Site Conditions

The Site contains one (1) one-story metal frame commercial building with an asphalt paved parking lot. The Site building is currently vacant and parking lot is completely covered with asphalt. The Site borders are covered with chained-fences with two access areas; one from Queens Boulevard and one from 52nd Street.

5.2.1 Surface Observations

The Site building's exterior walls are composed of metal frame. The Site building contained an office area and a bathroom. The parking lot located outside of the Site building is asphalt paved. During the Site inspection, AES observed a former hydraulic lift location area located along the northern portion of the Site.

AES did not observe any interior or exterior transformers on Site. AES observed no evidence of illegal or improper dumping, staining, or material mismanagement in the property.

During the Site investigation, no visual indications of stressed vegetation or discolored soils were observed on the site. No evidence of potentially hazardous materials or perceivable signs of hazardous material discharges (e.g., stained soil, stressed vegetation, unusual odors) were observed on the Site.

5.3 Hazardous Substance Use/Storage

AES did not observe any hazardous substances at the Site.

5.4 Underground and Aboveground Storage Tanks

No visual evidence (pipes, vents, pumps, stains), which would indicate the presence of USTs or ASTs on the Site was observed during the Site walk-through. At the time of the Site inspection, AES did not observe any sign of leakage or mismanagement of the Site. However, according to the historical sources, the Site contained at least one UST located at the Site. No documentation was available to AES in reference to the closure of this UST and the former hydraulic lift that were located at the Site.

5.5 Other Petroleum Products

AES did not observe any other chemicals at the Site at the time of the Site inspection.

5.6 Polychlorinated Biphenyls (PCBs)

PCBs are toxic coolants or lubricating oils used in some electrical transformers, light ballasts, electrical panels or other similar equipment. AES observed an evidence of a former hydraulic lift located along the northern portion of the Site. No further information was available to AES during the course of the assessment. AES did not observe any other evidence of the use, storage or disposal of PCB-containing transformers, lifts, or other equipment on the Site.

5.7 Waste Generation, Storage and Disposal

AES did observe that waste oil generation, storage on Site and disposal off Site. AES did not observe any stressed or dead vegetation, stained concrete.

5.8 Septic Systems

AES did not observe evidence of a septic system on the Site. According to the NYC DOB, the Site is connected to the municipal sewer system since its construction.

5.9 Storm Water Management/Surface Areas

AES did not observe any evidence of surface water, surface impoundments, retention ponds, dry wells, or other storm water management systems.

5.10 Wells

AES did not observe evidence of production or monitoring wells on the Site.

6.0 INTERVIEWS

6.1 Interview Summary

Mr. David Alani of Massey Knakal Realty Services, and Mr. Demetri Tsilogiannis, the site brokers, and owner's representatives were interviewed during the Site inspection of the Site. They indicated that no known obvious environmentally sensitive conditions are located at the Site.

7.0 NON-ASTM INVESTIGATION ITEMS

7.1 Wetlands

AES did not observe any indicators of wetlands at the Site or on adjacent properties. According to wetland data provided by the U.S. Department of the Interior, Fish & Wildlife Service National Wetland Inventory, and indicates that no designated wetlands exist on the Site.

7.2 Suspect Asbestos-Containing Material (ACM)

AES conducted a limited survey of the Site for suspect friable and non friable ACM. Based on this limited survey, AES did not identify any suspect friable ACM associated with the on-site structures. However, since the asbestos survey was limited, and AES was unable to gain access to the kiosk, it is possible that friable and/or non-friable ACM may exist at the Site that were not observed by AES during the Site visit (i.e., wall voids, ceiling cavities, beneath carpets). Should any suspect ACM is identified at a later date, the suspect ACM should be addressed as ACM, in accordance with applicable local, state, and federal regulations, until sampling and analysis indicate otherwise.

7.3 Radon

The USEPA defines radon as a colorless, odorless, radioactive gas that comes from the natural decay of uranium that is found in nearly all soils. It typically moves through the ground to the air above and into homes and other buildings through cracks and openings in the foundation.

The New York State Department of Health maintains a database of radon test results on a local and county level. The average radon level in living areas was found to be 0.730° picoCuries per liter (pCi/L) and in basements 1.310° pCi/L. This is well below the USEPA "action guideline" of 4.0 pCi/L in residential dwellings. The USEPA has not designated a recommended action level for radon in buildings. AES concludes that radon gas does not represent an environmental concern for the Site, and no further investigation is recommended.

AES did not perform testing for radon gas at the Site as a part of this assessment.

7.4 Lead Based Paint

AES conducted a visual survey to identify any damage (i.e., peeling, flaking, blistering) to painted surfaces within the accessible areas of the Property. Painted surfaces within the observed buildings were observed to be in good to fair condition. Based on age of the building located on the Property, it is possible that lead-based paint is present. Should the building at the Site be demolished or renovated, AES recommends that the paint be assumed to contain lead and that steps should be taken to minimize exposure of workers to paint dust during demolition work in compliance with OSHA regulations.

7.5 Mold Observation

AES provided a limited visual observation at the time of the Phase I ESA walk through for the presence of mold for the Site.

A reasonable effort was made to identify possible microbial-impacted areas. However, this does not imply a guarantee that all possible reservoirs (growth or airborne) of microbial growth were identified because microbial or water-impacted building materials may be hidden by walls, flooring, partitions, etc. In addition, it should be noted that bacteria growth might be present and amplified due to the presence of potential water-damaged building materials. Obvious evidence of microbial-impacted areas or water-damaged building materials was not identified in accessed areas at the Site at the time of the walk through.

8.0 FINDINGS AND OPINIONS

The following summarizes known or suspected environmental conditions in connection with the Site based on information collected during the ESA. For each condition, AES provides an opinion of the impact on the Site based on an evaluation of the results of record reviews, site reconnaissance and environmental sampling issues as discussed in this report. AES also provides a conclusion and rationale regarding whether or not an environmental condition is a *recognized environmental condition.*

- According to the NYC DOB records the Site is listed as little "E" for HAZMAT. Based on historical use of the Site as an incinerator with historical presence of USTs and hydraulic lift.

- Historical and current usage of the surrounding properties as a car repair and service center and light manufacturing may represent a recognized environmental condition to the Site.

9.0 CONCLUSIONS / RECOMMENDATIONS

This Phase I Environmental Site Assessment concludes that there are following *recognized environmental conditions* identified at 52-01 Queens Boulevard, Queens County, New York.

1. The historical usage of the Site as a stone yard, an incinerator and an automobile repair & sales facility with historical presence of hydraulic lift and USTs.
2. The Site is listed as little"E" facility for HAZMAT.
3. Historical and current usage of the surrounding properties as automobile repair & sales and light manufacturing facilities may represent a recognized environmental condition to the Site.

Based on the results of this assessment, AES recommends that an Environmental Work Plan should be submitted to NYC DEP for approval to conduct a Focused Subsurface Site Investigation at the Site. The Investigation will be performed at the Site to assess whether the Site soils and groundwater have been impacted by historical usage of the Site and current and historical usage of the surrounding properties. Upon completion of this investigation, a closure letter will be submitted to the NYCDEP.

ATHENICA
ENVIRONMENTAL SERVICES INC.
45-09 Greenpoint Avenue
Long Island City, N.Y. 11104
Tel (718) 784-7490
Fax (718)784-4085

March 15, 2007

New York City Department of Environmental Protection
Bureau of Environmental Planning and Assessment
59-17 Junction Boulevard, 11th Floor
Flushing, NY 11373-5108

RE: Phase II Focused Subsurface Site Investigation Work Plan
52-01 Queens Boulevard – Hazardous Material "E" Designation
Block 1321, Lot 1, Queens, New York
AES Project # 07-0072

Dear Sir/Madam:

Athenica Environmental Services, Inc. (AES) is pleased to provide this Phase II Subsurface Site Investigation Work Plan for the property located at 52-01 Queens Boulevard, Queens, New York (the "Site"). This Work Plane is based upon AES's review of following documents and AES's experience working with the New York City Department of Environmental Protection (NYCDEP):

- Phase II Environmental Assessment Report, prepared by Tri-State Engineering, P.C. (TSE), dated November 15, 2005.
- Phase I Environmental Site Assessment (Phase I ESA), prepared by AES, dated February 13, 2007.

I. SITE OVERVIEW

Based on the review of above documents, the following environmental concerns have been noted on the Site:

- Presence of historical underground storage tanks (USTs) at the Site.
- According to the New York State Department of Environmental Conversation (NYSDEC) Spill database, there are a number of Leaking Underground Storage Tank (LUSTs) sites located within a one-half mile radius of the Site that could impact soil and groundwater quality at the Subject Property.
- Historical usage of the Site and surrounding properties.

Based on the results of this assessment, AES recommended that an Environmental Work Plan should be submitted to New York Department of Environmental Protection (NYC DEP) for approval to conduct a Focused Subsurface Site Investigation for the entire Site. The Investigation will be performed at the Site to assess whether the Site soils and groundwater have been impacted by historical usage of the Site and current and historical usage of the surrounding properties. Based on NYCDEP's requirement, the following proposed Work Plan is presented for review and approval.

II. WORK PLAN

IIA. – Preliminary Work

- Arrange for mark-out of subsurface utilities;
- Prepare a site-specific health and safety plan (HASP) for the proposed work at the Site; and,
- Retain a qualified and experienced environmental subcontractor to assist in the implementation of the proposed Work Plan.

IIB. – Subsurface Investigation

A Senior Staff Engineer will coordinate and direct all drilling and test pit activities at the Site. Soil borings and a test pit will be advanced to evaluate subsurface soil quality due to the historical presence of the USTs and presence of LUST sites within a half mile radius of the Site. Continuous soil quality field screening will be conducted at all boring locations and a test pit excavation during the project. Field screening includes identifying visual or olfactory evidence of contamination, and use of a portable photo ionization detector (PID) to obtain qualitative measurements of volatile organic vapors. Soil samples will be collected for laboratory analysis as discussed below. Sampling procedures will follow generally accepted industry practices and NYSDEC guidelines.

Five (5) soil borings will be advanced at the Site using a Geoprobe. Please refer to the attached Site Plan showing proposed soil boring locations. Two (2) soil samples will be collected from each soil boring as required by the NYCDEP and submitted to a New York State ELAP-certified laboratory. In each soil boring, one soil sample will be collected from the 0' to 2' foot interval below ground surface (bgs), and the second sample will be collected at the proposed construction depth or above the water table, which ever is shallower. Soil samples from the soil borings will be analyzed for volatile organic compounds (VOCs), SVOCs, pesticides, polychlorinated biphenyls (PCBs), and TAL metals accordance with EPA Method 8260, 8270, 8081, 8082, and 6000/7000 series, respectively.

Based on the previous field investigation, groundwater was encountered at approximately 25 feet bgs at the Site. Because the proposed construction excavation limits are approximately 15 feet bgs, we do not believe that the evaluation of groundwater quality is warranted.

IID. - Report Preparation

A Phase II Subsurface Site Investigation Report will be generated following implementation of the field activities and receipt of the laboratory data. The report will present a detailed summary of the investigative findings and a summary of the analytical results compared to the NYSDEC TAGM 4046 RSCOs. The Report will include an updated Site Plan and remedial recommendations, if warranted.

III. Quality Assurance/Quality Control

III A. Quality Assurance/Quality Control (QA/QC) Procedures

QA/QC procedures will be used to provide performance information with regard to accuracy, precision, sensitivity, representiveness, completeness, and comparability associated with the sampling and analysis activities to be conducted as part of this Investigation. Field QA/QC procedures will be used to document that samples collected are representative of the actual conditions of the Site, and to document any cross contamination from the field activities or from sample transit. Laboratory QA/QC procedures and analyses will be used to demonstrate whether analytical results have been biased either by interfering compounds present in the sample matrix or by laboratory techniques that may have introduced systematic or random errors to the analytical process. A summary of the field and laboratory QA/QC procedures to be followed as part of this Investigation is provided below.

III B. Field QA/QC

Field QA/QC will include the following procedures: 1) calibration of field equipment; 2) the collection of trip and field blank and duplicate samples; 3) the use of dedicated and/or disposable field sampling equipment; 4) proper sample handling and preservation; 5) proper sample chain of custody documentation; and 6) the completion of report logs. A description of each of these procedures is provided below:

All field analytical equipment used including PIDs will be calibrated on a daily basis.

- Field blanks will be collected at a frequency of 1 per 20 samples to evaluate the decontamination methodologies or the integrity of the field equipment. The field blank will be collected by pouring deionized laboratory grade water over the decontaminated liners used to collect soil samples and gathering this water into appropriate sample containers preserved in the same manner as other aqueous matrix samples. The water used for the field blank will be from the same source as that used for the laboratory method blank. The field blank will be analyzed for the same parameters as the environmental samples to determine whether the field sampling equipment is cross-contaminating samples.

- Duplicate sample will be collected at a frequency of 1 per 20 samples to evaluate the integrity of the laboratory equipment. The duplicate sample will be collected during the environmental sampling program at the Site.

- Disposable sampling equipment including, acetate sleeves, latex gloves and disposable bailers will be used to minimize cross-contamination between samples.

- All drilling equipment will be decontaminated according to NYSDEC Protocol after each boring is completed.

- For each of the analytical parameters analyzed, a sufficient sample volume will be collected to allow the specified analytical method to be performed according to protocol, and to provide sufficient sample for reanalysis if necessary.

- Because plasticizers and other organic compounds inherent in plastic containers may contaminate samples requiring organic analysis, these samples will be collected in glass containers.

- Appropriate sample preservation techniques, including cold temperature storage at 4° C and pH adjustment with nitric acid, will be utilized to ensure that the analytical parameters in the samples analyzed by the laboratory have not changed from the time the sample was collected in the field.

- Samples will be analyzed prior to the expiration of the respective holding time for each of the analytical parameters to ensure the integrity of the analytical results.

III C. Sample Custody

Sample handling in the field will conform to appropriate sample custody procedures. Field custody procedures include proper sample identification, chain-of-custody forms, and packaging and shipping procedures. Sample labels will be attached to all sampling bottles before field activities begin to ensure proper sample identification. Each label will identify the site and sample location.

Proposed sampling locations are indicated in the Sample Location Plan. Actual sampling locations, if different than proposed, will be marked on the Sample Location Plan which will be revised accordingly.

Each cooler will be lined with two (2) 6-mil thick plastic bags. Styrofoam or bubble wrap will be used to absorb shock and prevent breakage of sample containers. VOC vials will be packaged inside a plastic "Ziploc" bag prior to placement inside the cooler. Ice or ice packs will be placed in between the plastic bags for sample preservation purposes.

After each sample is collected and appropriately identified, the following information will be entered into the chain-of-custody form: 1) site name and address; 2) sampler(s)' name(s) and signature(s); 3) names and signatures of persons involved in the chain of possession of samples; 4) sample number; 5) number of containers; 6) sample location; 7) date and time of collection; 8) type of sample, sample matrix and analyses requested; 9) preservation used (if any); and 10) any pertinent field data collected (pH, temperature, conductivity, DO).

The sampler will sign and date the "Relinquished" blank space prior to removing one (1) copy of the custody form and sealing the remaining copies of the form in a Ziploc plastic bag taped to the underside of the sample cooler lid. After sample containers are sufficiently packed and the chain-of-custody form completed, the 6-mil plastic bags will be sealed around the samples by twisting the top and securely taping the bag closed to prevent leakage. A sample custody seal will be placed around the neck of the bag, which will include the signature of the project manager, and/or his designee, and the date.

The sample cooler will be sealed with tape prior to delivery or shipment to the laboratory. Additionally, sample custody seals will be placed around the cooler lid to detect unauthorized tampering with samples following collection and prior to the time of analysis. The seals will be attached in such a way that it will be necessary to break them in order to open the container. Seals will be affixed at the time of sample packaging and will include the signature of the project manager and/or his designee and the date.

III D. Report Logs

The following project logs will be completed during the course of this investigation: 1) field logs; 2) boring logs; 3) monitoring well development purging and sampling data logs; and 4) monitoring well installation details. A field log will be completed on a daily basis which will describe all field activities including: 1) project number, name, manager, and address; 2) date; 3) weather; 4) attendees on-site and associated affiliations; 5) description of field activities; and 6) all pertinent sample collection information including sample identification numbers, description of samples, location of sampling points, number of samples taken, method of sample collection and any factors that may affect its quality, time of sample collection, name of collector, and field screening results.

A boring log will be completed for each boring advanced and each monitoring well drilled. The following information will be included on each boring log: 1) project number, name, manager, and location; 2) date; 3) drilling company and method used; 4) boring number; 5) total and water table depths; and 6) all pertinent soil sample information including sample number, interval, depth, amount recovered, color, composition, percent moisture, visual and olfactory observations of contamination, and field screening readings.

III E. Laboratory QA/QC

AN ELAP-certified laboratory will be used for all sample analyses to be performed as part of this Investigation. This laboratory will follow the following QA/QC protocols.

All samples will be delivered to the laboratory within 24 hours of sample collection. Samples will be received by laboratory personnel, who will inspect the sample cooler(s) to check the integrity of the custody seals. The cooler(s) will then be opened, the samples unpackaged and the information on the chain-of-custody form examined. If the samples shipped match those described on the chain-of-custody form, the laboratory sample custodian will sign and date the form on the next "Received" blank and assume responsibility for the samples. If problems are noted with the sample shipment, the laboratory custodian will sign the form and record problems in the "Remarks" box. The custodian will then immediately notify the Project Manager so appropriate follow-up steps can be implemented on a timely basis.

All samples will then be logged into a sample logbook and/or computerized information system. The following information will be recorded: 1) date and time of sample receipt; 2) project number; 3) field sample number; 4) laboratory sample number (assigned during log-in procedure); 5) sample matrix; 6) sample analytical parameters; 7) storage location; and 8) log-in person's initials. A record of the information detailing the handling of a particular sample through each stage of analysis will be provided by the completion of a laboratory chronicle form. The following information will be included on this form: 1) job reference; 2) sample matrix; 3) sample number; 4) date sampled; 5) date and time

received by laboratory; 6) holding conditions; 7) analytical parameters; 8) extraction date, time and extractor's initials (if applicable), 9) analysis date, time, and analyst's initials, and 10) QA batch number, date reviewed, and reviewer's initials.

All information relevant to the samples will be secured at the end of each business day. All samples will be stored in a designated sample storage refrigerator, access to which will be limited to laboratory employees.

IV – Schedule

AES can complete the above scope of work within 2 weeks of authorization to proceed, pending access to the Site. If any USTs are detected, they will be removed in accordance with all local, state, and federal regulations under a separate contract.

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

Very truly yours,

Athenica Environmental Services, Inc.

Levent Eskicakit, P.G.
Environmental Division Manager

Attachments

1 Proposed Soil Boring Location Plan
2 HASP

cc: Mr. Demetri Tsilogiannis
Mr. Spiro Dongaris, AES

I:\PHASE I& II INSPECTIONS\PHASE II ESA \52-01 Queens Blvd, Queens\Work Plan.doc

ATHENICA
ENVIRONMENTAL SERVICES INC.

45-09 Greenpoint Avenue
Long Island City, N.Y. 11104

Tel (718) 784-7490
Fax (718) 784-4085

PHASE II
FOCUSED SUBSURFACE SITE INVESTIGATION
COMMERCIAL PROPERTY
52-01 QUEENS BOULEVARD
WOODSIDE, QUEENS, NEW YORK 11377

ATHENICA PROJECT NO
07-0072

DATED:
APRIL 24, 2007

PREPARED FOR:

GEORGE TSILOGIANNIS
11 MIDDLE NECK ROAD, SUITE 204
GREAT NECK, NEW YORK 11021
PHONE: 516-829-0100
FAX: 516-829-0909

TABLE OF CONTENTS

FIGURES

APPENDICES

1.0 EXECUTIVE SUMMARY

Athenica Environmental Services Inc. (AES) performed a Phase II Focused Subsurface Site Investigation (Phase II) for the property located at 52-01 Queens Boulevard, Woodside, Queens, New York (the "Site"). The Site is bound to the west by 52nd Street, to the south by Queens Boulevard and to the north and east by residential and commercial properties. The Site is currently unoccupied previously occupied by used car dealerships.

A previous Phase I Environmental Site Assessment (ESA) report, prepared by AES, on behalf of the client, dated February 13, 2007, identified the following recognized environmental conditions warranting additional investigation at the Site:

- Presence of historical underground storage tanks (USTs) at the Site.
- According to the New York State Department of Environmental Conversation (NYSDEC) Spill database, there are a number of Leaking Underground Storage Tank (LUSTs) sites located within a one-half mile radius of the Site that could impact soil quality at the Subject Property.
- Historical usage of the Site and surrounding properties.

Based on these concerns, a Phase II was conducted by AES, on March 13, 2007 to evaluate soil and/or groundwater quality beneath the Site.

Geophysical Survey
Nova Geophysical Services (NOVA) conducted a geophysical survey, to determine if any current or former USTs are located at the Site. The geophysical survey did not identify the presence of any USTs at the Site.

Soil & Groundwater Investigation
AES advanced a total of five (5) borings throughout the Site and collected a total of ten (10) soil samples. The Site soils consist of native material, consisting of fine to medium sands with some silt, was observed at depths greater than two (2) feet to twenty (20) feet below ground surfaces (bgs). Field screening of soil samples with a photo ionization detector (PID), as well as visual and olfactory evidence, indicated that Site soils did not contain any field evidence of petroleum contamination. During the course of this project, no groundwater was observed at twenty (20) feet below ground surface. Therefore, no groundwater samples were collected. Further, since the future construction plans does not require any excavation more then fifteen (15) feet bgs for the future foundation work and based on no groundwater was observed at this depth (20 feet bgs), AES did not collect any groundwater samples for analysis.

Laboratory Results
Laboratory results indicated that no volatile organic compounds (VOCs) or semi-volatile organic compounds (SVOCs), PCBs or TAL metals were detected above New York State Department of Environmental Conservation Spill Technology Remediation Series #1 (STARS) Memo - Alternative Soil Guidance Values.

Conclusions and Recommendations
Based upon the field evidence and the laboratory data, AES concludes that the Site soils and groundwater have not been impacted by historical or current usage of the Site and recommends no further investigation.

2.0 INTRODUCTION

This Phase II Focused Subsurface Site Investigation (Phase II) was conducted on March 13, 2007 by AES in order to investigate potential areas as a result of historical usage of the Site. The Site is located at 52-01 Queens Boulevard, in Woodside, Queens County, New York. This report was prepared by Levent Eskicakit, P.G., E.P. at the request of the Client. The Site contains one (1) one-story commercial building with asphalt paved parking lot and is currently unoccupied.

2.1 Project Scope of Work

The Project Scope of Work included the following:

- Prior to the initiation of subsurface activities, New York Dig Safe was contacted in order to assure that no subsurface utility services associated with the current operations were encountered during drilling activities.
- AES prepared a site-specific health and safety plan (HASP) for the Phase II field work at the Site.
- NOVA Geophysical Services conducted a geophysical survey using ground penetrating radar (GPR) to locate if any former or current USTs are located at the Site.
- AES advanced five (5) soil borings using Geoprobe drilling equipment to depths of approximately 20 feet bgs at those locations identified by the GPR study.
- Ten (10) soil samples were collected from the selected soil borings. The soil samples were collected from each boring from the soil horizon showing the highest apparent contamination. If no field evidence of soil contamination was detected, then a sample from maximum depth was retained for laboratory analysis. All soil samples were analyzed for VOCs and SVOCs in accordance with EPA Methods 8260 and 8270, respectively. The soil sample collected from the inside of the building adjacent former hydraulic lift area was analyzed for PCBs.
- Preparation of a report summarizing the findings and conclusions with figures depicting soil boring locations, and significant Site features.

3.0 SITE INVESTIGATION

3.1 Geophysical Survey

On March 13, 2007, Nova Geophysical Services (NOVA) conducted a geophysical survey at the Site under a subcontract with AES. The purpose of this investigation was to clear and mark the locations of the proposed environmental soil borings and to locate (if any) abandoned USTs at the Site.

A ground penetrating radar (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 50 KHz. 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. This system is capable of transmitting electromagnetic energy in the frequency range of 16 MHz to 500 MHz. The GPR used in this process was a MALA model Mid-Range with a 350MHz antenna.

During this investigation, the GPR confirmed there are no USTs located at the Site. Additionally, all of the proposed environmental soil boring locations were cleared and marked for safety.

3.3 Soil Sample Collection Procedures and Field Observations

On March 13, 2007, AES advanced a total of five (5) soil borings throughout the Site. Total of ten (10) soil samples were collected. From those ten samples six (6) selected soil samples were further analyzed for VOCs, SVOCs and PCBs. Please refer to Figure 2 for Soil Sample Location Map.

Utilizing geoprobe equipment the selected soil borings were either continuously advanced in 2 or 4 foot intervals or direct pushed to selected depths. Selected intervals were field screened for evidence of contamination. All soils were physically evaluated for visual and olfactory evidence of contamination. Additionally, all soils were field screened with a PID for the presence of volatile organic vapors.

The soil borings were advanced to depths ranging from fifteen (15) feet to twenty (20) feet bgs for continuous soil sample collection. Soil samples were collected from selected intervals and submitted for laboratory analysis. The Site soils consist of approximately one (1) to two (2) feet of fill material containing brick, fine silty sands, clay and fine gravels. Native material, consisting of fine to medium sands with some silt, was observed at depths greater than one (1) feet below ground surface (bgs). Field screening of soil samples with a PID (0.0 parts per million), as well as for visual and olfactory evidence, indicated that Site soils did not contain any evidence of contamination.

Neither petroleum odor nor any chemical odors were observed within the photo ionization detector (PID) at the Site. Soil samples were collected continuously using a macrocore sample unit. All soil

samples were field-screened using a using a PID. PID readings ranged from 0 to 0.5 parts per million (ppm).

All selected soil samples were placed in appropriate containers supplied by the laboratory. AES completed all chain of custody documents prior to sample shipment. The samples were cooled to 4 degrees centigrade (wet ice) during shipment to the laboratory. All samples were submitted to Chemtech laboratory.

3.4 Groundwater Investigation

No groundwater was observed down to 20 feet bgs at the Site and no groundwater samples were collected during the course of this investigation.

4.0 RESULTS OF LABORATORY ANALYSES

4.1 Soil Sample Results

A complete copy of the laboratory report from the soil-sampling program is provided in Appendix A.

Laboratory results indicated that no VOCs or (SVOCs), PCBs or TAL metals were detected above New York State Department of Environmental Conservation Spill Technology Remediation Series #1 (STARS) Memo - Alternative Soil Guidance Values.

5.0 CONCLUSIONS/RECOMMENDATIONS

Based upon the results of this study, AES concludes the following:

- The Geophysical survey of the property indicated that there are no current or any abandoned USTs located at the Site. Additionally, the geophysical survey cleared all of the environmental soil borings at the Site.
- None of the soils exhibited petroleum or chemical odors at the Site.
- No evidence of petroleum or none-petroleum related chemicals were noted in the soil borings collected from the Site.
- No VOC's, SVOCs, TAL metals and PCBs were detected above NYSDEC TAGM Soil Cleanup Objectives or above the laboratory methods detection limits.

Based upon the field evidence and the laboratory data, AES concludes that the Site soils and groundwater have not been impacted by historical or current usage of the Site and recommends no further investigation.

6.0 LIMITATIONS OF THE FOCUSED SUBSURFACE SITE INVESTIGATION

AES has prepared this Focused Subsurface Site Investigation in accordance with the contract scope of work, using reasonable efforts to attempt to identify areas of potential liability associated with recognized environmental conditions in the Site. Any survey for the presence soil or groundwater contamination in the Site was focused in nature. The survey may not be relied upon as a comprehensive investigation for the presence of such contamination in all areas of the Site or as meeting any standards established for conducting such surveys. AES has made no independent investigation of the accuracy of these secondary sources and has assumed them to be accurate and complete. AES does not warrant the accuracy or completeness of information provided by secondary sources. AES does not warrant that contamination that may exist on the Site has been discovered, that the Site is suitable for any particular purpose or that the Site is clean or free of liability. Any cost estimates are based on general comparisons with past projects of similar scope and size, and actual costs or design-phase estimates may vary substantially from these estimates.

TABLE 1
SUMMARY OF ANALYTICAL SOIL RESULTS
March 2007
52-01 Queens Blvd, Woodside, NY

Sample ID. Sample Depth (ft)* Date Collected Media	B-1 0-2 3/29/2007 Soil	B-1 20-22 3/29/2007 Soil	B-2 0-2 3/29/2007 Soil	B-2 20-22 3/29/2007 Soil	B-3 0-2 3/29/2007 Soil	B-3 20-22 3/29/2007 Soil	B-4 0-2 3/29/2007 Soil	B-4 20-22 3/29/2007 Soil	B-5 0-2 3/29/2007 Soil	B-5 20-22 3/29/2007 Soil	NYSDEC TAGM Recommended Soil Cleanup Objectives
Volatile Organic Compounds (VOCs)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
SVOC (BN) Bis-phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50,000
PCB'S / PESTICIDES Endrin Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,000
TAL METALS											
Aluminum	6830	3670.0	7820.0	6830	9210.0	3670.0	6830	7450.0	6830	7880.0	33000
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A
Arsenic	ND	ND	0.6	ND	3.0	ND	ND	0.4	ND	0.4	12
Barium	41	25.6	46.5	41	57.4	25.6	41	43.0	41	46.0	600
Beryllium	0.3	0.1	0.3	0.3	0.4	0.1	0.3	0.2	0.3	0.3	1.75
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
Calcium	999	399	1130	999	1320	399	999	1160	999	1110	35000
Chromium	23.7	11.7	26.6	23.7	27	11.7	23.7	22	23.7	24.8	40
Cobalt	6	5.2	7.2	6	8.6	5.2	6	6.2	6	7.2	60
Copper	12.9	8.6	16.1	12.9	17.4	8.6	12.9	15.1	12.9	14.7	50
Iron	14400	9960	15500	14400	17600	9960	14400	14000	14400	14900	550000
Lead	5.4	3.2	7.1	5.4	6.9	3.2	5.4	9.1	5.4	7.1	200-500
Magnesium	2240	1360	2650	2240	3290	1360	2240	2500	2240	2740	5000
Manganese	305	374	320	305	335	374	305	259	305	297	5000
Mercury	0.007	ND	ND	0.007	0.006	ND	0.007	ND	0.007	0.005	0.2
Nickel	12.4	8	14.3	12.4	ND	8	12.4	12.8	12.4	14.4	25
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SB
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SB
Vanadium	22	16	23.9	22	26.9	16	22	20.8	22	22.7	300
Zinc	32.9	22.6	37.7	32.9	44.6	22.6	32.9	33.7	32.9	36.4	50

*-Sample depth is in feet below ground surface

All concentrations reported in ug/kg (parts per billion)

ND-Non-detect

SB-Site Background

Concentration Exceeds NYSDEC TAGM Recommended Soil Cleanup Objectives or Eastern USA Background Levels is **Bold and Underlined.**

* NYSDEC Remedial Program Soil Cleanup Objectives for Unrestricted Use Soil Cleanup Objective Value for Zinc.

Prepared by:
ATHENICA
1/31/2008

FIGURES

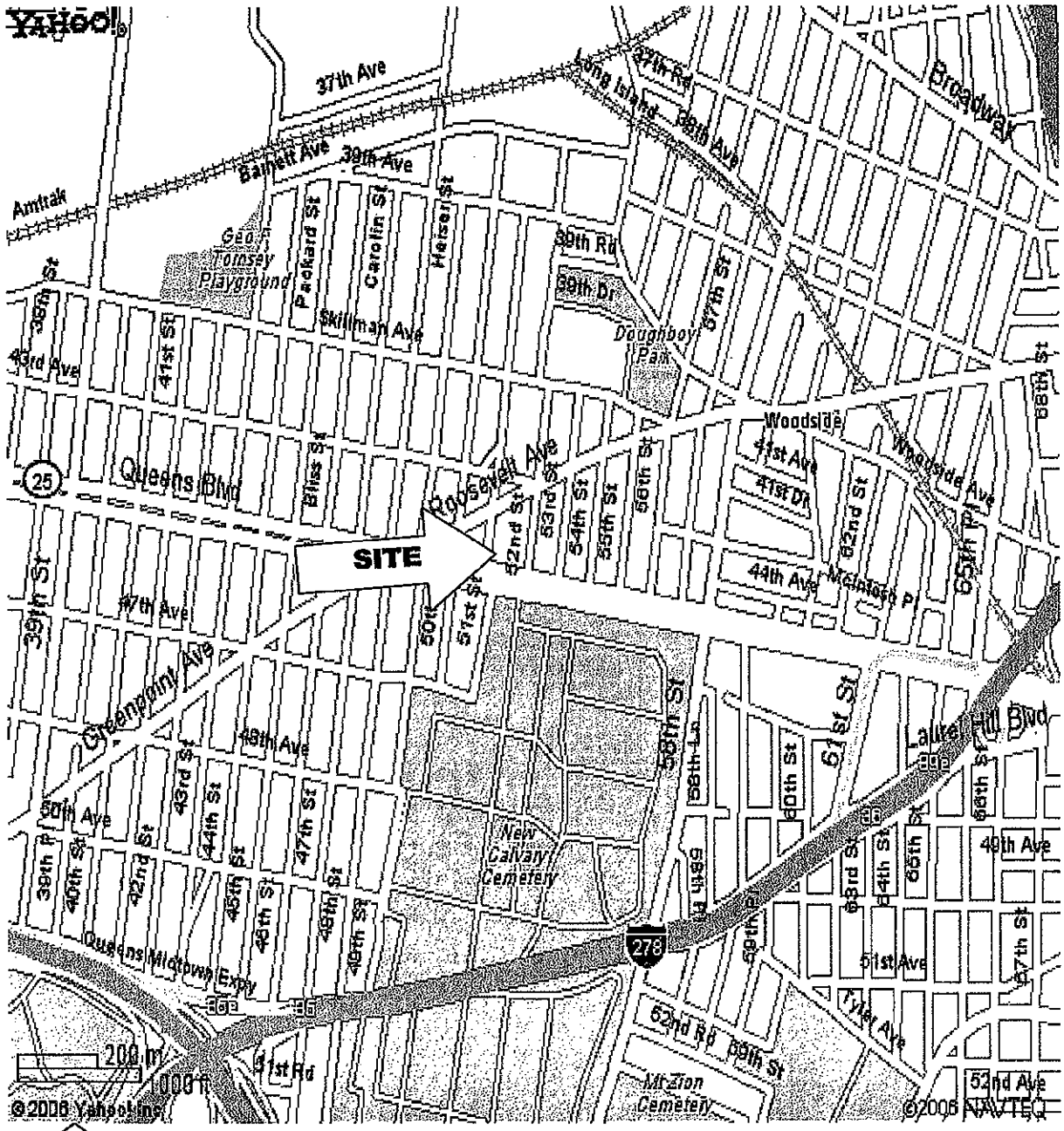


FIGURE 1

SITE LOCATION MAP

Yahoo Maps Queens County, New York

SITE:	**52-01 Queens Boulevard** Queens, New York 11377
PROJECT #:	07.0032
SCALE:	See Map

ATHENICA ENVIRONMENTAL SERVICES
45-09 Greenpoint Avenue, Long Island City, NY 11103
(718) 784-7490 Fax (718) 784-4085

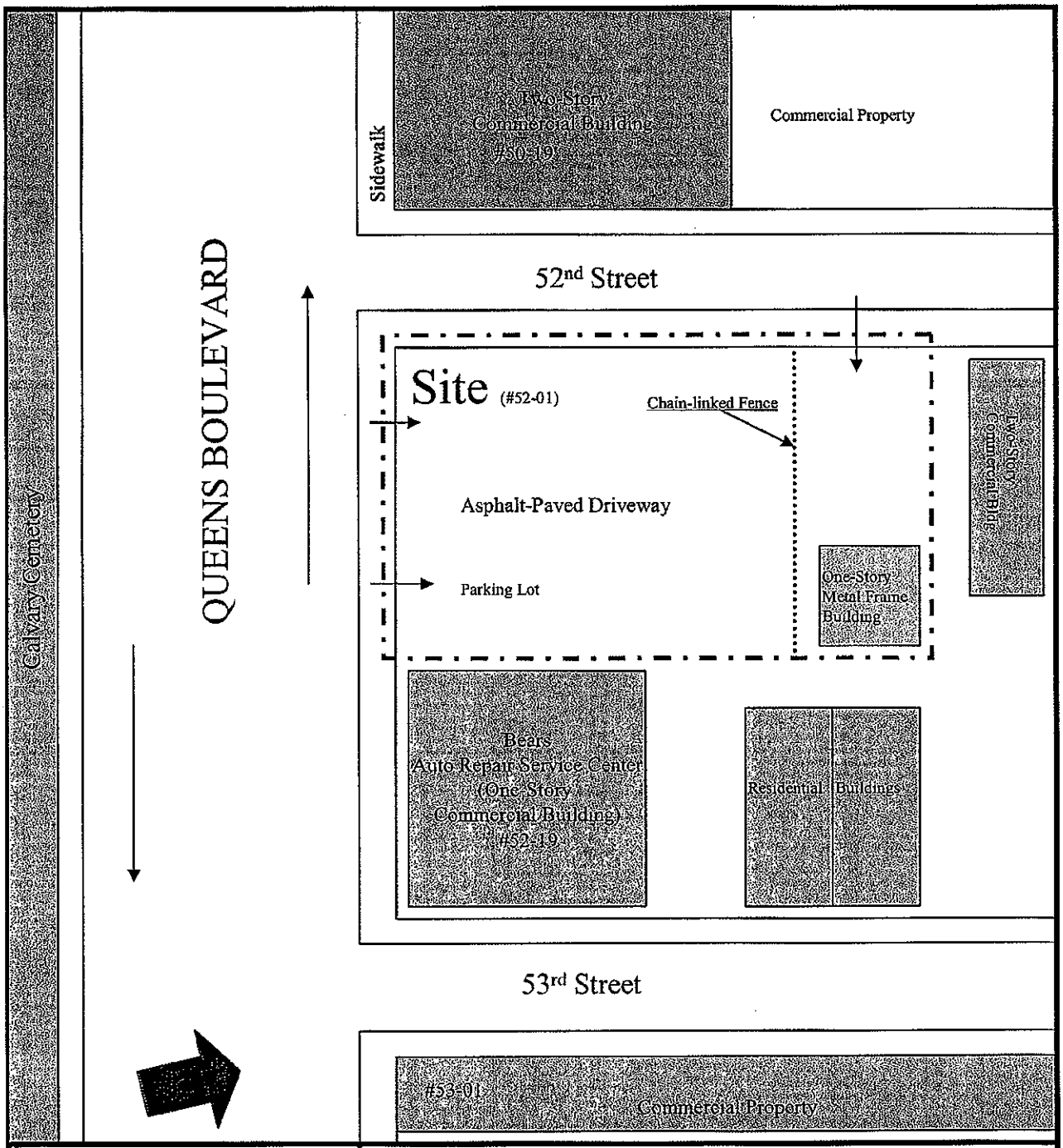
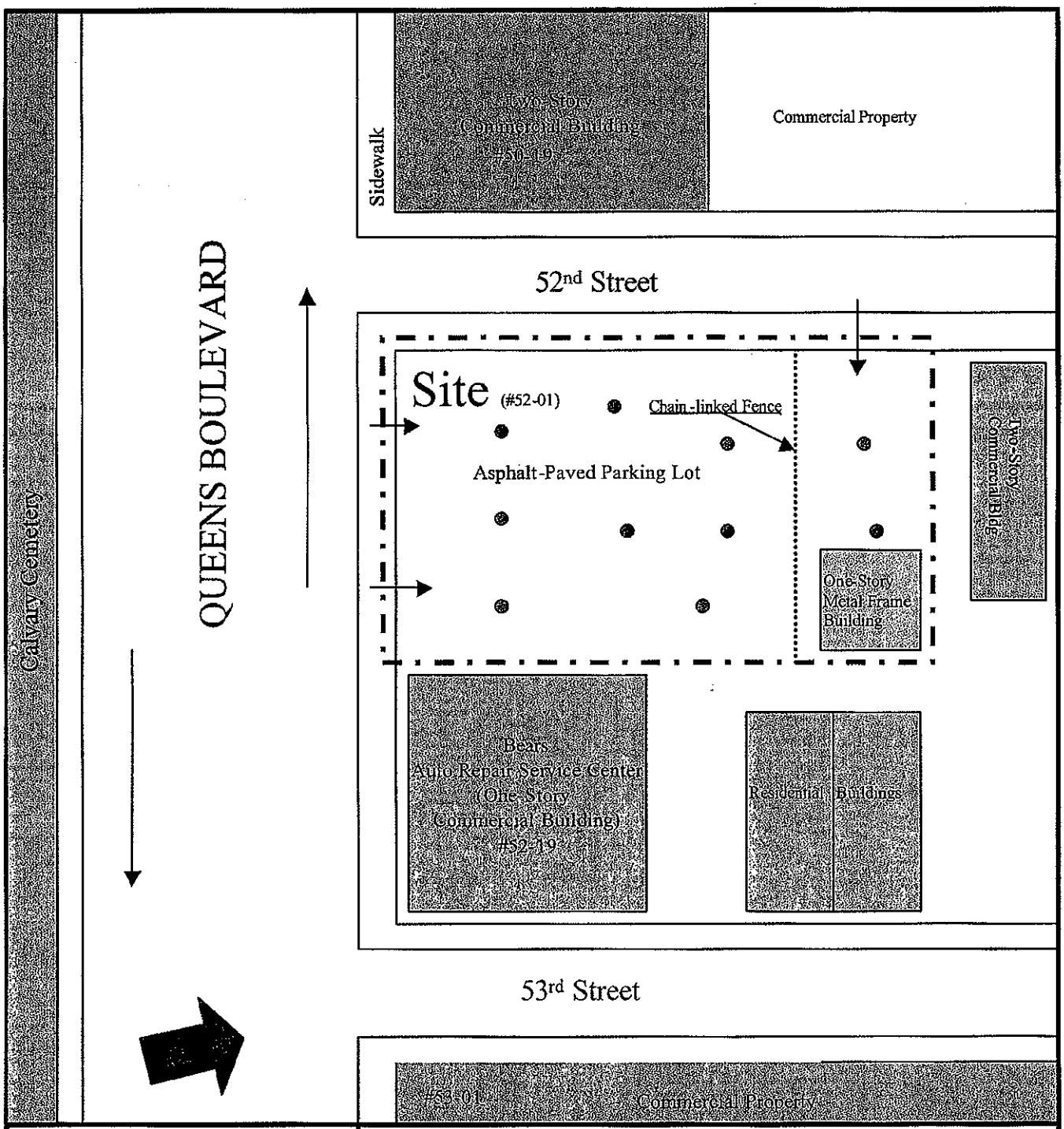


FIGURE 2
SITE PLAN

ATHENICA ENVIRONMENTAL SERVICES
45-09 Greenpoint Avenue, Long Island City, NY 11103
(718) 784-7490 Fax (718) 784-4085

SITE:	**52-01 Queens Boulevard** Queens, New York 11377
PROJECT #:	07.0032
SCALE:	Not to Scale



● Proposed Boring Locations
● Previous Soil Borings

FIGURE 1
SITE SAMPLING PLAN

ATHENICA ENVIRONMENTAL SERVICES
45-09 Greenpoint Avenue, Long Island City, NY 11103
(718) 784-7490 Fax (718) 784-4085

SITE: **Commercial Property**
52-01 Queens Boulevard
Queens, New York 11377

PROJECT #: 07.0072
SCALE: Not to Scale

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Engineering Consultants

March 6, 2008

Mr. John Wuthenow
Director
Bureau of Environmental Planning & Assessment
New York City Department of Environmental Protection
59-17 Junction Blvd.
Flushing, NY 11373
Phone: 718-595-6565
Fax: 718-595-3525

RE: Environmental Groundwater Investigation
52-01 Queens Boulevard – Hazardous Material "E" Designation
Block 1321, Lot 1, Queens, New York
NYC DEP # Pending
AES Project # 08-0099

Dear Mr. Wuthenow:

Athenica Environmental Services, Inc. (AES) was retained by Mr. George Tsilogiannis (The property Owner) to conduct an environmental groundwater investigation as per requirement of the New York City Department of Environmental Protection (NYCDEP).

Previous environmental studies (Phase I ESA, Phase II ESA, dated, March 2007) confirmed that the Site soils were not impacted by the historical usage of the Site and surrounding properties. As per requirement of the NYCDEP (Correspondent dated February 14, 2008), Athenica conducted groundwater investigation to confirm that groundwater quality of the site has not been impacted by the historical usage of the Site and surrounding properties

Specifically, Athenica installed three (3) borings to thirty feet (30') below ground surface (bgs) using hollow stem auger at the Site. Athenica applied following activities during the investigation of the groundwater at the Site.

Site Health and Safety Plan

AES prepared a Site-specific Health and Safety Plan (HASP) for the proposed groundwater sampling activities at the Site.

Field Investigation Activities

As required by the NYC DEP, Athenica implemented the following field investigation activities.

On March 5, 2008, three (3) borings were advanced to the thirty feet (30') bgs at the Site using a hollow stem auger. Please refer to the attached Site Plan showing boring locations. The Site soils consist of native material, consisting of fine to medium sand with some silt was observed at depths greater that two feet to thirty feet bgs. Field screening of soils with a photo ionization detector (PID), as well as visual and olfactory evidence of petroleum contamination, indicated that none of the soils observed during the installation of the temporary groundwater wells, contained field evidence of contamination. No PID readings were observed above the background levels of 0.0 parte per million (ppm). No groundwater was observed at this depth and no sampling was conducted for laboratory analysis.

CONCLUSION

These groundwater investigation activities have demonstrated that groundwater was not observed at the site at depths to 30 feet bgs. Further, since the proposed future construction plans does not require any excavation more than 15 feet bgs for the future foundation work and based on no groundwater was observed at 30 feet bgs Athenica recommends no further investigation at the Site.

Very truly yours,

Athenica Environmental Services, Inc.

Levent Eskicakit, P.G.
Environmental Division Manager

Attachments
Site Location Map
Site Sampling Plan
Field Logs
HASP
NYC DEP Correspondence

cc Mr. George Tsilogiannis
Mr. Spiro Dongaris, Athenica

K:\PHASE I& II INSPECTIONS\PHASE II ESA\52-01 Queens Blvd, Queens\Groundwater Investigation Report.doc

The City of New York

DEPARTMENT OF ENVIRONMENTAL PROTECTION
59-17 Junction Boulevard
Flushing, New York 11373

Emily Lloyd
Commissioner

Tel. (718) 595-6565
Fax (718) 595-3525
elloyd@dep.nyc.gov

Angela Licata
Deputy Commissioner

Bureau of Environmental Planning & Analysis

Tel. (718) 595-4398
Fax: (718) 595-4479
alicata@dep.nyc.gov

www.nyc.gov/dep

DIAL 311 Government Information and Services for NYC

April 18 , 2008

Levent Eskicakit
Athenica Environmental Services, Inc.
45-09 Greenpoint Avenue
LIC, NY 11104

Re: 52-01 Queens Boulevard
Hazardous Material/Noise/Air "E" Designation
Block 1321 Lot 1
DEP # 08DEPTECH212Q

Dear Mr. Eskicakit:

The New York City Department of Environmental Protection, Bureau of Environmental Planning and Analysis (BEPA) has reviewed the Groundwater Investigation Report dated march 6, 2008 for the above-referenced project. A previous Phase I revealed the site was historically occupied by used car dealerships. In addition, underground storage tanks (USTs) and tank spills in the area are concerns.

Based on a review of the Phase 2 investigation, it did not appear that a significant environmental concern and/or a potential pathway of exposure exists at the site as a result of the project/action. However, required groundwater samples were not analyzed. The applicant remobilized to obtain groundwater samples. Groundwater was not encountered in three borings at a depth of 30 feet. Therefore groundwater will not have an impact on this project.

The review of air/noise issues is continuing. A Notice to Proceed will be generated upon successful completion of that review. If you have any questions or comments, you may contact me at jwuthenow@dep.nyc.gov.

Sincerely,

John Wuthenow
Director

Cc: S, Vafadari
J. Wuthenow
W. Yu
G. Heath
File

APPENDIX B

HEALTH AND SAFETY PLAN (CD-ROM)

SITE SPECIFIC HEALTH AND SAFETEY PLAN (HASP)

52-01 QUEENS BOULEVARD
QUEENS, NEW YORK

PREPARED FOR

GEORGE TSILOGIANNIS
11 MIDDLE NECK ROAD, SUITE 204
GREAT NECK, NY 11021
ATTN: MR. DEMETRI TSILOGIANNIS
PH: : 516-829-0100
FX: 516-829-0909
EMAIL: DEMETRI010@YAHOO.COM

ATHENICA PROJECT NUMBER
08-0099

DATE
MARCH 3, 2008

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Engineering Consultants

45-09 Greenpoint Avenue
Long Island City, N.Y. 11104

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1.0 INTRODUCTION

This section of the Site Health and Safety Plan (HASP) document defines general applicability and general responsibilities with respect to compliance with Health and Safety programs.

1.1 Scope and Applicability of the Site Health and Safety Plan

The purpose of this Site HASP is to define the requirements and designate protocols to be followed at the Site during investigation and remediation activities. Applicability extends to all Government employees, contractors, subcontractors, and visitors.

All personnel on Site, contractors and subcontractors included, shall be informed of the Site emergency response procedures and any potential fire, explosion, health, or safety hazards of the operation. This HASP summarizes those hazards in Table 3.1 and defines protective measures planned for the Site.

This plan must be reviewed and an agreement to comply with the requirements must be signed by all personnel prior to entering the exclusion zone or contamination reduction zone.

During development of this plan, consideration was given to current safety standards as defined by the Environmental Protection Agency (EPA)/Occupational Health and Safety Administration (OSHA)/National Institute of Occupational Safety and Health (NIOSH), health effects and standards for known contaminants, and procedures designed to account for the potential for exposure to unknown substances. Specifically, the following reference sources have been consulted:

- OSHA 29 CFR 1910.120 and EPA 40 CFR 311
- USEPA, Office of Emergency and Remedial Response, Emergency Response Team, Standard Operating Safety Guides
- NIOSH/OSHA/USCG/EPA Occupational Health and Safety Guidelines
- American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values

1.2 Visitors

All visitors entering the contamination reduction zone and exclusion zone at the Site will be required to read and verify compliance with the provisions of this HASP. In addition, visitors will be expected to comply with relevant OSHA requirements such as medical monitoring (Sec. 6.0), training (Sec. 4.0), and respiratory protection (if applicable). Visitors will also be expected to provide their own protective equipment.

In the event that a visitor does not adhere to the provisions of the HASP, he/she will be requested to leave the work area. All nonconformance incidents will be recorded in the Site field log.

2.0 KEY PERSONNEL/IDENTIFICATION OF HEALTH AND SAFETY

2.1 Key Personnel

The following personnel and organizations are critical to the planned activities at the Site. The organizational structure will be reviewed and updated periodically by the site supervisor.

Field Investigation Team (FIT) Representatives:

Levent Eskicakit, Athenica Environmental Services, Inc.
Dimitris Bellos, Athenica Environmental Services, Inc.

2.2 Site Specific Health and Safety Personnel

The Site Health and Safety Officer (HSO) has total responsibility for ensuring that the provisions of this HASP are adequate and implemented in the field. Changing field conditions may require decisions to be made concerning adequate protection programs. Therefore, it is vital that personnel assigned as HSO be experienced and meet the additional training requirements specified by OSHA in 29 CFR 1910.120 (see Section 4.0 of this HASP). The HSO is also responsible for conducting site inspections on a regular basis in order to ensure the effectiveness of this plan.

The HSO at the Site is Mr. Levent Eskicakit (Cell# 347-556-7787)

Designated alternates include:

Dimitris Bellos (718-784-7490)
Spiro Dongaris (718-784-7490)

2.3 Organizational Responsibility

The FIT is responsible for performing the sample collection activities delineated in the Remedial Action Work Plan including the following tasks:

- Groundwater Sample Collection
- Ambient Air Monitoring

3.0 TASK/OPERATION SAFETY AND HEALTH RISK ANALYSIS

3.1 Historical Overview of Site

This HASP defines the hazards and methods to protect personnel from those hazards identified in previous site work or background information. For a thorough overview of historical information concerning the Subject see the following documents:

- Phase I Environmental Site Assessment and Phase II ESA Report, prepared by Athenica Environmental Services, Inc., dated March & April 2007.
- NYCDEP's Response Letter, dated February 14, 2008.

Based on the review of above documents, the following environmental concerns have been noted on the Site:

- Historical usage of the Site and surrounding properties may have impacted the groundwater quality at the Site.

The following activities, which will be performed as part of the Subsurface Site Investigation of the Site, are covered by this HASP:

- Ambient Air Monitoring
- Groundwater Sampling

3.2 Task by Task Risk Analysis

The following subsections describe each task/operation in terms of the specific associated hazards. In addition, the protective measures to be implemented during completion of the tasks are identified.

The following provides a summary of typical chemical of concern related to petroleum impacted soils and groundwater.

TABLE 3.1
TYPICAL CHEMICALS OF CONCERN RELATED TO PETROLEUM IMPACTED MATERIALS

Contaminant	TLV/IDLH	Source/Concentration	Routes of Exposure
Benzene & TVOCs	1.6 mg/m^3 100 mg/m^3	Soil/ <100 ppm	Inhalation, absorption, digestion
MTBE	1.5 mg/ m^3 500 mg/ m^3	Soil/<100 ppm	Inhalation, absorption, digestion
Total SVOC's	N/A	N/A	Inhalation, absorption, digestion

TLV = Threshold Limit Value
IDLH = Immediately Dangerous to Life and Health
(C) = ACGIH designated carcinogen
ACGIH = American Conference of Governmental Industrial Hygienists
NIOSH = National Institute of Occupational Safety and Health

3.3.1 Air Sampling/Monitoring

A. Hazard Identification

General hazards frequently encountered during air sampling and monitoring include:

- Electrical hazards as a result of power sources to run sampling pumps.
- Placing sampling pumps in elevated areas or areas where slip/trip and fall hazards exist.
- Hazards associated with ambient environment being sampled.
- Readings indicating non-explosive atmospheres, low concentrations of toxic substances, or other conditions may increase or decrease suddenly, changing the associated risks.
- Air sampling matrix solutions may be acidic or basic, causing a corrosive hazard, and broken glass collection tubes can cut hands if mishandled.

B. Hazard Prevention

- Grounded plugs should be used when a power source is needed to reduce the hazard of electric shock.
- Generators or air pumps should be used in dry areas, away from possible ignition sources. Do not stand in water or other liquids when handling equipment. Electrical equipment shall conform with OSHA 1910.303(a) and 1910.305(a), (f), (f)(3).
- Ground fault interrupters are used in the absence of properly grounded circuitry or when portable tools must be used in wet areas.
- Extension cords should be protected from damage and maintained in good condition.
- Air pumps should be placed within easy reach using an OSHA approved ladder, elevated platform or by placing the pump on a stake.
- Personnel should be thoroughly familiar with the use, limitations and operating characteristics of the monitoring instruments.
- Perform continuous monitoring in variable atmospheres.
- Use intrinsically safe instruments until the absence of combustible gases or vapors is anticipated.
- Proper protective clothing such as gloves and goggles should be used when handling corrosive substances. A 15-minute eyewash and first aid should be available. Handle and store corrosives in appropriate areas.

3.3.2 Soil Borings

A. Hazard Identification

Hazards generally associated with drilling operations include the following:

- Noise levels exceeding the OSHA PEL of 90 dBA are both a hazard and a hindrance to communication.
- Fumes (carbon monoxide) from the drill rig.

- Overhead utility wires, i.e., electrical and telephone, can be hazardous when the drill rig boom is in the upright position.
- Underground pipelines and utility lines can be ruptured or damaged during active drilling operations.
- Moving parts, i.e. augers, on the drill rig may catch clothing. Free or falling parts from the cat head may cause head injury.
- Moving the drill rig over uneven terrain may cause the vehicle to roll over or get stuck in a rut or mud. Be aware of hazards associated with moving heavy machinery and other associated injury.
- High pressure hydraulic lines and air lines used on drill rigs are hazardous when they are in ill repair or incorrectly assembled.

B. Hazard Prevention

- Review the contaminants suspected to be onsite and perform air monitoring as required. Shut down drill rig and/or divert exhaust fumes.
- All chains, lines, cables should be inspected daily for weak spots, frays, etc.
- Ear muffs and ear plugs effectively reduce noise levels.
- Hard hats should be worn at all times when working around a drill rig. Secure loose clothing. Check boom prior to approaching drill rig.
- To avoid contact with any overhead lines, the drill rig boom should be lowered prior to moving the rig. Overhead utilities should be considered "live" until determined otherwise
- The rig mast should not be erected within 10 feet of an overhead electrical line until the line is de-energized, grounded, or shielded and an electrician has certified that arcing cannot occur.
- Minimum working distances around "live" overhead power lines are:

Minimum working voltage range ((phase to phase) kilovolt)	Clear hot stick distance
2.1 to 15	2 ft. 0 in.
15.1 to 35	2 ft. 4. in.
35.1 to 46	2 ft. 6 in.
46.1 to 72.5	3 ft. 0 in.
72.6 to 121	3 ft. 0 in.
138 to 145	3 ft. 6 in.
161 to 169	3 ft. 8 in.
230 to 242	5 ft. 0 in.
345 to 362	7 ft. 1 in.
500 to 552	11 ft. 1 in.
700 to 765	15 ft. 1 in.

- A thorough underground utilities search should be conducted before the commencement of a drilling project.
- All high pressure lines should be checked prior to and during use.

3.3.3 Subsurface Soil Sampling

A. Hazard Identification

For the purposes of this hazard identification section, subsurface soil sampling will be considered any soil sampling obtained from split-spoons, or macrocore and large bore samplers completed following the advancement of soil borings using hollow-stem auger or Geoprobe-type direct-push drilling equipment. Hazards generally associated with subsurface soil sampling include:

- Contact with or inhalation of contaminants, potentially in high concentrations in sampling media.
- Contact with or inhalation of decontamination solutions.

B. Hazard Prevention

- To minimize exposure to chemical contaminants, a thorough review of suspected contaminants should be completed followed by implementation of an adequate protection program.
- Material Safety Data Sheets for all decon solutions should be included with each Site Health and Safety Plan.
- First aid equipment should be available based on MSDS requirements.

3.3.4 Groundwater Well Installation

A. Hazard Identification

Hazards generally associated with drilling operations include the following:

- Noise levels exceeding the OSHA PEL of 90 dBA are both a hazard and a hindrance to communication.
- Fumes (carbon monoxide) from the drill rig.
- Overhead utility wires, i.e., electrical and telephone, can be hazardous when the drill rig boom is in the upright position.
- Underground pipelines and utility lines can be ruptured or damaged during active drilling operations.
- Moving parts, i.e. augers, on the drill rig may catch clothing. Free or falling parts from the cat head may cause head injury.
- Moving the drill rig over uneven terrain may cause the vehicle to roll over or get stuck in a rut or mud. Be aware of hazards associated with moving heavy machinery and other associated injury.
- High pressure hydraulic lines and air lines used on drill rigs are hazardous when they are in ill repair or incorrectly assembled.

B. Hazard Prevention

- Review the contaminants suspected to be onsite and perform air monitoring as required. Shut down drill rig and/or divert exhaust fumes.
- All chains, lines, cables should be inspected daily for weak spots, frays, etc.
- Ear muffs and ear plugs effectively reduce noise levels.
- Hard hats should be worn at all times when working around a drill rig. Secure loose clothing. Check boom prior to approaching drill rig.
- To avoid contact with any overhead lines, the drill rig boom should be lowered prior to moving the rig. Overhead utilities should be considered "live" until determined otherwise.
- The rig mast should not be erected within 10 feet of an overhead electrical line until the line is de-energized, grounded, or shielded and an electrician has certified that arcing cannot occur.
- Minimum working distances around "live" overhead power lines are:

Minimum working voltage range ((phase to phase) kilovolt)	Clear hot stick distance
2.1 to 15	2 ft. 0 in.
15.1 to 35	2 ft. 4. in.
35.1 to 46	2 ft. 6 in.
46.1 to 72.5	3 ft. 0 in.
72.6 to 121	3 ft. 0 in.
138 to 145	3 ft. 6 in.
161 to 169	3 ft. 8 in.
230 to 242	5 ft. 0 in.
345 to 362	7 ft. 1 in.
500 to 552	11 ft. 1 in.
700 to 765	15 ft. 1 in.

- A thorough underground utilities search should be conducted before the commencement of a drilling project.
- All high pressure lines should be checked prior to and during use.

3.3.5 Groundwater Sampling

A. Hazard Identification

Hazards generally encountered during groundwater sampling include the following:

- Exposure to vapors of volatile organics when the well head is initially opened.
- Back strain due to lifting bailers or pumps from down-well depths and moving equipment (generators) to well locations.
- Slipping on wet, muddy surfaces created by spilled water.
- Electrical hazards associated with use of electrical equipment around water or wet surfaces.
- Possible water splashing in eyes during sampling.

B. Hazard Prevention

- To minimize exposure to volatiles when the well head is initially opened, a field monitoring instrument (Photo ionization Detector (PID)) should be placed near the opening to monitor organic levels. The breathing zone should also be monitored. The action levels on the instruments should be chosen before site work begins, and should be outlined in the safety plan. To prevent contact with contaminated groundwater, or product material, provide adequate protective equipment.
- Back strain can be prevented by employing proper lifting and bailing techniques. Heavy equipment, such as pumps and generators, should be only lifted with the legs, preferably using two or three personnel.
- Slipping on wet surfaces can be prevented by placing all purged water in drums for removal. Also, if the area is wet, wear boots with good treads and be alert of where personnel are walking to decrease the chance of slipping.
- Ground fault interrupters should be used in the absence of properly grounded circuitry or when pumps are used around wet conditions.
- Electrical extension cords should be protected or guarded from damage (i.e., cuts from other machinery) and be maintained in good condition.
- Eye protection should be worn as appropriate to prevent water splashing into eyes.

3.3.6 Soil Excavations

A. Hazard Identification

Hazards encountered during soil excavation involve both chemical and physical agents including the following:

- Exposure to airborne contaminants released during intrusive activities. Flammable atmospheres encountered in excavation.
- Sides of excavation can cave in. Possible burying or crushing of workers due to 1) absence of shoring, 2) misjudgment of stability, 3) defective shoring, and/or 4) undercut sides.
- Falling during access/egress or while monitoring or dismounting equipment, or stumbling into excavation.
- An overhead hazard can result from material, tools, rock, and/or soil falling into the excavation.
- Congested work area due to too many workers in a small area.

B. Hazard Prevention

- Monitor for airborne contaminants. Allow test pits to purge and/or use PPE.
- Provide adequate shoring or sloping of sides of the excavation. Regularly inspect trenches for changing conditions. The proper shoring angles for the following lithologies and maximum depths is provided below:

  Solid rock, cemented sand or gravel = 90 degrees
  Compact angular gravel = 63 degrees, 26 ft. deep
  Compacted sharp sand = 33 degrees, 41 ft. deep
  Rounded loose sand = 26 degrees, 34 ft. deep

- Provide ramps or ladders for trenches to allow safe access and egress.
- Provide an adequate barrier around open pits. Material from pit must be placed away from the edges to prevent cave ins and instability of pit.
- To prevent overexertion, limit manual lifting and emphasize mechanical means where practical.
- Maintain ample work room between workers.

4.0 PERSONNEL TRAINING REQUIREMENTS

Consistent with OSHA's 29 CFR 1910.120 regulations covering Hazardous Waste Operations and Emergency Response, all Site personnel are required to be trained in accordance with the standard. At a minimum, all personnel are required to be trained to recognize the hazards on-site, the provisions of this HASP, and the responsible personnel.

4.1 Pre-assignment and Annual Refresher Training

Prior to arrival on site, each employer will be responsible for certifying that his/her employees meet the requirements of pre-assignment training, consistent with OSHA 29 CFR 1910.120 paragraph (e)(3). The employer should be able to provide a document certifying that each general site worker has received 40 hours of instruction off the site, and 24 hours of training for any workers who are on site only occasionally for a specific task. If an individual employee has work experience and/or training that is equivalent to that provided in the initial training, an employer may waive the 40-hour training so long as that equivalent experience is documented or certified. All personnel must also receive 8 hours of refresher training annually.

4.2 Site Supervisors Training

Consistent with OSHA 29 CFR 1910.120 paragraph (e)(8), individuals designated as Site supervisors require an additional 8 hours of training.

The following individuals are identified as Site supervisors:

Name	Phone	Title/Responsibility
Levent Eskicakit	347-556-7787	Sr. Environmental Engineer/Group Manager
Dimitris Bellos	718-784-7490	Project Manager

4.3 Training and Briefing Topics

The following items will be discussed by a qualified individual at the site pre-entry briefing(s) or periodic site briefings:

TABLE 4.1
TRAINING AND BRIEFING TOPICS SUMMARY

Training	Frequency
Chemical Hazards, Table 3.1	As needed
Confined Space Entry Procedure, Section 11.0	As needed
Emergency Response Plan, Section 10.0; [29 CFR 1910.120(1)]	As needed
Engineering Controls and Work Practices	As needed
Handling Drums and Containers, [29 CFR 1910.120(j)]	As needed
Overhead and Underground Utilities	As needed
Personnel Protective Equipment, Section 5.0	As needed
Physical Hazards	As needed
Respiratory Protection, Section 5.8	As needed
Site Control, Sec. 8.0; [29 CFR 1910.120(d)]	As needed
Site Characterization and Analysis, Section 3.0	As needed
Spill Containment, Section 12.0; [29 CFR 1910.120(b)(4)(j)]	As needed
Symptoms of Overexposure to Hazards	As needed
Training Requirements, Section 4.0; [29 CFR 1910.120(e)]	As needed

5.0 PERSONNEL PROTECTIVE EQUIPMENT TO BE USED

This section describes the general requirements of the EPA designated Levels of Protection (A-D), and the specific levels of protection required for each task at the Site.

5.1 Levels of Protection

Personnel wear protective equipment when response activities involve known or suspected atmospheric contamination, vapors, gases, or particulates may be generated by site activities, or when direct contact with skin-affecting substances may occur. Full face piece respirators protect lungs, gastrointestinal tract, and eyes against airborne toxicants. Chemical-resistant clothing protects the skin from contact with skin-destructive and absorbable chemicals.

The specific levels of protection and necessary components for each have been divided into four categories according to the degrees of protection afforded:

Level A: Should be worn when the highest level of respiratory, skin, and eye protection is needed.

Level B: Should be worn when the highest level of respiratory protection is needed, but a lesser level of skin protection. Level B is the primary level of choice when encountering unknown environments.

Level C: Should be worn when the criteria for using air-purifying respirators are met, and a lesser level of skin protection is needed.

Level D: Should be worn only as a work uniform and not in any area with respiratory or skin hazards. It provides minimal protection against chemical hazards.

Modifications of these levels are permitted, and routinely employed during site work activities to maximize efficiency. For example, Level C respiratory protection and Level D skin protection may be required for a given task. Likewise the type of chemical protective ensemble (i.e., material, format) will depend upon contaminants and degrees of contact.

The Level of Protection selected is based upon the following:

- Type and measured concentration of the chemical substance in the ambient atmosphere and its toxicity.
- Potential for exposure to substances in air, liquids, or other direct contact with material due to work being done.
- Knowledge of chemicals on-site along with properties such as toxicity, route of exposure, and contaminant matrix.

In situations where the type of chemical, concentration, and possibilities of contact are not known, an appropriate level of protection must be selected based on professional experience and judgment until the hazards can be better identified.

5.2 Level A Personnel Protective Equipment:

- Supplied air respirator approved by the Mine Safety and Health Administration (MSHA) and National Institute for Occupational Safety and Health (NIOSH). Respirators may be positive pressure-demand, self-contained breathing apparatus (SCBA), or positive pressure-demand, airline respirator (with escape bottle for Immediately Dangerous to Life and Health (IDLH) or potential for IDLH atmosphere)
- Fully encapsulating chemical-resistant suit
- Coveralls
- Long cotton underwear
- Gloves (inner)
- Boots, chemical-resistant, steel toe and shank (depending on suit construction, worn over or under suit boot)
- Hard hat (under suit)
- Disposable gloves and boot covers (worn over fully encapsulating suit)
- Cooling unit
- 2-way radio communications (intrinsically safe)

5.3 Level B Personnel Protective Equipment:

- Supplied-air respirator (MSHA/NIOSH approved). Respirators may be positive pressure-demand, self-contained breathing apparatus (SCBA), or positive pressure-demand, airline respirator (with escape bottle for IDLH or potential for IDLH atmosphere)
- Chemical-resistant clothing (overalls and long-sleeved jacket; hooded, one or two-piece chemical-splash suit; disposable chemical-resistant, one-piece suits)
- Long cotton underwear
- Coveralls
- Gloves (outer), chemical-resistant
- Gloves (inner), chemical-resistant
- Boots (outer), chemical-resistant, steel toe and shank
- Boot covers (outer), chemical-resistant (disposable)
- Hard hat (face shield)
- 2-way radio communications (intrinsically safe)

5.4 Level C Personnel Protective Equipment:

- Air-purifying respirator, full-face, cartridge-equipped (MSHA/NIOSH approved)
- Chemical-resistant clothing (coveralls; hooded, one-piece or two-piece chemical splash suit; chemical-resistant hood and apron, disposable chemical-resistant coveralls)
- Coveralls
- Long cotton underwear
- Gloves (outer), chemical-resistant
- Gloves (inner), chemical-resistant
- Boots (outer), chemical-resistant, steel toe and shank
- Boot covers (outer), chemical-resistant (disposable)

- Hard hat (face shield)
- Escape mask
- 2-way radio communications (intrinsically safe)

5.5 Level D Personnel Protective Equipment:

- Coveralls
- Gloves
- Boots/shoes, leather or chemical-resistant, steel toe and shank
- Safety glasses
- Hard hat

5.6 Reassessment of Protection Program

The Level of Protection provided by PPE selection shall be upgraded or downgraded based upon a change in site conditions or findings of investigations. When a significant change occurs, the hazards should be reassessed. Some indicators of the need for reassessment are:

- Commencement of a new work phase, such as the start of drum sampling or work that begins on a different portion of the site.
- Change in job tasks during a work phase.
- Change of season/weather.
- When temperature extremes or individual medical considerations limit the effectiveness of PPE.
- Contaminants other than those previously identified are encountered.
- Change in work scope which effects the degree of contact with contaminants.

5.7 Work Mission Duration

Before the workers actually begin work in their PPE ensembles, the anticipated duration of the work mission should be established. Several factors limit mission length, including:

- Air supply consumption (SCBA use).
- Suit/Ensemble permeation and penetration rates for chemicals (section 5.8.).
- Ambient temperature and weather conditions (heat stress/cold stress).
- Capacity of personnel to work in PPE.

5.8 Personal Protective Equipment Recommended for Site

The following specific clothing materials are recommended for the Site:

Level D Protection, Level C if necessary

5.9 SOP for Personal Protective Equipment

Proper inspection of PPE features several sequences of inspection depending upon specific articles of PPE and it's frequency of use. The different levels of inspection are as follows:

- Inspection and operation testing of equipment received from the factory or distributor.
- Inspection of equipment as it is issued to workers.
- Inspection after use or training and prior to maintenance.
- Periodic inspection of stored equipment.
- Periodic inspection when a question arises concerning the appropriateness of the selected equipment, or when problems with similar equipment arise.
- The primary inspection of the PPE in use for activities at the Subject will occur prior to immediate use and will be conducted by the user. This ensures that the specific device or article has been checked-out by the user and that the user is familiar with its use.

The following provides a checklist for PPE:

CLOTHING

Before use:

- Determine that the clothing material is correct for the specified task at hand.
- Visually inspect for:
  - imperfect seams
  - non-uniform coatings
  - tears
  - malfunctioning closures
- Hold up to light and check for pinholes.
- Flex product:
  - observe for cracks
  - observe for other signs of shelf deterioration
- If the product has been used previously, inspect inside and out for signs of chemical attack:
  - discoloration
  - swelling
  - stiffness

During the work task:

- Evidence of chemical attack such as discoloration, swelling, stiffening, and softening. Keep in mind, however, that chemical permeation can occur without any visible effects.
- Closure failure.
- Tears.
- Punctures.

- Seam Discontinuities.

GLOVES

Before use:

- Visually inspect for:
  - imperfect seams
  - tears
  - non-uniform coating
  - pressurize glove with air; listen for pin-hole leaks.

5.10 SOP for Respiratory Protection Devices

The following subsections define standard operating procedures for air purifying respirators and self-contained breathing apparatus.

5.10.1 Cleaning and Disinfecting Respirators and Breathing Apparatus

The back piece is cleaned with cleaning solution and a brush. For self-contained Breathing Apparatus (SCBA), the face piece is combined with the regulator following cleaning and an operational check is performed.

5.10.2 SCBA Inspection and Checkout

A. Monthly Inspection

1. Check cylinder label for current hydrostatic test date.
2. Inspect cylinder for large dents or gouges.
3. Inspect cylinder gauge for damage.
4. Complete routine inspection
5. Fill out the appropriate records with results and recommendations.

B. Routine Inspection

Perform immediately prior to donning or after cleaning. Before proceeding, check the following equipment:

1. Valves

   - By-pass valve is closed.
   - Mainline valve is closed

2. Backpack and Harness Assembly

   - Visually inspect straps for wear, damage, and completeness.
   - Check wear and function of belt.
   - Check pack-plate and cylinder holder for damage.

3. Cylinder and High Pressure Hose Assembly

    - High-pressure hose connector is tight on cylinder fitting.
    - Check cylinder to assure that it is firmly attached to backplate.
    - Open cylinder valve; listen or feel for leakage around packing and hose connection.
    - Check high pressure hose for damage or leaks.

4. Regulator

    - Regulator outlet is not covered or obstructed.
    - Cover regulator outlet with palm of hand.
    - Open mainline valve.
    - Note stoppage of air flow after positive pressure builds.
    - Close mainline valve.
    - Remove hand from regulator outlet.
    - Open by-pass valve slowly to assure proper function
    - Close by-pass valve.
    - Open mainline valve.
    - Note pressure reading on regular gauge.
    - Close cylinder valve while keeping hand over regulator outlet.
    - Slowly remove hand from outlet and allow air to flow.
    - Note pressure when low-pressure warning alarm sounds; it should be between 550-650 psi.
    - Remove hand from regulator outlet.
    - Close mainline valve.
    - Check regulator for leaks by blowing air into regulator for 5-10 seconds. Draw air from outlet for 5-10 seconds. If a positive pressure or vacuum cannot be maintained there is a leak. DO NOT USE SCBA.

5. Face-piece and Corrugated Breathing Hose

    - Inspect hand harness and face-piece for damage, serrations, and deteriorated rubber.
    - Inspect lens for damage and proper seal in face-piece. Inspect exhalation valve for damage and dirt build-up.
    - Stretch breathing hose and carefully inspect for holes and deterioration.
    - Inspect connector for damage and presence of washer.
    - Perform negative pressure test with face-piece donned.

6. Storage

    - Refill cylinder to 2216 psi.
    - Close cylinder valve.
    - Tightly connect high pressure hose to cylinder.

- Bleed pressure from high pressure hose by opening mainline valve.
- Close by-pass valve.
- Close mainline valve.
- Fully extend all straps.
- Store face-piece in a clean plastic bag for protection.

5.11 Specific Levels of Protection Planned for the Site

The following levels of protection will be utilized during activities at the Site:

- LEVEL D Tasks: Ambient Air Monitoring, Soil Excavation, soil sampling, groundwater sampling (if needed).

6.0 MEDICAL SURVEILLANCE REQUIREMENTS

Medical monitoring programs are designed to track the physical condition of employees on a regular basis as well as survey pre-employment or baseline conditions prior to potential exposures. The medical surveillance program is a part of each employer's Health and Safety program.

6.1 Baseline or Pre-Assignment Monitoring

Prior to being assigned to a hazardous or a potentially hazardous activity involving exposure to toxic materials, employees must receive a pre-assignment or baseline physical. The contents of the physical are to be determined by the employer's medical consultant. As suggested by NIOSH/OSHA/USCG/EPA's Occupational Safety & Health Guidance Manual for Hazardous Waste Site Activities, the minimum medical monitoring requirements for work at the Site is as follows:

- Complete medical and work histories.
- Physical examination.
- Pulmonary function tests (FVC and FEV1).
- Chest X-ray (every 2 years)
- EKG.
- Eye examination and visual acuity.
- Audiometry.

The pre-assignment physical should categorize employees as fit-for-duty and able to wear respiratory protection.

6.2 Periodic Monitoring

In addition to a baseline physical, all employees require a periodic physical within the last 12 months unless the advising physician believes a shorter interval is appropriate. The employer's medical consultant should prescribe an adequate medical, which fulfills OSHA 29 CFR 1910.120 requirements. The pre-assigned medical outlined above may be applicable.

All personnel working in contaminated or potentially contaminated areas at the Site will verify currency (within 12 months) with respect to medical monitoring. This is done by indicating date of last physical on the safety plan agreement form.

6.3 Exposure/Injury/Medical Support

As a follow-up to an injury or possible exposure above established exposure limits, all employees are entitled to and encouraged to seek medical attention and physical testing. Depending upon the type of exposure, it is critical to perform follow-up testing within 24-48 hours. It will be up to the employer's medical consultant to advise the type of test required to accurately monitor for exposure effects.

6.4 Exit Physical

At termination of employment or reassignment to an activity or location which does not represent a risk of exposure to hazardous substances, an employee shall require an exit physical. If his/her last physical was within the last 6 months, the advising medical consultant has the right to determine adequacy and necessity of exit exam.

7.0 FREQUENCY AND TYPES OF AIR MONITORING/SAMPLING

This section explains the general concepts of an air monitoring program and specifies the surveillance activities that will take place during project completion at the Site.

The purpose of air monitoring is to identify and quantify airborne contaminants in order to verify and determine the level of worker protection needed. Initial screening for identification is often qualitative, i.e., the contaminant, or the class to which it belongs, is demonstrated to be present but the determination of its concentration (quantification) must await subsequent testing.

Air monitoring will consist of the use of direct-reading instruments only.

7.1 Direct-Reading Monitoring Instruments

Unlike air sampling devices, which are used to collect samples for subsequent analysis in a laboratory, direct-reading instruments provide information at the time of sampling, enabling rapid decision-making. Data obtained from the real-time monitors are used to assure proper selection of personnel protection equipment, engineering controls, and work practices. Overall, the instruments provide the user the capability to determine if site personnel are being exposed to concentrations which exceed exposure limits or action levels for specific hazardous materials.

Of significant importance, especially during initial entries, is the potential for IDLH conditions or oxygen deficient atmospheres. Real-time monitors can be useful in identifying any IDLH conditions, toxic levels of airborne contaminants, flammable atmospheres, or radioactive hazards. Periodic monitoring of conditions is critical, especially if exposures may have increased since initial monitoring or if new site activities have commenced.

The following provides an overview of available monitoring instrumentation and their specific operating parameters.

- **Instrument: Combustible gas indicator (CGI)**

  Hazard Monitored: Combustible gases and vapors.

  Application: Measures the concentration of a combustible gas or vapor.

  Detection Method: A filament, usually made of platinum, is heated by burning the combustible gas of vapor. The increase in heat is measured. Gases and vapors are ionized in a flame. A current is produced in proportion to the number of carbon atoms present.

  General Care/Maintenance: Recharge or replace battery. Calibrate immediately before use.
  Typical Operating Time: Can be used for as long as the battery lasts or for the recommended interval between calibrations, whichever is less.

- **Instrument: Flame Ionization Detector (FID) with Gas Chromatography Option. Example: Foxboro OVA.**

  Hazard Monitored: Many organic gases and vapors.

  Application: In survey mode, detects the concentration of many organic gases and vapors. In gas chromatography (GC) mode identifies and measures specific compounds. In survey mode, all the organic compounds are ionized and detected at the same time. In GC mode, volatile species are separated.

  General Care/Maintenance: Recharge or replace battery. Monitor fuel and/or combustion air supply gauges. Perform routine maintenance as described in the manual. Check for leaks.
  Typical Operating Time: 8 hours, 3 hours with strip chart recorder.

- **Instrument: Portable Infrared (IR) Spectrophotometer**

  Hazard Monitored: Many gases and vapors.

  Application: Measures concentration of many gases and vapors in air. Designed to quantify one or two component mixtures.

  Detection Method: Passes different frequencies of IR through the sample. The frequencies absorbed are specific for each compound.

  General Care/Maintenance: As specified by manufacturer.

- **Instrument: Ultraviolet (UV) Photo ionization Detector (PID)**

  Example: HNU.

  Hazard Monitored: Many organic and some inorganic gases and vapors.
  Application: Detects total concentration of many organic and some inorganic gases and vapors. Some identification of compounds are possible if more than one probe is measured.
  Detection Method: Ionizes molecules using UV radiation; produces a current that is proportional to the number of ions.
  General Care/Maintenance: Recharge or replace battery. Regularly clean lamp window. Regularly clean and maintain the instrument and accessories.
  Typical Operating Time: 10 hours. 5 hours with strip chart recorder.

- **Instrument: Direct Reading Colorimetric Indicator Tube**

  Hazard Measured: Specific gases and vapors.

  Application: Measures concentration of specific gases and vapors.

  Detection Method: The compound reacts with the indicator chemical in the tube, producing a stain whose length or color change is proportional to the compound's concentration.
  General Care/Maintenance: Do not use a previously opened tube even if the indicator chemical is not stained. Check pump for leaks before and after use. Refrigerate before use to

maintain a shelf life of about 2 years. Check expiration date of tubes. Calibrate pump volume at least quarterly. Avoid rough handling that may cause channeling.

- **Instrument: Oxygen Meter**

  Hazard Monitored: Oxygen (0_2)

  Application: Measures the percentage of 0_2 in the air.

  Detection Method: Uses an electrochemical sensor to measure the partial pressure of 0_2 in the air, and converts that reading to 0_2 concentrations.

  General Care/Maintenance: Replace detector cell according to manufacturer's recommendations. Recharge or replace batteries prior to expiration of the specified interval. If the ambient air is more than 0.5% CO_2, replace the detector cell frequently.

  Typical Operating Time: 8-12 hours.

- **Instrument: Real Time Aerosol Monitor**

  Hazard Monitored: Particulates

  Application: Measures total particulates in air.

  Detection Method: Uses an internal light source. The particulates defract the light beam and the amount of diffraction is converted into a concentration (mg/m_3).

  General Care/Maintenance: Recharge batteries. Replace desiccant when necessary.

  Typical Operating Time: 8-12 hours.

- **Instrument: Monitox**

  Hazard Monitored: Gases and Vapors

  Application: Measures specific gases and vapors

  Detection Method: Electrochemical sensor relatively specific for the chemical species in question.

  General Care/Maintenance: Moisten sponge before use; check the function switch; change the battery when needed.

Instrument: Gamma Radiation Survey Instrument

Hazard Monitored: Gamma Radiation

Application: Environmental radiation monitor

Detection Method: Scintillation detector

General Care/Maintenance: Must be calibrated annually at a specialized facility.

Typical Operating Time: Can be used for as long as the battery lasts, or for the recommended interval between calibrations, whichever is less.

After Site mitigation activities have commenced, the selective monitoring of high-risk workers, i.e., those who are closest to the source of contaminant generation, is essential. Personal monitoring samples should be collected in the breathing zone and, if workers are wearing respiratory protective equipment, outside the face-piece.

Those employees working closest with the source have the highest likelihood of being exposed to concentrations which exceed established exposure limits. Representative sampling approaches emphasizing worst case conditions, those employees with the greatest risk of exposure, is acceptable. However the sampling strategy may change if the operation or tasks change on site or if exposures potentially increase.

7.2 Site Air Monitoring and Sampling Program

A. Air Monitoring Instruments

ATHENICA will utilize a photo ionization detector and an aerosol meter. Monitoring will occur four times daily. Monitoring will be conducted in the exclusion zone and 50 feet downwind of the exclusion zone. A LEL/Oxygen meter will be used within the excavation or within confined spaces as needed.

B. Action Levels

TABLE 7.1		
AIR MONITORING ACTION LEVELS		
Hazard Monitored	**Action Level**	**Action**
Organic gases and vapors	The action level will be 15 ppm in the exclusion zone and 5 ppm 50 feet down wind of the Site	Activities in the vicinity of the area where action levels are exceeded will be discontinued until the concentrations of all organic gases and vapors fall below their respective action levels. If the concentration(s) of an organic gas(es) and vapor(s) continues to exceed its respective action level(s), then the level of protection will be upgraded to include appropriate respiratory protection.
Particulates	Action level will be 100 ug/m3 for the excavation and 100 ug/m3 50 feet downwind of the excavation.	Activities in the vicinity of the area where action levels are exceeded will be discontinued until the concentrations of all particulates fall below their respective action levels. If the concentrations of a particulate(s) continues to exceed its respective action level (s), then the level of protection will be upgraded to include appropriate respiratory protection.
Explosive atmosphere	<10% LEL 10%-25% LEL >25% LEL	Continue investigation. Continue on-site monitoring with extreme caution as higher levels are encountered. Explosion hazard. Withdraw from area immediately.
Oxygen	<19.5% 19.5%-25% >25%	Monitor wearing self-contained breathing apparatus. NOTE: Combustible gas readings are not valid in atmospheres with <19.5% oxygen. Continue investigation with caution. Deviation from normal level may be due to presence of other substances. Fire hazard potential. Discontinue investigation. Consult a fire safety specialist.

LEL = Lower Explosive Limit
PEL = Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit
REL = National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limit
TLV = American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value

C. Reporting Format

Air monitoring results will be maintained in a daily monitoring log.

7.3 Site Ambient Air Sampling

A. Sampling Criteria

A site ambient air sampling program will be considered if the following criteria are met:

1. Meteorological conditions –

   Winds sufficient to cause dispersion.

2. Health and safety observations -

   Vapor and/or particulate levels are two to three times above background.

3. Site specific activities –

   Site activity increases airborne contaminant(s) exposure potential.

8.0 SITE CONTROL MEASURES

The following section defines measures and procedures for maintaining site control. Site control is an essential component in the implementation of the site health and safety program.

8.1 Buddy System

During all Level B activities or when some conditions present a risk to personnel, the implementation of a buddy system is mandatory. A buddy system requires at least two (2) people to work as a team; each looking out for each other. Level B operations generally require three (3) people. Table 8.1 lists those tasks which require a buddy system and any additional site control requirements.

TABLE 8.1
PERSONNEL REQUIREMENTS

Task	Control Measures
All tasks	Line of sight, buddy system

8.2 Site Communications Plan

Successful communications between field teams and contact with personnel in the support zone is essential. The following communications systems will be available during activities at the Site.

- Hand Signals

For hand signal communications, the following definitions will apply during activities at the Subject:

TABLE 8.2
HAND SIGNAL DEFINITIONS

Signal	Definition
Hands clutching throat	Out of air/cannot breath
Hands on top of head	Need assistance
Thumbs up	OK/I am all right/I understand
Thumbs down	No/Negative
Arms waving upright	Send backup support
Grip partners wrist	Exit area immediately

8.3 Work Zone Definition

The three (3) general work zones established at the Site are the Exclusion Zone, Contamination Reduction Zone, and Support Zone. Figure 1 depicts a site map displaying the locations of each of these zones.

The Exclusion Zone is defined as the area where contamination is either known or likely to be present, or because of activity, will provide a potential to cause harm to personnel. Entry into the Exclusion Zone requires the use of personnel protective equipment.

The Contamination Reduction zone is the area where personnel conduct personal and equipment decontamination. It is essentially a buffer zone between contaminated areas and clean areas. Activities to be conducted in this zone will require personal protection as defined in the decontamination plan.

The Support Zone is situated in clean areas where the chance to encounter hazardous materials or conditions is minimal. Personal protection equipment is therefore not required.

8.4 Nearest Medical Assistance

Figure 2 illustrates the route to the nearest hospital which can provide emergency care for individuals who may experience an injury or exposure on Site. The route to the hospital should be verified by the HSO, and should be familiar to all Site personnel.

8.5 Safe Work Practices

The following provides a list of standing orders for the Exclusion Zone:

- No smoking, eating, or drinking in this zone.
- No horse-play.
- No matches or lighters in this zone.
- Check-in on entrance to this zone.
- Check-out on exit from this zone.
- Implement the communications system.
- Line of sight must be in position.
- Wear the appropriate level of protection as defined in the Safety Plan.

The following a list of standing orders for the Contamination Reduction Zone:

- No smoking, eating, or drinking in this zone.
- No horse play.
- No matches or lighters in this zone.
- Wear the appropriate level of protection.

8.6 Emergency Alarm Procedures

The warning signals described in Section 10.4 “Evacuation Routes and Procedures,” will be deployed in the event of an emergency. Communication signals will also be used according to Section 8.2.

9.0 DECONTAMINATION PLAN

Refer to Section 5.11 for the specific levels of protection required for each task. Consistent with the levels of protection required, the Decontamination Table(s) provides a step by step representation of the personnel decontamination process. These procedures should be modified to suit Site conditions and protective ensembles in use.

9.1 Standard Operating Procedures

Decontamination involves the orderly controlled removal of contaminants. Standard decontamination sequences are presented in the Decontamination Table. All site personnel should minimize contact with contaminants in order to minimize the need for extensive decon.

9.2 Levels of Decontamination Protection Required for Personnel

The levels of protection required for personnel assisting with decontamination will be Level D. The Site Safety Officer is responsible for monitoring decontamination procedures and determining their effectiveness.

9.3 Equipment Decontamination

Sampling equipment will be decontaminated in accordance with procedures as required by ASTM and generally accepted practices.

9.4 Disposition of Decontamination Wastes

The following table provides personnel decontamination process. Unless gross contamination is encountered, these wastes will be disposed of as typical household waste.

TABLE 9.1	
LEVEL D DECONTAMINATION STEPS	
Step 1	Remove outer garments (i.e., coveralls)
Step 2	Remove gloves
Step 3	Wash hands and face

10.0 EMERGENCY RESPONSE/CONTINGENCY PLAN

This section describes contingencies and emergency planning procedures to be implemented at the Site. This plan is compatible with local, state and federal disaster and emergency management plans, as appropriate.

10.1 Pre-Emergency Planning

During the site briefing held periodically/daily, all employees will be trained in and reminded of provisions of the emergency response plan, communication systems, and evacuation routes. Table 10.1 provides potential hazards associated with Site activities, along with the available emergency prevention/control equipment and its location. The plan will be reviewed and revised, if necessary, on a regular basis by the HSO. This will ensure that the plan is adequate and consistent with prevailing site conditions.

TABLE 10.1
EMERGENCY RECOGNITION/CONTROL MEASURES

HAZARD	PREVENTION/CONTROL	LOCATION
Fire/Explosion	Fire Extinguisher Alarm System Fire Inspections	Site Trailer, or Work Truck
Spill	Sorbent Materials	Site Trailer, or Work Truck

10.2 Personnel Roles

The Site Supervisor has primary responsibility for responding to and correcting emergency situations. This includes taking appropriate measure to ensure the safety of site personnel and the public. Possible actions may involve evacuation of personnel from the site area, and evacuation of adjacent residents. He/she is additionally responsible for ensuring that corrective measures have been implemented, appropriate authorities notified and follow-up reports completed. The HSO may be called upon to act on the behalf of the site supervisor, and will direct responses to any medical emergency. The individual contractor organizations are responsible for assisting the project manager in his/her mission within the parameters of their scope of work.

10.3 Emergency Recognition/Prevention

Table 3.1 provides a listing of typical chemicals related to petroleum impacted materials. Additional potential hazards associated with site activities are listed in Table 10.1, along with the available emergency prevention/control equipment and its location. Personnel will be familiar with techniques of hazard recognition from pre-assignment training and site specific briefings. The HSO is responsible for ensuring that prevention devices and equipment are available to personnel.

10.4 Evacuation Routes/Procedures

In the event of an emergency which necessitates an evacuation of the site, the following alarm procedures will be implemented:

- Insure that a predetermined location is identified off-site in case of an emergency, so that all personnel can be accounted for.
- Personnel will be expected to proceed to the closest exit with your buddy, and mobilize to the safe distance area associated with the evacuation route. Personnel will remain at that area until the re-entry alarm is sounded or an authorized individual provides further instructions.

10.5 Emergency Contact/Notification System

The following list provides names and telephone numbers for emergency contact personnel. In the event of a medical emergency, personnel will take direction from the HSO and notify the appropriate emergency organization(s). In the event of a fire or spill, the site supervisor will notify the appropriate local, state and federal agencies.

Complete the table below with the appropriate emergency contacts and telephone numbers.

TABLE 10.2
List of Emergency Contacts

Organization	Contact	Telephone
Police		911
Fire		911
Columbia Presbyterian Medical		718-960-4500
EPA Emergency Response Team		908-321-6660
NYSDEC		718-482-4951
National Response Center		800-424-8802
Center for Disease Control		404-488-4100
Chemtech		800-424-9555

10.6 Emergency Medical Treatment Procedures

Any person who becomes ill or injured in the exclusion zone must be decontaminated to the maximum extent possible. If the injury or illness is minor, full decontamination should be completed and first aid administered prior to transport. If the patient's condition is serious, at least partial decontamination should be completed (i.e., complete disrobing of the victim and redressing in clean coveralls or wrapping in a blanket.) First aid should be administered while awaiting an ambulance or paramedics. All injuries and illnesses must immediately be reported to the project manager.

Any person being transported to a clinic or hospital for treatment should take with them information on the chemical (s) they have been exposed to at the site.

Any vehicle used to transport contaminated personnel will be treated and cleaned as necessary.

10.7 Fire or Explosion

In the event of a fire or explosion, the local fire department should be summoned immediately. Upon their arrival, the project manager or designated alternate will advise the fire commander of the location, nature, and identification of the hazardous materials on site.

If it is safe to do so, site personnel may:

- Use fire fighting equipment available on Site to control or extinguish the fire; and,
- Remove or isolate flammable or other hazardous materials that may contribute to the fire.

10.8 Spill or Leaks

In the event of a spill or a leak, Site personnel will:

- Inform their supervisor immediately:
- Locate the source of the spillage and stop the flow if it can be done safely; and,
- Begin containment and recovery of the spilled materials.

10.9 Emergency Equipment/Facilities

The following emergency equipment/facilities will be utilized on-site.

Identify which of the following emergency equipment/facilities will be utilized, as well as their storage location on-site, in the table below.

TABLE 10.3
LIST OF EMERGENCY EQUIPMENT/FACILITIES

List of Emergency Equipment/Facilities	Storage Location
First Aid Kit	**Vehicle/Trailer**
Fire Extinguisher	**Vehicle/Trailer**
Mobile Telephone	**Vehicle/Trailer**
Spill Kits	**Vehicle/Trailer**
Eye Wash	**Vehicle/Trailer**

11.0 SPILL CONTAINMENT PROGRAM

The procedures defined in this section comprise the spill containment program in place for activities at the Site.

- All drums and containers used during the clean-up shall meet the appropriate DOT, OSHA, and EPA regulations for the waste that they will contain.
- Drums and containers shall be inspected and their integrity assured prior to being moved. Drums or containers that cannot be inspected before being moved because of storage conditions shall be positioned in an accessible location and inspected prior to further handling.
- Operations on site will be organized so as to minimize the amount of drum or container movement.
- Employees involved in the drum or container operations shall be warned of the hazards associated with the containers.
- Where spills, leaks, or ruptures may occur, adequate quantities of spill containment equipment (absorbent, pillows, etc.) will be stationed in the immediate area. The spill containment program must be sufficient to contain and isolate the entire volume of hazardous substances being transferred.
- Drums or containers that cannot be moved without failure, shall be emptied into a sound container.
- Fire extinguishing equipment meeting 29 CFR part 1910 Subpart 1 shall be on hand and ready for use to control fires.

12.0 HAZARD COMMUNICATION

In order to comply with 29 CFR 1910.1200, Hazard Communication, the following written Hazard Communication Program has been established. All employees will be briefed on this program, and have a written copy for review.

A. Container Labeling

All containers received on site will be inspected to ensure the following: (1) all containers will be clearly labeled as to the contents; (2) the appropriate hazard warnings will be noted; and (3) the name and address of the manufacturer will be listed.

All secondary containers will be labeled with either an extra copy of the original manufacturer's label or with generic labels which have a block for identity and blocks for the hazard warning.

B. Materials Safety Data Sheets (MSDSs)

Copies of MSDSs for all hazardous chemicals known or suspected to be on-site will be maintained in the work area. MSDSs will be available to all employees for review during each work shift.

C. Employee Training and Information

Prior to starting work, each employee will attend a health and safety orientation and will receive information and training on the following: (1) an overview of the requirements contained in the Hazard Communication Standard, 29 CFR 1910.1200; (2) chemicals present in their workplace operations; (3) location and availability of a written hazard program; (4) physical and health effects of the hazardous chemicals; (5) methods and observation techniques used to determine the presence or release of hazardous chemicals; (6) how to lessen or prevent exposure to these hazardous chemicals through usage of control/work practices and personal protective equipment; (7) emergency procedures to follow if they are exposed to these chemicals; (8) how to read labels and review MSDSs to obtain appropriate hazard information; (9) location of MSDS file and location of hazardous chemical list.

13.0 COMMUNITY AIR MONITORNIG PLAN

A Community Air Monitoring Plan (CAMP) requires real time monitoring for volatile organic compounds (VOCs) and particulates (i.e. dust) at the downwind perimeter of each designated work area when certain activities are in progress at a contaminated Site. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for downwind receptors from airborne contaminant releases as a direct result of investigator and remedial work. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shut down. Additionally, the CAMP helps to confirm that work activities do not spread contamination off-site through the air.

Real time air monitoring for VOCs and particulate levels will be required at the perimeter of the exclusion zone. Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection og groundwater samples from existing monitoring wells. Periodic monitoring during sample collection might reasonably consist of taking a reading upon arrival at the Site, monitoring while collecting the samples, and taking a reading upon leaving the Site. In some instances depending on the location of the sample point to sensitive receptors continuous monitoring may be required. Examples of such situations include, groundwater sampling on curbs of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOCs must be monitored with at the downwind perimeter of the immediate work area on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each work day and periodically thereafter to establish background conditions. The monitoring work will be conducted using a photo ionization detector. The equipment will be calibrated daily. The equipment will be capable of calculating 15 minute running average concentrations, which will be compared to levels specified below:

- If the ambient air concentration of total VOCs at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total VOC level readily decrease (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total VOC levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of the vapor identifies, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume, provided that the total VOC level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor, which ever is less – but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the VOC level is above 25 ppm at the perimeter of the work area, activities must be shut down.

All 15-minute readings must be recorded and be available for State (DEC or DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable f particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

REFERENCES

1. *Aldrich Chemical Book*, RTECS
2. *American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values*
3. *Chemical Protective Clothing Performance Index Book,* Forsburg
4. *Dangerous Properties of Industrial Materials,* SAX and Lewis
5. *Emergency Response Guide Book,* DOT P 5800.5, 1990
6. *EPA 40 CFR 311 Health and Safety Regulations*
7. *EPA/Office of Emergency and Remedial Response/Environmental Response Team Standard Operating Safety Guide*
8. *Extremely Hazardous Substances,* EPA, Noyes
9. *Guide to Occupational Exposure Values* – 1992
10. *Guidelines for the Selection of Chemical Protective Clothing*, Little
11. *Handbook of Toxic and Hazardous Chemicals and Carcinogens*, Sittig, np (Noyes)
12. *Hazardous Chemicals Data Book*, G. Weiss, ndc (Noyes)
13. *Hazardous Chemicals Desk Reference*
14. *NIOSH/OSHA/USCG/EPA Occupational Health and Safety Guidelines*
15. *OHMTADS Database*
16. *OSHA 29 CFR 1910.120 Health and Safety Regulations*
17. *The Merck Index, an Encyclopedia of Chemicals, Drugs, and Biologicals*, Merck & Co., Inc.
18. *Threshold Limit Values and Biological Exposure Indices, ACGIH*, 1991-1992
19. *V.S.L.G. Chris Manual*

APPENDIX C

PHOTOGRAPHS OF REMEDIAL INVESTIGATION

Installation of groundwater and soil vapor boring at TW-1/SV-1.

Original installation site of groundwater boring at TW-2.

Installation of groundwater and soil vapor boring at TW-3/SV-3.

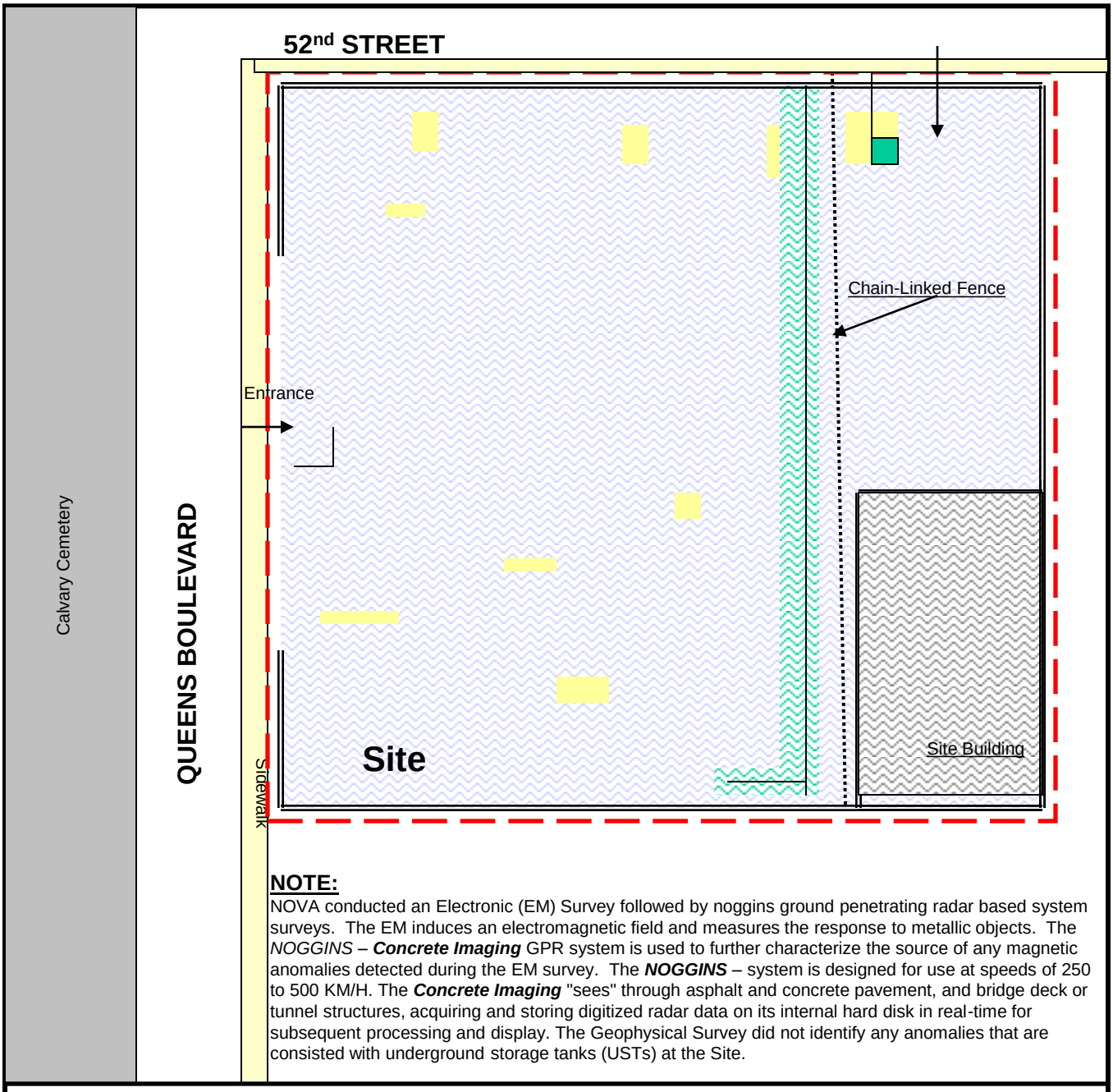
Installation of soil vapor boring at SV-2

Testing with Helium shroud at SV-1.

Testing with Helium shroud at SV-3.

APPENDIX D

GEOPHYSICAL INVESTIGATION



NOTE:

NOVA conducted an Electronic (EM) Survey followed by noggins ground penetrating radar based system surveys. The EM induces an electromagnetic field and measures the response to metallic objects. The *NOGGINS* – ***Concrete Imaging*** GPR system is used to further characterize the source of any magnetic anomalies detected during the EM survey. The ***NOGGINS*** – system is designed for use at speeds of 250 to 500 KM/H. The ***Concrete Imaging*** "sees" through asphalt and concrete pavement, and bridge deck or tunnel structures, acquiring and storing digitized radar data on its internal hard disk in real-time for subsequent processing and display. The Geophysical Survey did not identify any anomalies that are consisted with underground storage tanks (USTs) at the Site.

Legend:

- Site Boundary
- Scattered Anomaly
- Floor/Utility Pit
- Underground Partition Walls
- Underground Metal Piping
- GPR & EMI Surveyed Areas

GEOPHYSICAL SURVEY SITE PLAN

SITE: **COMMERCIAL PROPERTY**
52-01 Queens Boulevard
Woodside, Queens, New York

CLIENT: **ATHENICA ENVIRONMENTAL SERVICES**

SCALE: Not to Scale

NOVA
Geophysical Services
67-25 Clyde Street, Suite 5-S
Forest Hills, New York11375
Phone (347)556-7787 * Fax (718) 261-1527

N

APPENDIX E

SOIL BORING AND TEST PIT GEOLOGICAL LOGS

ATHENICA
Environmental Services Inc.
45-09 Greenpoint Avenue, Long Island City, New York, 11103
Phone: 718-784-7490 Fax 718-784-4085

	Client: GEORGE TSILOGIANNIS	**Boring No**. B-1
	Project Number: 07.0072	**Boring location**:
Driller: Laurel Environmental Associates **Environmental Engineer**: Levent Eskicakit.	**Location**: 52-01 Queens Boulevard Woodside, NY	
Groundwater Observations _____ ft AFTER ____hours GW was not encountered	**Casing Sampler** **Type**: GEOPROBE Size I.D.: NA	**Date Start:** 03/13/07 **Date Complete:** 03/13/07 **Surface Elev.** **Groundwater Elev**. NA

Depth	Sample #	Sample Type	Recovery (in.)	density or moist	PID (ppm)	Field Identification of Soil	Remarks
0				Dry	0.0	Approximately 3" of Asphalt Floor.	
4				Dry	0.0	Fill materials with bricks, medium to Fine dark SAND and Gravels	
8				Dry	0.0	No petroleum odor was observed with discoloration Natural Medium to fine silty SAND, medium gravel	
12				Dry	0.0	No petroleum odor was observed with discoloration	
15				Dry	0.1	Natural Medium to fine silty SAND, medium gravel No petroleum odor was observed with discoloration	
18				Dry	0.0	Fine to Medium light Brown SAND, cobbles and clays, dry with no odor or discoloration	
20				Dry	0.0	Medium light Brown SAND, cobbles and clays, dry with no odor or discoloration	

mc: macrocore HSA: hollow stem auger HA: Hand Auger tr.=trace = 0-10% l.=little = 10-20% s.=some = 20-35% and = 35-50% c = course m = medium
f = fine

ATHENICA
Environmental Services Inc.
45-09 Greenpoint Avenue, Long Island City, New York, 11103
Phone: 718-784-7490 Fax 718-784-4085

	Client: GEORGE TSILOGIANNIS	**Boring No**. B-2
	Project Number: 07.0072	**Boring location**:
Driller: Laurel Environmental Associates **Environmental Engineer**: Levent Eskicakit.	**Location**: 52-01 Queens Boulevard Woodside, NY	
Groundwater Observations _____ ft AFTER ____hours GW was not encountered	**Casing Sampler Type**: GEOPROBE Size I.D.: NA	**Date Start:** 03/13/07 **Date Complete:** 03/13/07 **Surface Elev.** **Groundwater Elev**. NA

Depth	Sample #	Sample Type	Recovery (in.)	density or moist	PID (ppm)	Field Identification of Soil	Remarks
0				Dry	0.0		
						Approximately 3" of Asphalt Floor.	
4				Dry	0.0		
						Fill materials with bricks, medium to Fine dark SAND and Gravels	
				Dry	0.0	No petroleum odor was observed with discoloration	
8							
						Natural Medium to fine silty SAND, medium gravel	
				Dry	0.0	No petroleum odor was observed with discoloration	
12							
				Dry	0.1	Natural Medium to fine silty SAND, medium gravel	
15						No petroleum odor was observed with discoloration	
				Dry	0.0	Fine to Medium light Brown SAND, cobbles and clays no odor or discoloration	
18							
				Dry	0.0	Medium light Brown SAND, cobbles and clays no odor or discoloration	
20							

mc: macrocore HSA: hollow stem auger HA: Hand Auger tr.=trace = 0-10% l.=little = 10-20% s.=some = 20-35% and = 35-50% c = course m = medium f = fine

ATHENICA
Environmental Services Inc.
45-09 Greenpoint Avenue, Long Island City, New York, 11103
Phone: 718-784-7490 Fax 718-784-4085

	Client: GEORGE TSILOGIANNIS	**Boring No**. B-3
	Project Number: 07.0072	**Boring location**:
Driller: Laurel Environmental Associates **Environmental Engineer**: Levent Eskicakit.	**Location**: 52-01 Queens Boulevard Woodside, NY	
Groundwater Observations _____ ft AFTER ____hours GW was not encountered	**Casing Sampler Type**: GEOPROBE Size I.D.: NA	**Date Start:** 03/13/07 **Date Complete:** 03/13/07 **Surface Elev.** **Groundwater Elev**. N/A

Depth	Sample #	Sample Type	Recovery (in.)	density or moist	PID (ppm)	Field Identification of Soil	Remarks
0				Dry	0.0		
						Approximately 3" of Asphalt Floor.	
4				Dry	0.0		
						Fill materials with bricks, medium to Fine dark SAND and Gravels	
				Dry	0.0	No petroleum odor was observed with discoloration	
8							
						Natural Medium to fine silty SAND, medium gravel	
				Dry	0.0	No petroleum odor was observed with discoloration	
12							
				Dry	0.1	Natural Medium to fine silty SAND, medium gravel	
15						No petroleum odor was observed with discoloration	
				Dry	0.0	Fine to Medium light Brown SAND, cobbles and clays no odor or discoloration	
18							
				Dry	0.0	Medium light Brown SAND, cobbles and clays no odor or discoloration	
20							

mc: macrocore HSA: hollow stem auger HA: Hand Auger tr.=trace = 0-10% l.=little = 10-20% s.=some = 20-35% and = 35-50% c = course m = medium f = fine

ATHENICA
Environmental Services Inc.
45-09 Greenpoint Avenue, Long Island City, New York, 11103
Phone: 718-784-7490 Fax 718-784-4085

	Client: GEORGE TSILOGIANNIS	**Boring No**. B-4
	Project Number: 07.0072	**Boring location**:
Driller: Laurel Environmental Associates **Environmental Engineer**: Levent Eskicakit.	**Location**: 52-01 Queens Boulevard Woodside, NY	
Groundwater Observations _____ ft AFTER ____hours GW was not encountered.	**Casing Sampler Type**: GEOPROBE Size I.D.: NA	**Date Start:** 03/13/07 **Date Complete:** 03/13/07 **Surface Elev.** **Groundwater Elev**. N/A

Depth	Sample #	Sample Type	Recovery (in.)	density or moist	PID (ppm)	Field Identification of Soil	Remarks
0				Dry	0.0		
						Approximately 3" of Asphalt Floor.	
4				Dry	0.0		
						Fill materials with bricks, medium to Fine dark SAND and Gravels	
				Dry	0.0	No petroleum odor was observed with discoloration	
8							
						Natural Medium to fine silty SAND, medium gravel	
				Dry	0.0	No petroleum odor was observed with discoloration	
12							
				Dry	0.1	Natural Medium to fine silty SAND, medium gravel	
15						No petroleum odor was observed with discoloration	
				Dry	0.0	Fine to Medium light Brown SAND, cobbles and clays no odor or discoloration	
18							
				Dry	0.0	Medium light Brown SAND, cobbles and clays no odor or discoloration	
20							

mc: macrocore HSA: hollow stem auger HA: Hand Auger tr.=trace = 0-10% l.=little = 10-20% s.=some = 20-35% and = 35-50% c = course m = medium f = fine

ATHENICA
Environmental Services Inc.
45-09 Greenpoint Avenue, Long Island City, New York, 11103
Phone: 718-784-7490 Fax 718-784-4085

	Client: GEORGE TSILOGIANNIS	**Boring No**. B-5
	Project Number: 07.0072	**Boring location**:
Driller: Laurel Environmental Associates **Environmental Engineer**: Levent Eskicakit.	**Location**: 52-01 Queens Boulevard Woodside, NY	
Groundwater Observations _____ ft AFTER ____hours GW was not encountered	**Casing Sampler Type**: GEOPROBE Size I.D.: NA	**Date Start:** 03/13/07 **Date Complete:** 03/13/07 **Surface Elev.** **Groundwater Elev**. N/A

Depth	Sample #	Sample Type	Recovery (in.)	density or moist	PID (ppm)	Field Identification of Soil	Remarks
0				Dry	0.0		
						Approximately 3" of Asphalt Floor.	
4				Dry	0.0		
						Fill materials with bricks, medium to Fine dark SAND and Gravels	
				Dry	0.0	No petroleum odor was observed with discoloration	
8							
						Natural Medium to fine silty SAND, medium gravel	
				Dry	0.0	No petroleum odor was observed with discoloration	
12							
				Dry	0.1	Natural Medium to fine silty SAND, medium gravel	
15						No petroleum odor was observed with discoloration	
				Dry	0.0	Fine to Medium light Brown SAND, cobbles and clays no odor or discoloration	
18							
				Dry	0.0	Medium light Brown SAND, cobbles and clays no odor or discoloration	
20							

mc: macrocore HSA: hollow stem auger HA: Hand Auger tr.=trace = 0-10% l.=little = 10-20% s.=some = 20-35% and = 35-50% c = course m = medium f = fine

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

45-09 Greenpoint Avenue
Long Island City, New York, 11104 Phone:
718-784-7490 Fax: 718-784-4085

Client:

Test Pit Number: TP-01

Job Name:

Boring Location: Southwest portion of the Site.

Job Number: 12-0013

Field Representatives:
Francesca Boutin, Shana Holberton, William Silveri

Location:
52-01 Queens Boulevard
Queens, NY 11377

Groundwater Observations:
Did not encounter groundwater.

Casing Sampler Type:
Excavator

Date Start: 5/7/2012
Date Completed: 5/7/2012

Depth (bgs)	Sample Number	Type	Density or Moist	PID (ppm)	Field Identification of Soil Remarks
0			Dry	0.0	0-2 feet bgs: Fine to medium brown SAND with some large boulders and historic fill (stone and brick). No odor or staining observed.
2			Dry	0.0	2-4 feet bgs: Fine to medium brown SAND with some large boulders and historic fill (stone and brick). No odor or staining observed.
	G1 (TP1-5/7/12[0-4'])	C			
4			Dry	0.0	4-6 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.
6			Dry	0.0	6-8 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.
	G7 (TP1-5/7/12[4-8'])	C			
8			Dry	0.0	8-10 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.
10			Dry	0.0	10-12 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.
12			Dry	0.0	12-15 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.
14					Test pit excavated to 15 feet bgs.
	G8 (TP1-5/7/12[8-15'])	C			
16					

G = Grab sample collected for analysis C = Composite Sample
bgs = Below Ground Surface

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

45-09 Greenpoint Avenue
Long Island City, New York, 11104
Phone: 718-784-7490 Fax: 718-784-4085

Client:

Test Pit Number: TP-02

Job Name:

Boring Location: Southeast portion of the Site.

Job Number: 12-0013

Field Representatives: Francesca Boutin, Shana Holberton, William Silveri

Location: 52-01 Queens Boulevard, Queens, NY 11377

Groundwater Observations: Did not encounter groundwater.

Casing Sampler Type: Excavator

Date Start: 5/7/2012

Date Completed: 5/7/2012

Depth (bgs)	Sample Number	Type	Density or Moist	PID (ppm)	Field Identification of Soil	Remarks
0			Dry	0.0	0-2 feet bgs: Historic fill (mostly brick, some stone) with some fine to medium brown sand. No odor or staining observed.	
2			Dry	0.0	2-4 feet bgs: Historic fill (mostly brick, some stone) with some fine to medium brown sand. No odor or staining observed.	
	G2 (TP2-5/7/12[0-4'])	C				
4			Dry	0.0	4-6 feet bgs: Historic fill (mostly brick, some stone) with some fine to medium brown sand and tar. No odor or staining observed.	
6			Dry	0.0	6-8 feet bgs: Fine to medium brown SAND with some historic fill (bricks and stone). No odor or staining observed.	
	G12 (TP2-5/7/12[7'])	G				
	G9 (TP2-5/7/12[4-8'])	C				
8			Dry	0.3	8-10 feet bgs: Fine to medium brown SAND with some stones. No odor or staining observed.	
10			Dry	0.0	10-12 feet bgs: Fine to medium brown SAND with some stones. No odor or staining observed.	
	G10 (TP2-5/7/12[8-12'])	C				
12			Dry	0.0	12-15 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.	
14					Test pit excavated to 15 feet bgs.	
	G11 (TP2-5/7/12[12-15'])	C				
16						

G = Grab sample collected for analysis
C = Composite Sample
bgs = Below Ground Surface

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

45-09 Greenpoint Avenue
Long Island City, New York, 11104
Phone: 718-784-7490 Fax: 718-784-4085

Client:

Test Pit Number: TP-03

Job Name:

Boring Location: Southwest portion of the Site.

Job Number: 12-0013

Field Representatives: Francesca Boutin, Shana Holberton, William Silveri

Location: 52-01 Queens Boulevard Queens, NY 11377

Groundwater Observations: Did not encounter groundwater.

Casing Sampler Type: Excavator

Date Start: 5/7/2012
Date Completed: 5/7/2012

Depth (bgs)	Sample Number	Type	Density or Moist	PID (ppm)	Field Identification of Soil	Remarks
0			Dry	0.0	0-2 feet bgs: Fine to medium brown SAND with some stone and brick. No odor or staining observed.	
2			Dry	0.0	2-4 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.	
	G3 (TP3-5/7/12[0-4'])	C				
4			Dry	0.0	4-6 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.	
	G6 (TP3-5/7/12[6'])	G				
6			Dry	0.0	6-8 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.	
	G15 (TP3-5/7/12[4-8'])	C				
8			Dry	0.0	8-10 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.	
	G18 (TP3-5/7/12[9'])	G				
10			Dry	0.0	10-12 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.	
	G16 (TP3-5/7/12[8-12'])	C				
12			Dry	0.0	12-15 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.	
14					Test pit excavated to 15 feet bgs.	
	G17 (TP3-5/7/12[12-15'])	C				
16						

G = Grab sample collected for analysis
C = Composite sample
bgs = Below Ground Surface

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

45-09 Greenpoint Avenue
Long Island City, New York, 11104 Phone:
718-784-7490 Fax: 718-784-4085

Client:

Test Pit Number: TP-04

Job Name:

Job Number: 12-0013

Boring Location: Southeast portion of the Site.

Field Representatives:
Francesca Boutin, Shana Holberton, William Silveri

Location:
52-01 Queens Boulevard
Queens, NY 11377

Groundwater Observations:
Did not encounter groundwater.

Casing Sampler Type:
Excavator

Date Start: 5/7/2012
Date Completed: 5/7/2012

Depth (bgs)	Sample Number	Type	Density or Moist	PID (ppm)	Field Identification of Soil Remarks
0			Dry	0.0	0-2 feet bgs: Fine to medium brown SAND with some historic fill (stone and brick). No odor or staining observed.
2			Dry	0.0	2-4 feet bgs: Fine to medium brown SAND with some historic fill (stone and brick). No odor or staining observed.
	G4 (TP4-5/7/12[0-4'])	C			
4			Dry	0.0	4-6 feet bgs: Fine to medium brown SAND with some stones. No odor or staining observed.
6			Dry	0.0	6-8 feet bgs: Fine to medium brown SAND with some stones. No odor or staining observed.
	G13 (TP4-5/7/12[4-8'])	C			
8			Dry	0.0	8-10 feet bgs: Fine to medium brown SAND with some stones. No odor or staining observed.
10			Dry	0.0	10-15 feet bgs: Fine to medium brown SAND with some stones. No odor or staining observed.
12					
14					Test pit exavated to 15 feet bgs.
	G14 (TP4-5/7/12[8-15'])	C			
16					

G = Grab sample collected for analysis C = Composite sample
bgs = Below Ground Surface

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

45-09 Greenpoint Avenue
Long Island City, New York, 11104 Phone:
718-784-7490 Fax: 718-784-4085

Client:

Test Pit Number: TP-05

Job Name:

Boring Location: Center portion of the Site.

Job Number: 12-0013

Field Representatives: Francesca Boutin, Shana Holberton, William Silveri

Location: 52-01 Queens Boulevard Queens, NY 11377

Groundwater Observations: Did not encounter groundwater.

Casing Sampler Type: Excavator

Date Start: 5/7/2012
Date Completed: 5/7/2012

Depth (bgs)	Sample Number	Type	Density or Moist	PID (ppm)	Field Identification of Soil	Remarks
0			Dry	0.0	0-2 feet bgs: Fine to medium brown SAND with trace brick and stone. No odor or staining observed.	
	G19 (TP5-5/7/12[0-2'])	C				
2			Dry	0.0	2-4 feet bgs: Fine to medium brown SAND with trace brick and stone. No odor or staining observed.	
	G20 (TP5-5/7/12[2-4'])	G				
4			Dry	0.0	4-6 feet bgs: Fine to medium brown SAND with trace brick and stone. No odor or staining observed.	
	G21 (TP5-5/7/12[4-6'])	C				
6			Dry	0.0	6-9 feet bgs: Fine to medium brown SAND with trace brick and stone. No odor or staining observed.	
8					Test pit excavated to 9 feet bgs.	
	G22 (TP5-5/7/12[6-9'])	C				
10						

G = Grab sample collected for analysis C = Composite sample
bgs = Below Ground Surface

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

45-09 Greenpoint Avenue
Long Island City, New York, 11104 Phone:
718-784-7490 Fax: 718-784-4085

Client:

Test Pit Number: TP-06

Job Name:

Boring Location: North portion of the Site.

Job Number: 12-0013

Field Representatives:
Francesca Boutin, Shana Holberton, William Silveri

Location:
52-01 Queens Boulevard
Queens, NY 11377

Groundwater Observations:
Did not encounter groundwater.

Casing Sampler Type:
Excavator

Date Start: 5/7/2012
Date Completed: 5/7/2012

Depth (bgs)	Sample Number	Type	Density or Moist	PID (ppm)	Field Identification of Soil	Remarks
0			Dry	0.0	0-3 feet bgs: Light brown sand. No odor or staining observed.	
2	G23 (TP3-5/7/12[0-3'])	C			Test pit excavated to 3 feet bgs.	
	G24 (TP3-5/7/12[3'])	G				
4						

G = Grab sample collected for analysis C = Composite sample
bgs = Below Ground Surface

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

45-09 Greenpoint Avenue
Long Island City, New York, 11104 Phone:
718-784-7490 Fax: 718-784-4085

Client: 52-01 LLC

Test Pit Number: TP-07

Job Name:

Job Number: 12-0013

Boring Location: Southeast portion of the Site.

Field Representatives: Jeffrey Strykowski, William Silveri

Location: 52-01 Queens Boulevard Queens, NY 11377

Groundwater Observations: Did not encounter groundwater.

Casing Sampler Type: Excavator

Date Start: 5/15/2012
Date Completed: 5/15/2012

Depth (bgs)	Sample Number	Type	Density or Moist	PID (ppm)	Field Identification of Soil Remarks
0			Dry	0.0	0-2 feet bgs: Fine to medium brown SAND. No odor or staining observed.
	TP-7-5/15/12-(2')	G			
2			Dry	0.0	2-4 feet bgs: Same Sand as above. No odor or staining observed.
	TP-7-5/15/12-(4')	G			
4					Test Pit completed at 4 feet bgs, which corresponds to 15 feet below original grade surface.
6					
8					
10					
12					
14					
16					

G = Grab sample collected for analysis
bgs = Below Ground Surface

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

45-09 Greenpoint Avenue
Long Island City, New York, 11104 Phone:
718-784-7490 Fax: 718-784-4085

Client:

Test Pit Number: TP-08

Job Name:

Boring Location: Middle of east portion of Site

Job Number: 12-0013

Field Representatives:
Jeffrey Strykowski, William Silveri

Location:
52-01 Queens Boulevard
Queens, NY 11377

Groundwater Observations:
Did not encounter groundwater.

Casing Sampler Type:
Excavator

Date Start: 5/15/2012
Date Completed: 5/15/2012

Depth (bgs)	Sample Number	Type	Density or Moist	PID (ppm)	Field Identification of Soil Remarks
0			Dry	0.0	0-2 feet bgs: Fine to medium, light brown SAND with some boulders and historic fill. No odor or staining observed.
2			Dry	0.0	2-4 feet bgs: Same Sand as above. No odor or staining observed.
	TP-8-5/15/12-(4')	G			
4			Dry	0.0	4-6 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.
6			Dry	0.0	6-8 feet bgs: Same SAND as above. No odor or staining observed.
	TP-8-5/15/12-(8')	G			
8			Dry	0.0	8-10 feet bgs: Fine to medium brown SAND with some large boulders. No odor or staining observed.
10			Dry	0.0	10-12 feet bgs: Same SAND as above. No odor or staining observed.
	TP-8-5/15/12-(12')	G			
12					Test Pit completed at 12 feet bgs, which corresponds to 15 feet below original grade surface.
14					
16					

G = Grab sample collected for analysis
bgs = Below Ground Surface

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

45-09 Greenpoint Avenue
Long Island City, New York, 11104
Phone: 718-784-7490 Fax: 718-784-4085

Client:

Test Pit Number: TP-09

Job Name:

Job Number: 12-0013

Boring Location: Middle of South portion of the Site.

Field Representatives: Jeffrey Strykowski, William Silveri

Location: 52-01 Queens Boulevard, Queens, NY 11377

Groundwater Observations: Did not encounter groundwater.

Casing Sampler Type: Excavator

Date Start: 5/16/2012
Date Completed: 5/16/2012

Depth (bgs)	Sample Number	Type	Density or Moist	PID (ppm)	Field Identification of Soil	Remarks
0			Dry	0.0	0-2 feet bgs: Fine to medium light brown sand with some Fill consisting of stone. No odor or staining observed.	
	TP-09-5/16/12-(2')	G				
2			Dry	0.0	2-4 feet bgs: Fine-medium light brown Sand with gravel and boulders. No odor or staining observed.	
4			Dry	0.0	4-6 feet bgs: Same Sand as above. No odor or staining observed.	
	TP-09-5/16/12-(6')	G				
6			Dry	0.0	6-8 feet bgs: Same Sand as above. No odor or staining observed.	
8			Dry	0.3	8-10 feet bgs: Same Sand as above. No odor or staining observed.	
	TP-09-5/16/12-(10')	G				
10			Dry	0.0	10-12 feet bgs: Same Sand as above. No odor or staining observed.	
	TP-09-5/16/12-(12')	G				
12					Test Pit completed at 12 feet bgs.	
14						
16						

G = Grab sample collected for analysis
bgs = Below Ground Surface

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

45-09 Greenpoint Avenue
Long Island City, New York, 11104
Phone: 718-784-7490 Fax: 718-784-4085

Client:

Test Pit Number: TP-10

Job Name:

Job Number: 12-0013

Boring Location: Middle of West Portion of Site

Field Representatives: Jeffrey Strykowski, William Silveri

Location: 52-01 Queens Boulevard, Queens, NY 11377

Groundwater Observations: Did not encounter groundwater.

Casing Sampler Type: Excavator

Date Start: 5/15/2012
Date Completed: 5/15/2012

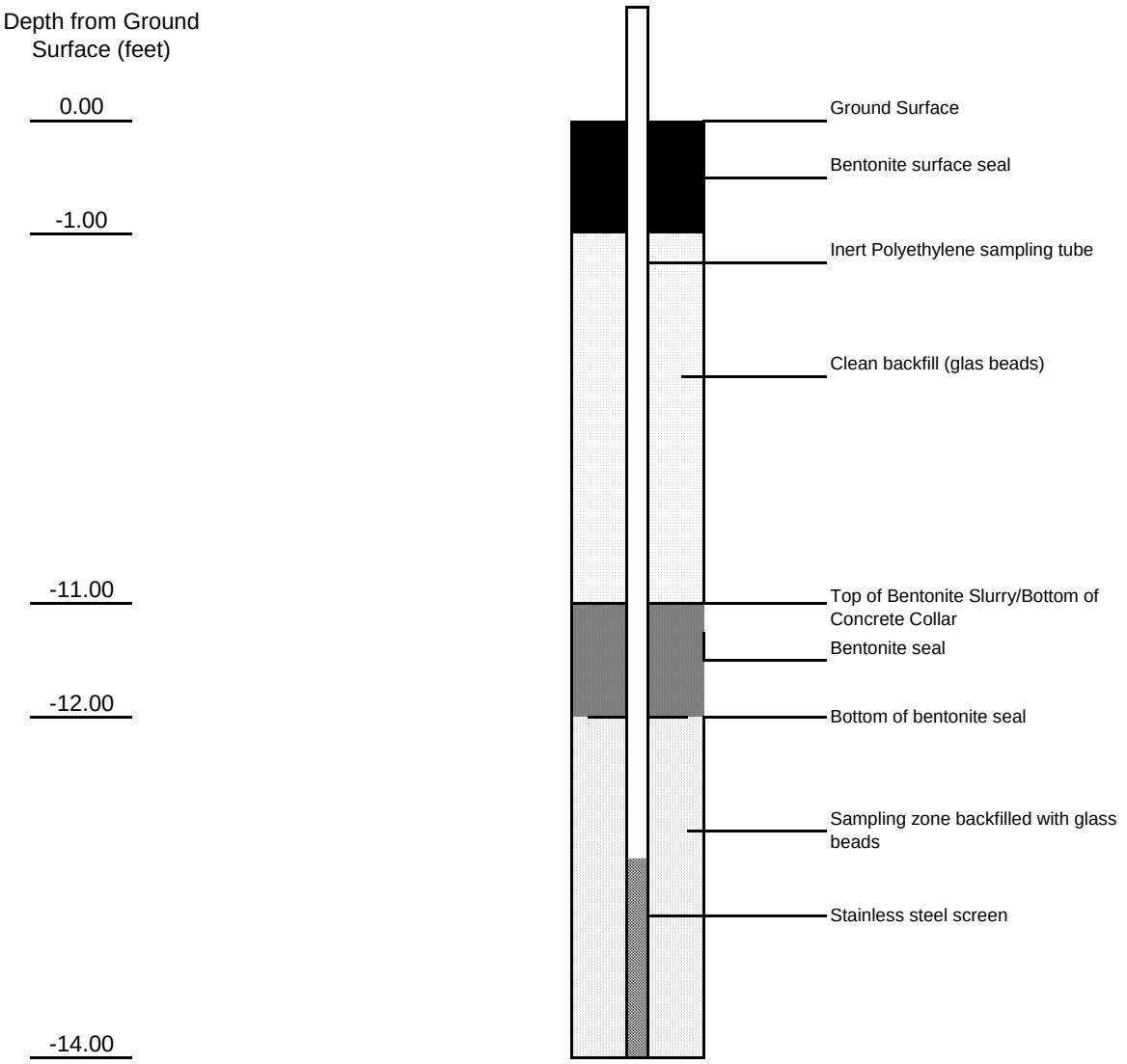
Depth (bgs)	Sample Number	Type	Density or Moist	PID (ppm)	Field Identification of Soil	Remarks
0			Dry	0.0	0-2 feet bgs: Fine to medium light brown sand. No odor or staining observed.	
	TP-10-5/15/12-(2')	G				
2			Dry	0.0	2-4 feet bgs: Same Sand as above. No odor or staining observed.	
4			Dry	0.0	4-6 feet bgs: Same Sand as above. No odor or staining observed.	
	TP-10-5/15/12-(6')	G				
6			Dry	0.0	6-8 feet bgs: Same Sand as above. No odor or staining observed.	
8			Dry	0.0	8-10 feet bgs: Same Sand as above. No odor or staining observed.	
	TP-10-5/15/12-(10')	G				
10					Test Pit completed at 10 feet bgs, which corresponds to 12 feet below original grade surface.	
12						
14						
16						

G = Grab sample collected for analysis
bgs = Below Ground Surface

APPENDIX F

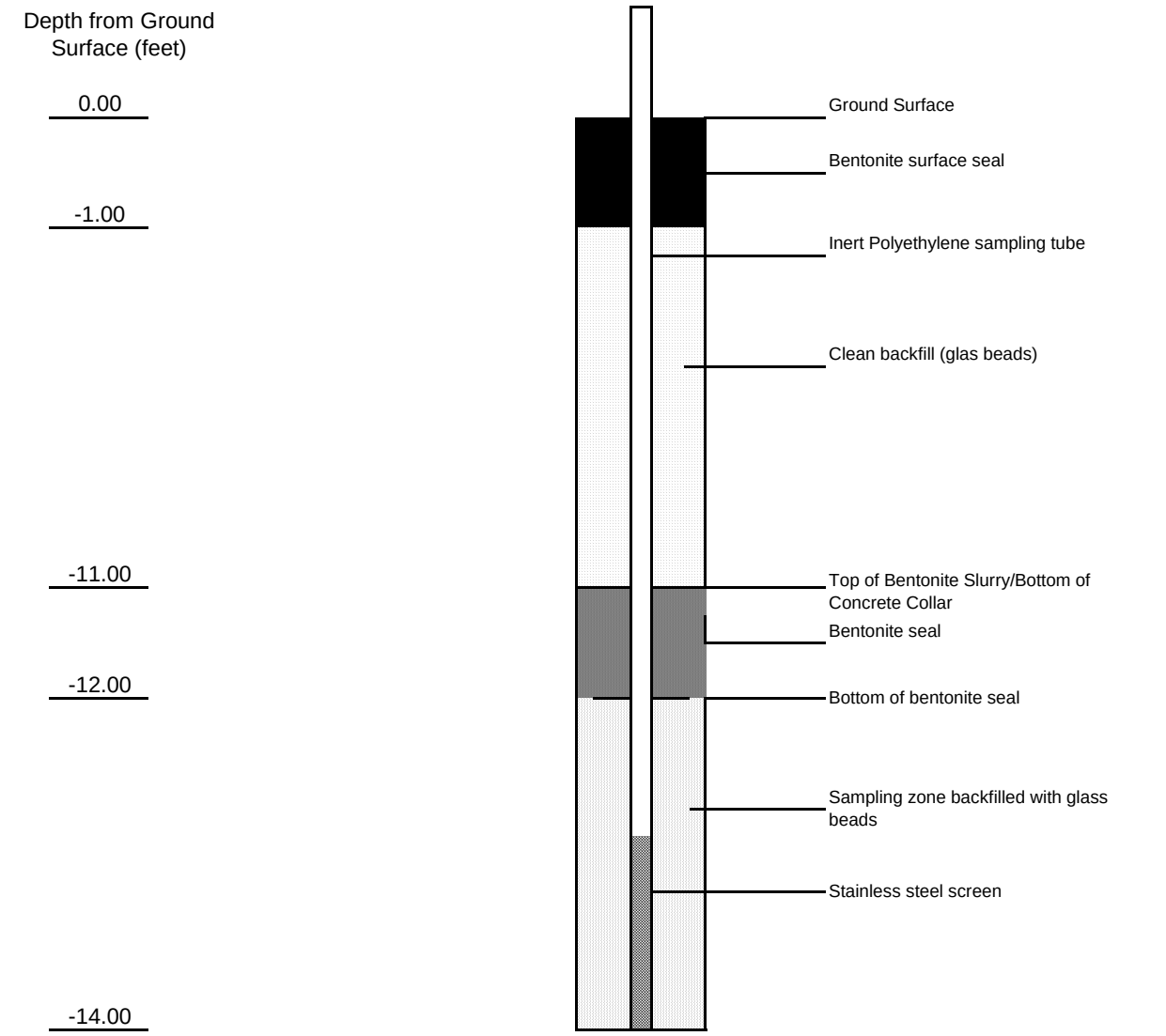
CONSTRUCTION DETAILS OF
TEMPORARY MONITORING WELLS AND SOIL VAPOR IMPLANTS

JOB NAME:	52-01 Queens Blvd	WELL NUMBER:	**SV-1**
ADDRESS:	52-01 Queens Blvd	DRILLING METHOD	Direct Push
INSTALLATION DATE:	4/9/12	DRILLER:	Laurel Environmental Associates



NOT TO SCALE

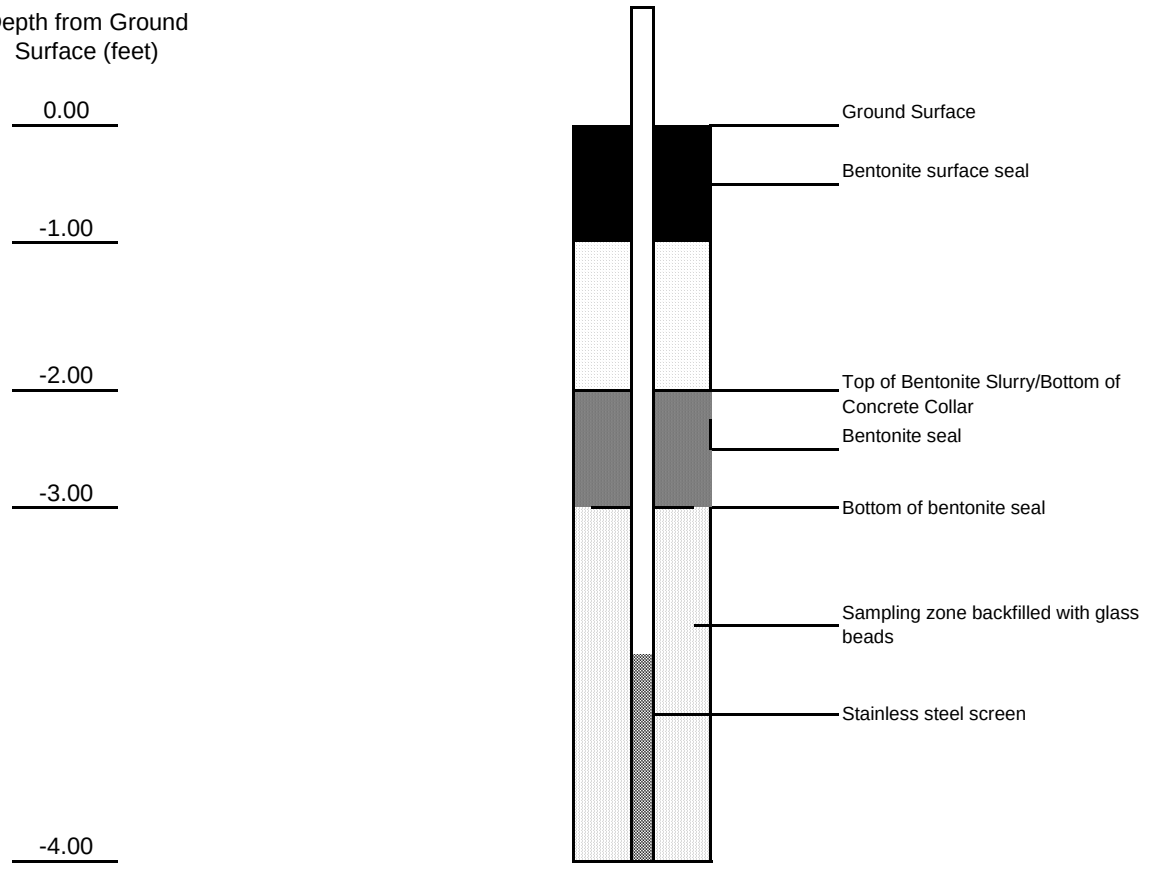
JOB NAME:	52-01 Queens Blvd	WELL NUMBER:	**SV-2**
ADDRESS:	52-01 Queens Blvd	DRILLING METHOD	Direct Push
INSTALLATION DATE:	4/9/12	DRILLER:	Laurel Environmental Associates



NOT TO SCALE

JOB NAME:	52-01 Queens Blvd	WELL NUMBER:	**SV-3**
ADDRESS:	52-01 Queens Blvd	DRILLING METHOD	Direct Push
INSTALLATION DATE:	4/9/12	DRILLER:	Laurel Environmental Associates

Depth from Ground Surface (feet)

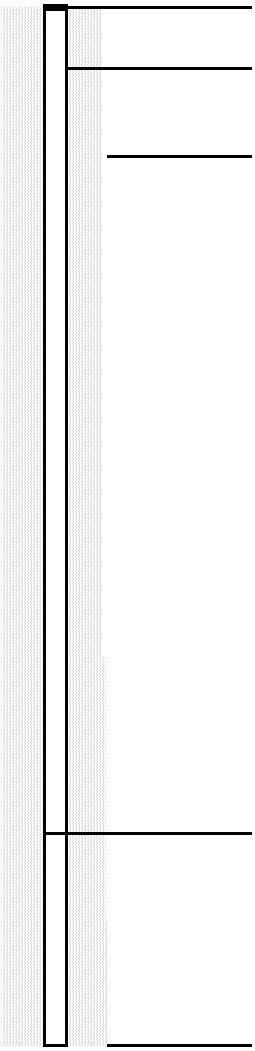


NOT TO SCALE

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

JOB NAME:	52-01 Queens Boulevard	WELL NUMBER:	**TW-1**
ADDRESS:	52-01 Queens Boulevard	DRILLING METHOD:	Direct Push Unit
INSTALLATION DATE:	4/9/12	DRILLER:	Laurel Environmental
DEVELOPMENT DATE:	N/A	GAUGING DATE:	N/A
HEIGHT OF STICK-UP:	N/A	DEPTH TO WATER:	30-34 feetbgs
ELEVATION DATUM:	Not Surveyed	DEPTH TO PRODUCT:	NA

Depth from Grade (feet)	Elevation (feet MSL)	
0.00		Ground Surface
		Polyethylene Tubing
		Native Formation
-30.00		Top of Steel Well Screen
-34.00		Depth to Bottom of Screen



NOT TO SCALE

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

JOB NAME: 52-01 Queens Boulevard
WELL NUMBER: **TW-2**

ADDRESS: 52-01 Queens Boulevard
DRILLING METHOD: Direct Push Unit

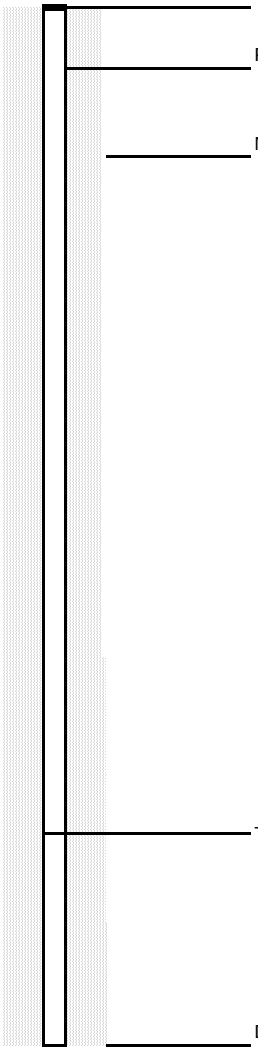
INSTALLATION DATE: 4/9/12
DRILLER: Laurel Environmental

DEVELOPMENT DATE: N/A
GAUGING DATE: N/A

HEIGHT OF STICK-UP: N/A
DEPTH TO WATER: 30-34 feetbgs

ELEVATION DATUM: Not Surveyed
DEPTH TO PRODUCT: NA

Depth from Grade (feet)	Elevation (feet MSL)	
0.00		Ground Surface
		Polyethylene Tubing
		Native Formation
-20.00		Top of Steel Well Screen
-24.00		Depth to Bottom of Screen



NOT TO SCALE

ATHENICA ENVIRONMENTAL SERVICES, INC.
Environmental Consultants

JOB NAME: 52-01 Queens Boulevard
WELL NUMBER: **TW-3**

ADDRESS: 52-01 Queens Boulevard
DRILLING METHOD: Direct Push Unit

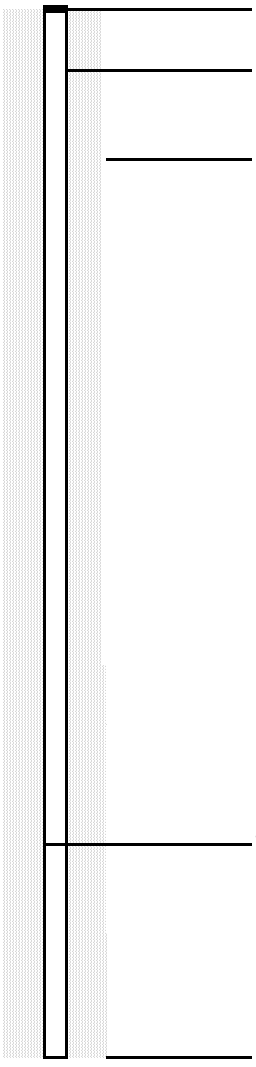
INSTALLATION DATE: 4/9/12
DRILLER: Laurel Environmental

DEVELOPMENT DATE: N/A
GAUGING DATE: N/A

HEIGHT OF STICK-UP: N/A
DEPTH TO WATER: 30-34 feetbgs

ELEVATION DATUM: Not Surveyed
DEPTH TO PRODUCT: NA

Depth from Grade (feet)	Elevation (feet MSL)	
0.00		Ground Surface
		Polyethylene Tubing
		Native Formation
-29.00		Top of Steel Well Screen
-31.00		Depth to Bottom of Screen



APPENDIX G

SOIL VAPOR SAMPLING LOGS

Soil Vapor Sampling Log
52-01 Queens Boulevard
Queens, New York

Sample ID	Sample Date	Flow Controller Readout (L/min)	Start Sampling Time	Stop Sampling Time	Cannister Pressure in Field ("Hg") (Start)	Cannister Pressure in Field ("Hg") (Stop)
SG-1	4/9/2012	0.025	13:39	14:09	30	1
SG-2	4/9/2012	0.025	13:50	14:20	30	1
SG-3	4/9/2012	0.025	13:54	14:24	30	1

APPENDIX H

LABORATORY DATA DELIVERABLES FOR SOIL ANALYTICAL DATA (CD-ROM)

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. Y2137

COC Number 063440

CLIENT INFORMATION (REPORT TO BE SENT TO:)

COMPANY Athenica Environmental
ADDRESS 45-09 Greenpoint Ave
CITY LIC STATE: NY ZIP: 11104
ATTENTION Leskicabit
PHONE 718-784-7490 FAX 718-784-4085

CLIENT PROJECT INFORMATION

PROJECT NAME. 52-01 Queens Blvd
PROJECT NO. 07-0032 LOCATION 52-01 Queens Blvd Woodside, NY
PROJECT MANAGER
e-mail: leskicabit@athenica.com
PHONE. FAX.

CLIENT BILLING INFORMATION

BILL TO: SAME PO#
ADDRESS:
CITY STATE: ZIP.
ATTENTION PHONE:

DATA TURNAROUND INFORMATION

FAX. 5 DAYS *
HARD COPY. DAYS *
EDD. DAYS *
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☐ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other
☐ EDD FORMAT

ANALYSIS

1	2	3	4	5	6	7	8	9
		VOCs	SVOC	PCB				

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.	B-1	SOIL		X	3/29/07		2	X	X								
2	B-1 (0-6")	"		X	"		2			HOLD							
3	B-2	"		X	"		2	X	X								
4	B-2 (0-6")	"		X	"		2			HOLD							
5	B-3 (0-6")	"		X	"		2			HOLD							
6	B-3	"		X	"		2	X	X								
7	B-4 (0-6")	"		X	"		2			HOLD							
8.	B-4	"		X	"		2	X	X								
9	B-5	"		X	"		2	X	X								
10	B-6 (10')	"		X	"		2			X							

← 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		3/30/07	1.
2	RELINQUISHED BY	DATE/TIME	RECEIVED BY 2.
3	RELINQUISHED BY DHL	DATE/TIME: 10:15 4-2-07	RECEIVED FOR LAB BY J. Dutton

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant Cooler Temp. 14°C
MeOH extraction requires an additional 4 oz jar for percent solid
Comments: Ice in Cooler?: No

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☒ OVERNIGHT CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☒ YES ☐ NO

Revision 4/2005

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:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-1	**Lab Sample ID:**	Y2137-01
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**Datafile:**	BF011715

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
108-95-2	Phenol	ND	U	ug/Kg	54	350	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/Kg	56	350	1	
95-57-8	2-Chlorophenol	ND	U	ug/Kg	56	350	1	
100-51-6	Benzyl Alcohol	ND	U	ug/Kg	37	350	1	
95-48-7	2-Methylphenol	ND	U	ug/Kg	59	350	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/Kg	57	350	1	
106-44-5	3+4-Methylphenols	ND	U	ug/Kg	56	350	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/Kg	59	350	1	
67-72-1	Hexachloroethane	ND	U	ug/Kg	60	350	1	
98-95-3	Nitrobenzene	ND	U	ug/Kg	77	350	1	
78-59-1	Isophorone	ND	U	ug/Kg	53	350	1	
88-75-5	2-Nitrophenol	ND	U	ug/Kg	54	350	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/Kg	56	350	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/Kg	58	350	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/Kg	65	350	1	
65-85-0	Benzoic acid	ND	U	ug/Kg	85	350	1	
91-20-3	Naphthalene	ND	U	ug/Kg	60	350	1	
106-47-8	4-Chloroaniline	ND	U	ug/Kg	42	350	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/Kg	54	350	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/Kg	49	350	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/Kg	59	350	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/Kg	56	350	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/Kg	52	350	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/Kg	54	890	1	
91-58-7	2-Chloronaphthalene	ND	U	ug/Kg	59	350	1	
88-74-4	2-Nitroaniline	ND	U	ug/Kg	45	890	1	
131-11-3	Dimethylphthalate	ND	U	ug/Kg	57	350	1	
208-96-8	Acenaphthylene	ND	U	ug/Kg	57	350	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-1	**Lab Sample ID:**	Y2137-01
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	BF011715

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
606-20-2	2,6-Dinitrotoluene	ND	U	ug/Kg	50	350	1	
99-09-2	3-Nitroaniline	ND	U	ug/Kg	46	890	1	
83-32-9	Acenaphthene	ND	U	ug/Kg	63	350	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/Kg	300	890	1	
100-02-7	4-Nitrophenol	ND	U	ug/Kg	44	890	1	
132-64-9	Dibenzofuran	ND	U	ug/Kg	59	350	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/Kg	52	350	1	
84-66-2	Diethylphthalate	ND	U	ug/Kg	61	350	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/Kg	56	350	1	
86-73-7	Fluorene	ND	U	ug/Kg	60	350	1	
100-01-6	4-Nitroaniline	ND	U	ug/Kg	60	890	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/Kg	69	890	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/Kg	58	350	1	
103-33-3	Azobenzene	ND	U	ug/Kg	71	350	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/Kg	53	350	1	
118-74-1	Hexachlorobenzene	ND	U	ug/Kg	57	350	1	
87-86-5	Pentachlorophenol	ND	U	ug/Kg	82	890	1	
85-01-8	Phenanthrene	ND	U	ug/Kg	56	350	1	
120-12-7	Anthracene	ND	U	ug/Kg	53	350	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/Kg	54	350	1	
206-44-0	Fluoranthene	75	J	ug/Kg	53	350	1	
129-00-0	Pyrene	80	J	ug/Kg	63	350	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/Kg	57	350	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/Kg	61	350	1	
56-55-3	Benzo(a)anthracene	ND	U	ug/Kg	50	350	1	
218-01-9	Chrysene	ND	U	ug/Kg	64	350	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/Kg	68	350	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/Kg	60	350	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-1	**Lab Sample ID:**	Y2137-01
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	BF011715

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE	
205-99-2	Benzo(b)fluoranthene	44	J	ug/Kg	39	350	1		
207-08-9	Benzo(k)fluoranthene	ND	U	ug/Kg	78	350	1		
50-32-8	Benzo(a)pyrene	ND	U	ug/Kg	57	350	1		
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/Kg	45	350	1		
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/Kg	44	350	1		
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/Kg	59	350	1		
	ACP3.00	5600	A	ug/Kg	0	0	1		TIC

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-1	**Lab Sample ID:**	Y2137-01
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	7.00
Result Type:	Final	**Datafile:**	VK015775

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/Kg	4.5	26	1	
74-87-3	Chloromethane	ND	U	ug/Kg	4.5	26	1	
75-01-4	Vinyl Chloride	ND	U	ug/Kg	4.3	26	1	
74-83-9	Bromomethane	ND	U	ug/Kg	11	26	1	
75-00-3	Chloroethane	ND	U	ug/Kg	11	26	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/Kg	6.5	26	1	
75-65-0	Tert butyl alcohol	ND	U	ug/Kg	8.5	130	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/Kg	3.0	26	1	
107-02-8	Acrolein	ND	U	ug/Kg	27	130	1	
107-13-1	Acrylonitrile	ND	U	ug/Kg	9.9	130	1	
67-64-1	Acetone	33	JB	ug/Kg	18	130	1	
75-15-0	Carbon Disulfide	ND	U	ug/Kg	1.9	26	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/Kg	1.9	26	1	
75-09-2	Methylene Chloride	61	B	ug/Kg	9.5	26	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/Kg	3.3	26	1	
108-05-4	Vinyl Acetate	ND	U	ug/Kg	6.8	130	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/Kg	1.4	26	1	
78-93-3	2-Butanone	ND	U	ug/Kg	15	130	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/Kg	2.3	26	1	
594-20-7	2,2-Dichloropropane	ND	U	ug/Kg	1.7	26	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/Kg	1.7	26	1	
74-97-5	Bromochloromethane	ND	U	ug/Kg	3.0	26	1	
67-66-3	Chloroform	ND	U	ug/Kg	1.8	26	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/Kg	2.2	26	1	
563-58-6	1,1-Dichloropropene	ND	U	ug/Kg	2.1	26	1	
71-43-2	Benzene	ND	U	ug/Kg	2.1	26	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/Kg	1.6	26	1	
79-01-6	Trichloroethene	ND	U	ug/Kg	1.6	26	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-1	**Lab Sample ID:**	Y2137-01
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	VK015775

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
78-87-5	1,2-Dichloropropane	ND	U	ug/Kg	2.1	26	1	
74-95-3	Dibromomethane	ND	U	ug/Kg	1.4	26	1	
75-27-4	Bromodichloromethane	ND	U	ug/Kg	1.7	26	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/Kg	10	130	1	
108-88-3	Toluene	ND	U	ug/Kg	2.1	26	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/Kg	1.9	26	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/Kg	1.7	26	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/Kg	1.5	26	1	
142-28-9	1,3-Dichloropropane	ND	U	ug/Kg	1.9	26	1	
110-75-8	2-Chloroethyl vinyl ether	ND	U	ug/Kg	7.9	130	1	
591-78-6	2-Hexanone	ND	U	ug/Kg	19	130	1	
124-48-1	Dibromochloromethane	ND	U	ug/Kg	1.2	26	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/Kg	2.1	26	1	
127-18-4	Tetrachloroethene	ND	U	ug/Kg	3.8	26	1	
108-90-7	Chlorobenzene	ND	U	ug/Kg	1.9	26	1	
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	ug/Kg	2.2	26	1	
100-41-4	Ethyl Benzene	ND	U	ug/Kg	1.8	26	1	
126777-61-2	m/p-Xylenes	ND	U	ug/Kg	4.5	52	1	
95-47-6	o-Xylene	ND	U	ug/Kg	2.0	26	1	
100-42-5	Styrene	ND	U	ug/Kg	2.4	26	1	
75-25-2	Bromoform	ND	U	ug/Kg	1.6	26	1	
98-82-8	Isopropylbenzene	ND	U	ug/Kg	2.2	26	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/Kg	1.6	26	1	
96-18-4	1,2,3-Trichloropropane	ND	U	ug/Kg	1.7	26	1	
108-86-1	Bromobenzene	ND	U	ug/Kg	2.1	26	1	
103-65-1	n-propylbenzene	ND	U	ug/Kg	2.8	26	1	
95-49-8	2-Chlorotoluene	ND	U	ug/Kg	2.1	26	1	
108-67-8	1,3,5-Trimethylbenzene	ND	U	ug/Kg	2.6	26	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-1	**Lab Sample ID:**	Y2137-01
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	VK015775

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
106-43-4	4-Chlorotoluene	ND	U	ug/Kg	2.3	26	1	
98-06-6	tert-Butylbenzene	ND	U	ug/Kg	3.7	26	1	
95-63-6	1,2,4-Trimethylbenzene	ND	U	ug/Kg	2.0	26	1	
135-98-8	sec-Butylbenzene	ND	U	ug/Kg	2.2	26	1	
99-87-6	p-Isopropyltoluene	ND	U	ug/Kg	2.2	26	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/Kg	2.9	26	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/Kg	2.8	26	1	
104-51-8	n-Butylbenzene	ND	U	ug/Kg	1.8	26	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/Kg	2.0	26	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/Kg	4.9	26	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/Kg	3.6	26	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/Kg	2.1	26	1	
91-20-3	Naphthalene	ND	U	ug/Kg	3.1	26	1	
87-61-6	1,2,3-Trichlorobenzene	ND	U	ug/Kg	5.3	26	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-1RE	**Lab Sample ID:**	Y2137-01RE
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**Datafile:**	BF011756

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
108-95-2	Phenol	ND	U	ug/Kg	54	350	1	RE
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/Kg	56	350	1	RE
95-57-8	2-Chlorophenol	ND	U	ug/Kg	56	350	1	RE
100-51-6	Benzyl Alcohol	ND	U	ug/Kg	37	350	1	RE
95-48-7	2-Methylphenol	ND	U	ug/Kg	59	350	1	RE
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/Kg	57	350	1	RE
106-44-5	3+4-Methylphenols	ND	U	ug/Kg	56	350	1	RE
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/Kg	59	350	1	RE
67-72-1	Hexachloroethane	ND	U	ug/Kg	60	350	1	RE
98-95-3	Nitrobenzene	ND	U	ug/Kg	77	350	1	RE
78-59-1	Isophorone	ND	U	ug/Kg	53	350	1	RE
88-75-5	2-Nitrophenol	ND	U	ug/Kg	54	350	1	RE
105-67-9	2,4-Dimethylphenol	ND	U	ug/Kg	56	350	1	RE
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/Kg	58	350	1	RE
120-83-2	2,4-Dichlorophenol	ND	U	ug/Kg	65	350	1	RE
65-85-0	Benzoic acid	ND	U	ug/Kg	85	350	1	RE
91-20-3	Naphthalene	ND	U	ug/Kg	60	350	1	RE
106-47-8	4-Chloroaniline	ND	U	ug/Kg	42	350	1	RE
87-68-3	Hexachlorobutadiene	ND	U	ug/Kg	54	350	1	RE
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/Kg	49	350	1	RE
91-57-6	2-Methylnaphthalene	ND	U	ug/Kg	59	350	1	RE
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/Kg	56	350	1	RE
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/Kg	52	350	1	RE
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/Kg	54	890	1	RE
91-58-7	2-Chloronaphthalene	ND	U	ug/Kg	59	350	1	RE
88-74-4	2-Nitroaniline	ND	U	ug/Kg	45	890	1	RE
131-11-3	Dimethylphthalate	ND	U	ug/Kg	57	350	1	RE
208-96-8	Acenaphthylene	ND	U	ug/Kg	57	350	1	RE

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-1RE	**Lab Sample ID:**	Y2137-01RE
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	BF011756

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
606-20-2	2,6-Dinitrotoluene	ND	U	ug/Kg	50	350	1	RE
99-09-2	3-Nitroaniline	ND	U	ug/Kg	46	890	1	RE
83-32-9	Acenaphthene	ND	U	ug/Kg	63	350	1	RE
51-28-5	2,4-Dinitrophenol	ND	U	ug/Kg	300	890	1	RE
100-02-7	4-Nitrophenol	ND	U	ug/Kg	44	890	1	RE
132-64-9	Dibenzofuran	ND	U	ug/Kg	59	350	1	RE
121-14-2	2,4-Dinitrotoluene	ND	U	ug/Kg	52	350	1	RE
84-66-2	Diethylphthalate	ND	U	ug/Kg	61	350	1	RE
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/Kg	56	350	1	RE
86-73-7	Fluorene	ND	U	ug/Kg	60	350	1	RE
100-01-6	4-Nitroaniline	ND	U	ug/Kg	60	890	1	RE
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/Kg	69	890	1	RE
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/Kg	58	350	1	RE
103-33-3	Azobenzene	ND	U	ug/Kg	71	350	1	RE
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/Kg	53	350	1	RE
118-74-1	Hexachlorobenzene	ND	U	ug/Kg	57	350	1	RE
87-86-5	Pentachlorophenol	ND	U	ug/Kg	82	890	1	RE
85-01-8	Phenanthrene	ND	U	ug/Kg	56	350	1	RE
120-12-7	Anthracene	ND	U	ug/Kg	53	350	1	RE
84-74-2	Di-n-butylphthalate	ND	U	ug/Kg	54	350	1	RE
206-44-0	Fluoranthene	67	J	ug/Kg	53	350	1	RE
129-00-0	Pyrene	85	J	ug/Kg	63	350	1	RE
85-68-7	Butylbenzylphthalate	ND	U	ug/Kg	57	350	1	RE
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/Kg	61	350	1	RE
56-55-3	Benzo(a)anthracene	ND	U	ug/Kg	50	350	1	RE
218-01-9	Chrysene	ND	U	ug/Kg	64	350	1	RE
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/Kg	68	350	1	RE
117-84-0	Di-n-octyl phthalate	ND	U	ug/Kg	60	350	1	RE

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-1RE	**Lab Sample ID:**	Y2137-01RE
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	BF011756

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
205-99-2	Benzo(b)fluoranthene	48	J	ug/Kg	39	350	1	RE
207-08-9	Benzo(k)fluoranthene	ND	U	ug/Kg	78	350	1	RE
50-32-8	Benzo(a)pyrene	ND	U	ug/Kg	57	350	1	RE
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/Kg	45	350	1	RE
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/Kg	44	350	1	RE
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/Kg	59	350	1	RE

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-2	**Lab Sample ID:**	Y2137-03
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	9.00
Result Type:	Final	**Datafile:**	BF011741

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
108-95-2	Phenol	ND	U	ug/Kg	55	360	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/Kg	57	360	1	
95-57-8	2-Chlorophenol	ND	U	ug/Kg	58	360	1	
100-51-6	Benzyl Alcohol	ND	U	ug/Kg	38	360	1	
95-48-7	2-Methylphenol	ND	U	ug/Kg	60	360	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/Kg	58	360	1	
106-44-5	3+4-Methylphenols	ND	U	ug/Kg	57	360	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/Kg	60	360	1	
67-72-1	Hexachloroethane	ND	U	ug/Kg	61	360	1	
98-95-3	Nitrobenzene	ND	U	ug/Kg	79	360	1	
78-59-1	Isophorone	ND	U	ug/Kg	54	360	1	
88-75-5	2-Nitrophenol	ND	U	ug/Kg	56	360	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/Kg	57	360	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/Kg	59	360	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/Kg	67	360	1	
65-85-0	Benzoic acid	ND	U	ug/Kg	87	360	1	
91-20-3	Naphthalene	ND	U	ug/Kg	62	360	1	
106-47-8	4-Chloroaniline	ND	U	ug/Kg	43	360	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/Kg	56	360	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/Kg	50	360	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/Kg	60	360	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/Kg	58	360	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/Kg	53	360	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/Kg	55	910	1	
91-58-7	2-Chloronaphthalene	ND	U	ug/Kg	60	360	1	
88-74-4	2-Nitroaniline	ND	U	ug/Kg	46	910	1	
131-11-3	Dimethylphthalate	ND	U	ug/Kg	58	360	1	
208-96-8	Acenaphthylene	ND	U	ug/Kg	59	360	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-2	**Lab Sample ID:**	Y2137-03
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	9.00
Result Type:	Final	**DataFile:**	BF011741

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
606-20-2	2,6-Dinitrotoluene	ND	U	ug/Kg	51	360	1	
99-09-2	3-Nitroaniline	ND	U	ug/Kg	47	910	1	
83-32-9	Acenaphthene	ND	U	ug/Kg	64	360	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/Kg	310	910	1	
100-02-7	4-Nitrophenol	ND	U	ug/Kg	45	910	1	
132-64-9	Dibenzofuran	ND	U	ug/Kg	60	360	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/Kg	53	360	1	
84-66-2	Diethylphthalate	ND	U	ug/Kg	62	360	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/Kg	57	360	1	
86-73-7	Fluorene	ND	U	ug/Kg	61	360	1	
100-01-6	4-Nitroaniline	ND	U	ug/Kg	62	910	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/Kg	70	910	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/Kg	60	360	1	
103-33-3	Azobenzene	ND	U	ug/Kg	73	360	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/Kg	54	360	1	
118-74-1	Hexachlorobenzene	ND	U	ug/Kg	58	360	1	
87-86-5	Pentachlorophenol	ND	U	ug/Kg	84	910	1	
85-01-8	Phenanthrene	ND	U	ug/Kg	58	360	1	
120-12-7	Anthracene	ND	U	ug/Kg	55	360	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/Kg	55	360	1	
206-44-0	Fluoranthene	ND	U	ug/Kg	54	360	1	
129-00-0	Pyrene	ND	U	ug/Kg	64	360	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/Kg	58	360	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/Kg	62	360	1	
56-55-3	Benzo(a)anthracene	ND	U	ug/Kg	51	360	1	
218-01-9	Chrysene	ND	U	ug/Kg	65	360	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/Kg	69	360	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/Kg	62	360	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-2	**Lab Sample ID:**	Y2137-03
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	9.00
Result Type:	Final	**DataFile:**	BF011741

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
205-99-2	Benzo(b)fluoranthene	ND	U	ug/Kg	40	360	1	
207-08-9	Benzo(k)fluoranthene	ND	U	ug/Kg	80	360	1	
50-32-8	Benzo(a)pyrene	ND	U	ug/Kg	58	360	1	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/Kg	46	360	1	
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/Kg	45	360	1	
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/Kg	60	360	1	
	ACP2.97	5900	AB	ug/Kg	0	0	1	TIC
7683-64-9	Squalene	540	J	ug/Kg	0	0	1	TIC

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-2	**Lab Sample ID:**	Y2137-03
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	9.00
Result Type:	Final	**Datafile:**	VK015754

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/Kg	4.7	27	1	
74-87-3	Chloromethane	ND	U	ug/Kg	4.6	27	1	
75-01-4	Vinyl Chloride	ND	U	ug/Kg	4.5	27	1	
74-83-9	Bromomethane	ND	U	ug/Kg	11	27	1	
75-00-3	Chloroethane	ND	U	ug/Kg	12	27	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/Kg	6.8	27	1	
75-65-0	Tert butyl alcohol	ND	U	ug/Kg	8.9	140	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/Kg	3.1	27	1	
107-02-8	Acrolein	ND	U	ug/Kg	28	140	1	
107-13-1	Acrylonitrile	ND	U	ug/Kg	10	140	1	
67-64-1	Acetone	54	JB	ug/Kg	18	140	1	
75-15-0	Carbon Disulfide	ND	U	ug/Kg	2.0	27	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/Kg	2.0	27	1	
75-09-2	Methylene Chloride	82	B	ug/Kg	9.9	27	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/Kg	3.5	27	1	
108-05-4	Vinyl Acetate	ND	U	ug/Kg	7.1	140	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/Kg	1.5	27	1	
78-93-3	2-Butanone	ND	U	ug/Kg	15	140	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/Kg	2.4	27	1	
594-20-7	2,2-Dichloropropane	ND	U	ug/Kg	1.8	27	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/Kg	1.8	27	1	
74-97-5	Bromochloromethane	ND	U	ug/Kg	3.1	27	1	
67-66-3	Chloroform	ND	U	ug/Kg	1.9	27	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/Kg	2.3	27	1	
563-58-6	1,1-Dichloropropene	ND	U	ug/Kg	2.1	27	1	
71-43-2	Benzene	ND	U	ug/Kg	2.2	27	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/Kg	1.7	27	1	
79-01-6	Trichloroethene	ND	U	ug/Kg	1.7	27	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-2	**Lab Sample ID:**	Y2137-03
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	9.00
Result Type:	Final	**DataFile:**	VK015754

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
78-87-5	1,2-Dichloropropane	ND	U	ug/Kg	2.2	27	1	
74-95-3	Dibromomethane	ND	U	ug/Kg	1.4	27	1	
75-27-4	Bromodichloromethane	ND	U	ug/Kg	1.8	27	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/Kg	11	140	1	
108-88-3	Toluene	ND	U	ug/Kg	2.2	27	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/Kg	2.0	27	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/Kg	1.8	27	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/Kg	1.6	27	1	
142-28-9	1,3-Dichloropropane	ND	U	ug/Kg	2.0	27	1	
110-75-8	2-Chloroethyl vinyl ether	ND	U	ug/Kg	8.2	140	1	
591-78-6	2-Hexanone	ND	U	ug/Kg	20	140	1	
124-48-1	Dibromochloromethane	ND	U	ug/Kg	1.3	27	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/Kg	2.2	27	1	
127-18-4	Tetrachloroethene	ND	U	ug/Kg	4.0	27	1	
108-90-7	Chlorobenzene	ND	U	ug/Kg	2.0	27	1	
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	ug/Kg	2.3	27	1	
100-41-4	Ethyl Benzene	ND	U	ug/Kg	1.9	27	1	
126777-61-2	m/p-Xylenes	ND	U	ug/Kg	4.7	54	1	
95-47-6	o-Xylene	ND	U	ug/Kg	2.1	27	1	
100-42-5	Styrene	ND	U	ug/Kg	2.5	27	1	
75-25-2	Bromoform	ND	U	ug/Kg	1.7	27	1	
98-82-8	Isopropylbenzene	ND	U	ug/Kg	2.3	27	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/Kg	1.7	27	1	
96-18-4	1,2,3-Trichloropropane	ND	U	ug/Kg	1.8	27	1	
108-86-1	Bromobenzene	ND	U	ug/Kg	2.2	27	1	
103-65-1	n-propylbenzene	ND	U	ug/Kg	2.9	27	1	
95-49-8	2-Chlorotoluene	ND	U	ug/Kg	2.2	27	1	
108-67-8	1,3,5-Trimethylbenzene	ND	U	ug/Kg	2.7	27	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-2	**Lab Sample ID:**	Y2137-03
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	9.00
Result Type:	Final	**DataFile:**	VK015754

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
106-43-4	4-Chlorotoluene	ND	U	ug/Kg	2.4	27	1	
98-06-6	tert-Butylbenzene	ND	U	ug/Kg	3.9	27	1	
95-63-6	1,2,4-Trimethylbenzene	ND	U	ug/Kg	2.1	27	1	
135-98-8	sec-Butylbenzene	ND	U	ug/Kg	2.3	27	1	
99-87-6	p-Isopropyltoluene	ND	U	ug/Kg	2.3	27	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/Kg	3.0	27	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/Kg	3.0	27	1	
104-51-8	n-Butylbenzene	ND	U	ug/Kg	1.8	27	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/Kg	2.1	27	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/Kg	5.1	27	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/Kg	3.7	27	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/Kg	2.2	27	1	
91-20-3	Naphthalene	ND	U	ug/Kg	3.2	27	1	
87-61-6	1,2,3-Trichlorobenzene	ND	U	ug/Kg	5.5	27	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-3	**Lab Sample ID:**	Y2137-06
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**Datafile:**	BF011716

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
108-95-2	Phenol	ND	U	ug/Kg	54	350	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/Kg	56	350	1	
95-57-8	2-Chlorophenol	ND	U	ug/Kg	57	350	1	
100-51-6	Benzyl Alcohol	ND	U	ug/Kg	37	350	1	
95-48-7	2-Methylphenol	ND	U	ug/Kg	59	350	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/Kg	57	350	1	
106-44-5	3+4-Methylphenols	ND	U	ug/Kg	56	350	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/Kg	59	350	1	
67-72-1	Hexachloroethane	ND	U	ug/Kg	60	350	1	
98-95-3	Nitrobenzene	ND	U	ug/Kg	77	350	1	
78-59-1	Isophorone	ND	U	ug/Kg	53	350	1	
88-75-5	2-Nitrophenol	ND	U	ug/Kg	55	350	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/Kg	56	350	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/Kg	58	350	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/Kg	66	350	1	
65-85-0	Benzoic acid	ND	U	ug/Kg	85	350	1	
91-20-3	Naphthalene	ND	U	ug/Kg	61	350	1	
106-47-8	4-Chloroaniline	ND	U	ug/Kg	42	350	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/Kg	55	350	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/Kg	49	350	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/Kg	59	350	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/Kg	57	350	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/Kg	52	350	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/Kg	54	890	1	
91-58-7	2-Chloronaphthalene	ND	U	ug/Kg	59	350	1	
88-74-4	2-Nitroaniline	ND	U	ug/Kg	45	890	1	
131-11-3	Dimethylphthalate	ND	U	ug/Kg	57	350	1	
208-96-8	Acenaphthylene	ND	U	ug/Kg	58	350	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-3	**Lab Sample ID:**	Y2137-06
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	BF011716

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
606-20-2	2,6-Dinitrotoluene	ND	U	ug/Kg	50	350	1	
99-09-2	3-Nitroaniline	ND	U	ug/Kg	46	890	1	
83-32-9	Acenaphthene	ND	U	ug/Kg	63	350	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/Kg	300	890	1	
100-02-7	4-Nitrophenol	ND	U	ug/Kg	44	890	1	
132-64-9	Dibenzofuran	ND	U	ug/Kg	59	350	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/Kg	52	350	1	
84-66-2	Diethylphthalate	ND	U	ug/Kg	61	350	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/Kg	56	350	1	
86-73-7	Fluorene	ND	U	ug/Kg	60	350	1	
100-01-6	4-Nitroaniline	ND	U	ug/Kg	61	890	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/Kg	69	890	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/Kg	58	350	1	
103-33-3	Azobenzene	ND	U	ug/Kg	72	350	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/Kg	53	350	1	
118-74-1	Hexachlorobenzene	ND	U	ug/Kg	57	350	1	
87-86-5	Pentachlorophenol	ND	U	ug/Kg	82	890	1	
85-01-8	Phenanthrene	270	J	ug/Kg	57	350	1	
120-12-7	Anthracene	ND	U	ug/Kg	54	350	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/Kg	54	350	1	
206-44-0	Fluoranthene	380		ug/Kg	53	350	1	
129-00-0	Pyrene	630		ug/Kg	63	350	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/Kg	57	350	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/Kg	61	350	1	
56-55-3	Benzo(a)anthracene	140	J	ug/Kg	50	350	1	
218-01-9	Chrysene	180	J	ug/Kg	64	350	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/Kg	68	350	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/Kg	60	350	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-3	**Lab Sample ID:**	Y2137-06
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	BF011716

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE	
205-99-2	Benzo(b)fluoranthene	230	J	ug/Kg	39	350	1		
207-08-9	Benzo(k)fluoranthene	88	J	ug/Kg	78	350	1		
50-32-8	Benzo(a)pyrene	130	J	ug/Kg	57	350	1		
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/Kg	45	350	1		
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/Kg	45	350	1		
191-24-2	Benzo(g,h,i)perylene	78	J	ug/Kg	59	350	1		
	ACP3.00	6100	A	ug/Kg	0	0	1	TIC	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-3	**Lab Sample ID:**	Y2137-06
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	7.00
Result Type:	Final	**Datafile:**	VK015755

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/Kg	4.5	26	1	
74-87-3	Chloromethane	ND	U	ug/Kg	4.5	26	1	
75-01-4	Vinyl Chloride	ND	U	ug/Kg	4.3	26	1	
74-83-9	Bromomethane	ND	U	ug/Kg	11	26	1	
75-00-3	Chloroethane	ND	U	ug/Kg	11	26	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/Kg	6.5	26	1	
75-65-0	Tert butyl alcohol	ND	U	ug/Kg	8.5	130	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/Kg	3.0	26	1	
107-02-8	Acrolein	ND	U	ug/Kg	27	130	1	
107-13-1	Acrylonitrile	ND	U	ug/Kg	9.9	130	1	
67-64-1	Acetone	57	JB	ug/Kg	18	130	1	
75-15-0	Carbon Disulfide	ND	U	ug/Kg	1.9	26	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/Kg	1.9	26	1	
75-09-2	Methylene Chloride	90	B	ug/Kg	9.5	26	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/Kg	3.3	26	1	
108-05-4	Vinyl Acetate	ND	U	ug/Kg	6.8	130	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/Kg	1.4	26	1	
78-93-3	2-Butanone	ND	U	ug/Kg	15	130	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/Kg	2.3	26	1	
594-20-7	2,2-Dichloropropane	ND	U	ug/Kg	1.7	26	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/Kg	1.7	26	1	
74-97-5	Bromochloromethane	ND	U	ug/Kg	3.0	26	1	
67-66-3	Chloroform	ND	U	ug/Kg	1.8	26	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/Kg	2.2	26	1	
563-58-6	1,1-Dichloropropene	ND	U	ug/Kg	2.1	26	1	
71-43-2	Benzene	ND	U	ug/Kg	2.1	26	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/Kg	1.6	26	1	
79-01-6	Trichloroethene	ND	U	ug/Kg	1.6	26	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-3	**Lab Sample ID:**	Y2137-06
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	VK015755

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
78-87-5	1,2-Dichloropropane	ND	U	ug/Kg	2.1	26	1	
74-95-3	Dibromomethane	ND	U	ug/Kg	1.4	26	1	
75-27-4	Bromodichloromethane	ND	U	ug/Kg	1.7	26	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/Kg	10	130	1	
108-88-3	Toluene	ND	U	ug/Kg	2.1	26	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/Kg	1.9	26	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/Kg	1.7	26	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/Kg	1.5	26	1	
142-28-9	1,3-Dichloropropane	ND	U	ug/Kg	1.9	26	1	
110-75-8	2-Chloroethyl vinyl ether	ND	U	ug/Kg	7.9	130	1	
591-78-6	2-Hexanone	ND	U	ug/Kg	19	130	1	
124-48-1	Dibromochloromethane	ND	U	ug/Kg	1.2	26	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/Kg	2.1	26	1	
127-18-4	Tetrachloroethene	ND	U	ug/Kg	3.8	26	1	
108-90-7	Chlorobenzene	ND	U	ug/Kg	1.9	26	1	
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	ug/Kg	2.2	26	1	
100-41-4	Ethyl Benzene	ND	U	ug/Kg	1.8	26	1	
126777-61-2	m/p-Xylenes	ND	U	ug/Kg	4.5	52	1	
95-47-6	o-Xylene	ND	U	ug/Kg	2.0	26	1	
100-42-5	Styrene	ND	U	ug/Kg	2.4	26	1	
75-25-2	Bromoform	ND	U	ug/Kg	1.6	26	1	
98-82-8	Isopropylbenzene	ND	U	ug/Kg	2.2	26	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/Kg	1.6	26	1	
96-18-4	1,2,3-Trichloropropane	ND	U	ug/Kg	1.7	26	1	
108-86-1	Bromobenzene	ND	U	ug/Kg	2.1	26	1	
103-65-1	n-propylbenzene	ND	U	ug/Kg	2.8	26	1	
95-49-8	2-Chlorotoluene	ND	U	ug/Kg	2.1	26	1	
108-67-8	1,3,5-Trimethylbenzene	ND	U	ug/Kg	2.6	26	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-3	**Lab Sample ID:**	Y2137-06
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	VK015755

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
106-43-4	4-Chlorotoluene	ND	U	ug/Kg	2.3	26	1	
98-06-6	tert-Butylbenzene	ND	U	ug/Kg	3.7	26	1	
95-63-6	1,2,4-Trimethylbenzene	ND	U	ug/Kg	2.0	26	1	
135-98-8	sec-Butylbenzene	ND	U	ug/Kg	2.2	26	1	
99-87-6	p-Isopropyltoluene	ND	U	ug/Kg	2.2	26	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/Kg	2.9	26	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/Kg	2.8	26	1	
104-51-8	n-Butylbenzene	ND	U	ug/Kg	1.8	26	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/Kg	2.0	26	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/Kg	4.9	26	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/Kg	3.6	26	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/Kg	2.1	26	1	
91-20-3	Naphthalene	ND	U	ug/Kg	3.1	26	1	
87-61-6	1,2,3-Trichlorobenzene	ND	U	ug/Kg	5.3	26	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-3RE	**Lab Sample ID:**	Y2137-06RE
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**Datafile:**	BF011757

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
108-95-2	Phenol	ND	U	ug/Kg	54	350	1	RE
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/Kg	56	350	1	RE
95-57-8	2-Chlorophenol	ND	U	ug/Kg	57	350	1	RE
100-51-6	Benzyl Alcohol	ND	U	ug/Kg	37	350	1	RE
95-48-7	2-Methylphenol	ND	U	ug/Kg	59	350	1	RE
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/Kg	57	350	1	RE
106-44-5	3+4-Methylphenols	ND	U	ug/Kg	56	350	1	RE
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/Kg	59	350	1	RE
67-72-1	Hexachloroethane	ND	U	ug/Kg	60	350	1	RE
98-95-3	Nitrobenzene	ND	U	ug/Kg	77	350	1	RE
78-59-1	Isophorone	ND	U	ug/Kg	53	350	1	RE
88-75-5	2-Nitrophenol	ND	U	ug/Kg	55	350	1	RE
105-67-9	2,4-Dimethylphenol	ND	U	ug/Kg	56	350	1	RE
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/Kg	58	350	1	RE
120-83-2	2,4-Dichlorophenol	ND	U	ug/Kg	66	350	1	RE
65-85-0	Benzoic acid	ND	U	ug/Kg	85	350	1	RE
91-20-3	Naphthalene	ND	U	ug/Kg	61	350	1	RE
106-47-8	4-Chloroaniline	ND	U	ug/Kg	42	350	1	RE
87-68-3	Hexachlorobutadiene	ND	U	ug/Kg	55	350	1	RE
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/Kg	49	350	1	RE
91-57-6	2-Methylnaphthalene	ND	U	ug/Kg	59	350	1	RE
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/Kg	57	350	1	RE
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/Kg	52	350	1	RE
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/Kg	54	890	1	RE
91-58-7	2-Chloronaphthalene	ND	U	ug/Kg	59	350	1	RE
88-74-4	2-Nitroaniline	ND	U	ug/Kg	45	890	1	RE
131-11-3	Dimethylphthalate	ND	U	ug/Kg	57	350	1	RE
208-96-8	Acenaphthylene	ND	U	ug/Kg	58	350	1	RE

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-3RE	**Lab Sample ID:**	Y2137-06RE
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	BF011757

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
606-20-2	2,6-Dinitrotoluene	ND	U	ug/Kg	50	350	1	RE
99-09-2	3-Nitroaniline	ND	U	ug/Kg	46	890	1	RE
83-32-9	Acenaphthene	ND	U	ug/Kg	63	350	1	RE
51-28-5	2,4-Dinitrophenol	ND	U	ug/Kg	300	890	1	RE
100-02-7	4-Nitrophenol	ND	U	ug/Kg	44	890	1	RE
132-64-9	Dibenzofuran	ND	U	ug/Kg	59	350	1	RE
121-14-2	2,4-Dinitrotoluene	ND	U	ug/Kg	52	350	1	RE
84-66-2	Diethylphthalate	ND	U	ug/Kg	61	350	1	RE
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/Kg	56	350	1	RE
86-73-7	Fluorene	ND	U	ug/Kg	60	350	1	RE
100-01-6	4-Nitroaniline	ND	U	ug/Kg	61	890	1	RE
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/Kg	69	890	1	RE
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/Kg	58	350	1	RE
103-33-3	Azobenzene	ND	U	ug/Kg	72	350	1	RE
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/Kg	53	350	1	RE
118-74-1	Hexachlorobenzene	ND	U	ug/Kg	57	350	1	RE
87-86-5	Pentachlorophenol	ND	U	ug/Kg	82	890	1	RE
85-01-8	Phenanthrene	250	J	ug/Kg	57	350	1	RE
120-12-7	Anthracene	ND	U	ug/Kg	54	350	1	RE
84-74-2	Di-n-butylphthalate	ND	U	ug/Kg	54	350	1	RE
206-44-0	Fluoranthene	350	J	ug/Kg	53	350	1	RE
129-00-0	Pyrene	650		ug/Kg	63	350	1	RE
85-68-7	Butylbenzylphthalate	ND	U	ug/Kg	57	350	1	RE
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/Kg	61	350	1	RE
56-55-3	Benzo(a)anthracene	140	J	ug/Kg	50	350	1	RE
218-01-9	Chrysene	180	J	ug/Kg	64	350	1	RE
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/Kg	68	350	1	RE
117-84-0	Di-n-octyl phthalate	ND	U	ug/Kg	60	350	1	RE

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-3RE	**Lab Sample ID:**	Y2137-06RE
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	BF011757

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
205-99-2	Benzo(b)fluoranthene	240	J	ug/Kg	39	350	1	RE
207-08-9	Benzo(k)fluoranthene	94	J	ug/Kg	78	350	1	RE
50-32-8	Benzo(a)pyrene	140	J	ug/Kg	57	350	1	RE
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/Kg	45	350	1	RE
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/Kg	45	350	1	RE
191-24-2	Benzo(g,h,i)perylene	83	J	ug/Kg	59	350	1	RE

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-4	**Lab Sample ID:**	Y2137-08
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**Datafile:**	BF011742

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
108-95-2	Phenol	ND	U	ug/Kg	54	350	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/Kg	56	350	1	
95-57-8	2-Chlorophenol	ND	U	ug/Kg	57	350	1	
100-51-6	Benzyl Alcohol	ND	U	ug/Kg	37	350	1	
95-48-7	2-Methylphenol	ND	U	ug/Kg	59	350	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/Kg	57	350	1	
106-44-5	3+4-Methylphenols	ND	U	ug/Kg	56	350	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/Kg	59	350	1	
67-72-1	Hexachloroethane	ND	U	ug/Kg	60	350	1	
98-95-3	Nitrobenzene	ND	U	ug/Kg	77	350	1	
78-59-1	Isophorone	ND	U	ug/Kg	53	350	1	
88-75-5	2-Nitrophenol	ND	U	ug/Kg	55	350	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/Kg	56	350	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/Kg	58	350	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/Kg	66	350	1	
65-85-0	Benzoic acid	ND	U	ug/Kg	85	350	1	
91-20-3	Naphthalene	ND	U	ug/Kg	61	350	1	
106-47-8	4-Chloroaniline	ND	U	ug/Kg	42	350	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/Kg	55	350	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/Kg	49	350	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/Kg	59	350	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/Kg	57	350	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/Kg	52	350	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/Kg	54	890	1	
91-58-7	2-Chloronaphthalene	ND	U	ug/Kg	59	350	1	
88-74-4	2-Nitroaniline	ND	U	ug/Kg	45	890	1	
131-11-3	Dimethylphthalate	ND	U	ug/Kg	57	350	1	
208-96-8	Acenaphthylene	ND	U	ug/Kg	58	350	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-4	**Lab Sample ID:**	Y2137-08
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	BF011742

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
606-20-2	2,6-Dinitrotoluene	ND	U	ug/Kg	50	350	1	
99-09-2	3-Nitroaniline	ND	U	ug/Kg	46	890	1	
83-32-9	Acenaphthene	ND	U	ug/Kg	63	350	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/Kg	300	890	1	
100-02-7	4-Nitrophenol	ND	U	ug/Kg	44	890	1	
132-64-9	Dibenzofuran	ND	U	ug/Kg	59	350	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/Kg	52	350	1	
84-66-2	Diethylphthalate	ND	U	ug/Kg	61	350	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/Kg	56	350	1	
86-73-7	Fluorene	ND	U	ug/Kg	60	350	1	
100-01-6	4-Nitroaniline	ND	U	ug/Kg	61	890	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/Kg	69	890	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/Kg	58	350	1	
103-33-3	Azobenzene	ND	U	ug/Kg	72	350	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/Kg	53	350	1	
118-74-1	Hexachlorobenzene	ND	U	ug/Kg	57	350	1	
87-86-5	Pentachlorophenol	ND	U	ug/Kg	82	890	1	
85-01-8	Phenanthrene	ND	U	ug/Kg	57	350	1	
120-12-7	Anthracene	ND	U	ug/Kg	54	350	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/Kg	54	350	1	
206-44-0	Fluoranthene	ND	U	ug/Kg	53	350	1	
129-00-0	Pyrene	ND	U	ug/Kg	63	350	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/Kg	57	350	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/Kg	61	350	1	
56-55-3	Benzo(a)anthracene	ND	U	ug/Kg	50	350	1	
218-01-9	Chrysene	ND	U	ug/Kg	64	350	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/Kg	68	350	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/Kg	60	350	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-4	**Lab Sample ID:**	Y2137-08
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	BF011742

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
205-99-2	Benzo(b)fluoranthene	ND	U	ug/Kg	39	350	1	
207-08-9	Benzo(k)fluoranthene	ND	U	ug/Kg	78	350	1	
50-32-8	Benzo(a)pyrene	ND	U	ug/Kg	57	350	1	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/Kg	45	350	1	
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/Kg	45	350	1	
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/Kg	59	350	1	
	ACP2.98	6000	A	ug/Kg	0	0	1	TIC
7683-64-9	Squalene	370	J	ug/Kg	0	0	1	TIC

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-4	**Lab Sample ID:**	Y2137-08
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	7.00
Result Type:	Final	**Datafile:**	VK015770

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/Kg	4.6	27	1	
74-87-3	Chloromethane	ND	U	ug/Kg	4.5	27	1	
75-01-4	Vinyl Chloride	ND	U	ug/Kg	4.4	27	1	
74-83-9	Bromomethane	ND	U	ug/Kg	11	27	1	
75-00-3	Chloroethane	ND	U	ug/Kg	11	27	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/Kg	6.6	27	1	
75-65-0	Tert butyl alcohol	ND	U	ug/Kg	8.7	130	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/Kg	3.1	27	1	
107-02-8	Acrolein	ND	U	ug/Kg	27	130	1	
107-13-1	Acrylonitrile	ND	U	ug/Kg	10	130	1	
67-64-1	Acetone	32	JB	ug/Kg	18	130	1	
75-15-0	Carbon Disulfide	ND	U	ug/Kg	2.0	27	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/Kg	2.0	27	1	
75-09-2	Methylene Chloride	53	B	ug/Kg	9.7	27	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/Kg	3.4	27	1	
108-05-4	Vinyl Acetate	ND	U	ug/Kg	6.9	130	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/Kg	1.4	27	1	
78-93-3	2-Butanone	ND	U	ug/Kg	15	130	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/Kg	2.4	27	1	
594-20-7	2,2-Dichloropropane	ND	U	ug/Kg	1.8	27	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/Kg	1.7	27	1	
74-97-5	Bromochloromethane	ND	U	ug/Kg	3.1	27	1	
67-66-3	Chloroform	ND	U	ug/Kg	1.9	27	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/Kg	2.2	27	1	
563-58-6	1,1-Dichloropropene	ND	U	ug/Kg	2.1	27	1	
71-43-2	Benzene	ND	U	ug/Kg	2.1	27	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/Kg	1.6	27	1	
79-01-6	Trichloroethene	ND	U	ug/Kg	1.6	27	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-4	**Lab Sample ID:**	Y2137-08
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	VK015770

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
78-87-5	1,2-Dichloropropane	ND	U	ug/Kg	2.1	27	1	
74-95-3	Dibromomethane	ND	U	ug/Kg	1.4	27	1	
75-27-4	Bromodichloromethane	ND	U	ug/Kg	1.8	27	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/Kg	11	130	1	
108-88-3	Toluene	ND	U	ug/Kg	2.2	27	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/Kg	1.9	27	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/Kg	1.8	27	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/Kg	1.6	27	1	
142-28-9	1,3-Dichloropropane	ND	U	ug/Kg	2.0	27	1	
110-75-8	2-Chloroethyl vinyl ether	ND	U	ug/Kg	8.1	130	1	
591-78-6	2-Hexanone	ND	U	ug/Kg	19	130	1	
124-48-1	Dibromochloromethane	ND	U	ug/Kg	1.2	27	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/Kg	2.1	27	1	
127-18-4	Tetrachloroethene	ND	U	ug/Kg	3.9	27	1	
108-90-7	Chlorobenzene	ND	U	ug/Kg	1.9	27	1	
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	ug/Kg	2.2	27	1	
100-41-4	Ethyl Benzene	ND	U	ug/Kg	1.9	27	1	
126777-61-2	m/p-Xylenes	ND	U	ug/Kg	4.6	53	1	
95-47-6	o-Xylene	ND	U	ug/Kg	2.0	27	1	
100-42-5	Styrene	ND	U	ug/Kg	2.4	27	1	
75-25-2	Bromoform	ND	U	ug/Kg	1.7	27	1	
98-82-8	Isopropylbenzene	ND	U	ug/Kg	2.2	27	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/Kg	1.7	27	1	
96-18-4	1,2,3-Trichloropropane	ND	U	ug/Kg	1.8	27	1	
108-86-1	Bromobenzene	ND	U	ug/Kg	2.2	27	1	
103-65-1	n-propylbenzene	ND	U	ug/Kg	2.9	27	1	
95-49-8	2-Chlorotoluene	ND	U	ug/Kg	2.2	27	1	
108-67-8	1,3,5-Trimethylbenzene	ND	U	ug/Kg	2.6	27	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-4	**Lab Sample ID:**	Y2137-08
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	VK015770

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
106-43-4	4-Chlorotoluene	ND	U	ug/Kg	2.4	27	1	
98-06-6	tert-Butylbenzene	ND	U	ug/Kg	3.8	27	1	
95-63-6	1,2,4-Trimethylbenzene	ND	U	ug/Kg	2.0	27	1	
135-98-8	sec-Butylbenzene	ND	U	ug/Kg	2.2	27	1	
99-87-6	p-Isopropyltoluene	ND	U	ug/Kg	2.3	27	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/Kg	3.0	27	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/Kg	2.9	27	1	
104-51-8	n-Butylbenzene	ND	U	ug/Kg	1.8	27	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/Kg	2.1	27	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/Kg	5.0	27	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/Kg	3.6	27	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/Kg	2.1	27	1	
91-20-3	Naphthalene	ND	U	ug/Kg	3.1	27	1	
87-61-6	1,2,3-Trichlorobenzene	ND	U	ug/Kg	5.4	27	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-5	**Lab Sample ID:**	Y2137-09
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**Datafile:**	BF011743

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
108-95-2	Phenol	ND	U	ug/Kg	54	350	1	
111-44-4	bis(2-Chloroethyl)ether	ND	U	ug/Kg	56	350	1	
95-57-8	2-Chlorophenol	ND	U	ug/Kg	57	350	1	
100-51-6	Benzyl Alcohol	ND	U	ug/Kg	37	350	1	
95-48-7	2-Methylphenol	ND	U	ug/Kg	59	350	1	
108-60-1	2,2-oxybis(1-Chloropropane)	ND	U	ug/Kg	57	350	1	
106-44-5	3+4-Methylphenols	ND	U	ug/Kg	56	350	1	
621-64-7	N-Nitroso-di-n-propylamine	ND	U	ug/Kg	59	350	1	
67-72-1	Hexachloroethane	ND	U	ug/Kg	60	350	1	
98-95-3	Nitrobenzene	ND	U	ug/Kg	78	350	1	
78-59-1	Isophorone	ND	U	ug/Kg	53	350	1	
88-75-5	2-Nitrophenol	ND	U	ug/Kg	55	350	1	
105-67-9	2,4-Dimethylphenol	ND	U	ug/Kg	56	350	1	
111-91-1	bis(2-Chloroethoxy)methane	ND	U	ug/Kg	58	350	1	
120-83-2	2,4-Dichlorophenol	ND	U	ug/Kg	66	350	1	
65-85-0	Benzoic acid	ND	U	ug/Kg	85	350	1	
91-20-3	Naphthalene	ND	U	ug/Kg	61	350	1	
106-47-8	4-Chloroaniline	ND	U	ug/Kg	42	350	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/Kg	55	350	1	
59-50-7	4-Chloro-3-methylphenol	ND	U	ug/Kg	49	350	1	
91-57-6	2-Methylnaphthalene	ND	U	ug/Kg	59	350	1	
77-47-4	Hexachlorocyclopentadiene	ND	U	ug/Kg	57	350	1	
88-06-2	2,4,6-Trichlorophenol	ND	U	ug/Kg	52	350	1	
95-95-4	2,4,5-Trichlorophenol	ND	U	ug/Kg	54	890	1	
91-58-7	2-Chloronaphthalene	ND	U	ug/Kg	59	350	1	
88-74-4	2-Nitroaniline	ND	U	ug/Kg	45	890	1	
131-11-3	Dimethylphthalate	ND	U	ug/Kg	57	350	1	
208-96-8	Acenaphthylene	ND	U	ug/Kg	58	350	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-5	**Lab Sample ID:**	Y2137-09
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	BF011743

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
606-20-2	2,6-Dinitrotoluene	ND	U	ug/Kg	50	350	1	
99-09-2	3-Nitroaniline	ND	U	ug/Kg	46	890	1	
83-32-9	Acenaphthene	ND	U	ug/Kg	63	350	1	
51-28-5	2,4-Dinitrophenol	ND	U	ug/Kg	300	890	1	
100-02-7	4-Nitrophenol	ND	U	ug/Kg	44	890	1	
132-64-9	Dibenzofuran	ND	U	ug/Kg	59	350	1	
121-14-2	2,4-Dinitrotoluene	ND	U	ug/Kg	52	350	1	
84-66-2	Diethylphthalate	ND	U	ug/Kg	61	350	1	
7005-72-3	4-Chlorophenyl-phenylether	ND	U	ug/Kg	56	350	1	
86-73-7	Fluorene	ND	U	ug/Kg	60	350	1	
100-01-6	4-Nitroaniline	ND	U	ug/Kg	61	890	1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	ug/Kg	69	890	1	
86-30-6	N-Nitrosodiphenylamine	ND	U	ug/Kg	59	350	1	
103-33-3	Azobenzene	ND	U	ug/Kg	72	350	1	
101-55-3	4-Bromophenyl-phenylether	ND	U	ug/Kg	53	350	1	
118-74-1	Hexachlorobenzene	ND	U	ug/Kg	57	350	1	
87-86-5	Pentachlorophenol	ND	U	ug/Kg	82	890	1	
85-01-8	Phenanthrene	ND	U	ug/Kg	57	350	1	
120-12-7	Anthracene	ND	U	ug/Kg	54	350	1	
84-74-2	Di-n-butylphthalate	ND	U	ug/Kg	54	350	1	
206-44-0	Fluoranthene	ND	U	ug/Kg	53	350	1	
129-00-0	Pyrene	ND	U	ug/Kg	63	350	1	
85-68-7	Butylbenzylphthalate	ND	U	ug/Kg	57	350	1	
91-94-1	3,3-Dichlorobenzidine	ND	U	ug/Kg	61	350	1	
56-55-3	Benzo(a)anthracene	ND	U	ug/Kg	50	350	1	
218-01-9	Chrysene	ND	U	ug/Kg	64	350	1	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	ug/Kg	68	350	1	
117-84-0	Di-n-octyl phthalate	ND	U	ug/Kg	60	350	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-5	**Lab Sample ID:**	Y2137-09
Test:	SVOC-Chemtech Full -25	**SDG ID:**	Y2137
Analytical Method:	EPA SW-846 8270	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	BF011743

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE	
205-99-2	Benzo(b)fluoranthene	ND	U	ug/Kg	39	350	1		
207-08-9	Benzo(k)fluoranthene	ND	U	ug/Kg	78	350	1		
50-32-8	Benzo(a)pyrene	ND	U	ug/Kg	57	350	1		
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	ug/Kg	45	350	1		
53-70-3	Dibenz(a,h)anthracene	ND	U	ug/Kg	45	350	1		
191-24-2	Benzo(g,h,i)perylene	ND	U	ug/Kg	59	350	1		
	ACP2.97	6000	AB	ug/Kg	0	0	1		TIC

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-5	**Lab Sample ID:**	Y2137-09
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	7.00
Result Type:	Final	**Datafile:**	VK015771

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/Kg	4.6	27	1	
74-87-3	Chloromethane	ND	U	ug/Kg	4.6	27	1	
75-01-4	Vinyl Chloride	ND	U	ug/Kg	4.4	27	1	
74-83-9	Bromomethane	ND	U	ug/Kg	11	27	1	
75-00-3	Chloroethane	ND	U	ug/Kg	11	27	1	
75-69-4	Trichlorofluoromethane	ND	U	ug/Kg	6.7	27	1	
75-65-0	Tert butyl alcohol	ND	U	ug/Kg	8.8	130	1	
75-35-4	1,1-Dichloroethene	ND	U	ug/Kg	3.1	27	1	
107-02-8	Acrolein	ND	U	ug/Kg	28	130	1	
107-13-1	Acrylonitrile	ND	U	ug/Kg	10	130	1	
67-64-1	Acetone	27	JB	ug/Kg	18	130	1	
75-15-0	Carbon Disulfide	ND	U	ug/Kg	2.0	27	1	
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/Kg	2.0	27	1	
75-09-2	Methylene Chloride	48	B	ug/Kg	9.8	27	1	
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/Kg	3.4	27	1	
108-05-4	Vinyl Acetate	ND	U	ug/Kg	7.0	130	1	
75-34-3	1,1-Dichloroethane	ND	U	ug/Kg	1.4	27	1	
78-93-3	2-Butanone	ND	U	ug/Kg	15	130	1	
56-23-5	Carbon Tetrachloride	ND	U	ug/Kg	2.4	27	1	
594-20-7	2,2-Dichloropropane	ND	U	ug/Kg	1.8	27	1	
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/Kg	1.7	27	1	
74-97-5	Bromochloromethane	ND	U	ug/Kg	3.1	27	1	
67-66-3	Chloroform	ND	U	ug/Kg	1.9	27	1	
71-55-6	1,1,1-Trichloroethane	ND	U	ug/Kg	2.2	27	1	
563-58-6	1,1-Dichloropropene	ND	U	ug/Kg	2.1	27	1	
71-43-2	Benzene	ND	U	ug/Kg	2.1	27	1	
107-06-2	1,2-Dichloroethane	ND	U	ug/Kg	1.7	27	1	
79-01-6	Trichloroethene	ND	U	ug/Kg	1.7	27	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-5	**Lab Sample ID:**	Y2137-09
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	VK015771

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
78-87-5	1,2-Dichloropropane	ND	U	ug/Kg	2.1	27	1	
74-95-3	Dibromomethane	ND	U	ug/Kg	1.4	27	1	
75-27-4	Bromodichloromethane	ND	U	ug/Kg	1.8	27	1	
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/Kg	11	130	1	
108-88-3	Toluene	ND	U	ug/Kg	2.2	27	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/Kg	2.0	27	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/Kg	1.8	27	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/Kg	1.6	27	1	
142-28-9	1,3-Dichloropropane	ND	U	ug/Kg	2.0	27	1	
110-75-8	2-Chloroethyl vinyl ether	ND	U	ug/Kg	8.1	130	1	
591-78-6	2-Hexanone	ND	U	ug/Kg	19	130	1	
124-48-1	Dibromochloromethane	ND	U	ug/Kg	1.2	27	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/Kg	2.2	27	1	
127-18-4	Tetrachloroethene	ND	U	ug/Kg	3.9	27	1	
108-90-7	Chlorobenzene	ND	U	ug/Kg	1.9	27	1	
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	ug/Kg	2.2	27	1	
100-41-4	Ethyl Benzene	ND	U	ug/Kg	1.9	27	1	
126777-61-2	m/p-Xylenes	ND	U	ug/Kg	4.7	54	1	
95-47-6	o-Xylene	ND	U	ug/Kg	2.1	27	1	
100-42-5	Styrene	ND	U	ug/Kg	2.5	27	1	
75-25-2	Bromoform	ND	U	ug/Kg	1.7	27	1	
98-82-8	Isopropylbenzene	ND	U	ug/Kg	2.2	27	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/Kg	1.7	27	1	
96-18-4	1,2,3-Trichloropropane	ND	U	ug/Kg	1.8	27	1	
108-86-1	Bromobenzene	ND	U	ug/Kg	2.2	27	1	
103-65-1	n-propylbenzene	ND	U	ug/Kg	2.9	27	1	
95-49-8	2-Chlorotoluene	ND	U	ug/Kg	2.2	27	1	
108-67-8	1,3,5-Trimethylbenzene	ND	U	ug/Kg	2.7	27	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Athenica Environmental Services, Inc.	**Date Collected:**	03/29/07
Project ID:	52-01 Queens Blvd	**Date Received:**	04/02/07
Customer Sample No.:	B-5	**Lab Sample ID:**	Y2137-09
Test:	VOC-Chemtech Full -15	**SDG ID:**	Y2137
Analytical Method:	EPA SW846 8260	**% Moisture:**	7.00
Result Type:	Final	**DataFile:**	VK015771

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
106-43-4	4-Chlorotoluene	ND	U	ug/Kg	2.4	27	1	
98-06-6	tert-Butylbenzene	ND	U	ug/Kg	3.8	27	1	
95-63-6	1,2,4-Trimethylbenzene	ND	U	ug/Kg	2.0	27	1	
135-98-8	sec-Butylbenzene	ND	U	ug/Kg	2.2	27	1	
99-87-6	p-Isopropyltoluene	ND	U	ug/Kg	2.3	27	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/Kg	3.0	27	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/Kg	2.9	27	1	
104-51-8	n-Butylbenzene	ND	U	ug/Kg	1.8	27	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/Kg	2.1	27	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/Kg	5.1	27	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/Kg	3.7	27	1	
87-68-3	Hexachlorobutadiene	ND	U	ug/Kg	2.1	27	1	
91-20-3	Naphthalene	ND	U	ug/Kg	3.1	27	1	
87-61-6	1,2,3-Trichlorobenzene	ND	U	ug/Kg	5.5	27	1	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	**Athenica Environmental Services, Inc.**	**Date Collected:**	**03/29/07**
Project ID:	**52-01 Queens Blvd**	**Date Received:**	**04/02/07**
Customer Sample No.:	**B-6(10)**	**Lab Sample ID:**	**Y2137-10**
Test:	**PCB**	**SDG ID:**	**Y2137**
Analytical Method:	**EPA SW-846 8082**	**% Moisture:**	**7.00**
Result Type:	**Final**	**Datafile:**	**P5013873**

CAS Number	Parameter	Results	Qualifier	Units	DL	RT/RL	DF	DIL/RE
12674-11-2	Aroclor-1016	ND	U	ug/Kg	2.7	18	1	
11104-28-2	Aroclor-1221	ND	U	ug/Kg	4.2	18	1	
11141-16-5	Aroclor-1232	18	J	ug/Kg	6.3	18	1	
53469-21-9	Aroclor-1242	ND	U	ug/Kg	5.6	18	1	
12672-29-6	Aroclor-1248	ND	U	ug/Kg	2.7	18	1	
11097-69-1	Aroclor-1254	ND	U	ug/Kg	1.8	18	1	
11096-82-5	Aroclor-1260	ND	U	ug/Kg	4.5	18	1	

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

May 24, 2012

Mr. William Silveri
Athenica Environmental Services, Inc.
45-09 Greenpoint Avenue
Sunnyside, NY 11104

Certificate of Analysis

Project Name:	**2012-PART 375 - NY SOIL CLEAN**	Workorder:	**9966506**
Purchase Order:		Workorder ID:	**2012-PART 375 - NY SOIL CLEAN**

Dear Mr. Silveri,

Enclosed are the analytical results for samples received by the laboratory on Monday, May 07, 2012.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Tonya Hironimus (Project Coordinator) or Anna G Milliken (Technical Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALS' NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

CC: Ms. Francesca Boutin, Ms. Shana Holberton, Mr. Basim Altemimi, Mr. Jeffrey Strykowski, Ms. Ela Eren, Ms. Ela Eren

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

SAMPLE SUMMARY

Workorder: 9966506 2012-PART 375 - NY SOIL CLEAN Discard Date: 06/07/2012

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9966506001	G18 [TP-3:9']	NY Solid	5/7/12 14:40	5/7/12 21:40	William Silveri
9966506002	G24 [TP-6:3']	NY Solid	5/7/12 14:50	5/7/12 21:40	William Silveri
9966506003	C1 [TP1-TP4,0-4']	Solid	5/7/12 13:50	5/7/12 21:40	William Silveri
9966506004	C2 [TP1/TP2,4-15']	Solid	5/7/12 14:23	5/7/12 21:40	William Silveri
9966506005	C3 [TP3:4-15',TP4:4-15']	Solid	5/7/12 14:36	5/7/12 21:40	William Silveri
9966506006	C4 [TP5:0-9',TP6:0-3']	Solid	5/7/12 14:45	5/7/12 21:40	William Silveri
9966506007	G6 [TP-3:3']	NY Solid	5/7/12 14:02	5/7/12 21:40	William Silveri
9966506008	G12 [TP-2:6']	NY Solid	5/7/12 14:23	5/7/12 21:40	William Silveri

Workorder Comments:

This report was modified to show the RDL and MDL colums and J flags. TMH 5/24/12

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as “analyze immediately” require analysis within 15 minutes of collection. Any “analyze immediately” parameters not listed under the header “Field Parameters” are performed in the laboratory and are therefore analyzed out of hold time.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9966506 2012-PART 375 - NY SOIL CLEAN

Lab ID: **9966506001** Date Collected: 5/7/2012 14:40 Matrix: NY Solid

Sample ID: **G18 [TP-3:9']** Date Received: 5/7/2012 21:40

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	14.3	ug/kg		11.0	5.1	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Benzene	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
2-Butanone	ND	ug/kg		11.0	3.5	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
n-Butylbenzene	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
tert-Butylbenzene	ND	ug/kg		2.2	0.61	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
sec-Butylbenzene	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Carbon Tetrachloride	ND	ug/kg		2.2	0.56	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Chlorobenzene	ND	ug/kg		2.2	0.56	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Chloroform	ND	ug/kg		2.2	0.58	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
1,2-Dichlorobenzene	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
1,3-Dichlorobenzene	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
1,4-Dichlorobenzene	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
1,1-Dichloroethane	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
1,2-Dichloroethane	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
1,1-Dichloroethene	ND	ug/kg		2.2	0.57	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
cis-1,2-Dichloroethene	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
trans-1,2-Dichloroethene	ND	ug/kg		2.2	0.57	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
1,4-Dioxane	ND	ug/kg		82.6	19.6	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Ethylbenzene	ND	ug/kg		2.2	0.75	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Methyl t-Butyl Ether	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Methylene Chloride	ND	ug/kg		2.2	0.86	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
n-Propylbenzene	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Tetrachloroethene	ND	ug/kg		2.2	0.66	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Toluene	ND	ug/kg		2.2	0.74	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Total Xylenes	ND	ug/kg		6.6	1.5	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
1,1,1-Trichloroethane	ND	ug/kg		2.2	0.68	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Trichloroethene	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
1,2,4-Trimethylbenzene	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
1,3,5-Trimethylbenzene	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Vinyl Chloride	ND	ug/kg		2.2	0.55	8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	89	%		56-124		8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
4-Bromofluorobenzene (S)	122	%		51-128		8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Dibromofluoromethane (S)	96.5	%		62-123		8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
Toluene-d8 (S)	104	%		59-131		8260/5035	5/8/12	JAH	5/10/12 02:39	CHS	A
WET CHEMISTRY											
Moisture	17.6	%		0.1	0.01	SM20-2540 G			5/9/12 15:20	KAK	A
Total Solids	82.4	%		0.1	0.01	SM20-2540 G			5/9/12 15:20	KAK	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9966506 2012-PART 375 - NY SOIL CLEAN

Lab ID:	**9966506001**	Date Collected:	5/7/2012 14:40	Matrix:	NY Solid
Sample ID:	**G18 [TP-3:9']**	Date Received:	5/7/2012 21:40		

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9966506 2012-PART 375 - NY SOIL CLEAN

Lab ID: **9966506002** Date Collected: 5/7/2012 14:50 Matrix: NY Solid

Sample ID: **G24 [TP-6:3']** Date Received: 5/7/2012 21:40

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	ND	ug/kg		10.7	4.9	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Benzene	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
2-Butanone	ND	ug/kg		10.7	3.4	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
n-Butylbenzene	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
tert-Butylbenzene	ND	ug/kg		2.1	0.59	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
sec-Butylbenzene	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Carbon Tetrachloride	ND	ug/kg		2.1	0.55	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Chlorobenzene	ND	ug/kg		2.1	0.55	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Chloroform	ND	ug/kg		2.1	0.57	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
1,2-Dichlorobenzene	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
1,3-Dichlorobenzene	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
1,4-Dichlorobenzene	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
1,1-Dichloroethane	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
1,2-Dichloroethane	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
1,1-Dichloroethene	ND	ug/kg		2.1	0.56	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
cis-1,2-Dichloroethene	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
trans-1,2-Dichloroethene	ND	ug/kg		2.1	0.56	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
1,4-Dioxane	ND	ug/kg		80.6	19.1	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Ethylbenzene	ND	ug/kg		2.1	0.73	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Methyl t-Butyl Ether	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Methylene Chloride	ND	ug/kg		2.1	0.84	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
n-Propylbenzene	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Tetrachloroethene	ND	ug/kg		2.1	0.64	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Toluene	ND	ug/kg		2.1	0.72	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Total Xylenes	ND	ug/kg		6.4	1.5	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
1,1,1-Trichloroethane	ND	ug/kg		2.1	0.67	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Trichloroethene	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
1,2,4-Trimethylbenzene	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
1,3,5-Trimethylbenzene	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Vinyl Chloride	ND	ug/kg		2.1	0.54	8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	87.8	%		56-124		8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
4-Bromofluorobenzene (S)	118	%		51-128		8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Dibromofluoromethane (S)	93.1	%		62-123		8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
Toluene-d8 (S)	109	%		59-131		8260/5035	5/8/12	JAH	5/10/12 03:08	CHS	A
WET CHEMISTRY											
Moisture	11.5	%		0.1	0.01	SM20-2540 G			5/9/12 15:20	KAK	A
Total Solids	88.5	%		0.1	0.01	SM20-2540 G			5/9/12 15:20	KAK	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9966506 2012-PART 375 - NY SOIL CLEAN

Lab ID:	**9966506002**	Date Collected:	5/7/2012 14:50	Matrix:	NY Solid
Sample ID:	**G24 [TP-6:3']**	Date Received:	5/7/2012 21:40		

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9966506 2012-PART 375 - NY SOIL CLEAN

Lab ID: **9966506007** Date Collected: 5/7/2012 14:02 Matrix: NY Solid

Sample ID: **G6 [TP-3:3']** Date Received: 5/7/2012 21:40

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	38.5	ug/kg		12.5	5.7	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Benzene	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
2-Butanone	ND	ug/kg		12.5	4.0	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
n-Butylbenzene	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
tert-Butylbenzene	ND	ug/kg		2.5	0.69	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
sec-Butylbenzene	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Carbon Tetrachloride	ND	ug/kg		2.5	0.64	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Chlorobenzene	ND	ug/kg		2.5	0.64	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Chloroform	ND	ug/kg		2.5	0.66	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
1,2-Dichlorobenzene	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
1,3-Dichlorobenzene	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
1,4-Dichlorobenzene	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
1,1-Dichloroethane	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
1,2-Dichloroethane	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
1,1-Dichloroethene	ND	ug/kg		2.5	0.65	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
cis-1,2-Dichloroethene	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
trans-1,2-Dichloroethene	ND	ug/kg		2.5	0.65	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
1,4-Dioxane	ND	ug/kg		93.7	22.2	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Ethylbenzene	ND	ug/kg		2.5	0.85	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Methyl t-Butyl Ether	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Methylene Chloride	ND	ug/kg		2.5	0.97	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
n-Propylbenzene	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Tetrachloroethene	ND	ug/kg		2.5	0.75	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Toluene	ND	ug/kg		2.5	0.84	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Total Xylenes	ND	ug/kg		7.5	1.7	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
1,1,1-Trichloroethane	ND	ug/kg		2.5	0.77	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Trichloroethene	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
1,2,4-Trimethylbenzene	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
1,3,5-Trimethylbenzene	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Vinyl Chloride	ND	ug/kg		2.5	0.62	8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	84.6	%		56-124		8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
4-Bromofluorobenzene (S)	129	%	1	51-128		8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Dibromofluoromethane (S)	93.5	%		62-123		8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
Toluene-d8 (S)	109	%		59-131		8260/5035	5/8/12	JAH	5/10/12 03:37	CHS	A
WET CHEMISTRY											
Moisture	18.0	%		0.1	0.01	SM20-2540 G			5/9/12 15:20	KAK	A
Total Solids	82.0	%		0.1	0.01	SM20-2540 G			5/9/12 15:20	KAK	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9966506 2012-PART 375 - NY SOIL CLEAN

Lab ID:	**9966506007**	Date Collected:	5/7/2012 14:02	Matrix:	NY Solid
Sample ID:	**G6 [TP-3:3']**	Date Received:	5/7/2012 21:40		

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9966506 2012-PART 375 - NY SOIL CLEAN

Lab ID: **9966506008** Date Collected: 5/7/2012 14:23 Matrix: NY Solid

Sample ID: **G12 [TP-2:6']** Date Received: 5/7/2012 21:40

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	40.6	ug/kg		12.1	5.6	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Benzene	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
2-Butanone	ND	ug/kg		12.1	3.9	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
n-Butylbenzene	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
tert-Butylbenzene	ND	ug/kg		2.4	0.67	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
sec-Butylbenzene	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Carbon Tetrachloride	ND	ug/kg		2.4	0.62	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Chlorobenzene	ND	ug/kg		2.4	0.62	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Chloroform	ND	ug/kg		2.4	0.64	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
1,2-Dichlorobenzene	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
1,3-Dichlorobenzene	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
1,4-Dichlorobenzene	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
1,1-Dichloroethane	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
1,2-Dichloroethane	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
1,1-Dichloroethene	ND	ug/kg		2.4	0.63	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
cis-1,2-Dichloroethene	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
trans-1,2-Dichloroethene	ND	ug/kg		2.4	0.63	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
1,4-Dioxane	ND	ug/kg		90.7	21.5	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Ethylbenzene	ND	ug/kg		2.4	0.82	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Methyl t-Butyl Ether	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Methylene Chloride	ND	ug/kg		2.4	0.94	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
n-Propylbenzene	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Tetrachloroethene	ND	ug/kg		2.4	0.73	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Toluene	ND	ug/kg		2.4	0.81	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Total Xylenes	ND	ug/kg		7.3	1.7	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
1,1,1-Trichloroethane	ND	ug/kg		2.4	0.75	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Trichloroethene	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
1,2,4-Trimethylbenzene	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
1,3,5-Trimethylbenzene	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Vinyl Chloride	ND	ug/kg		2.4	0.60	8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Surrogate Recoveries	*Results*	*Units*	*Footnotes*	*Limits*		*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	90.1	%		56-124		8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
4-Bromofluorobenzene (S)	124	%		51-128		8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Dibromofluoromethane (S)	95.5	%		62-123		8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
Toluene-d8 (S)	103	%		59-131		8260/5035	5/8/12	JAH	5/10/12 04:05	CHS	A
WET CHEMISTRY											
Moisture	17.1	%		0.1	0.01	SM20-2540 G			5/9/12 15:20	KAK	A
Total Solids	82.9	%		0.1	0.01	SM20-2540 G			5/9/12 15:20	KAK	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9966506 2012-PART 375 - NY SOIL CLEAN

Lab ID:	**9966506008**	Date Collected:	5/7/2012 14:23	Matrix:	NY Solid
Sample ID:	**G12 [TP-2:6']**	Date Received:	5/7/2012 21:40		

Parameters	Results	Units	Footnotes	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9966506 2012-PART 375 - NY SOIL CLEAN

PARAMETER QUALIFIERS\FLAGS

[1] The surrogate 4-Bromofluorobenzene for method 8260/5035 was outside of control limits. The % Recovery was reported as 129 and the control limits were 51 to 128. This result was reported at a dilution of 1.

CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS

ALS Environmental
Ship to: 34 Dogwood Lane • Middletown, PA 17057 • 717.944.5541 • Fax: 717.944.1430

Page 1 of 2
Courier:
Tracking #:

Co. Name: Advance Environmental
Contact (Report to): Bill Silver
Phone: (718) 784-7700
Address: 45-09 Greenpoint Avenue
Sunnyside, NY 11104

Bill to (if different than Report to):
PO#:

Project Name/#: 52-01 Queens Blvd 12-0013 ALS Quote #:

TAT: Normal-Standard TAT is 5 business days. Rush-Subject to ALS approval and surcharges.
Date Required:
Approved By:

Email? Y N wsilver@advanceenv.com
Fax? Y N No:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	Matrix	# of Containers	Total Volatile Organics (Super Soil Clean up List + TCL/TAL)	Percent Solids	TPHC (GRM Method)	Total Semi Volatile Organics (Super Soil Clean up List + TCL/TAL)	Total Metals (RCRA + Cu, Ni, Zn, Va, Ca, Mo, Chromium + TCL/TAL)	TCLP Metals	PCBs	Herbicides/Pesticides (Super Soil Clean up List + TCL/TAL)
1 GI8(TP-3:9')		5/7/12	1440	GS	2								
2 GI8(TP 3:9')			1440	GS	1								
3 G24(TP-6 3')			1450	GS	2								
4 G24(TP-6.3')			1450	GS	1								
5													
6													
7													
8													

Enter Number of Containers Per Analysis

Container Type: Bare CG
Container Size: 5g 40z
Preservative:

Receipt Information (received/sample temps.)
Returned by: Y N
Cooler Temp: 1.1 1.1 deg C
Therm. ID: 1 (11)
No. of Cooders:
Notes:

		Circle appropriate Y or N.
Container in good condition?	Y N	Y N
Received on Ice?	Y N	Y N
COC/Labels complete/accurate?	Y N	Y N
Headspace/Volatiles?	Y N	Y N
Correct preservation?	Y N	Y N
Correct sample volume?	Y N	Y N
Correct container?	Y N	Y N
(if present) Seals Intact?	Y N	Y N
Custody seals Present?	Y N	Y N

ALS FIELD SERVICES: Pickup, Labor, Composite Sampling, Rental Equipment, Other:

Data Deliverables: Standard, CLP-like, NJ-Reduced, NJ-Full Parts-Forms, If yes, format type:
SDWA Forms? Yes/No
State Samples Collected in? MD NJ NY PA
EDDs Required? Other:

DOD Criteria Required?

SAMPLED BY (Please Print): Bill Silver

LOGGED BY (signature): Date: Time:
REVIEWED BY (signature): Date: Time:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	5/7/12	16:30	2		
3	5/7	2000	4		
5	5/7	2140	6		
7			8		
9			10		

* GeGrab; C=Composite
**Matrix: Air=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 6/2011

CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER (INSTRUCTIONS ON THE BACK)

Page 2 of 2

Courier:

Tracking #:

ALS Environmental
Ship to: 34 Dogwood Lane • Middletown, PA 17057 • 717.944.5541 • Fax: 717.944.1430

Co. Name: Arcadis Environmental
Contact (Report to): Bill Silver Phone: (718) 784-7990
Address: 45-09 Greenpoint Avenue
Sunnyside, NY 11104

Bill to (if different than Report to): PO#:

Project Name/#: 52-01 Queens Boulevard 12-0013 ALS Quote #:

TAT: [X] Normal-Standard TAT is X business days. [ ] Rush-Subject to ALS approval and surcharges. Date Required: Approved By:

Email? [X] Y wsilver@arcadis.com
Fax? Y No:

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	G or C	Matrix	***Container Type	***Container Size	Preservative	Total Volatile Organics (Number of Target Analytes)	Total Semi Volatile Organics (Number of Target Analytes)	Total Metals (Cam Method)	TCLP Metals	4 CBs	Soil Clean up List + TCL/TAL (Number of Target Analytes)	Enter Number of Containers Per Analysis
1 C1 (TP1-TP4,0-4')		5/7/12	1350	C	S	CG	4oz				2			2	2
2 C2 (TP1/TP2,4-15')			1423	C	S	CG	4oz				2			2	2
3 C3 (TP3:4-15', TP4:4-15')			1436	C	S	CG	4oz				2			2	2
4 C4 (TP5:0-9', TP6:0-3')			1445	C	S	CG	4oz				2			2	2
5 G6 (TP-3:-3')			1402	G	S	2									
6 G6 (TP-3:3')			1402	G	S	1									
7 G12 (TP-2:6')			1423	G	S	2									
8 G12 (TP-2:6')			1423	G	S	1									

SAMPLED BY (Please Print): Bill Silver

LOGGED BY (signature): DATE 5/9

REVIEWED BY (signature): DATE 5/11/12

Data Deliverables: [X] Standard; CLP-like; NJ-Reduced; NJ-Full; [X] EDD Required?; If yes, format type:

STARS Forms/Fee: yes yes yes yes

State Samples Collected In? MD NJ NY PA Other

ALS FIELD SERVICES: Pickup; Labor; Composite Sampling; Rental Equipment; Other:

Cooler Temp: Therm. ID:

No. of Coolers:

Notes:

Custody seals Present?	Y	N	Correct containers?	Y	N	Circle appropriate Y or N.
(If present) Seals Intact?	Y	N	Correct sample volume?	Y	N	
Received on Ice?	Y	N	Correct preservation?	Y	N	
COC/Labels complete/accurate?	Y	N	Headspace/Volatiles?	Y	N	
Container in good condition?	Y	N				

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	5/7/12	1630	2	5/8/12	1230
3	5/7	2000	4	5/7	2000
5	5/7	2140	6	5/8/12	0940
7			8		
9			10		

DOD Criteria Required?

*G=Grab; C=Composite **Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Oil=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater ***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 6/2011

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

Project #: Y2137
4/9/2007 6:17:59 PM
End of Report

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

June 14, 2012

Mr. William Silveri
Athenica Environmental Services, Inc.
45-09 Greenpoint Avenue
Sunnyside, NY 11104

Certificate of Analysis

Project Name:	**Queens Blvd**	Workorder:	**9967991**
Purchase Order:	**12-0013**	Workorder ID:	**52-01 Green Point Ave**

Dear Mr. Silveri,

Enclosed are the analytical results for samples received by the laboratory on Wednesday, May 16, 2012.

The ALS Environmental laboratory in Middletown, Pennsylvania (formerly Analytical Laboratory Services, Inc.) is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Tonya Hironimus (Project Coordinator) or Anna G Milliken (Technical Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALS' NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

CC: Ms. Francesca Boutin, Ms. Shana Holberton, Mr. Basim Altemimi, Mr. Jeffrey Strykowski, Ms. Ela Eren, Ms. Ela Eren

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

SAMPLE SUMMARY

Workorder: 9967991 52-01 Green Point Ave Discard Date: 06/28/2012

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9967991001	TP-9 - 5/16/12 - (2')	Solid	5/16/12 12:55	5/16/12 20:00	Customer
9967991002	TP-9 - 5/16/12 - (6')	Solid	5/16/12 13:05	5/16/12 20:00	Customer
9967991003	TP-9 - 5/16/12 - (10')	Solid	5/16/12 13:15	5/16/12 20:00	Customer
9967991004	TP-9 - 5/16/12 - (12')	Solid	5/16/12 13:25	5/16/12 20:00	Customer

Workorder Comments:

This report was modified to add TAL metals at the request of William Silveri. TMH 6/14/12

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as “analyze immediately” require analysis within 15 minutes of collection. Any “analyze immediately” parameters not listed under the header “Field Parameters” are performed in the laboratory and are therefore analyzed out of hold time.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967991 52-01 Green Point Ave

Lab ID: **9967991001** Date Collected: 5/16/2012 12:55 Matrix: Solid

Sample ID: **TP-9 - 5/16/12 - (2')** Date Received: 5/16/2012 20:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/kg	10.6	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Benzene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Bromochloromethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Bromodichloromethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Bromoform	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Bromomethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
2-Butanone	ND		ug/kg	10.6	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Carbon Disulfide	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Carbon Tetrachloride	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Chlorobenzene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Chlorodibromomethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Chloroethane	ND		ug/kg	5.3	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Chloroform	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Chloromethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.3	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
1,2-Dibromoethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
1,2-Dichlorobenzene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
1,3-Dichlorobenzene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
1,4-Dichlorobenzene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
1,1-Dichloroethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
1,2-Dichloroethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
1,1-Dichloroethene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
cis-1,2-Dichloroethene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
trans-1,2-Dichloroethene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
1,2-Dichloropropane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
cis-1,3-Dichloropropene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
trans-1,3-Dichloropropene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Ethylbenzene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
2-Hexanone	ND		ug/kg	10.6	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	10.6	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Methylene Chloride	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Styrene	ND	1	ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Tetrachloroethene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Toluene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Total Xylenes	ND		ug/kg	6.4	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
1,1,1-Trichloroethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
1,1,2-Trichloroethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Trichloroethene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967991 52-01 Green Point Ave

Lab ID: **9967991001** Date Collected: 5/16/2012 12:55 Matrix: Solid

Sample ID: **TP-9 - 5/16/12 - (2')** Date Received: 5/16/2012 20:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
o-Xylene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
mp-Xylene	ND		ug/kg	4.3	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	70.1		%	56-124	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
4-Bromofluorobenzene (S)	125		%	51-128	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Dibromofluoromethane (S)	87.8		%	62-123	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
Toluene-d8 (S)	107		%	59-131	8260/5035	5/17/12	DD	5/17/12 05:41	DD	A
LIBRARY SEARCH - VOLATILES										
No TIC's Detected	.				Lib Search VOC			5/17/12 05:41	CPK	A
WET CHEMISTRY										
Moisture	8.8		%	0.1	SM20-2540 G			5/17/12 07:15	KAK	A
Total Solids	91.2		%	0.1	SM20-2540 G			5/17/12 07:15	KAK	A
METALS										
Aluminum, Total	4040		mg/kg	9.8	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Antimony, Total	ND		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Arsenic, Total	ND		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Barium, Total	26.4		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Beryllium, Total	ND		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Cadmium, Total	ND		mg/kg	0.49	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Calcium, Total	1240		mg/kg	9.8	SW846 6010C	6/13/12	KMK	6/14/12 05:57	KMH	A1
Chromium, Total	10.9		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Cobalt, Total	4.0		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Copper, Total	7.7		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Iron, Total	8600		mg/kg	9.8	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Lead, Total	2.8		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Magnesium, Total	1410		mg/kg	9.8	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Manganese, Total	252		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Mercury, Total	ND		mg/kg	0.055	SW846 7471B	6/13/12	MNP	6/13/12 13:05	MNP	A2
Nickel, Total	8.0		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Potassium, Total	738		mg/kg	49.0	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Selenium, Total	ND		mg/kg	4.9	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Silver, Total	ND		mg/kg	0.49	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Sodium, Total	73.6		mg/kg	49.0	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Thallium, Total	ND		mg/kg	2.9	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Vanadium, Total	14.6		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1
Zinc, Total	14.1		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:04	KMH	A1

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967991 52-01 Green Point Ave

Lab ID:	**9967991001**	Date Collected:	5/16/2012 12:55	Matrix:	Solid
Sample ID:	**TP-9 - 5/16/12 - (2')**	Date Received:	5/16/2012 20:00		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967991 52-01 Green Point Ave

Lab ID: **9967991002** Date Collected: 5/16/2012 13:05 Matrix: Solid

Sample ID: **TP-9 - 5/16/12 - (6')** Date Received: 5/16/2012 20:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/kg	10.5	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Benzene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Bromochloromethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Bromodichloromethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Bromoform	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Bromomethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
2-Butanone	ND		ug/kg	10.5	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Carbon Disulfide	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Carbon Tetrachloride	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Chlorobenzene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Chlorodibromomethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Chloroethane	ND		ug/kg	5.3	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Chloroform	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Chloromethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.3	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
1,2-Dibromoethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
1,2-Dichlorobenzene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
1,3-Dichlorobenzene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
1,4-Dichlorobenzene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
1,1-Dichloroethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
1,2-Dichloroethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
1,1-Dichloroethene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
cis-1,2-Dichloroethene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
trans-1,2-Dichloroethene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
1,2-Dichloropropane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
cis-1,3-Dichloropropene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
trans-1,3-Dichloropropene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Ethylbenzene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
2-Hexanone	ND		ug/kg	10.5	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	10.5	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Methylene Chloride	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Styrene	ND	2	ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Tetrachloroethene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Toluene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Total Xylenes	ND		ug/kg	6.3	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
1,1,1-Trichloroethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
1,1,2-Trichloroethane	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Trichloroethene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967991 52-01 Green Point Ave

Lab ID: **9967991002** Date Collected: 5/16/2012 13:05 Matrix: Solid

Sample ID: **TP-9 - 5/16/12 - (6')** Date Received: 5/16/2012 20:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
o-Xylene	ND		ug/kg	2.1	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
mp-Xylene	ND		ug/kg	4.2	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	73.1		%	56-124	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
4-Bromofluorobenzene (S)	122		%	51-128	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Dibromofluoromethane (S)	84		%	62-123	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
Toluene-d8 (S)	103		%	59-131	8260/5035	5/17/12	DD	5/17/12 06:10	DD	A
LIBRARY SEARCH - VOLATILES										
No TIC's Detected	.				Lib Search VOC			5/17/12 06:10	CPK	A
WET CHEMISTRY										
Moisture	6.5		%	0.1	SM20-2540 G			5/17/12 07:15	KAK	A
Total Solids	93.5		%	0.1	SM20-2540 G			5/17/12 07:15	KAK	A
METALS										
Aluminum, Total	4580		mg/kg	9.5	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Antimony, Total	ND		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Arsenic, Total	ND		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Barium, Total	29.4		mg/kg	0.95	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Beryllium, Total	ND		mg/kg	0.95	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Cadmium, Total	ND		mg/kg	0.48	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Calcium, Total	1280		mg/kg	9.5	SW846 6010C	6/13/12	KMK	6/14/12 06:01	KMH	A1
Chromium, Total	14.2		mg/kg	0.95	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Cobalt, Total	4.1		mg/kg	0.95	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Copper, Total	9.1		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Iron, Total	9420		mg/kg	9.5	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Lead, Total	2.9		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Magnesium, Total	2110		mg/kg	9.5	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Manganese, Total	242		mg/kg	0.95	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Mercury, Total	ND		mg/kg	0.053	SW846 7471B	6/13/12	MNP	6/13/12 13:06	MNP	A2
Nickel, Total	9.1		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Potassium, Total	1080		mg/kg	47.7	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Selenium, Total	ND		mg/kg	4.8	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Silver, Total	ND		mg/kg	0.48	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Sodium, Total	81.4		mg/kg	47.7	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Thallium, Total	ND		mg/kg	2.9	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Vanadium, Total	17.1		mg/kg	0.95	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1
Zinc, Total	17.3		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 04:08	KMH	A1

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967991 52-01 Green Point Ave

Lab ID:	**9967991002**	Date Collected:	5/16/2012 13:05	Matrix:	Solid
Sample ID:	**TP-9 - 5/16/12 - (6')**	Date Received:	5/16/2012 20:00		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967991 52-01 Green Point Ave

Lab ID: **9967991003** Date Collected: 5/16/2012 13:15 Matrix: Solid

Sample ID: **TP-9 - 5/16/12 - (10')** Date Received: 5/16/2012 20:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/kg	9.6	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Benzene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Bromochloromethane	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Bromodichloromethane	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Bromoform	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Bromomethane	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
2-Butanone	ND		ug/kg	9.6	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Carbon Disulfide	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Carbon Tetrachloride	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Chlorobenzene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Chlorodibromomethane	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Chloroethane	ND		ug/kg	4.8	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Chloroform	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Chloromethane	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.8	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
1,2-Dibromoethane	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
1,2-Dichlorobenzene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
1,3-Dichlorobenzene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
1,4-Dichlorobenzene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
1,1-Dichloroethane	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
1,2-Dichloroethane	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
1,1-Dichloroethene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
cis-1,2-Dichloroethene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
trans-1,2-Dichloroethene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
1,2-Dichloropropane	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
cis-1,3-Dichloropropene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
trans-1,3-Dichloropropene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Ethylbenzene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
2-Hexanone	ND		ug/kg	9.6	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	9.6	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Methylene Chloride	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Styrene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Tetrachloroethene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Toluene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Total Xylenes	ND		ug/kg	5.8	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
1,1,1-Trichloroethane	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
1,1,2-Trichloroethane	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Trichloroethene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967991 52-01 Green Point Ave

Lab ID: **9967991003** Date Collected: 5/16/2012 13:15 Matrix: Solid

Sample ID: **TP-9 - 5/16/12 - (10')** Date Received: 5/16/2012 20:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
o-Xylene	ND		ug/kg	1.9	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
mp-Xylene	ND		ug/kg	3.8	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	73.8		%	56-124	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
4-Bromofluorobenzene (S)	120		%	51-128	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Dibromofluoromethane (S)	87.8		%	62-123	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
Toluene-d8 (S)	92.4		%	59-131	8260/5035	5/17/12	DD	5/17/12 06:39	DD	A
LIBRARY SEARCH - VOLATILES										
No TIC's Detected	.				Lib Search VOC			5/17/12 06:39	CPK	A
WET CHEMISTRY										
Moisture	7.6		%	0.1	SM20-2540 G			5/17/12 07:15	KAK	A
Total Solids	92.4		%	0.1	SM20-2540 G			5/17/12 07:15	KAK	A
METALS										
Aluminum, Total	7000		mg/kg	10.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Antimony, Total	ND		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Arsenic, Total	ND		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Barium, Total	36.8		mg/kg	1.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Beryllium, Total	ND		mg/kg	1.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Cadmium, Total	ND		mg/kg	0.50	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Calcium, Total	1360		mg/kg	10.0	SW846 6010C	6/13/12	KMK	6/14/12 06:05	KMH	A1
Chromium, Total	12.7		mg/kg	1.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Cobalt, Total	4.3		mg/kg	1.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Copper, Total	9.9		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Iron, Total	11000		mg/kg	10.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Lead, Total	2.6		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Magnesium, Total	1780		mg/kg	10.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Manganese, Total	222		mg/kg	1.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Mercury, Total	ND		mg/kg	0.051	SW846 7471B	6/13/12	MNP	6/13/12 13:07	MNP	A2
Nickel, Total	9.0		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Potassium, Total	1410		mg/kg	50.1	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Selenium, Total	ND		mg/kg	5.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Silver, Total	ND		mg/kg	0.50	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Sodium, Total	139		mg/kg	50.1	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Thallium, Total	ND		mg/kg	3.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Vanadium, Total	17.9		mg/kg	1.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1
Zinc, Total	20.3		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:12	KMH	A1

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967991 52-01 Green Point Ave

Lab ID:	**9967991003**	Date Collected:	5/16/2012 13:15	Matrix:	Solid
Sample ID:	**TP-9 - 5/16/12 - (10')**	Date Received:	5/16/2012 20:00		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967991 52-01 Green Point Ave

Lab ID: **9967991004** Date Collected: 5/16/2012 13:25 Matrix: Solid

Sample ID: **TP-9 - 5/16/12 - (12')** Date Received: 5/16/2012 20:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/kg	9.8	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Benzene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Bromochloromethane	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Bromodichloromethane	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Bromoform	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Bromomethane	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
2-Butanone	ND		ug/kg	9.8	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Carbon Disulfide	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Carbon Tetrachloride	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Chlorobenzene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Chlorodibromomethane	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Chloroethane	ND		ug/kg	4.9	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Chloroform	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Chloromethane	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.9	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
1,2-Dibromoethane	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
1,2-Dichlorobenzene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
1,3-Dichlorobenzene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
1,4-Dichlorobenzene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
1,1-Dichloroethane	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
1,2-Dichloroethane	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
1,1-Dichloroethene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
cis-1,2-Dichloroethene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
trans-1,2-Dichloroethene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
1,2-Dichloropropane	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
cis-1,3-Dichloropropene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
trans-1,3-Dichloropropene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Ethylbenzene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
2-Hexanone	ND		ug/kg	9.8	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	9.8	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Methylene Chloride	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Styrene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Tetrachloroethene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Toluene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Total Xylenes	ND		ug/kg	5.9	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
1,1,1-Trichloroethane	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
1,1,2-Trichloroethane	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Trichloroethene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967991 52-01 Green Point Ave

Lab ID: **9967991004** Date Collected: 5/16/2012 13:25 Matrix: Solid

Sample ID: **TP-9 - 5/16/12 - (12')** Date Received: 5/16/2012 20:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
o-Xylene	ND		ug/kg	2.0	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
mp-Xylene	ND		ug/kg	3.9	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	72.4		%	56-124	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
4-Bromofluorobenzene (S)	176	3	%	51-128	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Dibromofluoromethane (S)	81.6		%	62-123	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
Toluene-d8 (S)	96.6		%	59-131	8260/5035	5/17/12	DD	5/17/12 07:08	DD	A
LIBRARY SEARCH - VOLATILES										
No TIC's Detected	.				Lib Search VOC			5/17/12 07:08	CPK	A
WET CHEMISTRY										
Moisture	7.1		%	0.1	SM20-2540 G			5/17/12 07:15	KAK	A
Total Solids	92.9		%	0.1	SM20-2540 G			5/17/12 07:15	KAK	A
METALS										
Aluminum, Total	2920		mg/kg	9.8	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Antimony, Total	ND		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Arsenic, Total	ND		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Barium, Total	23.7		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Beryllium, Total	ND		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Cadmium, Total	ND		mg/kg	0.49	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Calcium, Total	1090		mg/kg	9.8	SW846 6010C	6/13/12	KMK	6/14/12 06:08	KMH	A1
Chromium, Total	9.4		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Cobalt, Total	3.4		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Copper, Total	9.6		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Iron, Total	10800		mg/kg	9.8	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Lead, Total	2.3		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Magnesium, Total	1360		mg/kg	9.8	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Manganese, Total	295		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Mercury, Total	ND		mg/kg	0.053	SW846 7471B	6/13/12	MNP	6/13/12 13:08	MNP	A2
Nickel, Total	10		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Potassium, Total	552		mg/kg	48.9	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Selenium, Total	ND		mg/kg	4.9	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Silver, Total	ND		mg/kg	0.49	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Sodium, Total	54.5		mg/kg	48.9	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Thallium, Total	ND		mg/kg	2.9	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Vanadium, Total	13.2		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1
Zinc, Total	15.4		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 04:15	KMH	A1

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967991 52-01 Green Point Ave

Lab ID:	**9967991004**	Date Collected:	5/16/2012 13:25	Matrix:	Solid
Sample ID:	**TP-9 - 5/16/12 - (12')**	Date Received:	5/16/2012 20:00		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9967991 52-01 Green Point Ave

PARAMETER QUALIFIERS\FLAGS

[1] The QC sample type MS for method 8260/5035 was outside the control limits for the analyte Styrene. The % Recovery was reported as 61.6 and the control limits were 77 to 130.

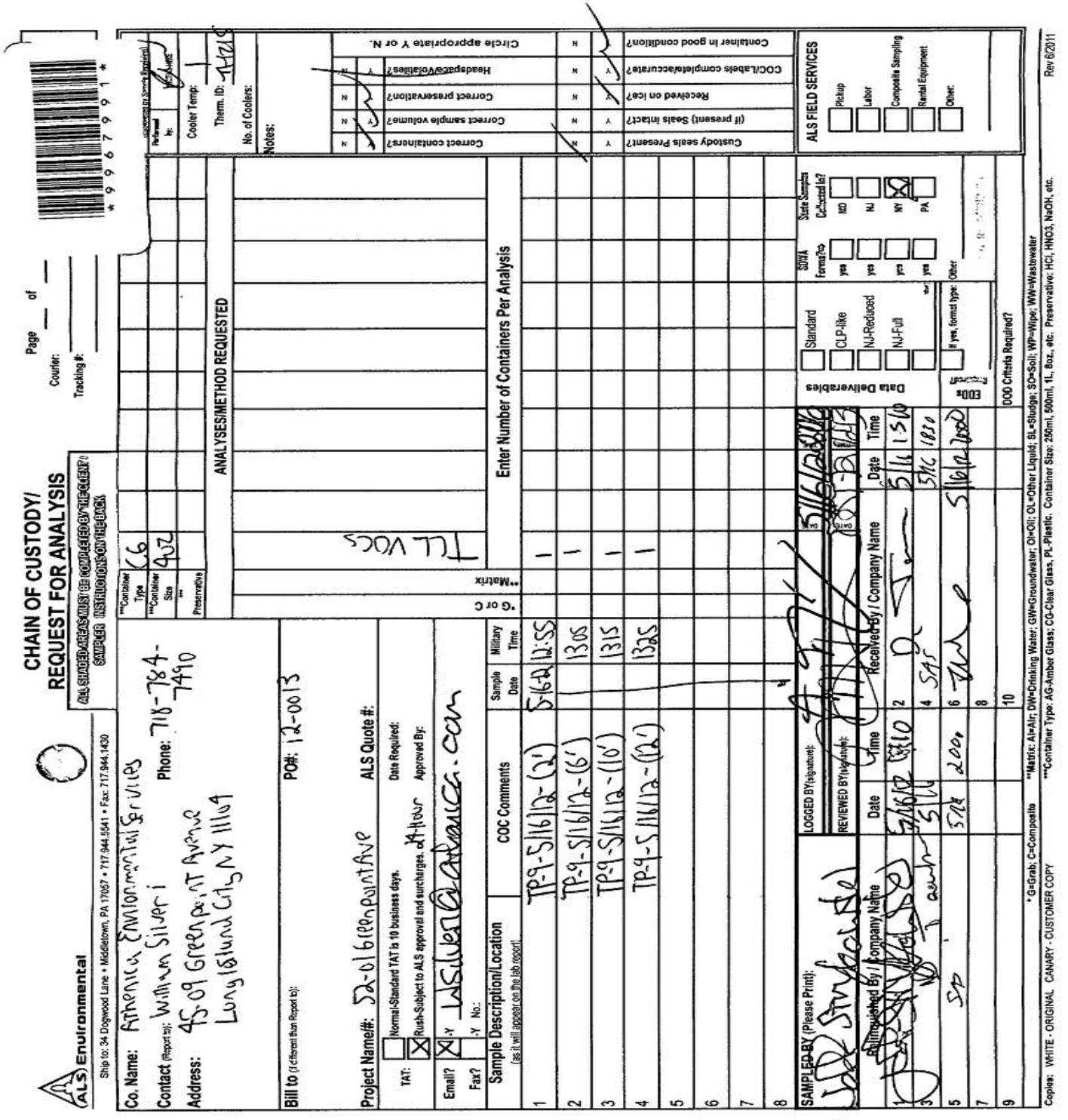
[2] The QC sample type MS for method 8260/5035 was outside the control limits for the analyte Styrene. The % Recovery was reported as 60.6 and the control limits were 77 to 130.

[3] The surrogate 4-Bromofluorobenzene for method 8260/5035 was outside of control limits. The % Recovery was reported as 176 and the control limits were 51 to 128. This result was reported at a dilution of 1.

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343



ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

June 14, 2012

Mr. William Silveri
Athenica Environmental Services, Inc.
45-09 Greenpoint Avenue
Sunnyside, NY 11104

Certificate of Analysis

Project Name:	**Queens Blvd**	Workorder:	**9967721**
Purchase Order:	**12-0013**	Workorder ID:	**52-01 Queens Blvd**

Dear Mr. Silveri,

Enclosed are the analytical results for samples received by the laboratory on Tuesday, May 15, 2012.

The ALS Environmental laboratory in Middletown, Pennsylvania (formerly Analytical Laboratory Services, Inc.) is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Tonya Hironimus (Project Coordinator) or Anna G Milliken (Technical Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALS' NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

CC: Ms. Francesca Boutin, Ms. Shana Holberton, Mr. Basim Altemimi, Mr. Jeffrey Strykowski, Ms. Ela Eren, Ms. Ela Eren

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

SAMPLE SUMMARY

Workorder: 9967721 52-01 Queens Blvd Discard Date: 06/28/2012

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9967721001	TP-7 - 5/15/12 - (2')	Solid	5/15/12 10:40	5/15/12 20:11	William Silveri
9967721002	TP-7 - 5/15/12 - (4')	Solid	5/15/12 10:45	5/15/12 20:11	William Silveri
9967721003	TP-8 - 5/15/12 - (4')	Solid	5/15/12 11:00	5/15/12 20:11	William Silveri
9967721004	TP-8 - 5/15/12 - (8')	Solid	5/15/12 11:05	5/15/12 20:11	William Silveri
9967721005	TP-8 - 5/15/12 - (12')	Solid	5/15/12 11:10	5/15/12 20:11	William Silveri
9967721006	TP-10 - 5/15/12 - (2')	Solid	5/15/12 11:20	5/15/12 20:11	William Silveri
9967721007	TP-10 - 5/15/12 - (6')	Solid	5/15/12 11:30	5/15/12 20:11	William Silveri
9967721008	TP-10 - 5/15/12 - (10')	Solid	5/15/12 11:40	5/15/12 20:11	William Silveri

Workorder Comments:

This report was modified to add TAL metals at the request of William Silveri. TMH 6/14/12

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as “analyze immediately” require analysis within 15 minutes of collection. Any “analyze immediately” parameters not listed under the header “Field Parameters” are performed in the laboratory and are therefore analyzed out of hold time.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721001** Date Collected: 5/15/2012 10:40 Matrix: Solid

Sample ID: **TP-7 - 5/15/12 - (2')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/kg	10.7	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Benzene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Bromochloromethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Bromodichloromethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Bromoform	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Bromomethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
2-Butanone	ND		ug/kg	10.7	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Carbon Disulfide	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Carbon Tetrachloride	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Chlorobenzene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Chlorodibromomethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Chloroethane	ND		ug/kg	5.3	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Chloroform	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Chloromethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.3	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
1,2-Dibromoethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
1,2-Dichlorobenzene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
1,3-Dichlorobenzene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
1,4-Dichlorobenzene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
1,1-Dichloroethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
1,2-Dichloroethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
1,1-Dichloroethene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
cis-1,2-Dichloroethene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
trans-1,2-Dichloroethene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
1,2-Dichloropropane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
cis-1,3-Dichloropropene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
trans-1,3-Dichloropropene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Ethylbenzene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
2-Hexanone	ND		ug/kg	10.7	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	10.7	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Methylene Chloride	ND	1	ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Styrene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Tetrachloroethene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Toluene	8.9		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Total Xylenes	ND		ug/kg	6.4	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
1,1,1-Trichloroethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
1,1,2-Trichloroethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Trichloroethene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721001** Date Collected: 5/15/2012 10:40 Matrix: Solid

Sample ID: **TP-7 - 5/15/12 - (2')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND	2	ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
o-Xylene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
mp-Xylene	ND		ug/kg	4.3	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	66.6		%	56-124	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
4-Bromofluorobenzene (S)	124		%	51-128	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Dibromofluoromethane (S)	64.1		%	62-123	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
Toluene-d8 (S)	105		%	59-131	8260/5035	5/16/12	TMP	5/16/12 13:49	TMP	A2
LIBRARY SEARCH - VOLATILES										
No TIC's Detected	.				Lib Search VOC			5/16/12 13:49	CPK	A
WET CHEMISTRY										
Moisture	11.1		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
Total Solids	88.9		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
METALS										
Aluminum, Total	6210		mg/kg	10.6	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Antimony, Total	ND		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Arsenic, Total	ND		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Barium, Total	33.2		mg/kg	1.1	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Beryllium, Total	ND		mg/kg	1.1	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Cadmium, Total	ND		mg/kg	0.53	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Calcium, Total	1050		mg/kg	10.6	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Chromium, Total	17.0		mg/kg	1.1	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Cobalt, Total	4.1		mg/kg	1.1	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Copper, Total	9.5		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 05:05	KMH	A1
Iron, Total	9620		mg/kg	10.6	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Lead, Total	2.4		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Magnesium, Total	1550		mg/kg	10.6	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Manganese, Total	237		mg/kg	1.1	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Mercury, Total	ND		mg/kg	0.050	SW846 7471B	6/13/12	MNP	6/13/12 12:52	MNP	A2
Nickel, Total	7.4		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Potassium, Total	1300		mg/kg	53.0	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Selenium, Total	ND		mg/kg	5.3	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Silver, Total	ND		mg/kg	0.53	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Sodium, Total	99.6		mg/kg	53.0	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Thallium, Total	ND		mg/kg	3.2	SW846 6010C	6/13/12	KMK	6/14/12 05:05	KMH	A1
Vanadium, Total	16.1		mg/kg	1.1	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1
Zinc, Total	17.6		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 03:20	KMH	A1

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID:	**9967721001**	Date Collected:	5/15/2012 10:40	Matrix:	Solid
Sample ID:	**TP-7 - 5/15/12 - (2')**	Date Received:	5/15/2012 20:11		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721002** Date Collected: 5/15/2012 10:45 Matrix: Solid

Sample ID: **TP-7 - 5/15/12 - (4')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/kg	8.9	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Benzene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Bromochloromethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Bromodichloromethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Bromoform	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Bromomethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
2-Butanone	ND		ug/kg	8.9	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Carbon Disulfide	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Carbon Tetrachloride	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Chlorobenzene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Chlorodibromomethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Chloroethane	ND		ug/kg	4.5	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Chloroform	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Chloromethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.5	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
1,2-Dibromoethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
1,2-Dichlorobenzene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
1,3-Dichlorobenzene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
1,4-Dichlorobenzene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
1,1-Dichloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
1,2-Dichloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
1,1-Dichloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
cis-1,2-Dichloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
trans-1,2-Dichloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
1,2-Dichloropropane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
cis-1,3-Dichloropropene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
trans-1,3-Dichloropropene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Ethylbenzene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
2-Hexanone	ND		ug/kg	8.9	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	8.9	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Methylene Chloride	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Styrene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Tetrachloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Toluene	3.1		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Total Xylenes	ND		ug/kg	5.4	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
1,1,1-Trichloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
1,1,2-Trichloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Trichloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721002** Date Collected: 5/15/2012 10:45 Matrix: Solid

Sample ID: **TP-7 - 5/15/12 - (4')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
o-Xylene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
mp-Xylene	ND		ug/kg	3.6	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	77.8		%	56-124	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
4-Bromofluorobenzene (S)	126		%	51-128	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Dibromofluoromethane (S)	84.9		%	62-123	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
Toluene-d8 (S)	97.5		%	59-131	8260/5035	5/16/12	CPK	5/17/12 07:37	DD	A3
LIBRARY SEARCH - VOLATILES										
No TIC's Detected	.				Lib Search VOC			5/17/12 07:37	CPK	A
WET CHEMISTRY										
Moisture	9.8		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
Total Solids	90.2		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
METALS										
Aluminum, Total	5470		mg/kg	9.9	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Antimony, Total	ND		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Arsenic, Total	ND		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Barium, Total	32.8		mg/kg	0.99	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Beryllium, Total	ND		mg/kg	0.99	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Cadmium, Total	ND		mg/kg	0.49	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Calcium, Total	1740		mg/kg	9.9	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Chromium, Total	13.2		mg/kg	0.99	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Cobalt, Total	4.6		mg/kg	0.99	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Copper, Total	11.2		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Iron, Total	12200		mg/kg	9.9	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Lead, Total	3.5		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Magnesium, Total	2430		mg/kg	9.9	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Manganese, Total	295		mg/kg	0.99	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Mercury, Total	ND		mg/kg	0.053	SW846 7471B	6/13/12	MNP	6/13/12 12:53	MNP	A2
Nickel, Total	9.8		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Potassium, Total	1070		mg/kg	49.5	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Selenium, Total	ND		mg/kg	4.9	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Silver, Total	ND		mg/kg	0.49	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Sodium, Total	69.9		mg/kg	49.5	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Thallium, Total	ND		mg/kg	3.0	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Vanadium, Total	18.7		mg/kg	0.99	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1
Zinc, Total	21.3		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 03:23	KMH	A1

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID:	**9967721002**	Date Collected:	5/15/2012 10:45	Matrix:	Solid
Sample ID:	**TP-7 - 5/15/12 - (4')**	Date Received:	5/15/2012 20:11		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721003** Date Collected: 5/15/2012 11:00 Matrix: Solid

Sample ID: **TP-8 - 5/15/12 - (4')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/kg	10.2	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Benzene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Bromochloromethane	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Bromodichloromethane	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Bromoform	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Bromomethane	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
2-Butanone	ND		ug/kg	10.2	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Carbon Disulfide	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Carbon Tetrachloride	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Chlorobenzene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Chlorodibromomethane	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Chloroethane	ND		ug/kg	5.1	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Chloroform	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Chloromethane	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.1	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
1,2-Dibromoethane	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
1,2-Dichlorobenzene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
1,3-Dichlorobenzene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
1,4-Dichlorobenzene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
1,1-Dichloroethane	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
1,2-Dichloroethane	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
1,1-Dichloroethene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
cis-1,2-Dichloroethene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
trans-1,2-Dichloroethene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
1,2-Dichloropropane	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
cis-1,3-Dichloropropene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
trans-1,3-Dichloropropene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Ethylbenzene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
2-Hexanone	ND		ug/kg	10.2	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	10.2	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Methylene Chloride	ND	1	ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Styrene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Tetrachloroethene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Toluene	3.4		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Total Xylenes	ND		ug/kg	6.1	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
1,1,1-Trichloroethane	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
1,1,2-Trichloroethane	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Trichloroethene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721003** Date Collected: 5/15/2012 11:00 Matrix: Solid

Sample ID: **TP-8 - 5/15/12 - (4')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND	2	ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
o-Xylene	ND		ug/kg	2.0	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
mp-Xylene	ND		ug/kg	4.1	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	83.2		%	56-124	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
4-Bromofluorobenzene (S)	127		%	51-128	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Dibromofluoromethane (S)	93.8		%	62-123	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
Toluene-d8 (S)	108		%	59-131	8260/5035	5/16/12	TMP	5/16/12 14:47	TMP	A2
LIBRARY SEARCH - VOLATILES										
No TIC's Detected	.				Lib Search VOC			5/16/12 14:47	CPK	A
WET CHEMISTRY										
Moisture	8.2		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
Total Solids	91.8		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
METALS										
Aluminum, Total	4950		mg/kg	10.7	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Antimony, Total	ND		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Arsenic, Total	ND		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Barium, Total	37.5		mg/kg	1.1	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Beryllium, Total	ND		mg/kg	1.1	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Cadmium, Total	ND		mg/kg	0.53	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Calcium, Total	3120		mg/kg	10.7	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Chromium, Total	12.2		mg/kg	1.1	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Cobalt, Total	4.2		mg/kg	1.1	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Copper, Total	13.4		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Iron, Total	10200		mg/kg	10.7	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Lead, Total	22.8		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Magnesium, Total	2750		mg/kg	10.7	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Manganese, Total	252		mg/kg	1.1	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Mercury, Total	ND		mg/kg	0.048	SW846 7471B	6/13/12	MNP	6/13/12 12:54	MNP	A2
Nickel, Total	9.5		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Potassium, Total	851		mg/kg	53.4	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Selenium, Total	ND		mg/kg	5.3	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Silver, Total	ND		mg/kg	0.53	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Sodium, Total	66.3		mg/kg	53.4	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Thallium, Total	ND		mg/kg	3.2	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Vanadium, Total	16.1		mg/kg	1.1	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1
Zinc, Total	39.4		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 03:27	KMH	A1

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID:	**9967721003**	Date Collected:	5/15/2012 11:00	Matrix:	Solid
Sample ID:	**TP-8 - 5/15/12 - (4')**	Date Received:	5/15/2012 20:11		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721004** Date Collected: 5/15/2012 11:05 Matrix: Solid

Sample ID: **TP-8 - 5/15/12 - (8')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	16.1		ug/kg	9.9	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Benzene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Bromochloromethane	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Bromodichloromethane	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Bromoform	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Bromomethane	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
2-Butanone	ND		ug/kg	9.9	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Carbon Disulfide	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Carbon Tetrachloride	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Chlorobenzene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Chlorodibromomethane	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Chloroethane	ND		ug/kg	4.9	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Chloroform	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Chloromethane	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.9	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
1,2-Dibromoethane	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
1,2-Dichlorobenzene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
1,3-Dichlorobenzene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
1,4-Dichlorobenzene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
1,1-Dichloroethane	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
1,2-Dichloroethane	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
1,1-Dichloroethene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
cis-1,2-Dichloroethene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
trans-1,2-Dichloroethene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
1,2-Dichloropropane	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
cis-1,3-Dichloropropene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
trans-1,3-Dichloropropene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Ethylbenzene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
2-Hexanone	ND		ug/kg	9.9	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	9.9	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Methylene Chloride	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Styrene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Tetrachloroethene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Toluene	3.3		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Total Xylenes	ND		ug/kg	5.9	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
1,1,1-Trichloroethane	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
1,1,2-Trichloroethane	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Trichloroethene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721004** Date Collected: 5/15/2012 11:05 Matrix: Solid

Sample ID: **TP-8 - 5/15/12 - (8')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
o-Xylene	ND		ug/kg	2.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
mp-Xylene	ND		ug/kg	4.0	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	73.2		%	56-124	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
4-Bromofluorobenzene (S)	135	4	%	51-128	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Dibromofluoromethane (S)	85.9		%	62-123	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
Toluene-d8 (S)	99.6		%	59-131	8260/5035	5/16/12	CPK	5/17/12 08:06	DD	A3
LIBRARY SEARCH - VOLATILES										
No TIC's Detected	.				Lib Search VOC			5/17/12 08:06	CPK	A
WET CHEMISTRY										
Moisture	8.6		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
Total Solids	91.4		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
METALS										
Aluminum, Total	8010		mg/kg	9.8	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Antimony, Total	ND		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Arsenic, Total	ND		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Barium, Total	51.8		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Beryllium, Total	ND		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Cadmium, Total	ND		mg/kg	0.49	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Calcium, Total	2330		mg/kg	9.8	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Chromium, Total	18.2	3	mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Cobalt, Total	5.0		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Copper, Total	20.7		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Iron, Total	13100		mg/kg	9.8	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Lead, Total	21.0		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Magnesium, Total	2690		mg/kg	9.8	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Manganese, Total	264		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Mercury, Total	ND		mg/kg	0.051	SW846 7471B	6/13/12	MNP	6/13/12 12:55	MNP	A2
Nickel, Total	11.7		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Potassium, Total	1580	3	mg/kg	48.8	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Selenium, Total	ND		mg/kg	4.9	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Silver, Total	ND		mg/kg	0.49	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Sodium, Total	156		mg/kg	48.8	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Thallium, Total	ND		mg/kg	2.9	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Vanadium, Total	22.8		mg/kg	0.98	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1
Zinc, Total	44.4		mg/kg	2.0	SW846 6010C	6/13/12	KMK	6/14/12 03:31	KMH	A1

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID:	**9967721004**	Date Collected:	5/15/2012 11:05	Matrix:	Solid
Sample ID:	**TP-8 - 5/15/12 - (8')**	Date Received:	5/15/2012 20:11		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721005** Date Collected: 5/15/2012 11:10 Matrix: Solid

Sample ID: **TP-8 - 5/15/12 - (12')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	35.8		ug/kg	6.7	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Benzene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Bromochloromethane	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Bromodichloromethane	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Bromoform	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Bromomethane	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
2-Butanone	ND		ug/kg	6.7	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Carbon Disulfide	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Carbon Tetrachloride	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Chlorobenzene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Chlorodibromomethane	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Chloroethane	ND		ug/kg	3.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Chloroform	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Chloromethane	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
1,2-Dibromoethane	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
1,2-Dichlorobenzene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
1,3-Dichlorobenzene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
1,4-Dichlorobenzene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
1,1-Dichloroethane	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
1,2-Dichloroethane	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
1,1-Dichloroethene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
cis-1,2-Dichloroethene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
trans-1,2-Dichloroethene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
1,2-Dichloropropane	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
cis-1,3-Dichloropropene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
trans-1,3-Dichloropropene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Ethylbenzene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
2-Hexanone	ND		ug/kg	6.7	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	6.7	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Methylene Chloride	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Styrene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Tetrachloroethene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Toluene	3.5		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Total Xylenes	ND		ug/kg	4.0	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
1,1,1-Trichloroethane	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
1,1,2-Trichloroethane	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Trichloroethene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721005** Date Collected: 5/15/2012 11:10 Matrix: Solid

Sample ID: **TP-8 - 5/15/12 - (12')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
o-Xylene	ND		ug/kg	1.3	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
mp-Xylene	ND		ug/kg	2.7	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	97.9		%	56-124	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
4-Bromofluorobenzene (S)	125		%	51-128	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Dibromofluoromethane (S)	105		%	62-123	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
Toluene-d8 (S)	101		%	59-131	8260/5035	5/16/12	CPK	5/17/12 08:34	DD	A3
LIBRARY SEARCH - VOLATILES										
No TIC's Detected	.				Lib Search VOC			5/17/12 08:34	CPK	A
WET CHEMISTRY										
Moisture	7.1		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
Total Solids	92.9		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
METALS										
Aluminum, Total	6980		mg/kg	9.6	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Antimony, Total	ND		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Arsenic, Total	ND		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Barium, Total	46.8		mg/kg	0.96	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Beryllium, Total	ND		mg/kg	0.96	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Cadmium, Total	ND		mg/kg	0.48	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Calcium, Total	4330		mg/kg	9.6	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Chromium, Total	14.4		mg/kg	0.96	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Cobalt, Total	4.5		mg/kg	0.96	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Copper, Total	15.0		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Iron, Total	11200		mg/kg	9.6	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Lead, Total	23.2		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Magnesium, Total	3770		mg/kg	9.6	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Manganese, Total	267		mg/kg	0.96	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Mercury, Total	ND		mg/kg	0.051	SW846 7471B	6/13/12	MNP	6/13/12 12:56	MNP	A2
Nickel, Total	10.7		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Potassium, Total	1370		mg/kg	48.1	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Selenium, Total	ND		mg/kg	4.8	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Silver, Total	ND		mg/kg	0.48	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Sodium, Total	117		mg/kg	48.1	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Thallium, Total	ND		mg/kg	2.9	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Vanadium, Total	22.0		mg/kg	0.96	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1
Zinc, Total	43.0		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:42	KMH	A1

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID:	**9967721005**	Date Collected:	5/15/2012 11:10	Matrix:	Solid
Sample ID:	**TP-8 - 5/15/12 - (12')**	Date Received:	5/15/2012 20:11		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721006** Date Collected: 5/15/2012 11:20 Matrix: Solid

Sample ID: **TP-10 - 5/15/12 - (2')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	28.4		ug/kg	9.2	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Benzene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Bromochloromethane	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Bromodichloromethane	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Bromoform	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Bromomethane	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
2-Butanone	ND		ug/kg	9.2	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Carbon Disulfide	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Carbon Tetrachloride	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Chlorobenzene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Chlorodibromomethane	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Chloroethane	ND		ug/kg	4.6	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Chloroform	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Chloromethane	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.6	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
1,2-Dibromoethane	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
1,2-Dichlorobenzene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
1,3-Dichlorobenzene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
1,4-Dichlorobenzene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
1,1-Dichloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
1,2-Dichloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
1,1-Dichloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
cis-1,2-Dichloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
trans-1,2-Dichloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
1,2-Dichloropropane	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
cis-1,3-Dichloropropene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
trans-1,3-Dichloropropene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Ethylbenzene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
2-Hexanone	ND		ug/kg	9.2	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	9.2	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Methylene Chloride	ND	1	ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Styrene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Tetrachloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Toluene	4.0		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Total Xylenes	ND		ug/kg	5.5	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
1,1,1-Trichloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
1,1,2-Trichloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Trichloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721006** Date Collected: 5/15/2012 11:20 Matrix: Solid

Sample ID: **TP-10 - 5/15/12 - (2')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND	2	ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
o-Xylene	ND		ug/kg	1.8	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
mp-Xylene	ND		ug/kg	3.7	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	83.3		%	56-124	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
4-Bromofluorobenzene (S)	127		%	51-128	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Dibromofluoromethane (S)	92.8		%	62-123	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
Toluene-d8 (S)	102		%	59-131	8260/5035	5/16/12	TMP	5/16/12 16:14	TMP	A2
LIBRARY SEARCH - VOLATILES										
No TIC's Detected	.				Lib Search VOC			5/16/12 16:14	CPK	A
WET CHEMISTRY										
Moisture	5.6		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
Total Solids	94.4		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
METALS										
Aluminum, Total	5590		mg/kg	9.6	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Antimony, Total	ND		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Arsenic, Total	ND		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Barium, Total	43.9		mg/kg	0.96	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Beryllium, Total	ND		mg/kg	0.96	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Cadmium, Total	ND		mg/kg	0.48	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Calcium, Total	3710		mg/kg	9.6	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Chromium, Total	14.0		mg/kg	0.96	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Cobalt, Total	4.1		mg/kg	0.96	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Copper, Total	16.2		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Iron, Total	10400		mg/kg	9.6	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Lead, Total	31.0		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Magnesium, Total	3050		mg/kg	9.6	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Manganese, Total	236		mg/kg	0.96	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Mercury, Total	ND		mg/kg	0.050	SW846 7471B	6/13/12	MNP	6/13/12 12:58	MNP	A2
Nickel, Total	9.6		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Potassium, Total	1060		mg/kg	48.1	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Selenium, Total	ND		mg/kg	4.8	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Silver, Total	ND		mg/kg	0.48	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Sodium, Total	81.5		mg/kg	48.1	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Thallium, Total	ND		mg/kg	2.9	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Vanadium, Total	18.4		mg/kg	0.96	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1
Zinc, Total	47.4		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:45	KMH	A1

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID:	**9967721006**	Date Collected:	5/15/2012 11:20	Matrix:	Solid
Sample ID:	**TP-10 - 5/15/12 - (2')**	Date Received:	5/15/2012 20:11		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721007** Date Collected: 5/15/2012 11:30 Matrix: Solid

Sample ID: **TP-10 - 5/15/12 - (6')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	39.8		ug/kg	9.0	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Benzene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Bromochloromethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Bromodichloromethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Bromoform	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Bromomethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
2-Butanone	ND		ug/kg	9.0	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Carbon Disulfide	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Carbon Tetrachloride	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Chlorobenzene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Chlorodibromomethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Chloroethane	ND		ug/kg	4.5	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Chloroform	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Chloromethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.5	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
1,2-Dibromoethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
1,2-Dichlorobenzene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
1,3-Dichlorobenzene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
1,4-Dichlorobenzene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
1,1-Dichloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
1,2-Dichloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
1,1-Dichloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
cis-1,2-Dichloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
trans-1,2-Dichloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
1,2-Dichloropropane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
cis-1,3-Dichloropropene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
trans-1,3-Dichloropropene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Ethylbenzene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
2-Hexanone	ND		ug/kg	9.0	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	9.0	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Methylene Chloride	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Styrene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Tetrachloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Toluene	3.4		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Total Xylenes	ND		ug/kg	5.4	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
1,1,1-Trichloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
1,1,2-Trichloroethane	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Trichloroethene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721007** Date Collected: 5/15/2012 11:30 Matrix: Solid

Sample ID: **TP-10 - 5/15/12 - (6')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
o-Xylene	ND		ug/kg	1.8	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
mp-Xylene	ND		ug/kg	3.6	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	76.8		%	56-124	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
4-Bromofluorobenzene (S)	135	4	%	51-128	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Dibromofluoromethane (S)	85.6		%	62-123	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
Toluene-d8 (S)	108		%	59-131	8260/5035	5/16/12	CPK	5/17/12 09:03	DD	A3
LIBRARY SEARCH - VOLATILES										
No TIC's Detected	.				Lib Search VOC			5/17/12 09:03	CPK	A
WET CHEMISTRY										
Moisture	7.9		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
Total Solids	92.1		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
METALS										
Aluminum, Total	5850		mg/kg	9.5	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Antimony, Total	ND		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Arsenic, Total	ND		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Barium, Total	43.0		mg/kg	0.95	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Beryllium, Total	ND		mg/kg	0.95	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Cadmium, Total	ND		mg/kg	0.48	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Calcium, Total	5080		mg/kg	9.5	SW846 6010C	6/13/12	KMK	6/14/12 05:45	KMH	A1
Chromium, Total	13.7		mg/kg	0.95	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Cobalt, Total	4.2		mg/kg	0.95	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Copper, Total	13.2		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Iron, Total	10800		mg/kg	9.5	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Lead, Total	25.7		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Magnesium, Total	3880		mg/kg	9.5	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Manganese, Total	257		mg/kg	0.95	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Mercury, Total	ND		mg/kg	0.051	SW846 7471B	6/13/12	MNP	6/13/12 12:59	MNP	A2
Nickel, Total	9.5		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Potassium, Total	1040		mg/kg	47.6	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Selenium, Total	ND		mg/kg	4.8	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Silver, Total	ND		mg/kg	0.48	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Sodium, Total	92.0		mg/kg	47.6	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Thallium, Total	ND		mg/kg	2.9	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Vanadium, Total	18.5		mg/kg	0.95	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1
Zinc, Total	42.6		mg/kg	1.9	SW846 6010C	6/13/12	KMK	6/14/12 03:57	KMH	A1

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID:	**9967721007**	Date Collected:	5/15/2012 11:30	Matrix:	Solid
Sample ID:	**TP-10 - 5/15/12 - (6')**	Date Received:	5/15/2012 20:11		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721008** Date Collected: 5/15/2012 11:40 Matrix: Solid

Sample ID: **TP-10 - 5/15/12 - (10')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/kg	10.6	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Benzene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Bromochloromethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Bromodichloromethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Bromoform	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Bromomethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
2-Butanone	ND		ug/kg	10.6	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Carbon Disulfide	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Carbon Tetrachloride	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Chlorobenzene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Chlorodibromomethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Chloroethane	ND		ug/kg	5.3	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Chloroform	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Chloromethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.3	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
1,2-Dibromoethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
1,2-Dichlorobenzene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
1,3-Dichlorobenzene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
1,4-Dichlorobenzene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
1,1-Dichloroethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
1,2-Dichloroethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
1,1-Dichloroethene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
cis-1,2-Dichloroethene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
trans-1,2-Dichloroethene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
1,2-Dichloropropane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
cis-1,3-Dichloropropene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
trans-1,3-Dichloropropene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Ethylbenzene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
2-Hexanone	ND		ug/kg	10.6	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
4-Methyl-2-Pentanone(MIBK)	ND		ug/kg	10.6	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Methylene Chloride	ND	1	ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Styrene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Tetrachloroethene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Toluene	3.1		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Total Xylenes	ND		ug/kg	6.3	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
1,1,1-Trichloroethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
1,1,2-Trichloroethane	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Trichloroethene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID: **9967721008** Date Collected: 5/15/2012 11:40 Matrix: Solid

Sample ID: **TP-10 - 5/15/12 - (10')** Date Received: 5/15/2012 20:11

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND	2	ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
o-Xylene	ND		ug/kg	2.1	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
mp-Xylene	ND		ug/kg	4.2	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	77.4		%	56-124	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
4-Bromofluorobenzene (S)	210	5	%	51-128	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Dibromofluoromethane (S)	87.5		%	62-123	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
Toluene-d8 (S)	104		%	59-131	8260/5035	5/16/12	TMP	5/16/12 20:34	TMP	A3
LIBRARY SEARCH - VOLATILES										
No TIC's Detected	.				Lib Search VOC			5/16/12 20:34	CPK	A
WET CHEMISTRY										
Moisture	7.4		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
Total Solids	92.6		%	0.1	SM20-2540 G			5/16/12 14:20	KAK	A
METALS										
Aluminum, Total	4840		mg/kg	10.4	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Antimony, Total	ND		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Arsenic, Total	ND		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Barium, Total	44.2		mg/kg	1.0	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Beryllium, Total	ND		mg/kg	1.0	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Cadmium, Total	ND		mg/kg	0.52	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Calcium, Total	5430		mg/kg	10.4	SW846 6010C	6/13/12	KMK	6/14/12 05:49	KMH	A1
Chromium, Total	12.1		mg/kg	1.0	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Cobalt, Total	3.8		mg/kg	1.0	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Copper, Total	13.9		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Iron, Total	9560		mg/kg	10.4	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Lead, Total	32.2		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Magnesium, Total	3890		mg/kg	10.4	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Manganese, Total	225		mg/kg	1.0	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Mercury, Total	ND		mg/kg	0.046	SW846 7471B	6/13/12	MNP	6/13/12 13:00	MNP	A2
Nickel, Total	8.8		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Potassium, Total	910		mg/kg	51.9	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Selenium, Total	ND		mg/kg	5.2	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Silver, Total	ND		mg/kg	0.52	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Sodium, Total	78.8		mg/kg	51.9	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Thallium, Total	ND		mg/kg	3.1	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Vanadium, Total	16.9		mg/kg	1.0	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1
Zinc, Total	50.2		mg/kg	2.1	SW846 6010C	6/13/12	KMK	6/14/12 04:00	KMH	A1

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9967721 52-01 Queens Blvd

Lab ID:	**9967721008**	Date Collected:	5/15/2012 11:40	Matrix:	Solid
Sample ID:	**TP-10 - 5/15/12 - (10')**	Date Received:	5/15/2012 20:11		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

One or more of the method 8260 internal standards were recovered outside of the control limits due to a matrix interference.

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9967721 52-01 Queens Blvd

PARAMETER QUALIFIERS\FLAGS

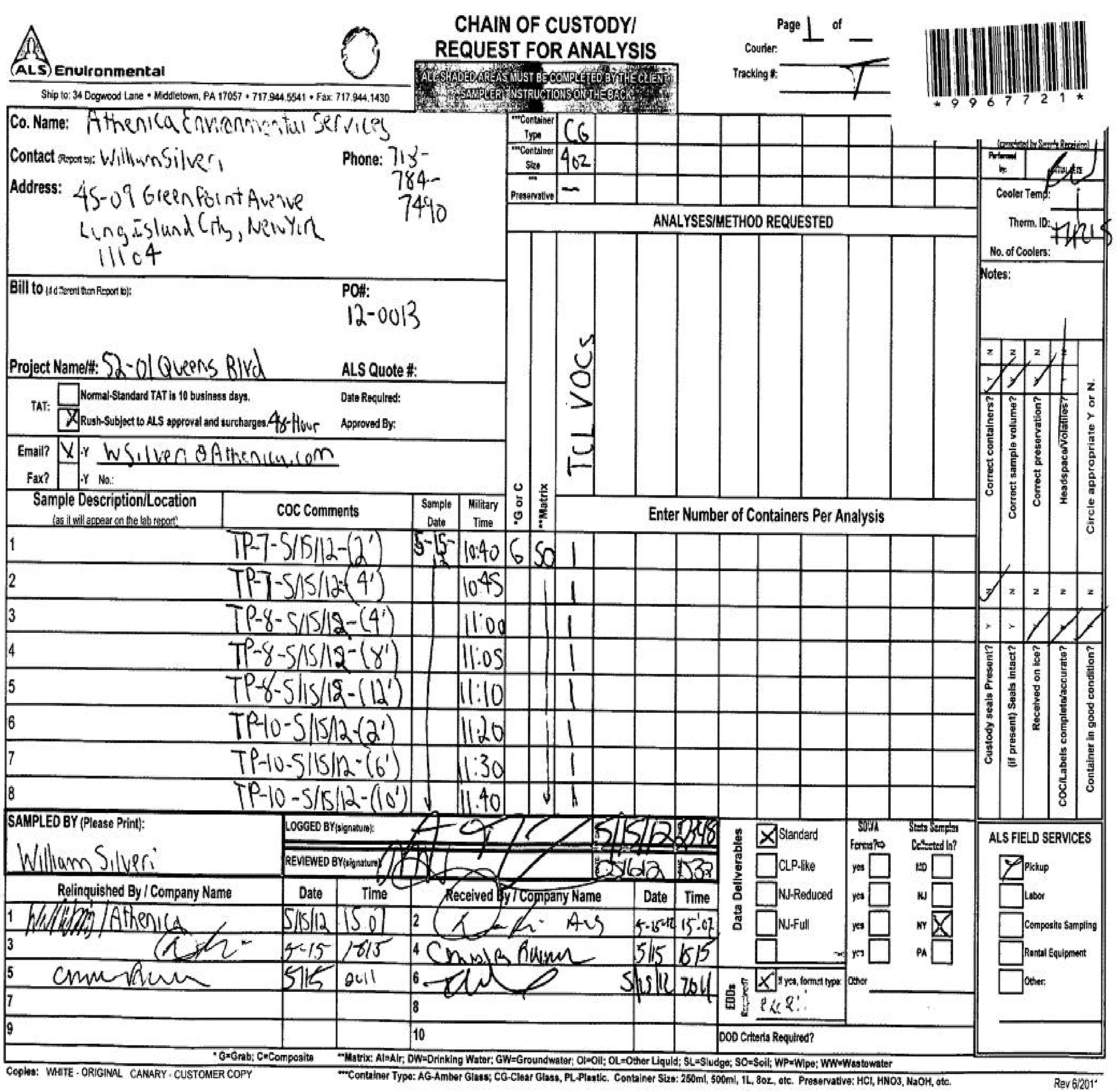
[1] The QC sample type LCSD for method 8260/5035 was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 63.6 and the control limits were 68 to 133.

[2] The QC sample type LCSD for method 8260/5035 was outside the control limits for the analyte Vinyl Chloride. The % Recovery was reported as 51.1 and the control limits were 53 to 141.

[3] The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. The sample was post-digestion spiked, and this matrix spike was within acceptable recovery limits.

[4] The surrogate 4-Bromofluorobenzene for method 8260/5035 was outside of control limits. The % Recovery was reported as 135 and the control limits were 51 to 128. This result was reported at a dilution of 1.

[5] The surrogate 4-Bromofluorobenzene for method 8260/5035 was outside of control limits. The % Recovery was reported as 210 and the control limits were 51 to 128. This result was reported at a dilution of 1.



ALS Environmental
Ship to: 34 Dogwood Lane • Middletown, PA 17057 • 717.944.5541 • Fax: 717.944.1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/ SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1
Courier:
Tracking #:

9967721

Co. Name: Athenica Environmental Services
Contact (Report to): William Silveri
Phone: 718-784-7490
Address: 45-09 Greenpoint Avenue
Long Island City, New York
11104

Bill to (if different than Report to):
PO#: 12-0013

Project Name/#: 52-01 Queens Blvd
ALS Quote #:

TAT: ☐ Normal-Standard TAT is 10 business days. ☒ Rush-Subject to ALS approval and surcharges. 48-Hour
Date Required:
Approved By:

Email? ☒ Y wsilveri@athenica.com
Fax? ☐ Y No.:

***Container Type	CG					
***Container Size	4oz					
***Preservative	—					

ANALYSES/METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	TCL VOCs
1	TP-7-5/15/12-(2')	5-15-12	10:40	G	SO	1
2	TP-7-5/15/12-(4')		10:45			1
3	TP-8-5/15/12-(4')		11:00			1
4	TP-8-5/15/12-(8')		11:05			1
5	TP-8-5/15/12-(12')		11:10			1
6	TP-10-5/15/12-(2')		11:20			1
7	TP-10-5/15/12-(6')		11:30			1
8	TP-10-5/15/12-(10')		11:40			1

Enter Number of Containers Per Analysis

(completed by Sample Receiving)
Performed by: Initials
Cooler Temp:
Therm. ID: 7/12/15
No. of Coolers:
Notes:

	Y	N		Y	N
Correct containers?	✓		Custody seals Present?		✓
Correct sample volume?	✓		(if present) Seals Intact?		
Correct preservation?	✓		Received on ice?	✓	
Headspace/Volatiles?			COC/Labels complete/accurate?	✓	
Circle appropriate Y or N.			Container in good condition?	✓	

SAMPLED BY (Please Print): William Silveri

LOGGED BY(signature): 5/15/12 2348
REVIEWED BY(signature): 5/16/12 1533

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	William / Athenica	5/15/12	15:01	2	ALS	5-15-12	15:02
3		5-15	1815	4		5/15	1815
5		5/15	2011	6		5/15/12	2011
7				8			
9				10			

Data Deliverables: ☒ Standard ☐ CLP-like ☐ NJ-Reduced ☐ NJ-Full ☐
EDDs Required? ☒ If yes, format type: EQuIS
SDWA Forms? yes ☐ yes ☐ yes ☐ yes ☐ Other
State Samples Collected In? MD ☐ NJ ☐ NY ☒ PA ☐
DOD Criteria Required?

ALS FIELD SERVICES
☑ Pickup
☐ Labor
☐ Composite Sampling
☐ Rental Equipment
☐ Other:

*G=Grab; C=Composite **Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY ***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.
Rev 6/2011

ALS Environmental Laboratory Locations Across North America
Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay Vancouver Waterloo · Winnipeg · Yellowknife **United States:** Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York **Mexico:** Monterrey
Report ID: 9967721 - 6/14/2012 Page 28 of 28

APPENDIX I

LABORATORY DATA DELIVERABLES FOR GROUNDWATER ANALYTICAL DATA
(CD ROM)

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

April 12, 2012

Ms. Francesca Boutin
Athenica Environmental Service

Certificate of Analysis

Project Name:	**Queens Blvd**	Workorder:	**9961452**
Purchase Order:		Workorder ID:	**52-01 Queens Blvd/12-0013**

Dear Ms. Boutin,

Enclosed are the analytical results for samples received by the laboratory on Tuesday, April 10, 2012.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Tonya Hironimus (Project Coordinator) or Anna G Milliken (Technical Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALS' NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

CC: Mr. Basim Altemimi, Mr. Jeffrey Strykowski, Mr. William Silveri, Ms. Ela Eren, Ms. Ela Eren

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

SAMPLE SUMMARY

Workorder: 9961452 52-01 Queens Blvd/12-0013 Discard Date: 04/26/2012

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9961452001	TW-1 - 4/9/12 - S1	Water	4/9/12 09:15	4/10/12 19:00	William Silveri
9961452002	TW-1 - 4/9/12 - S1	Water	4/9/12 09:20	4/10/12 19:00	William Silveri
9961452003	TW-3 - 4/9/12 - S3	Water	4/9/12 12:10	4/10/12 19:00	William Silveri
9961452004	TW-3 - 4/9/12 - S3	Water	4/9/12 12:14	4/10/12 19:00	William Silveri
9961452005	TW-2 - 4/9/12 - S2	Water	4/9/12 15:05	4/10/12 19:00	William Silveri
9961452006	TW-2 - 4/9/12 - S2	Water	4/9/12 15:10	4/10/12 19:00	William Silveri
9961452007	Trip Blank	Water	4/10/12 19:00	4/10/12 19:00	William Silveri

Workorder Comments:

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as “analyze immediately” require analysis within 15 minutes of collection. Any “analyze immediately” parameters not listed under the header “Field Parameters” are performed in the laboratory and are therefore analyzed out of hold time.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452001** Date Collected: 4/9/2012 09:15 Matrix: Water

Sample ID: **TW-1 - 4/9/12 - S1** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/L	10.0	SW846 8260B			4/11/12 12:02	MES	A
Benzene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Bromochloromethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Bromodichloromethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Bromoform	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Bromomethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
2-Butanone	ND		ug/L	10.0	SW846 8260B			4/11/12 12:02	MES	A
Carbon Disulfide	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Carbon Tetrachloride	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Chlorobenzene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Chlorodibromomethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Chloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Chloroform	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Chloromethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
1,2-Dibromo-3-chloropropane	ND		ug/L	7.0	SW846 8260B			4/11/12 12:02	MES	A
1,2-Dibromoethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
1,2-Dichlorobenzene	ND		ug/L	10.0	SW846 8260B			4/12/12 14:06	TMP	B
1,3-Dichlorobenzene	ND		ug/L	10.0	SW846 8260B			4/12/12 14:06	TMP	B
1,4-Dichlorobenzene	ND		ug/L	10.0	SW846 8260B			4/12/12 14:06	TMP	B
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
cis-1,2-Dichloroethene	4.9		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
1,2-Dichloropropane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
cis-1,3-Dichloropropene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
trans-1,3-Dichloropropene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
2-Hexanone	ND		ug/L	5.0	SW846 8260B			4/11/12 12:02	MES	A
4-Methyl-2-Pentanone(MIBK)	ND		ug/L	5.0	SW846 8260B			4/11/12 12:02	MES	A
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Styrene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Tetrachloroethene	434		ug/L	10.0	SW846 8260B			4/12/12 14:06	TMP	B
Toluene	2.1		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Total Xylenes	ND		ug/L	3.0	SW846 8260B			4/11/12 12:02	MES	A
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
1,1,2-Trichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
Trichloroethene	4.6		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452001** Date Collected: 4/9/2012 09:15 Matrix: Water

Sample ID: **TW-1 - 4/9/12 - S1** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
o-Xylene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:02	MES	A
mp-Xylene	ND		ug/L	2.0	SW846 8260B			4/11/12 12:02	MES	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	111		%	62-133	SW846 8260B			4/11/12 12:02	MES	A
4-Bromofluorobenzene (S)	81.9		%	79-114	SW846 8260B			4/11/12 12:02	MES	A
Dibromofluoromethane (S)	106		%	78-116	SW846 8260B			4/11/12 12:02	MES	A
Toluene-d8 (S)	108		%	76-127	SW846 8260B			4/11/12 12:02	MES	A
1,2-Dichloroethane-d4 (S)	93.1		%	62-133	SW846 8260B			4/12/12 14:06	TMP	B
4-Bromofluorobenzene (S)	84		%	79-114	SW846 8260B			4/12/12 14:06	TMP	B
Dibromofluoromethane (S)	88.4		%	78-116	SW846 8260B			4/12/12 14:06	TMP	B
Toluene-d8 (S)	96.9		%	76-127	SW846 8260B			4/12/12 14:06	TMP	B
LIBRARY SEARCH - VOLATILES										
No TIC's Detected	.				Lib Search VOC			4/11/12 12:02	CPK	A

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452002** Date Collected: 4/9/2012 09:20 Matrix: Water

Sample ID: **TW-1 - 4/9/12 - S1** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
Acenaphthene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Acenaphthylene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Anthracene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Benzo(a)anthracene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Benzo(a)pyrene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Benzo(b)fluoranthene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Benzo(g,h,i)perylene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Benzo(k)fluoranthene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
4-Bromophenyl-phenylether	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Butylbenzylphthalate	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Carbazole	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
4-Chloro-3-methylphenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
4-Chloroaniline	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
bis(2-Chloroethoxy)methane	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
bis(2-Chloroisopropyl)ether	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2-Chloronaphthalene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2-Chlorophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
4-Chlorophenyl-phenylether	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Chrysene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
mp-Cresol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
o-Cresol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Di-n-Butylphthalate	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Di-n-Octylphthalate	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Dibenzo(a,h)anthracene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Dibenzofuran	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
3,3-Dichlorobenzidine	ND		ug/L	15.1	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2,4-Dichlorophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Diethylphthalate	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2,4-Dimethylphenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Dimethylphthalate	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2,4-Dinitrophenol	ND		ug/L	15.1	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2,4-Dinitrotoluene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2,6-Dinitrotoluene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
bis(2-Ethylhexyl)phthalate	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Fluoranthene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Fluorene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Hexachlorobenzene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Hexachlorobutadiene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Hexachlorocyclopentadiene	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Hexachloroethane	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452002** Date Collected: 4/9/2012 09:20 Matrix: Water

Sample ID: **TW-1 - 4/9/12 - S1** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Indeno(1,2,3-cd)pyrene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Isophorone	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2-Methyl-4,6-dinitrophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2-Methylnaphthalene	ND		ug/L	1.9	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Naphthalene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2-Nitroaniline	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
3-Nitroaniline	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
4-Nitroaniline	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Nitrobenzene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2-Nitrophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
4-Nitrophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
N-Nitroso-di-n-propylamine	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
N-Nitrosodiphenylamine	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Pentachlorophenol	ND		ug/L	15.1	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Phenanthrene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Phenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Pyrene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
1,2,4-Trichlorobenzene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2,4,5-Trichlorophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2,4,6-Trichlorophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Library Search - SemiVolatiles										
Tetrachloroethylene	139	J N	ug/L		SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Unknown	10.9	J	ug/L		SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	68.5		%	40-125	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2-Fluorobiphenyl (S)	67.5		%	50-110	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
2-Fluorophenol (S)	44.4		%	20-75	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Nitrobenzene-d5 (S)	81.1		%	40-110	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Phenol-d5 (S)	28.8		%	13-49	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
Terphenyl-d14 (S)	41.8	2	%	50-122	SW846 8270D	4/11/12	GEC	4/11/12 22:31	CGS	A1
SEMIVOLATILE SIM										
Acenaphthene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Acenaphthylene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Anthracene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Benzo(a)anthracene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Benzo(a)pyrene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Benzo(b)fluoranthene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Benzo(g,h,i)perylene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452002** Date Collected: 4/9/2012 09:20 Matrix: Water

Sample ID: **TW-1 - 4/9/12 - S1** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Benzo(k)fluoranthene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Chrysene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Dibenzo(a,h)anthracene	ND		ug/L	0.066	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Fluoranthene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Fluorene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Indeno(1,2,3-cd)pyrene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Naphthalene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Phenanthrene	0.16		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Pyrene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2-Methylnapthalene-d10 (S)	59.1		%	29-112	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2
Fluoranthene-d10 (S)	34.7	1	%	45-130	8270 SIM	4/11/12	GEC	4/12/12 14:46	SAS	A2

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452003** Date Collected: 4/9/2012 12:10 Matrix: Water

Sample ID: **TW-3 - 4/9/12 - S3** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/L	10.0	SW846 8260B			4/11/12 12:47	MES	A
Benzene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Bromochloromethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Bromodichloromethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Bromoform	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Bromomethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
2-Butanone	ND		ug/L	10.0	SW846 8260B			4/11/12 12:47	MES	A
Carbon Disulfide	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Carbon Tetrachloride	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Chlorobenzene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Chlorodibromomethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Chloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Chloroform	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Chloromethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
1,2-Dibromo-3-chloropropane	ND		ug/L	7.0	SW846 8260B			4/11/12 12:47	MES	A
1,2-Dibromoethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
1,2-Dichlorobenzene	ND		ug/L	20.0	SW846 8260B			4/12/12 14:39	TMP	B
1,3-Dichlorobenzene	ND		ug/L	20.0	SW846 8260B			4/12/12 14:39	TMP	B
1,4-Dichlorobenzene	ND		ug/L	20.0	SW846 8260B			4/12/12 14:39	TMP	B
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
cis-1,2-Dichloroethene	11.3		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
1,2-Dichloropropane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
cis-1,3-Dichloropropene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
trans-1,3-Dichloropropene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
2-Hexanone	ND		ug/L	5.0	SW846 8260B			4/11/12 12:47	MES	A
4-Methyl-2-Pentanone(MIBK)	ND		ug/L	5.0	SW846 8260B			4/11/12 12:47	MES	A
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Styrene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Tetrachloroethene	882		ug/L	20.0	SW846 8260B			4/12/12 14:39	TMP	B
Toluene	2.3		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Total Xylenes	ND		ug/L	3.0	SW846 8260B			4/11/12 12:47	MES	A
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
1,1,2-Trichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
Trichloroethene	10.4		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452003** Date Collected: 4/9/2012 12:10 Matrix: Water

Sample ID: **TW-3 - 4/9/12 - S3** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
o-Xylene	ND		ug/L	1.0	SW846 8260B			4/11/12 12:47	MES	A
mp-Xylene	ND		ug/L	2.0	SW846 8260B			4/11/12 12:47	MES	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	113		%	62-133	SW846 8260B			4/11/12 12:47	MES	A
4-Bromofluorobenzene (S)	84.6		%	79-114	SW846 8260B			4/11/12 12:47	MES	A
Dibromofluoromethane (S)	110		%	78-116	SW846 8260B			4/11/12 12:47	MES	A
Toluene-d8 (S)	111		%	76-127	SW846 8260B			4/11/12 12:47	MES	A
1,2-Dichloroethane-d4 (S)	92.9		%	62-133	SW846 8260B			4/12/12 14:39	TMP	B
4-Bromofluorobenzene (S)	82.8		%	79-114	SW846 8260B			4/12/12 14:39	TMP	B
Dibromofluoromethane (S)	89.4		%	78-116	SW846 8260B			4/12/12 14:39	TMP	B
Toluene-d8 (S)	97.2		%	76-127	SW846 8260B			4/12/12 14:39	TMP	B
Library Search - Volatiles										
Propene	24.3	J N	ug/L		SW846 8260B			4/11/12 12:47	MES	A

Sample Comments:

Anna G Milliken
Technical Manager

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452004** Date Collected: 4/9/2012 12:14 Matrix: Water

Sample ID: **TW-3 - 4/9/12 - S3** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
Acenaphthene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Acenaphthylene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Anthracene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Benzo(a)anthracene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Benzo(a)pyrene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Benzo(b)fluoranthene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Benzo(g,h,i)perylene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Benzo(k)fluoranthene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
4-Bromophenyl-phenylether	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Butylbenzylphthalate	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Carbazole	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
4-Chloro-3-methylphenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
4-Chloroaniline	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
bis(2-Chloroethoxy)methane	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
bis(2-Chloroisopropyl)ether	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2-Chloronaphthalene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2-Chlorophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
4-Chlorophenyl-phenylether	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Chrysene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
mp-Cresol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
o-Cresol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Di-n-Butylphthalate	10.8		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Di-n-Octylphthalate	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Dibenzo(a,h)anthracene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Dibenzofuran	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
3,3-Dichlorobenzidine	ND		ug/L	15.1	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2,4-Dichlorophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Diethylphthalate	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2,4-Dimethylphenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Dimethylphthalate	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2,4-Dinitrophenol	ND		ug/L	15.1	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2,4-Dinitrotoluene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2,6-Dinitrotoluene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
bis(2-Ethylhexyl)phthalate	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Fluoranthene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Fluorene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Hexachlorobenzene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Hexachlorobutadiene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Hexachlorocyclopentadiene	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Hexachloroethane	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452004** Date Collected: 4/9/2012 12:14 Matrix: Water

Sample ID: **TW-3 - 4/9/12 - S3** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Indeno(1,2,3-cd)pyrene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Isophorone	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2-Methyl-4,6-dinitrophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2-Methylnaphthalene	ND		ug/L	1.9	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Naphthalene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2-Nitroaniline	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
3-Nitroaniline	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
4-Nitroaniline	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Nitrobenzene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2-Nitrophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
4-Nitrophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
N-Nitroso-di-n-propylamine	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
N-Nitrosodiphenylamine	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Pentachlorophenol	ND		ug/L	15.1	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Phenanthrene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Phenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Pyrene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
1,2,4-Trichlorobenzene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2,4,5-Trichlorophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2,4,6-Trichlorophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Library Search - SemiVolatiles										
Tetrachloroethylene	223	J N	ug/L		SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Unknown	10.1	J	ug/L		SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Unknown	21.8	J	ug/L		SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Octanoic Acid	87.1	J N	ug/L		SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Cyclohexadecane	3.9	J N	ug/L		SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	71.6		%	40-125	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2-Fluorobiphenyl (S)	61.7		%	50-110	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
2-Fluorophenol (S)	39.9		%	20-75	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Nitrobenzene-d5 (S)	73.8		%	40-110	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Phenol-d5 (S)	26.6		%	13-49	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
Terphenyl-d14 (S)	41.8	2	%	50-122	SW846 8270D	4/11/12	GEC	4/11/12 23:03	CGS	A1
SEMIVOLATILE SIM										
Acenaphthene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Acenaphthylene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Anthracene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Benzo(a)anthracene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452004** Date Collected: 4/9/2012 12:14 Matrix: Water

Sample ID: **TW-3 - 4/9/12 - S3** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Benzo(a)pyrene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Benzo(b)fluoranthene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Benzo(g,h,i)perylene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Benzo(k)fluoranthene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Chrysene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Dibenzo(a,h)anthracene	ND		ug/L	0.066	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Fluoranthene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Fluorene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Indeno(1,2,3-cd)pyrene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Naphthalene	0.10		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Phenanthrene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Pyrene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2-Methylnapthalene-d10 (S)	55.4		%	29-112	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2
Fluoranthene-d10 (S)	36	3	%	45-130	8270 SIM	4/11/12	GEC	4/12/12 15:15	SAS	A2

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452005** Date Collected: 4/9/2012 15:05 Matrix: Water

Sample ID: **TW-2 - 4/9/12 - S2** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/L	10.0	SW846 8260B			4/11/12 13:19	MES	A
Benzene	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Bromochloromethane	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Bromodichloromethane	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Bromoform	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Bromomethane	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
2-Butanone	ND		ug/L	10.0	SW846 8260B			4/11/12 13:19	MES	A
Carbon Disulfide	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Carbon Tetrachloride	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Chlorobenzene	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Chlorodibromomethane	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Chloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Chloroform	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Chloromethane	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
1,2-Dibromo-3-chloropropane	ND		ug/L	7.0	SW846 8260B			4/11/12 13:19	MES	A
1,2-Dibromoethane	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
1,2-Dichlorobenzene	ND		ug/L	5.0	SW846 8260B			4/12/12 15:13	TMP	B
1,3-Dichlorobenzene	ND		ug/L	5.0	SW846 8260B			4/12/12 15:13	TMP	B
1,4-Dichlorobenzene	ND		ug/L	5.0	SW846 8260B			4/12/12 15:13	TMP	B
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
cis-1,2-Dichloroethene	1.6		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
1,2-Dichloropropane	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
cis-1,3-Dichloropropene	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
trans-1,3-Dichloropropene	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
2-Hexanone	ND		ug/L	5.0	SW846 8260B			4/11/12 13:19	MES	A
4-Methyl-2-Pentanone(MIBK)	ND		ug/L	5.0	SW846 8260B			4/11/12 13:19	MES	A
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Styrene	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Tetrachloroethene	252		ug/L	5.0	SW846 8260B			4/12/12 15:13	TMP	B
Toluene	2.2		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Total Xylenes	ND		ug/L	3.0	SW846 8260B			4/11/12 13:19	MES	A
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
1,1,2-Trichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
Trichloroethene	2.1		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452005** Date Collected: 4/9/2012 15:05 Matrix: Water

Sample ID: **TW-2 - 4/9/12 - S2** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
o-Xylene	ND		ug/L	1.0	SW846 8260B			4/11/12 13:19	MES	A
mp-Xylene	ND		ug/L	2.0	SW846 8260B			4/11/12 13:19	MES	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	106		%	62-133	SW846 8260B			4/11/12 13:19	MES	A
4-Bromofluorobenzene (S)	83		%	79-114	SW846 8260B			4/11/12 13:19	MES	A
Dibromofluoromethane (S)	109		%	78-116	SW846 8260B			4/11/12 13:19	MES	A
Toluene-d8 (S)	108		%	76-127	SW846 8260B			4/11/12 13:19	MES	A
1,2-Dichloroethane-d4 (S)	93.3		%	62-133	SW846 8260B			4/12/12 15:13	TMP	B
4-Bromofluorobenzene (S)	86		%	79-114	SW846 8260B			4/12/12 15:13	TMP	B
Dibromofluoromethane (S)	90.3		%	78-116	SW846 8260B			4/12/12 15:13	TMP	B
Toluene-d8 (S)	95.2		%	76-127	SW846 8260B			4/12/12 15:13	TMP	B
Library Search - Volatiles										
Propene	7.4	J N	ug/L		SW846 8260B			4/11/12 13:19	MES	A

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452006** Date Collected: 4/9/2012 15:10 Matrix: Water

Sample ID: **TW-2 - 4/9/12 - S2** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
Acenaphthene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Acenaphthylene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Anthracene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Benzo(a)anthracene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Benzo(a)pyrene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Benzo(b)fluoranthene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Benzo(g,h,i)perylene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Benzo(k)fluoranthene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
4-Bromophenyl-phenylether	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Butylbenzylphthalate	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Carbazole	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
4-Chloro-3-methylphenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
4-Chloroaniline	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
bis(2-Chloroethoxy)methane	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
bis(2-Chloroisopropyl)ether	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2-Chloronaphthalene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2-Chlorophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
4-Chlorophenyl-phenylether	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Chrysene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
mp-Cresol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
o-Cresol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Di-n-Butylphthalate	8.2		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Di-n-Octylphthalate	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Dibenzo(a,h)anthracene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Dibenzofuran	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
3,3-Dichlorobenzidine	ND		ug/L	15.1	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2,4-Dichlorophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Diethylphthalate	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2,4-Dimethylphenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Dimethylphthalate	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2,4-Dinitrophenol	ND		ug/L	15.1	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2,4-Dinitrotoluene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2,6-Dinitrotoluene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
bis(2-Ethylhexyl)phthalate	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Fluoranthene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Fluorene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Hexachlorobenzene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Hexachlorobutadiene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Hexachlorocyclopentadiene	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Hexachloroethane	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452006** Date Collected: 4/9/2012 15:10 Matrix: Water

Sample ID: **TW-2 - 4/9/12 - S2** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Indeno(1,2,3-cd)pyrene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Isophorone	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2-Methyl-4,6-dinitrophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2-Methylnaphthalene	ND		ug/L	1.9	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Naphthalene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2-Nitroaniline	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
3-Nitroaniline	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
4-Nitroaniline	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Nitrobenzene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2-Nitrophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
4-Nitrophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
N-Nitroso-di-n-propylamine	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
N-Nitrosodiphenylamine	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Pentachlorophenol	ND		ug/L	15.1	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Phenanthrene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Phenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Pyrene	ND		ug/L	1.4	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
1,2,4-Trichlorobenzene	ND		ug/L	2.8	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2,4,5-Trichlorophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2,4,6-Trichlorophenol	ND		ug/L	7.5	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Library Search - SemiVolatiles										
Tetrachloroethylene	72.6	J N	ug/L		SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	65.1		%	40-125	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2-Fluorobiphenyl (S)	55.9		%	50-110	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
2-Fluorophenol (S)	34.2		%	20-75	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Nitrobenzene-d5 (S)	68.8		%	40-110	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Phenol-d5 (S)	22		%	13-49	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
Terphenyl-d14 (S)	46.1	4	%	50-122	SW846 8270D	4/11/12	GEC	4/11/12 23:34	CGS	A1
SEMIVOLATILE SIM										
Acenaphthene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Acenaphthylene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Anthracene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Benzo(a)anthracene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Benzo(a)pyrene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Benzo(b)fluoranthene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Benzo(g,h,i)perylene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Benzo(k)fluoranthene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452006** Date Collected: 4/9/2012 15:10 Matrix: Water

Sample ID: **TW-2 - 4/9/12 - S2** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Chrysene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Dibenzo(a,h)anthracene	ND		ug/L	0.066	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Fluoranthene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Fluorene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Indeno(1,2,3-cd)pyrene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Naphthalene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Phenanthrene	0.17		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Pyrene	ND		ug/L	0.094	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2-Methylnapthalene-d10 (S)	50.9		%	29-112	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2
Fluoranthene-d10 (S)	51.4		%	45-130	8270 SIM	4/11/12	GEC	4/12/12 15:44	SAS	A2

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452007** Date Collected: 4/10/2012 19:00 Matrix: Water

Sample ID: **Trip Blank** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acetone	ND		ug/L	10.0	SW846 8260B			4/11/12 11:29	MES	A
Benzene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Bromochloromethane	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Bromodichloromethane	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Bromoform	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Bromomethane	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
2-Butanone	ND		ug/L	10.0	SW846 8260B			4/11/12 11:29	MES	A
Carbon Disulfide	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Carbon Tetrachloride	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Chlorobenzene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Chlorodibromomethane	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Chloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Chloroform	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Chloromethane	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
1,2-Dibromo-3-chloropropane	ND		ug/L	7.0	SW846 8260B			4/11/12 11:29	MES	A
1,2-Dibromoethane	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
1,2-Dichlorobenzene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
1,3-Dichlorobenzene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
1,4-Dichlorobenzene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
1,1-Dichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
1,2-Dichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
1,1-Dichloroethene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
cis-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
trans-1,2-Dichloroethene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
1,2-Dichloropropane	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
cis-1,3-Dichloropropene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
trans-1,3-Dichloropropene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
2-Hexanone	ND		ug/L	5.0	SW846 8260B			4/11/12 11:29	MES	A
4-Methyl-2-Pentanone(MIBK)	ND		ug/L	5.0	SW846 8260B			4/11/12 11:29	MES	A
Methylene Chloride	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Styrene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Tetrachloroethene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Toluene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Total Xylenes	ND		ug/L	3.0	SW846 8260B			4/11/12 11:29	MES	A
1,1,1-Trichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
1,1,2-Trichloroethane	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
Trichloroethene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961452 52-01 Queens Blvd/12-0013

Lab ID: **9961452007** Date Collected: 4/10/2012 19:00 Matrix: Water

Sample ID: **Trip Blank** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Vinyl Chloride	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
o-Xylene	ND		ug/L	1.0	SW846 8260B			4/11/12 11:29	MES	A
mp-Xylene	ND		ug/L	2.0	SW846 8260B			4/11/12 11:29	MES	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	111		%	62-133	SW846 8260B			4/11/12 11:29	MES	A
4-Bromofluorobenzene (S)	83.4		%	79-114	SW846 8260B			4/11/12 11:29	MES	A
Dibromofluoromethane (S)	108		%	78-116	SW846 8260B			4/11/12 11:29	MES	A
Toluene-d8 (S)	112		%	76-127	SW846 8260B			4/11/12 11:29	MES	A

LIBRARY SEARCH - VOLATILES

No TIC's Detected	.				Lib Search VOC			4/11/12 11:29	CPK	A

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9961452 52-01 Queens Blvd/12-0013

PARAMETER QUALIFIERS\FLAGS

[1] The surrogate Fluoranthene-d10 for method 8270 SIM was outside of control limits. The % Recovery was reported as 34.7 and the control limits were 45 to 130. This result was reported at a dilution of 1.

[2] The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 41.8 and the control limits were 50 to 122. This result was reported at a dilution of 1.

[3] The surrogate Fluoranthene-d10 for method 8270 SIM was outside of control limits. The % Recovery was reported as 36 and the control limits were 45 to 130. This result was reported at a dilution of 1.

[4] The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 46.1 and the control limits were 50 to 122. This result was reported at a dilution of 1.

APPENDIX J

LABORATORY DATA DELIVERABLES FOR SOIL VAPOR ANALYTICAL DATA

(CD-ROM)

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

April 12, 2012

Ms. Francesca Boutin
Athenica Environmental Service

Certificate of Analysis

Project Name:	**Queens Blvd**	Workorder:	**9961493**
Purchase Order:		Workorder ID:	**12-0013/52-01 Queens Blvd.**

Dear Ms. Boutin,

Enclosed are the analytical results for samples received by the laboratory on Tuesday, April 10, 2012.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Tonya Hironimus (Project Coordinator) or Anna G Milliken (Technical Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALS' NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

CC: Mr. Basim Altemimi, Mr. Jeffrey Strykowski, Mr. William Silveri, Ms. Ela Eren, Ms. Ela Eren

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

SAMPLE SUMMARY

Workorder: 9961493 12-0013/52-01 Queens Blvd. Discard Date: 04/26/2012

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9961493001	SV-1	NY Air	4/9/12 14:09	4/10/12 19:00	William Silveri
9961493002	SV-2	NY Air	4/9/12 14:20	4/10/12 19:00	William Silveri
9961493003	SV-3	NY Air	4/9/12 14:24	4/10/12 19:00	William Silveri

Workorder Comments:

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as “analyze immediately” require analysis within 15 minutes of collection. Any “analyze immediately” parameters not listed under the header “Field Parameters” are performed in the laboratory and are therefore analyzed out of hold time.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961493 12-0013/52-01 Queens Blvd.

Lab ID: **9961493001** Date Collected: 4/9/2012 14:09 Matrix: NY Air

Sample ID: **SV-1** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS @ STP										
Acetone	82		ug/m3	0.5	TO-15			4/12/12 09:29	ECB	A
Benzene	2		ug/m3	0.6	TO-15			4/12/12 09:29	ECB	A
Bromomethane	ND		ug/m3	0.8	TO-15			4/12/12 09:29	ECB	A
2-Butanone	8		ug/m3	0.6	TO-15			4/12/12 09:29	ECB	A
Carbon Tetrachloride	ND		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
Chlorobenzene	ND		ug/m3	0.9	TO-15			4/12/12 09:29	ECB	A
Chloroethane	ND		ug/m3	0.5	TO-15			4/12/12 09:29	ECB	A
Chloroform	ND		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
Chloromethane	0.9		ug/m3	0.4	TO-15			4/12/12 09:29	ECB	A
Cyclohexane	0.7		ug/m3	0.7	TO-15			4/12/12 09:29	ECB	A
1,2-Dibromoethane	ND		ug/m3	2	TO-15			4/12/12 09:29	ECB	A
1,2-Dichlorobenzene	ND		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
1,3-Dichlorobenzene	ND		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
1,4-Dichlorobenzene	ND		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
Dichlorodifluoromethane	4		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
1,1-Dichloroethane	ND		ug/m3	0.8	TO-15			4/12/12 09:29	ECB	A
1,2-Dichloroethane	ND		ug/m3	0.8	TO-15			4/12/12 09:29	ECB	A
1,1-Dichloroethene	ND		ug/m3	0.8	TO-15			4/12/12 09:29	ECB	A
cis-1,2-Dichloroethene	2		ug/m3	0.8	TO-15			4/12/12 09:29	ECB	A
1,2-Dichloropropane	ND		ug/m3	0.9	TO-15			4/12/12 09:29	ECB	A
cis-1,3-Dichloropropene	ND		ug/m3	0.9	TO-15			4/12/12 09:29	ECB	A
trans-1,3-Dichloropropene	ND		ug/m3	0.9	TO-15			4/12/12 09:29	ECB	A
Ethylbenzene	1		ug/m3	0.9	TO-15			4/12/12 09:29	ECB	A
Freon 113	ND		ug/m3	2	TO-15			4/12/12 09:29	ECB	A
Heptane	1		ug/m3	0.8	TO-15			4/12/12 09:29	ECB	A
Hexachlorobutadiene	ND		ug/m3	2	TO-15			4/12/12 09:29	ECB	A
Hexane	4		ug/m3	0.7	TO-15			4/12/12 09:29	ECB	A
Isopropylbenzene	ND		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
Methyl t-Butyl Ether	1		ug/m3	0.7	TO-15			4/12/12 09:29	ECB	A
4-Methyl-2-Pentanone(MIBK)	1		ug/m3	0.8	TO-15			4/12/12 09:29	ECB	A
Methylene Chloride	6	1	ug/m3	0.7	TO-15			4/12/12 09:29	ECB	A
Styrene	ND		ug/m3	0.8	TO-15			4/12/12 09:29	ECB	A
1,1,2,2-Tetrachloroethane	ND		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
Tetrachloroethene	15		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
Toluene	6		ug/m3	0.8	TO-15			4/12/12 09:29	ECB	A
1,2,4-Trichlorobenzene	ND		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
1,1,1-Trichloroethane	ND		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
1,1,2-Trichloroethane	ND		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
Trichloroethene	ND		ug/m3	1	TO-15			4/12/12 09:29	ECB	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961493 12-0013/52-01 Queens Blvd.

Lab ID: **9961493001** Date Collected: 4/9/2012 14:09 Matrix: NY Air

Sample ID: **SV-1** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Trichlorofluoromethane	1		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
1,2,4-Trimethylbenzene	2		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
1,3,5-Trimethylbenzene	1		ug/m3	1	TO-15			4/12/12 09:29	ECB	A
Vinyl Chloride	ND		ug/m3	0.5	TO-15			4/12/12 09:29	ECB	A
Acetone	34		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Benzene	0.60		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Bromomethane	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
2-Butanone	2.7		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Carbon Tetrachloride	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Chlorobenzene	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Chloroethane	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Chloroform	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Chloromethane	0.41		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Cyclohexane	0.21		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
1,2-Dibromoethane	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
1,2-Dichlorobenzene	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
1,3-Dichlorobenzene	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
1,4-Dichlorobenzene	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Dichlorodifluoromethane	0.74		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
1,1-Dichloroethane	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
1,2-Dichloroethane	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
1,1-Dichloroethene	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
cis-1,2-Dichloroethene	0.41		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
1,2-Dichloropropane	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
cis-1,3-Dichloropropene	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
trans-1,3-Dichloropropene	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Ethylbenzene	0.23		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Freon 113	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Heptane	0.34		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Hexachlorobutadiene	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Hexane	1.3		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Isopropylbenzene	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Methyl t-Butyl Ether	0.34		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
4-Methyl-2-Pentanone(MIBK)	0.26		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Methylene Chloride	1.9	1	ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Styrene	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
1,1,2,2-Tetrachloroethane	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Tetrachloroethene	2.2		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Toluene	1.6		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
1,2,4-Trichlorobenzene	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
1,1,1-Trichloroethane	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961493 12-0013/52-01 Queens Blvd.

Lab ID: **9961493001** Date Collected: 4/9/2012 14:09 Matrix: NY Air

Sample ID: **SV-1** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,2-Trichloroethane	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Trichloroethene	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Trichlorofluoromethane	0.23		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
1,2,4-Trimethylbenzene	0.48		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
1,3,5-Trimethylbenzene	0.28		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Vinyl Chloride	ND		ppbv	0.20	TO-15			4/12/12 09:29	ECB	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
4-Bromofluorobenzene (S)	98		%	70-130	TO-15			4/12/12 09:29	ECB	A

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961493 12-0013/52-01 Queens Blvd.

Lab ID: **9961493002** Date Collected: 4/9/2012 14:20 Matrix: NY Air

Sample ID: **SV-2** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS @ STP										
Acetone	250		ug/m3	2	TO-15			4/12/12 10:52	ECB	A
Benzene	5		ug/m3	3	TO-15			4/12/12 10:52	ECB	A
Bromomethane	ND		ug/m3	4	TO-15			4/12/12 10:52	ECB	A
2-Butanone	21		ug/m3	3	TO-15			4/12/12 10:52	ECB	A
Carbon Tetrachloride	ND		ug/m3	6	TO-15			4/12/12 10:52	ECB	A
Chlorobenzene	ND		ug/m3	5	TO-15			4/12/12 10:52	ECB	A
Chloroethane	ND		ug/m3	3	TO-15			4/12/12 10:52	ECB	A
Chloroform	ND		ug/m3	5	TO-15			4/12/12 10:52	ECB	A
Chloromethane	ND		ug/m3	2	TO-15			4/12/12 10:52	ECB	A
Cyclohexane	ND		ug/m3	3	TO-15			4/12/12 10:52	ECB	A
1,2-Dibromoethane	ND		ug/m3	8	TO-15			4/12/12 10:52	ECB	A
1,2-Dichlorobenzene	ND		ug/m3	6	TO-15			4/12/12 10:52	ECB	A
1,3-Dichlorobenzene	ND		ug/m3	6	TO-15			4/12/12 10:52	ECB	A
1,4-Dichlorobenzene	ND		ug/m3	6	TO-15			4/12/12 10:52	ECB	A
Dichlorodifluoromethane	ND		ug/m3	5	TO-15			4/12/12 10:52	ECB	A
1,1-Dichloroethane	ND		ug/m3	4	TO-15			4/12/12 10:52	ECB	A
1,2-Dichloroethane	ND		ug/m3	4	TO-15			4/12/12 10:52	ECB	A
1,1-Dichloroethene	ND		ug/m3	4	TO-15			4/12/12 10:52	ECB	A
cis-1,2-Dichloroethene	ND		ug/m3	4	TO-15			4/12/12 10:52	ECB	A
1,2-Dichloropropane	ND		ug/m3	5	TO-15			4/12/12 10:52	ECB	A
cis-1,3-Dichloropropene	ND		ug/m3	5	TO-15			4/12/12 10:52	ECB	A
trans-1,3-Dichloropropene	ND		ug/m3	5	TO-15			4/12/12 10:52	ECB	A
Ethylbenzene	5		ug/m3	4	TO-15			4/12/12 10:52	ECB	A
Freon 113	ND		ug/m3	8	TO-15			4/12/12 10:52	ECB	A
Heptane	ND		ug/m3	4	TO-15			4/12/12 10:52	ECB	A
Hexachlorobutadiene	ND		ug/m3	11	TO-15			4/12/12 10:52	ECB	A
Hexane	8		ug/m3	4	TO-15			4/12/12 10:52	ECB	A
Isopropylbenzene	ND		ug/m3	5	TO-15			4/12/12 10:52	ECB	A
Methyl t-Butyl Ether	ND		ug/m3	4	TO-15			4/12/12 10:52	ECB	A
4-Methyl-2-Pentanone(MIBK)	ND		ug/m3	4	TO-15			4/12/12 10:52	ECB	A
Methylene Chloride	6	1	ug/m3	3	TO-15			4/12/12 10:52	ECB	A
Styrene	ND		ug/m3	4	TO-15			4/12/12 10:52	ECB	A
1,1,2,2-Tetrachloroethane	ND		ug/m3	7	TO-15			4/12/12 10:52	ECB	A
Tetrachloroethene	83		ug/m3	7	TO-15			4/12/12 10:52	ECB	A
Toluene	21		ug/m3	4	TO-15			4/12/12 10:52	ECB	A
1,2,4-Trichlorobenzene	ND		ug/m3	7	TO-15			4/12/12 10:52	ECB	A
1,1,1-Trichloroethane	ND		ug/m3	5	TO-15			4/12/12 10:52	ECB	A
1,1,2-Trichloroethane	ND		ug/m3	5	TO-15			4/12/12 10:52	ECB	A
Trichloroethene	ND		ug/m3	5	TO-15			4/12/12 10:52	ECB	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961493 12-0013/52-01 Queens Blvd.

Lab ID: **9961493002** Date Collected: 4/9/2012 14:20 Matrix: NY Air

Sample ID: **SV-2** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Trichlorofluoromethane	ND		ug/m3	6	TO-15			4/12/12 10:52	ECB	A
1,2,4-Trimethylbenzene	10		ug/m3	5	TO-15			4/12/12 10:52	ECB	A
1,3,5-Trimethylbenzene	ND		ug/m3	5	TO-15			4/12/12 10:52	ECB	A
Vinyl Chloride	ND		ug/m3	3	TO-15			4/12/12 10:52	ECB	A
Acetone	110		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Benzene	1.5		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Bromomethane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
2-Butanone	7.1		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Carbon Tetrachloride	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Chlorobenzene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Chloroethane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Chloroform	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Chloromethane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Cyclohexane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
1,2-Dibromoethane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
1,2-Dichlorobenzene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
1,3-Dichlorobenzene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
1,4-Dichlorobenzene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Dichlorodifluoromethane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
1,1-Dichloroethane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
1,2-Dichloroethane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
1,1-Dichloroethene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
cis-1,2-Dichloroethene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
1,2-Dichloropropane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
cis-1,3-Dichloropropene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
trans-1,3-Dichloropropene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Ethylbenzene	1.0		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Freon 113	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Heptane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Hexachlorobutadiene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Hexane	2.4		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Isopropylbenzene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Methyl t-Butyl Ether	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
4-Methyl-2-Pentanone(MIBK)	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Methylene Chloride	1.7	1	ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Styrene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
1,1,2,2-Tetrachloroethane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Tetrachloroethene	12		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Toluene	5.5		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
1,2,4-Trichlorobenzene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
1,1,1-Trichloroethane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961493 12-0013/52-01 Queens Blvd.

Lab ID: **9961493002** Date Collected: 4/9/2012 14:20 Matrix: NY Air

Sample ID: **SV-2** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,2-Trichloroethane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Trichloroethene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Trichlorofluoromethane	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
1,2,4-Trimethylbenzene	2.1		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
1,3,5-Trimethylbenzene	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Vinyl Chloride	ND		ppbv	1.0	TO-15			4/12/12 10:52	ECB	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
4-Bromofluorobenzene (S)	99		%	70-130	TO-15			4/12/12 10:52	ECB	A

Sample Comments:

The reporting limits for the TO15 analytes were raised due to the dilution of the sample caused by the level of target and non-target compounds.

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961493 12-0013/52-01 Queens Blvd.

Lab ID: **9961493003** Date Collected: 4/9/2012 14:24 Matrix: NY Air

Sample ID: **SV-3** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS @ STP										
Acetone	210		ug/m3	5	TO-15			4/12/12 08:48	ECB	A
Benzene	4		ug/m3	0.6	TO-15			4/12/12 10:10	ECB	A
Bromomethane	ND		ug/m3	0.8	TO-15			4/12/12 10:10	ECB	A
2-Butanone	46		ug/m3	0.6	TO-15			4/12/12 10:10	ECB	A
Carbon Tetrachloride	ND		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
Chlorobenzene	ND		ug/m3	0.9	TO-15			4/12/12 10:10	ECB	A
Chloroethane	ND		ug/m3	0.5	TO-15			4/12/12 10:10	ECB	A
Chloroform	1		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
Chloromethane	ND		ug/m3	0.4	TO-15			4/12/12 10:10	ECB	A
Cyclohexane	3		ug/m3	0.7	TO-15			4/12/12 10:10	ECB	A
1,2-Dibromoethane	ND		ug/m3	2	TO-15			4/12/12 10:10	ECB	A
1,2-Dichlorobenzene	ND		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
1,3-Dichlorobenzene	6		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
1,4-Dichlorobenzene	ND		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
Dichlorodifluoromethane	2		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
1,1-Dichloroethane	ND		ug/m3	0.8	TO-15			4/12/12 10:10	ECB	A
1,2-Dichloroethane	ND		ug/m3	0.8	TO-15			4/12/12 10:10	ECB	A
1,1-Dichloroethene	ND		ug/m3	0.8	TO-15			4/12/12 10:10	ECB	A
cis-1,2-Dichloroethene	ND		ug/m3	0.8	TO-15			4/12/12 10:10	ECB	A
1,2-Dichloropropane	ND		ug/m3	0.9	TO-15			4/12/12 10:10	ECB	A
cis-1,3-Dichloropropene	ND		ug/m3	0.9	TO-15			4/12/12 10:10	ECB	A
trans-1,3-Dichloropropene	ND		ug/m3	0.9	TO-15			4/12/12 10:10	ECB	A
Ethylbenzene	5		ug/m3	0.9	TO-15			4/12/12 10:10	ECB	A
Freon 113	ND		ug/m3	2	TO-15			4/12/12 10:10	ECB	A
Heptane	4		ug/m3	0.8	TO-15			4/12/12 10:10	ECB	A
Hexachlorobutadiene	ND		ug/m3	2	TO-15			4/12/12 10:10	ECB	A
Hexane	8		ug/m3	0.7	TO-15			4/12/12 10:10	ECB	A
Isopropylbenzene	ND		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
Methyl t-Butyl Ether	10		ug/m3	0.7	TO-15			4/12/12 10:10	ECB	A
4-Methyl-2-Pentanone(MIBK)	4		ug/m3	0.8	TO-15			4/12/12 10:10	ECB	A
Methylene Chloride	2	1	ug/m3	0.7	TO-15			4/12/12 10:10	ECB	A
Styrene	ND		ug/m3	0.8	TO-15			4/12/12 10:10	ECB	A
1,1,2,2-Tetrachloroethane	ND		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
Tetrachloroethene	21		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
Toluene	22		ug/m3	0.8	TO-15			4/12/12 10:10	ECB	A
1,2,4-Trichlorobenzene	ND		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
1,1,1-Trichloroethane	ND		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
1,1,2-Trichloroethane	ND		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
Trichloroethene	1		ug/m3	1	TO-15			4/12/12 10:10	ECB	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961493 12-0013/52-01 Queens Blvd.

Lab ID: **9961493003** Date Collected: 4/9/2012 14:24 Matrix: NY Air

Sample ID: **SV-3** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Trichlorofluoromethane	1		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
1,2,4-Trimethylbenzene	11		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
1,3,5-Trimethylbenzene	3		ug/m3	1	TO-15			4/12/12 10:10	ECB	A
Vinyl Chloride	ND		ug/m3	0.5	TO-15			4/12/12 10:10	ECB	A
Acetone	90		ppbv	2.0	TO-15			4/12/12 08:48	ECB	A
Benzene	1.2		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Bromomethane	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
2-Butanone	16		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Carbon Tetrachloride	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Chlorobenzene	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Chloroethane	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Chloroform	0.22		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Chloromethane	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Cyclohexane	0.75		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
1,2-Dibromoethane	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
1,2-Dichlorobenzene	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
1,3-Dichlorobenzene	0.93		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
1,4-Dichlorobenzene	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Dichlorodifluoromethane	0.40		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
1,1-Dichloroethane	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
1,2-Dichloroethane	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
1,1-Dichloroethene	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
cis-1,2-Dichloroethene	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
1,2-Dichloropropane	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
cis-1,3-Dichloropropene	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
trans-1,3-Dichloropropene	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Ethylbenzene	1.1		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Freon 113	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Heptane	1.0		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Hexachlorobutadiene	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Hexane	2.2		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Isopropylbenzene	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Methyl t-Butyl Ether	2.7		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
4-Methyl-2-Pentanone(MIBK)	0.95		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Methylene Chloride	0.64	1	ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Styrene	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
1,1,2,2-Tetrachloroethane	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Tetrachloroethene	3.1		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Toluene	5.8		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
1,2,4-Trichlorobenzene	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
1,1,1-Trichloroethane	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9961493 12-0013/52-01 Queens Blvd.

Lab ID: **9961493003** Date Collected: 4/9/2012 14:24 Matrix: NY Air

Sample ID: **SV-3** Date Received: 4/10/2012 19:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,2-Trichloroethane	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Trichloroethene	0.22		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Trichlorofluoromethane	0.20		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
1,2,4-Trimethylbenzene	2.2		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
1,3,5-Trimethylbenzene	0.52		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Vinyl Chloride	ND		ppbv	0.20	TO-15			4/12/12 10:10	ECB	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
4-Bromofluorobenzene (S)	98		%	70-130	TO-15			4/12/12 08:48	ECB	A
4-Bromofluorobenzene (S)	97		%	70-130	TO-15			4/12/12 10:10	ECB	A

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9961493 12-0013/52-01 Queens Blvd.

PARAMETER QUALIFIERS\FLAGS

[1] The QC sample type LCS for method TO-15 was outside the control limits for the analyte Methylene Chloride. The % Recovery was reported as 145 and the control limits were 60 to 140.

52-01 Queens Blvd

ALS Environmental | Analytical Laboratory Services, Inc.

SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057

AIR ANALYSIS
CHAIN-OF-CUSTODY/FIELD TEST DATA SHEET

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER. INSTRUCTIONS ON THE BACK.

COC ALS *9961493*

Page of

1. CLIENT INFORMATION

Client Name/Address: Advance Environmental, 45-09 Greenpoint Avenue

Contact: Bill Silures

Phone#: 12-0013

Project Name/#: (718) 784-7900

Bill To:

TAT: Normal Standard TAT is 10-12 business days. Rush 3 TAT Subject to ALSI approval and surcharges.

Date Required: Approved By:

Email? Y Wsilvers@advance.com

Fax? Y No.:

2. ANALYSES/METHOD REQUESTED

No.	TO-15 Analysis:	STD LIST	UST LIST	OTHER
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

✓ APPROPRIATE TEST CODE/ANALYTE LIST:

3. LABORATORY CANISTER CERTIFIED BY:

ALS Analyst Signature: Erin Boyd

CANISTERS PREPARED BY:

Name: Erin Boyd

Title: Srlms Analyst

Custody Sealed Date/Time: 4/4/12 1545

Date Shipped to Client: 4/4/12

Custody Seal #(s): 4044445 & 04445

Courier/Tracking #:

RECEIVING INFORMATION:

COC Complete/Accurate? Y N Initial

Labels Complete/Accurate?

Cont. in Good Cond.?

Custody Seals Present? NA

(if present) Seals Intact?

Returned in ≤ 15 days?

Custody Seal #(s):

4. FIELD DATA SHEET

SAMPLE INFORMATION FOR TO-15

	Sample Description/Location (as it will appear on the lab report)	Sample Type- Choose one: *IA-Indoor air *AS-ambient soil *V-vapor *SB-sub-slab	Sample Date	Start Time	Stop Time	Temp Deg C
1	SV-1	V	4/9/12	1339	1409	
2	SV-2	V	/	1350	1420	
3	SV-3	V	V	1354	1424	
4						
5						
6						
7						
8						
9						
10						

TO-15 FIELD DATA

UST LIST	1L	6L	Canister No.	Flow Controller No.	Canister Pressure ("Hg) Start	Canister Pressure ("Hg) Stop
		X	2299	7321928	-30	-1
		X	10075	7286512	—	—
		X	10061	7321533	-30	-1

LABORATORY RECORD

	Canister Certification File	Canister Pressure ("Hg) Out	Canister Pressure ("Hg) In	Flow Controller Setpoint (mL/min)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

5. SAMPLED BY (Please Print): Williams/Silures E. Boutin

LOGGED BY (signature):

REVIEWED BY (signature):

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 Advance Environmental	4/10/12	9:24	2 ALS	4-10-12	0921
3	4-10	1736	4	4/10	1736
5	4/10	1900	6	4/10/12	1900
7			8		
9			10		

6. PROJECT INFORMATION

Data Deliverables: ☐ Standard ☐ DOD ☐ Other ☐ CLP-like ☐ TO-15

EDDs-Format Type:

ALSI Field Services: ☐ Pickup ☐ Labor

Other:

State Samples Collected In: ☐ NY ☐ NJ ☐ PA ☐ NC ☐ other

Phone: 1-717-944-5541 ALS ENVIRONMENTAL SHIPPING ADDRESS: 34 DOGWOOD LANE, MIDDLETOWN, PA 17057

Rev 03Mar2011

ALS-Middletown

TO-15 Sample Receipt Checklist

Client ID: Athenica
Horizon WO#: 9961493
Sample Delivery Group ID:
Log In By/Date: 4/11/12 Kelli Snow
(signature) Kelli Snow
Number of Shipping containers received:

Project Name/#: 12-0013/52-01 Queens Blvd.
Date/Time received: 4/10/12 1900
Received By: Steve Smith
Project Manager Review (date)
(signature)
Courier: ALS

Circle the response below as appropriate.

1.	Did kit(s) come with a shipping slip (airbill, etc.)?	YES	(NO)	NA
	If YES, enter airbill numbers:			
Shipping Container Information:				
2.	Were shipping containers received without signs of tampering?	(YES)	NO	NA
	Comments			
3.	Were custody seals present and intact?	YES	(NO)	NA
4.	Were custody seals numbers present?	YES	(NO)	NA
	List Custody Seal Numbers:			
Sample Condition:				
5.	Were sample containers received intact without signs of tampering?	(YES)	NO	NA
	Comments			
Chain of Custody:				
6.	Did COC arrive with the samples?	(YES)	NO	NA
7.	Do sample ID/Sample Description(s) match samples submitted?	(YES)	NO	NA
8.	Is date and time of collection listed on the COC for all samples?	(YES)	NO	NA
9.	Is identification of sampler on COC?	(YES)	NO	NA
10.	Are requested test method(s) on COC?	(YES)	NO	NA
11.	Are necessary signatures on COC?	(YES)	NO	NA
12.	Was Internal COC initiated? (should always be YES)	YES	(NO)	NA
Sample Integrity Usability:				
13.	Do sample containers match the COC?	(YES)	NO	NA
14.	Were sample canisters received within 15 days of shipment to client	(YES)	NO	NA

Anomalies or Non-Conformances:

Use provided by winner via email 4/11/12
Compounds crossed off, either are not analyzed or can't in NY by ALS.
TMH 4/12/12

Table C1. NYSDOH 2003: Study of volatile organic chemicals in air of fuel oil heated homes

All results are micrograms per cubic meter (mcg/m³).

Compound	INDOOR AIR												
	ND	ND(%)	N	Mean*	Min	25th	Median	75th	90th	95th	99th	Max	Upper F
1,1,2,2-TETRACHLOROETHANE	386	96.5%	400	0.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.8	2.7	0.4
1,1,2-TRICHLOROETHANE	384	96.0%	400	0.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	1	6.2	0.4
1,1-DICHLOROETHANE	396	99.0%	400	0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.4	4.4	0.4
1,1-DICHLOROETHENE	373	93.3%	400	1.4	<0.25	<0.25	<0.25	<0.25	<0.25	0.7	6.3	430	0.4
1,2,4-TRICHLOROBENZENE	319	79.8%	400	1.3	<0.25	<0.25	<0.25	<0.25	3.4	6.3	26	37	0.5
1,2,4-TRIMETHYLBENZENE	49	12.3%	400	4.8	<0.25	0.7	1.9	4.3	9.5	18	35	260	9.8
1,2-DICHLOROBENZENE	315	78.8%	400	0.3	<0.25	<0.25	<0.25	<0.25	0.7	1	2.3	4.9	0.5
1,2-DICHLOROETHANE	394	98.5%	400	0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.4	4.9	0.4
1,3,5-TRIMETHYLBENZENE	100	25.0%	400	2	<0.25	0.3	0.6	1.7	3.6	6.5	25	97	3.9
1,4-DICHLOROBENZENE	266	66.5%	400	3.7	<0.25	<0.25	<0.25	0.5	1.3	2.6	24	770	1.2
2,2,4-TRIMETHYLPENTANE	129	32.3%	400	3.8	<0.25	<0.25	0.7	2.2	7.5	16	50	210	5.2
ACETONE	12	5.3%	227	42	<0.25	9.9	21	52	110	140	200	690	115
ALPHA-PINENE	79	19.8%	400	5.8	<0.25	0.3	1.5	4.4	14	27	63	91	10
BENZENE	308	77.0%	400	0.3	<0.25	<0.25	<0.25	<0.25	0.6	0.9	3.2	23	0.5
BROMOMETHANE	201	50.3%	400	0.4	<0.25	<0.25	<0.25	0.6	0.8	1.1	3.2	4.2	1.3
CARBON TETRACHLORIDE	361	90.3%	400	0.2	<0.25	<0.25	<0.25	<0.25	<0.25	0.6	0.9	4.5	0.4
CHLOROETHANE	212	53.0%	400	0.9	<0.25	<0.25	<0.25	0.5	1.4	4.6	13	25	1.2
CHLOROFORM	364	91.0%	400	0.3	<0.25	<0.25	<0.25	<0.25	<0.25	1.2	4.6	7.4	0.4
CHLOROMETHANE	388	97.0%	400	0.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	2.1	3.5	0.4
CIS-1,2-DICHLOROETHENE	125	31.3%	400	6	<0.25	<0.25	0.8	2.6	8.1	19	88	510	6.3
CIS-1,3-DICHLOROPROPENE	215	53.8%	400	7.9	<0.25	<0.25	<0.25	4.1	15	26	180	300	10
CYCLOHEXANE	3	1.3%	227	610	<0.25	27	160	540	1400	3000	6900	16000	1300
DICHLORODIFLUOROMETHANE	58	14.5%	400	3.7	<0.25	0.4	1	2.8	7.3	13	26	340	6.4
ETHYL ALCOHOL													
ETHYLBENZENE													

(Continued)

Table C1. NYSDOH 2003: Study of volatile organic chemicals in air of fuel oil heated homes -- Continued

All results are micrograms per cubic meter (mcg/m^3).

Compound	INDOOR AIR												
	ND	ND(%)	N	Mean*	Min	25th	Median	75th	90th	95th	99th	Max	Upper F
HEXACHLORO-1,3-BUTADIENE	304	76.0%	400	1.8	<0.25	<0.25	<0.25	<0.25	4.6	11	29	51	0.5
ISO-OCTANE	130	32.5%	400	5.5	<0.25	<0.25	0.6	2.1	6.5	14	63	870	5.0
ISOPROPYLBENZENE	259	64.8%	400	0.4	<0.25	<0.25	<0.25	0.4	0.9	1.3	2.7	27	0.8
M,P-XYLENE	54	13.5%	400	5.9	<0.25	0.5	1.5	4.6	12	21	46	550	11
METHYL ETHYL KETONE	102	44.9%	227	1.2	<0.25	<0.25	0.3	0.9	2.2	5.3	16	36	1.9
METHYL ISOBUTYL KETONE	112	28.0%	400	4.9	<0.25	<0.25	0.7	1.9	6.4	12	32	620	4.5
METHYLCYCLOHEXANE	197	86.8%	227	0.6	<0.25	<0.25	<0.25	<0.25	0.4	1.1	5.3	66	0.4
METHYLMETHACRYLATE	69	30.4%	227	13	<0.25	<0.25	0.8	5.6	26	71	230	340	14
METHYL-tert-BUTYL ETHER	40	10.0%	400	7.7	<0.25	1.2	2.7	6.6	16	31	83	190	15
n-DECANE	73	18.3%	400	5.6	<0.25	0.4	1.5	3.9	11	19	61	420	9.2
n-DODECANE	50	12.5%	400	9.5	<0.25	0.6	1.6	5.9	18	35	93	950	14
n-HEXANE	65	16.3%	400	3.8	<0.25	0.4	1.3	3.4	8.8	13	50	89	7.9
n-NONANE	206	51.5%	400	0.8	<0.25	<0.25	<0.25	0.7	1.7	2.8	8.2	41	1.5
n-PROPYLBENZENE	59	14.8%	400	5.4	<0.25	0.6	1.8	5	12	20	61	290	12
n-UNDECANE	225	56.3%	400	0.5	<0.25	<0.25	<0.25	0.6	1.2	1.7	4.1	11	1.2
o-XYLENE	175	43.8%	400	0.8	<0.25	<0.25	0.3	0.6	1.3	2.3	6.2	50	1.4
sec-BUTYLBENZENE	187	46.8%	400	1.3	<0.25	<0.25	0.3	1.1	2.9	4.1	20	51	2.5
TETRACHLOROETHENE	164	72.2%	227	2.1	<0.25	<0.25	<0.25	0.4	3.3	9.4	19	180	0.8
tert-BUTYLBENZENE	323	80.8%	400	0.4	<0.25	<0.25	<0.25	<0.25	0.5	0.8	7.4	25	0.5
TETRAHYDROFURAN	29	6.5%	400	26	<0.25	3.5	9.8	25	58	110	300	610	57
TOLUENE	400	100.0%	400	0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NC
TRANS-1,3-DICHLOROPROPENE	400	100.0%	400	0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NC
TRICHLOROETHENE	323	80.8%	400	0.4	<0.25	<0.25	<0.25	<0.25	0.5	0.8	7.4	25	0.5
TRICHLOROFLUOROMETHANE	42	10.5%	400	0.4	<0.25	<0.25	<0.25	0.4	1.1	1.8	3.5	190	0.4
VINYL CHLORIDE	387	96.8%	400	0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.8	1	0.4

(Continued)

Table C1. NYSDOH 2003: Study of volatile organic chemicals in air of fuel oil heated homes -- Continued

All results are micrograms per cubic meter (mcg/m^3).

Compound	OUTDOOR AIR												
	ND	ND(%)	N	Mean*	Min	25th	Median	75th	90th	95th	99th	Max	Upper F
1,1,2,2-TETRACHLOROETHANE	199	99.5%	200	0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.5	0.4
1,1,2-TRICHLOROETHANE	199	99.5%	200	0.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	6.3	0.3
1,1-DICHLOROETHANE	200	100.0%	200	0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NC
1,1-DICHLOROETHENE	199	99.5%	200	0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	1	0.4
1,2,4-TRICHLOROBENZENE	168	84.0%	200	0.8	<0.25	<0.25	<0.25	2.3	4.8	12	21	21	0.4
1,2,4-TRIMETHYLBENZENE	109	54.5%	200	0.9	<0.25	<0.25	0.8	1.7	2.5	8.2	50	50	1.9
1,2-DICHLOROBENZENE	166	83.0%	200	0.2	<0.25	<0.25	<0.25	0.6	0.9	1.6	6.1	6.1	0.4
1,2-DICHLOROETHANE	199	99.5%	200	0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.3	0.3	0.4
1,2-DICHLOROPROPANE	196	98.0%	200	0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.3	0.4
1,2-DICHLOROTETRAFLUOROETHANE	169	84.5%	200	0.3	<0.25	<0.25	<0.25	<0.25	0.6	1.3	2.4	4.5	0.5
1,3,5-TRIMETHYLBENZENE	143	71.5%	200	0.3	<0.25	<0.25	<0.25	0.3	0.7	1	2.4	2.5	0.7
1,3-DICHLOROBENZENE	170	85.0%	200	0.2	<0.25	<0.25	<0.25	<0.25	0.6	0.9	1.8	7.1	0.5
1,4-DICHLOROBENZENE	164	82.0%	200	0.3	<0.25	<0.25	<0.25	<0.25	0.5	0.8	1.8	7.1	0.5
2,2,4-TRIMETHYLPENTANE	147	73.5%	200	0.5	<0.25	<0.25	<0.25	0.3	1	2	8.6	13	0.7
2,2-DIMETHYLBUTANE	131	65.5%	200	0.7	<0.25	<0.25	<0.25	0.4	1.6	3.8	24	65	0.8
ACETONE	7	6.1%	114	16	<0.25	3.4	6.4	14	44	58	170	200	30
ALPHA-PINENE	122	61.0%	200	0.9	<0.25	<0.25	<0.25	0.5	2	3.8	12	18	1.2
BENZENE	118	59.0%	200	0.9	<0.25	0.5	0.8	1.2	2.2	3.8	10	17	1.6
BROMOMETHANE	162	81.0%	200	0.4	<0.25	<0.25	<0.25	<0.25	0.5	0.9	3.1	27	0.5
CARBON TETRACHLORIDE	108	54.0%	200	0.4	<0.25	<0.25	<0.25	0.6	0.8	1	3.3	3.6	1.2
CHLOROBENZENE	200	100.0%	200	0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NC
CHLOROETHANE	188	94.0%	200	0.2	<0.25	<0.25	<0.25	<0.25	<0.25	0.4	0.7	1.4	0.4
CHLOROFORM	168	84.0%	200	0.2	<0.25	<0.25	<0.25	<0.25	0.4	0.5	0.8	1.3	0.5
CHLOROMETHANE	96	48.0%	200	1.3	<0.25	<0.25	0.9	1.8	3	4.6	16	43	2.9
CIS-1,2-DICHLOROETHENE	193	96.5%	200	0.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	1.8	2.7	0.4
CIS-1,3-DICHLOROPROPENE	195	97.5%	200	0.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	2.4	3.3	0.4
CYCLOHEXANE	137	68.5%	200	1.5	<0.25	<0.25	<0.25	0.4	1.3	3	16	170	0.9
DICHLORODIFLUOROMETHANE	108	54.0%	200	2.8	<0.25	<0.25	<0.25	4.2	7.5	11	23	38	10
ETHANOL	155	77.5%	200	3.9	<0.25	2.1	3.5	6.5	9.8	14	24	83	6.5
ETHYL ALCOHOL	1	0.9%	114	35	<0.25	3.3	6.9	16	31	220	610	930	34
ETHYLBENZENE	107	53.5%	200	0.8	<0.25	<0.25	<0.25	0.5	1.1	1.9	19	21	1.0
ETHYLCYCLOHEXANE	84	42.0%	200	0.4	<0.25	<0.25	<0.25	<0.25	0.5	1	3.1	4.1	1.0

(Continued)

Table C1. NYSDOH 2003: Study of volatile organic chemicals in air of fuel oil heated homes -- Continued

All results are micrograms per cubic meter (mcg/m^3).

Compound	OUTDOOR AIR												
	ND	ND(%)	N	Mean*	Min	25th	Median	75th	90th	95th	99th	Max	Upper F
HEXACHLORO-1,3-BUTADIENE	162	81.0%	200	1.2	<0.25	<0.25	<0.25	<0.25	2.3	7	20	27	0.5
ISO-OCTANE	139	69.5%	200	0.5	<0.25	<0.25	<0.25	0.3	0.9	2	7.5	11	0.7
ISOPROPYLBENZENE	182	91.0%	200	0.2	<0.25	<0.25	<0.25	<0.25	<0.25	0.4	0.7	0.9	0.4
M,P-XYLENE	110	55.0%	200	0.8	<0.25	<0.25	<0.25	0.5	1.4	3.1	17	20	1.0
METHYL ETHYL KETONE	81	37.0%	219	1.2	<0.25	0.3	0.5	1.1	2.6	5.3	18	180	2.5
METHYL ISOBUTYL KETONE	86	75.4%	114	0.8	<0.25	<0.25	<0.25	<0.25	0.9	2.9	21	24	0.5
METHYLCYCLOHEXANE	141	70.5%	200	0.5	<0.25	<0.25	<0.25	0.3	0.8	1.6	4.7	23	0.7
METHYLENE CHLORIDE	80	90.9%	88	0.3	<0.25	<0.25	<0.25	<0.25	0.5	0.9	1.7	2.5	0.6
METHYLMETHACRYLATE	110	96.5%	114	0.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	1.5	2.4	0.4
n-BUTYLBENZENE	53	46.5%	114	1	<0.25	<0.25	0.3	0.9	2.1	5.9	10	14	1.9
n-DECANE	174	87.9%	198	0.3	<0.25	<0.25	<0.25	<0.25	0.5	0.9	1.2	1.8	0.4
n-DODECANE	65	32.5%	200	1.3	<0.25	<0.25	0.8	2	2.6	3.6	8.5	20	4.7
n-HEPTANE	94	47.0%	200	2.2	<0.25	<0.25	0.5	1.9	4.5	7.6	27	89	4.5
n-HEXANE	119	59.8%	199	1.5	<0.25	<0.25	0.3	1.1	2.6	5.3	20	67	2.8
n-NONANE	79	39.5%	200	1.1	<0.25	<0.25	0.4	0.9	1.6	3.6	19	26	2.0
n-OCTANE	131	65.5%	200	0.4	<0.25	<0.25	<0.25	0.4	0.8	1.2	5.1	13	0.7
n-PROPYLBENZENE	112	56.0%	200	0.3	<0.25	<0.25	<0.25	0.3	0.7	1.2	3.1	8.6	0.7
n-UNDECANE	184	92.0%	200	0.2	<0.25	<0.25	<0.25	<0.25	<0.25	0.5	2	8	0.4
O-XYLENE	105	52.5%	200	0.6	<0.25	<0.25	<0.25	0.7	1.7	2.3	5.8	6.8	1.5
P-ETHYLTOLUENE	160	80.0%	200	0.2	<0.25	<0.25	<0.25	<0.25	0.4	0.5	1.2	3.8	0.5
sec-BUTYLBENZENE	158	79.0%	200	0.2	<0.25	<0.25	<0.25	<0.25	0.4	0.6	2.3	3.6	0.5
STYRENE	172	86.0%	200	0.4	<0.25	<0.25	<0.25	<0.25	0.5	0.6	2.3	3.6	0.4
tert-BUTYLBENZENE	172	86.0%	200	0.4	<0.25	<0.25	<0.25	<0.25	0.5	0.6	2.3	3.6	0.4
TETRACHLOROETHENE	143	71.5%	200	0.6	<0.25	<0.25	<0.25	0.3	0.8	1.6	12	20	0.7
TETRAHYDROFURAN	108	94.7%	114	0.3	<0.25	<0.25	<0.25	<0.25	<0.25	0.4	4	8.5	0.4
TOLUENE	122	61.0%	200	1.1	<0.25	<0.25	0.6	1.4	2.9	4.5	13	34	1.0
TRANS-1,3-DICHLOROPROPENE	200	100.0%	200	0.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NC
TRICHLOROETHENE	177	88.5%	200	0.2	<0.25	<0.25	<0.25	<0.25	0.3	0.5	1	1.3	0.4
TRICHLOROFLUOROMETHANE	70	35.0%	200	1.3	<0.25	<0.25	0.8	2	3.6	6.1	17	50	3.5
VINYL CHLORIDE	197	98.5%	200	0.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.4	4.8	0.4

ND = Number of non-detects

ND (%) = Percentage of total number in sample that are non-detect

N = Total number of samples

* Non-detects were estimated at 1/2 the detection limit to calculate the mean

Min; Max = minimum and maximum value detected

Upper F = Upper Fence = The upper fence is calculated as 1.5 times the interquartile range (difference between the 25th and 75th percentile values) above the 75th percentile value.

NC = Upper Fence not calculated. Compound not detected in any sample.