



Via E-Mail

January 28, 2016

Ms. Francine Gallegoe
New York State Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo NY 14203-2915

**Re: NYSDEC Spill No. 15-09926
Elmwood Regal Commercial Property
1959 Elmwood Avenue
Buffalo, NY**

Dear Ms. Gallegoe,

The purpose of this correspondence is to provide the New York State Department of Environmental Conservation (NYSDEC) with a summary of the recent events which lead to the assignment of Spill No. 15-09926 on January 5, 2016 at the above-referenced property (hereinafter referred to as the "Subject Property") (see **Figure 1**). Based upon the data presented herein, Apex Companies, LLC (Apex) respectfully submits that the spill incident should be closed as there is no new or ongoing release at the Subject Property and no previously undocumented risks to human health and the environment were identified by the NYSDEC associated with the Subject Property.

Property Background

The Subject Property is a former steel foundry (Atlas Steel Castings Corporation) that operated from 1912 to 1986. In 1986, Atlas Steel filed for bankruptcy. In 1992 the site was undergoing demolition and environmental assessment. The northern portion of the site contained an approximately 5-acre parcel that is described as the former Hartwell Street Landfill (NYSDEC Inactive Hazardous Waste Site No. 915030) and the entire subject site was investigated by the NYSDEC circa 1991 / 1992 (see **Attachment A**). As part of the work, multiple surface and subsurface soil samples were collected and analyzed for a wide-range of contaminant types including NYSDEC Target Compound List (TCL) volatile organic compound (VOCs), poly aromatic hydrocarbons (PAHs), pesticides, polychlorinated biphenyls (PCBs) and Target Analyte List (TAL) metals. The property sat idle until commercial development began circa 1996.

Tables 1 and 2 provide a summary of ranges of contaminants detected in the subsurface samples, as presented in the 1992 NYSDEC report. Soil Cleanup Objectives (SCOs), as presented in 6 NYCRR Part 375 – Subpart 375-6, are included in both summary tables to reflect current NYSDEC protocols and thresholds of concern with respect to allowable contaminant conditions associated with differing potential land uses.

The NYSDEC data indicates the following:

- No NYSDEC TCL pesticides or PCBs were detected in any of the subsurface soil samples;
- The only TCL VOC, detected at a very low concentration, well below any SCO, was chloroform (a likely field-decontamination artifact);
- Several PAHs were detected. Benzo(a)anthracene was detected at concentrations exceeding its respective NYSDEC commercial SCO; and, benzo(a)pyrene, benzo(b)fluoranthene and dibenzo(a,h)anthracene were detected at concentrations exceeding their respective Industrial SCOs; and,
- Cadmium and manganese were both detected at concentrations exceeding their respective Restricted Residential SCOs and below their Commercial SCOs; and, arsenic was detected at a concentration exceeding its Industrial SCO.

The NYSDEC report included the following conclusions and recommendations:

- *"Minimal possible threats to human health and the environment posed by the Hartwell Street Landfill site included direct dermal contact and indirect ingestion of contaminated shallow soils at the site. Contaminants detected (i.e., PAHs, heavy metals, etc.) are consistent with those expected based on the site's former heavy industrial use."*
- *"Any future action at the site should include consideration of the proposed future land use. Commercial and residential uses have been mentioned for the site."*
- *"In summary, proper closure under 6 NY Part 360 including an upgrading of the site's cover materials is recommended. Proper closure would alleviate contaminant migration and further reduce or eliminate any threats caused by the site."*

The Hartwell Street Landfill, and by extension the Subject Property, was included in a September 17, 2010 NYSDEC correspondence to the Clean Air Coalition of WNY which was prepared to provide a status of various NYSDEC "activities" in the vicinity of Botsford Place in the City of Buffalo (see **Attachment B**). With respect to the Hartwell Street Landfill, the NYSDEC letter states the following: *"In 1992, the Department completed a study of the landfill area (formerly Atlas Steel) which confirmed that site soils contained contaminants consistent with past industrial use of the area. However, the presence of hazardous waste posing a significant threat to human health and the environment was not identified at the site, and remedial action in this regard was deemed unnecessary. The area has now been re-developed as commercial property."*

Based upon the two NYSDEC documents discussed above, Apex submits the following:

- Contaminants, including PAHs and arsenic, associated with historic property uses, have been previously identified at the Subject Property. The presence of these contaminants represent impacts from historic site activities and do not represent current / on-going releases;
- The NYSDEC has acknowledged that it is appropriate to redevelop the Subject Property for commercial uses (e.g., the current and future property uses);
- As long as a cover cap is maintained, there is no completed or “completable” exposure pathway(s) for site users to come into contact with the impacted media; and,
- There is no current NYSDEC requirement(s) to remediate on-site fill / soils.

Recent Site Activities

On behalf of the general contractor (Pinnacle Reality Environmental Services) retained by the current operator / developer of the property, the firm of Hazard Evaluations, Inc. (HEI), conducted a test-pit excavation / fill sampling and analyses program in early January of 2016 to evaluate sub-surface conditions associated with redevelopment plans associated with the former Office Depot facility (see **Figure 2**)¹. As summarized in HEI's draft submission (see **Attachment C**):

- Eleven test pits were conducted focusing on portions of the Subject Property that were targeted for the following commercial development: 1) two areas where the existing building was to be expanded; 2) an area where the existing building floor slab is to be removed; 3) areas where trenching is required to support the installation of sub-grade utilities; and, 4) general areas of the site;
- HEI generally observed the presence of historic industrial fill materials within the test pits with some of the materials exhibiting visual and olfactory evidence of impacts and well as positive organic vapor monitoring (OVM) responses ranging from 18 to 105 parts per million (see **Table 1** in **Attachment A**); and,
- One sample per test pit was submitted to Alpha Analytical Laboratories (Alpha) and analyzed for NYSDEC TCL VOCs plus petroleum-related VOCs by EPA Method 8260, TCL semi-volatile organic compounds (SVOCs) by EPA Method

¹ Please note that in order to more fully allow for evaluation of the Subject Property, HEI's Test Pit Location Plan (which is included in **Attachment C**) has been overlain with a recent aerial photograph.

8270, TCL PCBs by EPA Method 8082 and TAL Metals by the 6010 / 7471 Series.

Review of the HEI laboratory analytical data indicates the following:

- **TCL VOCs:** Generally, only low-level, petroleum-related VOCs were detected in all 11 samples. The only VOC detected above its respective NYSDEC Unrestricted SCO was 32,000 micrograms per kilogram (ug/kg) of naphthalene in the TP11 sample. A few of the samples also contained acetone, which is a common laboratory artifact, at slightly elevated (e.g., above Unrestricted SCOs but below Restricted Residential SCOs). No VOCs associated with former halogenated solvents, or their breakdown products, were detected in any of the 11 samples.
- **TCL SVOCs:** Several SVOCs were detected in nine of the 11 samples at concentrations exceeding their respective NYSDEC Commercial and / or Industrial SCOs.
- **TCL PCBs:** Low concentrations of various PCBs were detected at concentrations above their respective NYSDEC Restricted Residential SCOs but below Commercial SCOs in nine of the 11 samples. One sample (i.e., TP12) contained 1,350 ug/kg total PCBs which exceeds the NYSDEC Commercial SCO of 1,000 ug/kg, but is below the NYSDEC Industrial SCO of 25,000 ug/kg [equivalent to parts per billion (ppb)]. Moreover, all PCB concentrations were well below the 50,000 ppb threshold that the federal EPA established to define regulated PCB waste.
- **TAL Metals:** The only TAL metal which was detected at a concentration exceeding Restricted Residential SCOs was arsenic in the TP7, TP11 and TP12 samples at 65 milligrams per kilogram (mg/kg), 16 mg/kg and 26 mg/kg, respectively.

Discussion

According to HEI, Spill No. 15-09926 was assigned on January 5, 2016 when suspected petroleum impacts were observed in test pit locations where development utilities are planned to be located. Based on historical maps this area is the vicinity of a former fuel tank area that served the former Atlas Steel foundry. The chemicals detected are consistent with old weathered fuel oil and petroleum compounds. There is no supporting evidence that the referenced tanks were underground storage tanks (USTs) or aboveground storage tanks (ASTs), and that the facility was ever subject to NYSDEC Petroleum Bulk Storage (PBS) regulations. It should be noted that similar impacts were identified in 1991 / 1992 by the NYSDEC associated with the Hartwell Street Landfill. During the 1992 NYSDEC investigation the Atlas Steel facility was no longer in operation, buildings demolished, and no USTs or ASTs present. Since that time period, there have been no petroleum bulk storage tanks on site, fueling activities, or new petroleum discharges. As such, the subsurface conditions observed by HEI did not reflect a recent or on-going release(s) and

were not associated with a NYSDEC-registered PBS facility. Therefore, Apex respectfully requests that the NYSDEC close Spill No. 15-09926.

With respect to the previously-identified impacted fill materials underlying the entire vicinity of the Subject Property, it is reasonable to anticipate that materials exhibiting visual / olfactory impacts related to its historic uses will be encountered during intrusive excavation activities conducted at the Subject Property to support ongoing / future commercial property uses. Future potential impacts to site users and adjacent properties would only occur when the existing cap (e.g., building envelope(s), asphalt paving, etc.) is disturbed to support site development activities.

Recommendation

To “close” these “completable” exposure pathways, the work associated with the current project will be conducted in accordance with a site-specific Soil Management Plan (SMP) which will include the following components at a minimum, per NYSDEC requirements included in DER-10:

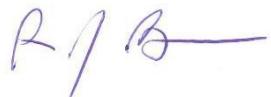
- All excavation work will be conducted in accordance with a Construction Health and Safety Plan (CHASP) which will include required air monitoring;
- All excavation activities will be conducted with oversight provided by a qualified environmental professional (QEP). Note that only impacted soils required to be addressed due to property development constraints will be excavated;
- Excavated materials will be field screened by visual / olfactory inspection, as well as with a photo-ionization detector (PID);
- All excavated materials will be staged in and on-site stockpile(s) and placed on and covered by plastic sheeting, or live loaded on to trucks for transport;
- Samples of all staged materials will be analyzed for waste-characterization purposes, and transported to and disposed of at appropriately-licensed facilities. As an alternative, the materials may be sampled / pre-characterized for waste facility approval to allow the live load out of the materials;
- All excavations will be backfilled with appropriate materials; and,
- Upon completion of the project, a SMP Report will be prepared primarily to provide supporting data and waste disposal documentation

In conclusion, the impacted media observed and reported to the NYSDEC by HEI do not represent a new or ongoing release. Via the conduct of a SMP, contaminated media encountered during the planned re-development activities at the Subject Property will be properly and safely managed by a QEP, and as such, do not pose a risk to human health and the environment.

Apex will provide development schedules and updates as the project moves forward.

If you have any questions or would like to discuss any aspect of this issue, please call me at (631) 567-1777, extension 6502.

Sincerely,
Apex Companies, LLC.



Richard J. Baldwin, C.P.G., P.G.
Program Manager

encl.

cc: P. Granholm, Apex

TABLES

Table 1
Hartwell Street Landfill
Subsurface Soil VOC and PAHs Analytical Data

TCL VOCs (ug/kg)	NYSDEC Part 375-6 Soil Cleanup Objectives (SCOs)					Sample Concentration Range (ug/kg)
	Unrestricted	Residential	Restricted Residential	Commercial	Industrial	
Chloroform	370	10,000	49,000	350,000	700,000	ND - 8
TCL SVOCs (ug/kg)						
Acenaphthene	20,000	100,000	100,000	500,000	1,000,000	ND - 1,300
Anthracene	100,000	100,000	100,000	500,000	1,000,000	ND - 3,000
Benzo[a]anthracene	1,000	1,000	1,000	5,600	11,000	ND - 7,100
Benzo[a]pyrene	1,000	1,000	1,000	1,000	1,100	ND - 6,300
Benzo[b]fluoranthene	1,000	1,000	1,000	5,600	11,000	ND - 12,000
Benzo[g,h,i]perylene	100,000	100,000	100,000	500,000	1,000,000	ND - 4,100
Benzo[k]fluoranthene	800	1,000	3,900	56,000	110,000	ND - 4,100
Chrysene	1,000	1,000	3,900	56,000	110,000	ND - 7,000
Dibenz(a,h)anthracene	330	330	330	560	1,100	ND - 2,400
Fluoranthene	100,000	100,000	100,000	500,000	1,000,000	ND - 15,000
Fluorene	30,000	100,000	100,000	500,000	1,000,000	ND - 1,300
Indeno[1,2,3-cd]pyrene	500	500	500	5,600	11,000	ND - 2,400
Phenanthrene	100,000	100,000	100,000	500,000	1,000,000	ND - 14,000
Pyrene	100,000	100,000	100,000	500,000	1,000,000	ND - 11,000

Notes:

Source: Table 4-5 - Subsurface Soil Organic Analyses (NYSDEC 1992 Report).

ND - Non-Detect

No pesticides or PCBs were detected in the subsurface Samples

 Analyte was not detected exceeding its NYSDEC Commercial SCO.

 Analyte was detected at a concentration between its NYSDEC Commercial and Industrial SCO.

 Analyte was detected at a concentration exceeding its NYSDEC Industrial SCO.

Table 2
Hartwell Street Landfill
Subsurface Soil Metals Analytical Data

TAL Metals (mg/kg)	NYSDEC Part 375-6 Soil Cleanup Objectives (SCOs)					Sample Concentration Range (mg/kg)
	Unrestricted	Residential	Restricted Residential	Commercial	Industrial	
Aluminum	NA	NA	NA	NA	NA	6,230 - 14,000
Arsenic	13	16	16	16	16	0.98 - 18.7
Barium	350	350	400	400	10,000	41.1 - 160
Beryllium	7.2	14	72	590	2,700	ND - 1.3
Cadmium	2.5	2.5	4.3	9.3	60	1.4 - 5.9
Calcium	NA	NA	NA	NA	NA	5,510 - 66,900
Chromium ¹	30	36	180	1,500	6,800	11.8 - 40.5
Cobalt	NA	NA	NA	NA	NA	6.2 - 17.7
Copper	50	270	270	270	10,000	14.3 - 122
Iron	NA	NA	NA	NA	NA	16,600 - 68800
Lead	63	400	400	1,000	3,900	8.6 - 175
Magnesium	NA	NA	NA	NA	NA	1,100 - 22,700
Manganese	1,600	2,000	2,000	10,000	10,000	395 - 2,790
Mercury	0.18	0.81	0.81	2.8	5.7	ND - 0.22
Nickel	30	140	310	310	10,000	15.9 - 112
Potassium	NA	NA	NA	NA	NA	578 - 2,190
Sodium	NA	NA	NA	NA	NA	ND - 564
Vanadium	NA	NA	NA	NA	NA	16.7 - 28.1
Zinc	109	2,200	10,000	10,000	10,000	58 - 159

Notes:

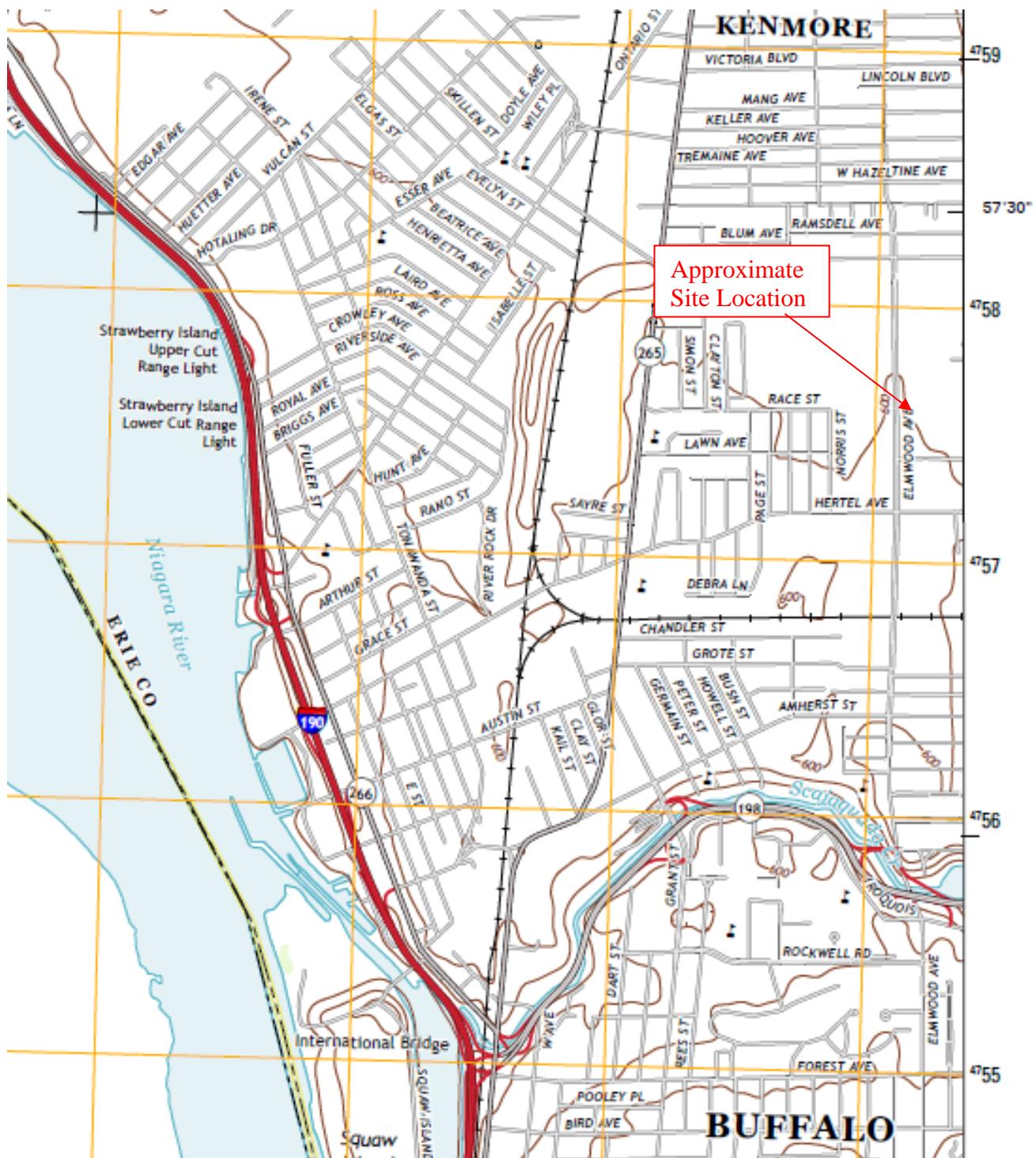
Source: Table 4-6 - Subsurface Inorganic Analyses (NYSDEC 1992 Report).

ND - Non-Detect

No pesticides or PCBs were detected in the subsurface Samples

	Analyte was not detected exceeding its NYSDEC Commercial SCO.
	Analyte was detected at a concentration between its NYSDEC Commercial and Industrial SCO.
	Analyte was detected at a concentration exceeding its NYSDEC Industrial SCO.

FIGURES



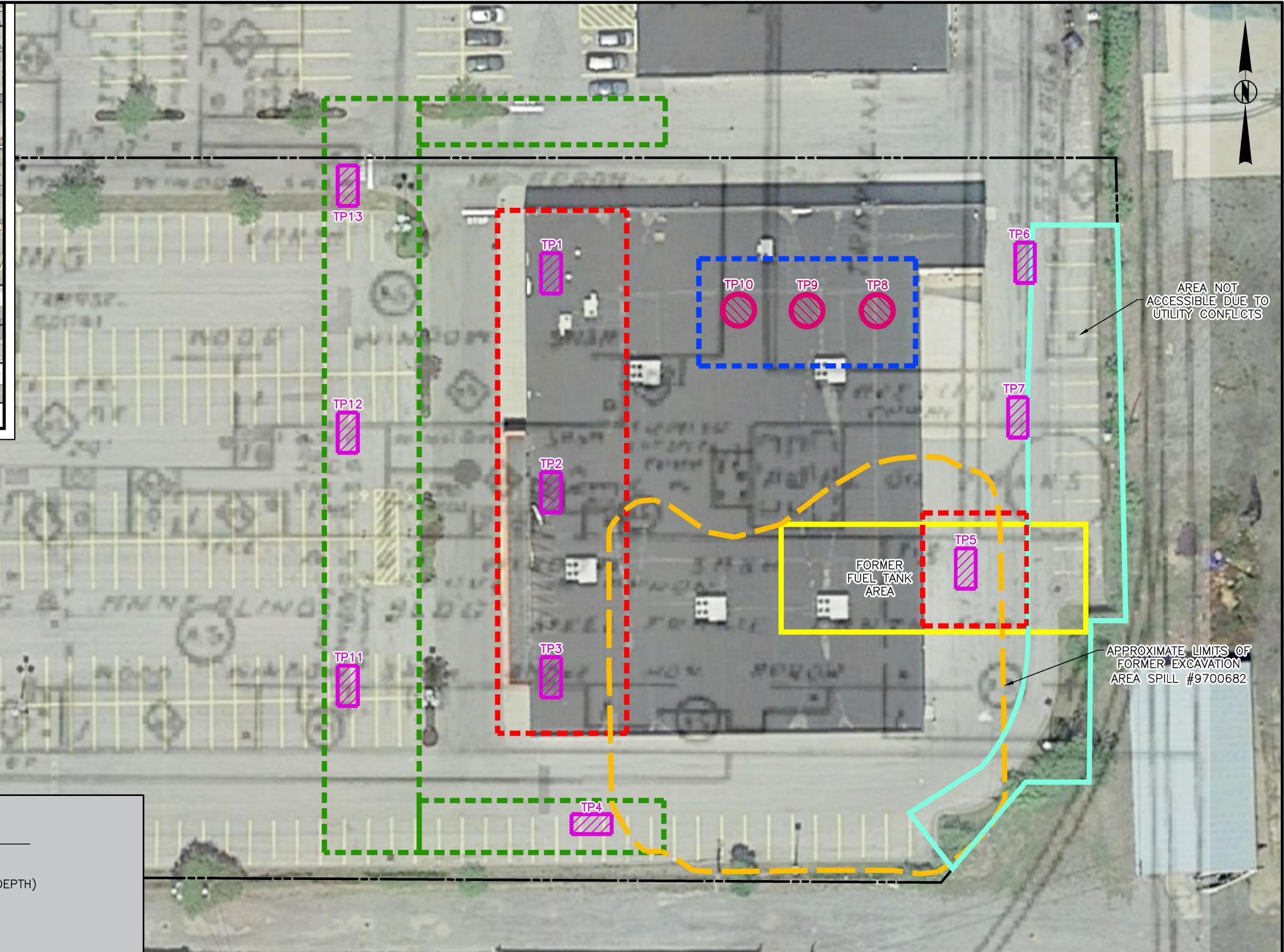
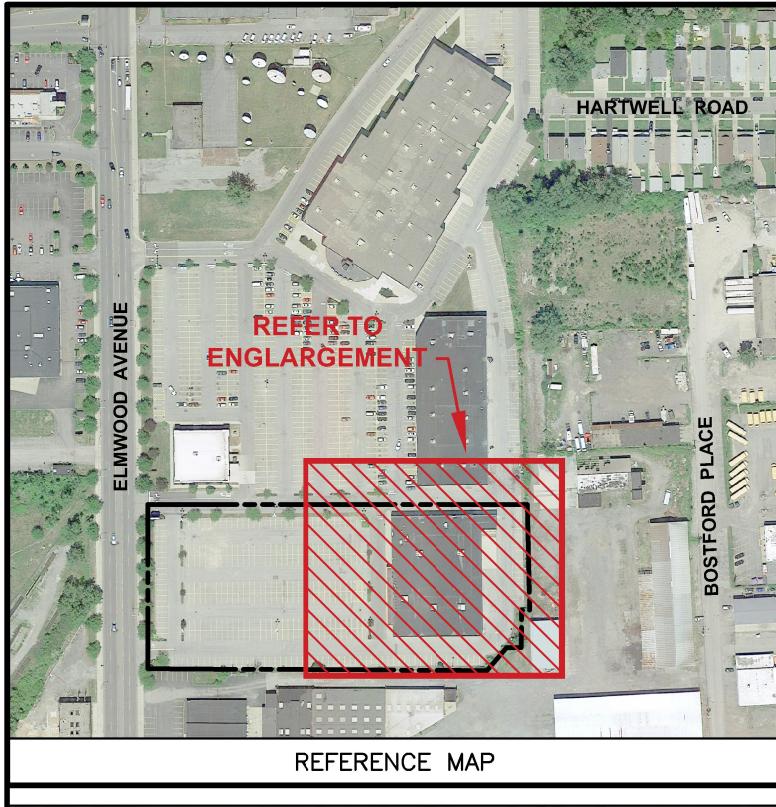
Source: USGS 7.5' Buffalo NW, NY-ON 2013 Quadrangle Map



155 Tri-County Parkway, Suite 250, Cincinnati, Ohio 45246

Elmwood Regal Center
2001 Elmwood Avenue
Buffalo, Erie County
New York 14207

Figure 1: Site Location Map



REFERENCED HAZARD EVALUATIONS, INC.
TEST PIT LOCATION PLAN OF JANUARY 2016

SCALE IN FEET
0 20 40 60 80

CHECK BY SC
DRAWN BY OS
DATE 1-27-16
SCALE AS SHOWN
CAD NO. DDR16001A
PRJ NO. DDR16001

SITE PLAN
DEVELOPMENT PROPERTY
1959 ELMWOOD AVENUE
BUFFALO, NEW YORK

APEX

2

ATTACMENT A

1992 NYSDEC Hartwell Street Landfill Report

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK

PHASE II INVESTIGATIONS

**Hartwell Street Landfill
Site No. 915030
City of Buffalo, Erie County**

February 1992

Prepared for:

**New York State Department
of Environmental Conservation**

50 Wolf Road, Albany, New York 12233

Thomas C. Jorling, Commissioner

Division of Hazardous Waste Remediation

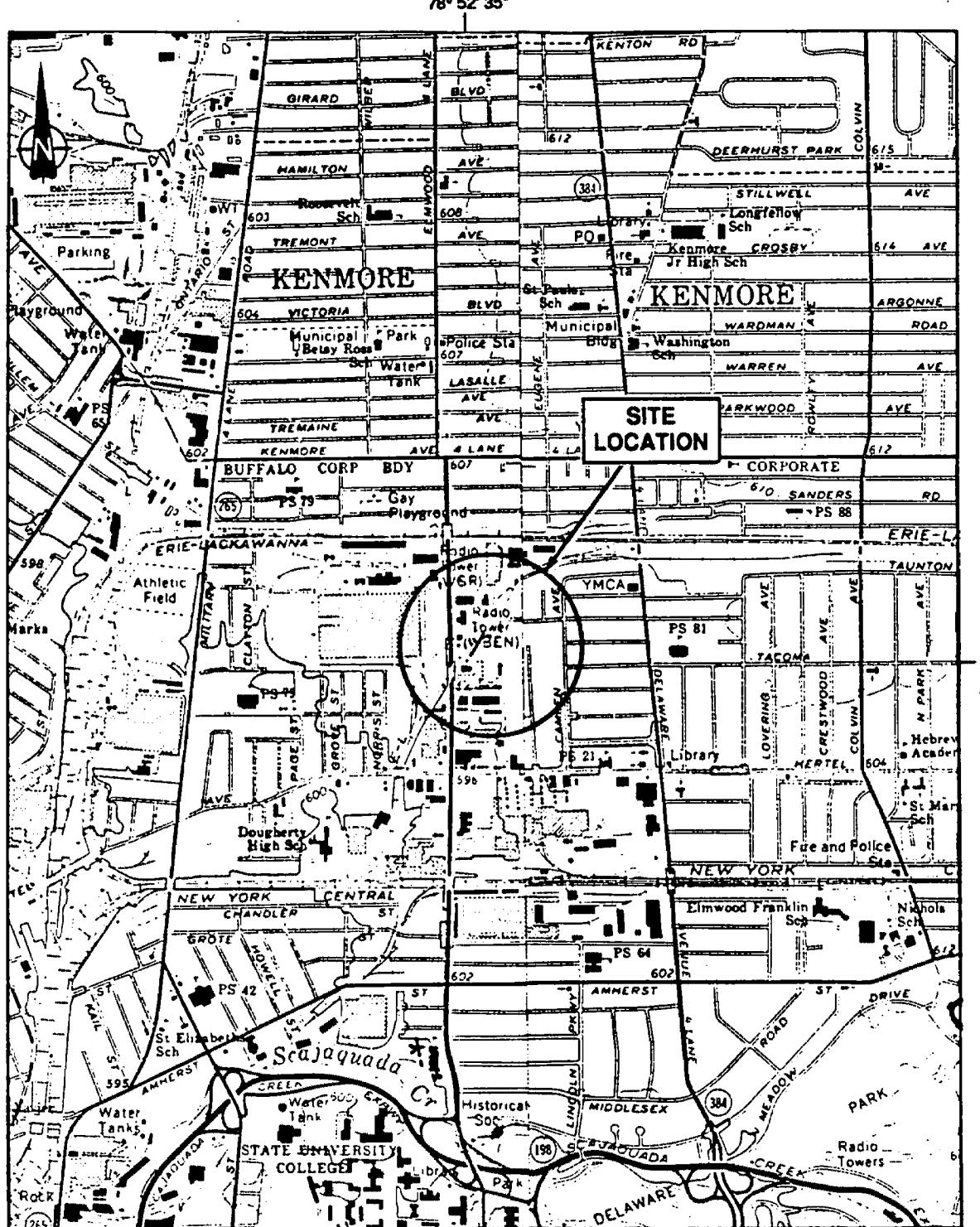
Michael J. O'Toole, Jr., P.E., Director

Prepared by:



**ecology and environment
engineering, p.c.**

**BUFFALO CORPORATE CENTER
368 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. 716/684-8060**



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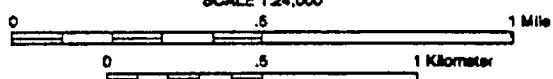
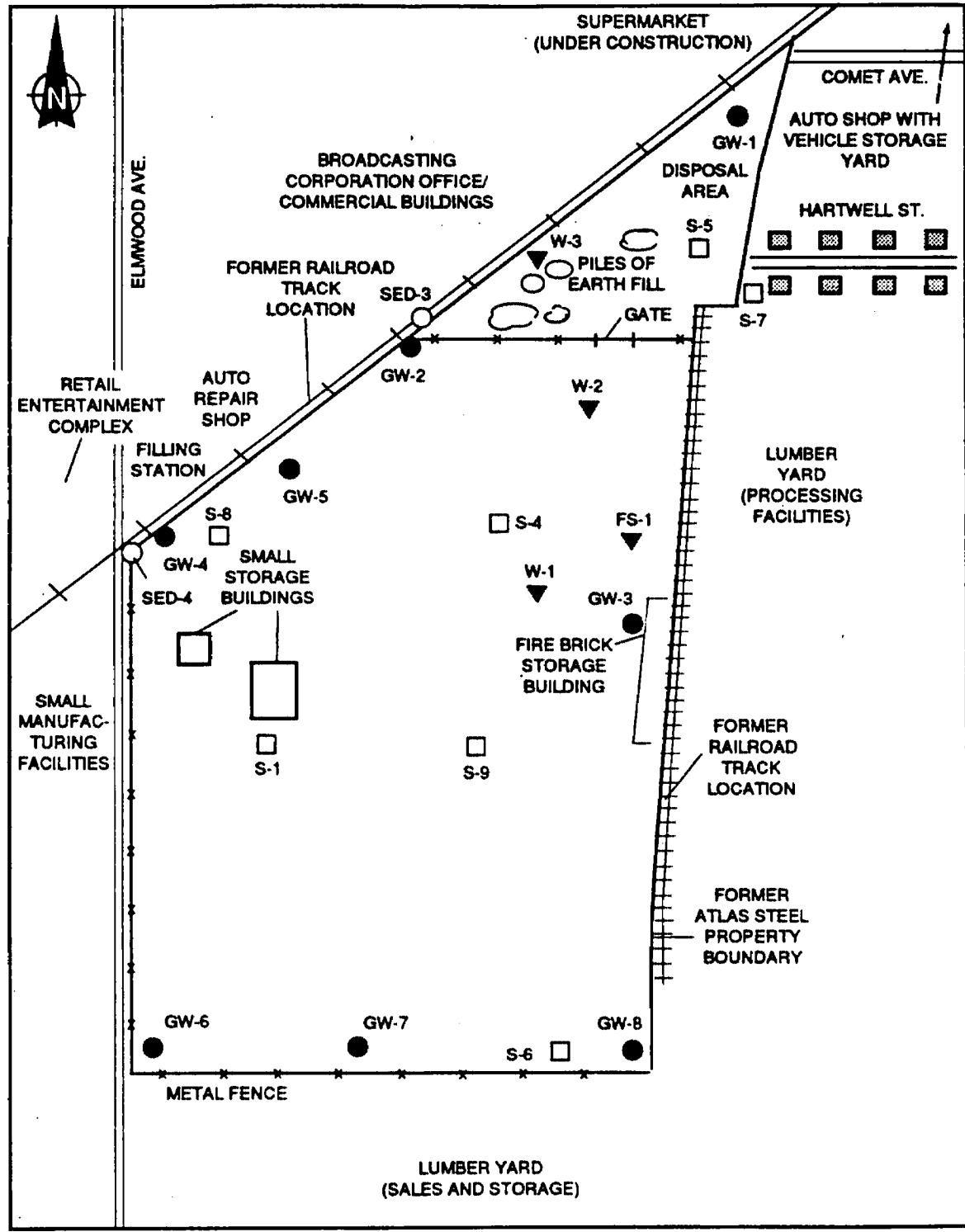


Figure 1-1
SITE LOCATION MAP
HARTWELL STREET LANDFILL



NOT TO SCALE

KEY:

- | | | | |
|----------|---------------------|----------------|-------------------|
| (Circle) | Sediment Sample | (Triangle) | Waste Sample |
| (Square) | Surface Soil Sample | (Solid Circle) | Subsurface Boring |

Figure 3-1
SAMPLING LOCATIONS
HARTWELL STREET LANDFILL SITE

4. SITE ASSESSMENT

4.1 SITE HISTORY

The 18-acre Hartwell Street Landfill site is located at 1963 Elmwood Avenue in the City of Buffalo. Atlas Steel Castings Corporation owned and operated 13 acres of the site as a steel manufacturing facility from 1912 to 1986. Atlas Steel purchased an additional 5-acre parcel to the north of the facility in 1952.

Research of available tax maps dating as far back as 1916 show the Hartwell Street Landfill site as a vacant lot prior to its purchase by Atlas Steel Castings Corporation in 1952. Atlas Steel Castings Corporation was formed in 1911 and began operations on the adjoining property in 1912. The original melt process for castings involved the use of an oil-fired hearth furnace and was upgraded with the introduction of an electric arc furnace shortly after the end of World War I. From 1949 until the closing of the facility, the melting process utilized electric arc furnaces exclusively. Typical casting production processes were used to make specialty castings consisting of carbon and low alloy steel, with products ranging in size from one pound to seven tons. Materials used for alloy content included molybdenum, nickel, chrome, and vanadium. Products varied from small screw devices for meat grinders, to large castings for Navy ships, to castings used in the rolling mill operations of large steel producers.

Sand used in the casting molds was the largest waste stream component. During the mid-1970's, approximately 100 tons of the 150 tons of sand used per week were being disposed. Typical metal casting requires the use of additives for the chemical bonding of the sand used in the casting molds, and thus the sand cannot be reclaimed after a molding process is completed. In 1978, the company introduced a new

vacuum molding method that utilizes dry sand containing no additives, thus allowing for reuse of the material. However, conventional casting methods, which required the use of additives, were continued for some products. The actual reduction in the quantity of waste sand owed to the introduction of the vacuum method is unknown.

When production at the facility ceased, several buildings remained on site, with the foundry and its adjoining buildings being the dominant structures. Smaller structures on the property were used principally for storage of patterns and other equipment.

By 1986, Atlas Steel had filed for bankruptcy and M&T Bank, which held the first mortgage, controlled the property. Between 1986 and 1988, M&T contracted with G&R Salvage to recover machinery and other equipment left at the site. By 1988, the site had reverted to the City of Buffalo, and in 1989, the site was purchased by Roger Pasquarella and Daniel Mele for back taxes.

Disposal has occurred in several areas at the site, on both parcels of Atlas Steel property. The material on the smaller, 5-acre parcel includes construction and demolition debris and earth fill from plant modifications, used to fill in a low-lying swampy area. Debris inside the fence includes wooden pallets and molds, bricks, and metal products. One of the former buildings contained three pits that at one time contained oily water, a weak basic solution, and oil. Following recent demolition activities, only one pit was observed, which contained oily water and debris. A large quantity of foundry sand (estimated at several thousand cubic yards) was present at the site in open mounds. Recent grading of the site surface has smoothed the mounds. No foundry sand is known to have been removed from the site. A small mound of sand, away from the area of the former mounds, is currently awaiting removal. Previous sampling results found some of the sand to contain a water-soluble sodium silicate bonding agent and some contains greater than 1 ppb phenols. The bonding agent is a skin and eye irritant, but is nonhazardous based on laboratory analysis.

The dates of landfilling are unknown; however, complaints were received in 1978 and 1979 by the Erie County Department of Environment and planning regarding disposal and "poor housekeeping practices" at the

site. In September, 1979, NYSDEC recommended that Atlas Steel stop waste disposal at the end of Hartwell Street or obtain a valid Part 360 permit. Atlas Steel stopped disposal activities in 1979.

NYSDEC conducted field surveys at the site in 1979 and 1981. In 1982, NYSDEC collected soil and water samples from two areas of standing water at the landfill and one water sample from the sump in the basement of a house adjacent to the landfill. Lead was detected in excess of effluent standards in one water sample from the landfill and in the sample from the basement sump. The water samples also contained detectable levels of chromium, copper, zinc, and TOC. Soil samples contained "fairly high amounts" of copper, nickel, and zinc and detectable amounts of chromium, lead, and silver.

In September 1986, NYSDEC received information regarding transformers possibly located at the Atlas Steel facility. On September 16, 1986, NYSDEC representatives located these transformers in an area with evidence of spillage. They collected two soil samples and one oil sample. Results showed the oil to contain less than 1 ppb PCBs and the soil to contain no PCBs. Numerous drums and debris were noted at the site at this time.

On September 16 and 17, 1986, NYSDEC collected two foundry sand samples, one drummed-liquid sample, and one sample of material supposedly spilled from a drum. The foundry sands, one representative of drummed sand and one from large mounds of sand on the property, passed the EP toxicity analysis, but contained trace levels of phenols. The drummed-liquid sample was a hazardous waste by the ignitability characteristic. The spilled-material sample was caustic, but was below hazardous waste levels for corrosivity. Also at this time, three large oil tanks were found partially buried in an area of stained soil. One of the tanks was full and the other two contained bottom sludges. The contents were thought to be fuel oil. These tanks were not observed during the site reconnaissance conducted as part of this investigation.

On September 17, 1986, NYSDEC representatives inventoried drums at the site. A total of 660 drums were counted, of which 250 were empty, 200 contained foundry sand, 33 contained pollution-control equipment dust, (including sand, steel dust, and iron oxide) 23 contained oils and greases, 14 contained a binder-type material, and 140 contained

miscellaneous materials such as alcohols, tars, wood preservatives, and unknowns. Also during the drum inventory, a total of nine transformers were located at the site. Two of these transformers had tags identifying them as containing PCBs. In the laboratory in the laboratory building on site, some "off-specification and old hazardous chemicals" were found and placed in lab packs according to waste characteristic. These, along with the formerly tested drum of ignitable material and three other drums, were placed in a room in the laboratory building. The room was then boarded up and nailed shut.

A fire later occurred in the laboratory building and firemen are believed to have opened the lab packs and pumped water into the drums. A subsequent inspection by NYSDEC found the chemicals scattered around the room. The chemicals were cleaned up, placed in six to eight drums, and stored in the same room in the lab building. An inspection by NYSDEC on July 6, 1989 found that these drums had been opened and the contents scattered, apparently by vandals.

A recent problem at the site investigated by NYSDEC on December 13, 1989 involves the burning of painted wood molds by site workers inside one of the buildings. NYSDEC received a complaint from a nearby industry regarding smoke and strong odors from the site. An inspection showed the source of the odors to be a core-baking oven in which painted wood molds were being burned. The paint was subsequently determined to contain lead and NYSDEC was concerned about the proper disposal of ash that resulted from burning.

Current site activities are concentrated on the steel plant property and involve the demolition of older buildings and debris removal. According to the site owner, Region 9 NYSDEC personnel have been kept informed of on-going activities and have been involved in ensuring that proper demolition, removal, and disposal practices are carried out. Buildings remaining on site include two small storage buildings in the western portion of the site and a fire brick storage building along the eastern property boundary. The site owner is awaiting NYSDEC approval for the removal of a small amount of debris remaining at the site, including crushed empty drums, foundry sand, bricks, and miscellaneous metal debris. No transformers were observed at the site during the recent site reconnaissance, however details of removal were not available.

several feet below the bedrock surface produces small but sufficient yields for domestic use. Wells that tap solution openings have yields ranging from 300 to 1,200 gallons per minute (LaSala 1968).

Surface Water

No surface water bodies were observed at the Hartwell Street Landfill site during the course of the Phase II investigation. Surface runoff from the site eventually enters the City of Buffalo storm sewer system.

Surface water bodies located in the site vicinity include Lake Erie and the Niagara River, located 3.5 miles southwest and 1.7 miles west, respectively. Scajaquada Creek is located 1.1 miles south of the site. Lake Erie and the Niagara River are used as sources of municipal drinking water supplies and public recreation. Scajaquada Creek is classified as suitable for primary contact recreation. There are no protected wetlands within 1 mile of the site.

4.5 SITE CONTAMINATION ASSESSMENT

Analytical data for the contamination assessment are presented in Appendix D. Data summary sheets are presented for TCL organic and inorganic analyses.

All CLP data packages were reviewed to determine whether qualified data were acceptable for the intended use.

4.5.1 Surface Soil/Waste

Seven surface soil samples were collected for TCL organic, inorganic, and cyanide analyses as part of the Phase II study.

No volatile organics, pesticides or PCBs were detected in surface soil samples. Semivolatile organic compounds known as PAHs were detected in all of the surface soil samples (see Table 4-1). PAHs are a group of semivolatile compounds composed of hydrogen and carbon arranged in the form of two or more fused benzene rings in linear, angular, or cluster arrangements (Eisler 1987). Total PAH concentrations in surface soil ranged from 4,200 µg/kg in S-9 to 330,000 µg/kg in S-6. PAHs were detected in S-1 and S-7 (the background sample) below quantitation limits. The concentrations of organic compounds found in surface soil samples are presented in Table 4-1.

Twenty-one inorganic analytes were detected in site surface soil samples (see Table 4-2). Nine of these analytes were found above their standard ranges (Schacklette and Boerngen 1984) in one or more of the samples. These include antimony, arsenic, cadmium, chromium, iron, lead, manganese, silver, and zinc. Antimony was found above its standard range in sample S-5 only. Arsenic was found above its standard range in sample S-8 at 75.2 mg/kg. Cadmium was found above its standard range in all samples including the background sample (Lindsay 1979). The only sample containing cadmium at a level significantly (greater than 3 times) above the background level of 4.4 mg/kg was sample S-4 at 54.5 mg/kg. Chromium, manganese, silver, and zinc were found above their standard ranges in S-4 only at concentrations of 1,740 mg/kg, 12,900 mg/kg, 6.7 mg/kg, and 5,720 mg/kg, respectively. Samples S-4 and S-6 contained iron above its standard range at 260,000 mg/kg and 110,000 mg/kg, respectively. Samples S-4 and S-8 contained lead above its standard range at 3,070 mg/kg and 525 mg/kg, respectively.

Concentrations of arsenic, chromium, iron, lead, manganese, and zinc are significantly above the concentration in S-7, the background sample. Antimony was detected in S-5 only; silver was detected in S-4 and S-6 only.

Sample S-4 exhibits the highest concentrations and the greatest number of inorganic analytes of the surface soil and waste samples collected. This sample was collected from a depression near a waste pile that may have received runoff from the pile and/or contained waste itself.

Three waste samples, W-1, W-2 and W-3, were collected for full TCL analysis, and one waste sample, FS-1, was collected for EP toxicity metals analysis only. EP toxicity data indicate that the leaching potential of toxic metals from the foundry sand on site is below detection limits.

No volatile organic compounds, pesticides, or PCBs were detected in the waste samples subjected to full TCL analysis. The only organic compounds found above quantitation limits in waste samples were PAHs (see Table 4-3). Total PAHs above quantitation limits were found at concentrations of 6,200 µg/kg in W-1, 3,900 µg/kg in W-2, and 32,000 µg/kg in W-3.

Seventeen inorganic analytes were detected in waste samples at the site. Cadmium and iron were found above their standard ranges in waste samples (see Table 4-4). Cadmium was detected above its standard range at 12.5 mg/kg in W-1, 9.1 mg/kg in W-2, and 1.7 mg/kg in W-3. Iron was detected above its standard range in W-1 at a concentration of 147,000 mg/kg.

4.5.2 Subsurface Soil

Seventeen subsurface soils samples were collected from eight test borings at the site. Sample depths and analyses performed are summarized in Table 3-2. Analytical results are presented in Tables 4-5 and 4-6.

Volatile organics detected in subsurface soil include chloroform at 7 µg/kg in GW-7 (0 to 20 feet) and GW-8 (4 to 26 feet). Bromodichloromethane was detected below quantitation limits in GW-7 (0 to 20 feet) and GW-8 (4 to 26 feet). Low levels of chloroform and bromodichloromethane are characteristic of potable water supplies. The presence of these compounds in subsurface soil samples may be due to the steam cleaning of drilling and sampling equipment with potable water or from an independent subsurface source of potable water such as a leaking water pipe. Semivolatile organic compounds detected in samples GW-2 (0 to 4 feet), GW-5 (0 to 4 feet), and GW-8 (0 to 4 feet) consisted of various PAHs. Total PAHs above quantitation limits were found at concentrations of 6,100 µg/kg in GW-2 (0 to 4 feet), 68,000 µg/kg in GW-5 (0 to 4 feet), and 89,000 µg/kg in GW-8 (0 to 4 feet). PAHs were detected below quantitation limits in samples GW-3 (0 to 20 feet), GW-4 (0 to 20 feet), GW-6 (0 to 4 feet), and GW-7 (0 to 20 feet). No PAHs were found in GW-1 samples.

No pesticides or PCBs were detected in subsurface soil samples.

Nineteen inorganic analytes were detected in subsurface soil samples at the site. Cadmium was detected above its standard range in all samples collected (see Table 4-6). None of the concentrations of cadmium in subsurface soil samples was significantly above background levels.

Three subsurface soil samples that included foundry sands or other wastes were chosen for EP toxicity metals analysis. These included GW-3 (2 to 4 feet), GW-5 (0 to 4 feet), and GW-7 (0 to 20 feet). The three

subsurface soil samples selected for leachability testing exhibited total concentrations of arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver below detection limits.

Cadmium concentrations in waste samples were not significantly above levels in the background sample. The concentration of iron in W-1 is significantly above background levels.

4.5.3 Surface Water/Sediment

Two sediment samples were collected for full TCL analysis from a drainage ditch on the northern perimeter of the site (see Figure 3-1). Analytical results are summarized in Tables 4-7 and 4-8.

No volatile organic compounds, pesticides, or PCBs were detected in sediment samples. Semivolatile organic compounds detected consisted of various PAHs in both sediment samples (see Table 4-7). Total PAHs above quantitation limits were found in sample SED-3 at 13,000 mg/kg and in sample SED-4 at 230,000 µg/kg.

Twenty inorganic analytes were detected in sediment samples from the site (see Table 4-8). Cadmium concentrations exceeded the standard range in SED-3 at 7.7 mg/kg and SED-4 at 4.6 mg/kg. The lead and antimony concentrations in SED-4, 979 mg/kg, and 19.4 mg/kg, respectively, exceeded the standard ranges of these analytes in eastern United States soils and surficial materials.

Cadmium concentrations in sediment samples were not significantly above concentrations in the background sample. The lead concentration in SED-4 is significantly above background levels. Antimony was not detected in the background sample.

4.5.4 Contamination Assessment Summary

The principal immediate threat to public health and the environment posed by the Hartwell Street Landfill site is potential direct contact with surface soil contaminated with heavy metals and semivolatile organic compounds on the site.

The major organic compounds of concern at the site are PAHs. These compounds are widely occurring at the site, being detected in soil, waste, and sediment samples. PAHs were found above quantitation limits in five of the seven surface soil samples at concentrations ranging from

4,200 µg/kg (ppb) to 340,000 µg/kg. The remaining two surface soil samples, including the background sample, contained PAHs below quantitation limits. All of the three waste samples collected contained PAHs ranging from 3,900 µg/kg to 32,000 µg/kg. PAHs were found above quantitation limits in three of the eight shallow samples from soil borings. Concentrations in these samples, all from the 0- to 4-foot interval, ranged from 6,100 µg/kg to 89,000 µg/kg. PAHs were also found below quantitation limits in shallow soil boring samples from four of the remaining five borings. These shallow samples include these 0- to 20-foot composite samples and one 0- to 4-foot composite sample. Reported PAH concentrations in 0- to 20-foot samples may be lower than the actual values in the top few feet of soil due to the effects of compositing a larger volume of soil.

PAHs were detected in both sediment samples collected at the soil at concentrations of 13,000 µg/kg in sample SED-3 and 230,000 µg/kg in SED-4.

According to Edwards (1983), typical concentrations of PAHs in soil range from 0.4 µg/kg in protected remote areas to 650,000 µg/kg in industrial areas. PAHs may be formed by natural processes such as microbial synthesis, forest fires, and volcanic activity. Anthropogenic sources of PAHs include iron and steel manufacturing, asphalt, heating and power generation, refuse incineration, open burning, and engine combustion emissions. Sources of PAHs at the Hartwell Street Landfill site include former steel-making activities, intentional burning and accidental fires, fallout from automobile emissions, and asphalt and roofing tar from a burned building. The concentrations of PAHs detected at the site are indicative of an urban industrial site.

Metals found above their standard ranges at the site include cadmium in all surface and subsurface soil, waste, and sediment samples; arsenic in surface soil and sediment samples; iron in surface soil and waste samples; lead and antimony in surface soil and sediment samples; and chromium, manganese, silver, and zinc in surface soil samples only. Cadmium, chromium, lead, and arsenic are the most toxic of the metals exceeding standard ranges, and of these, cadmium and lead are the most widely occurring at the site. The cadmium concentrations, which exceeded the standard range in all samples collected, may be related to

a natural soil condition at the site. This conclusion is based on the fact that values above the standard range were found in the background sample and in deep samples (4 to 26 or 20 to 40 feet) from borings. These soils are not likely to be contaminated by waste disposal at the site. Cadmium levels in these samples may be attributed to natural or non-site-specific conditions. The only cadmium concentration significantly above background levels was 54.5 mg/kg in surface soil sample S-4. The standard range of chromium was exceeded in sample S-4 with a concentration of 1,740 mg/kg. The standard range of lead was exceeded in samples S-4 at 3,070 mg/kg, S-8 at 525 mg/kg and SED-4 at 979 mg/kg. The standard range of arsenic was exceeded in sample S-8 at 75.2 mg/kg.

Cadmium is a naturally occurring element found in soil, air, water, and food. Anthropogenic sources that increase natural concentrations include municipal incinerators, iron and steel making, fossil fuel combustion, and metal melting. Background soil levels in rural areas are normally around 0.1 ppm, while soils in urban areas have considerably higher concentrations of 6 ppm or more. Also, highly industrialized areas have higher soil concentrations than areas of less industrial activity. Possible sources of cadmium at the site include the former steel-making activities, fossil fuel combustion due to power generation at the plant and other nearby industries, and automobile emissions on area roads. As stated earlier, elevated levels of cadmium in the background and deep soil boring samples suggest a potential natural or non-site-specific source for cadmium at the site.

Chromium is a naturally occurring element found in crystal material, and volcanic dust and gases. Human activities such as chemical manufacturing, steel production, and combustion of fossil fuels release additional chromium to the environment (Life Systems, Inc. 1989). Potential sources of chromium at the site include former steel-manufacturing activities and fallout from combustion emissions from fossil fuel consumption at the plant, nearby industries, and automobile traffic.

Lead is a naturally occurring metal found in small quantities in all parts of the environment. Anthropogenic sources of lead include leaded gasoline combustion, emissions from iron and steel production,

metal smelting operations, lead-acid battery manufacturing, and weathering of lead-based paints. Potential sources of lead at the site include automobile engine fallout, steel production emissions, and lead-based paints possibly on or inside site buildings. Deposition of lead from atmospheric sources can greatly increase lead levels in soils. It has been estimated that soils adjacent to roadways have been enriched in lead by as much as 10,000 micrograms per gram of soil (ppm) since 1930. Furthermore, soils in urban areas and in sites adjacent to smelters may have as much as 130,000 micrograms of lead per gram of soil. Soils adjacent to buildings with exterior lead-based paint may have concentrations of greater than 10,000 ppm lead (ATSDR 1988).

Arsenic is an inorganic element found naturally in volcanic gases, most fossil fuels, and minerals and ores. Releases of arsenic into the environment as a result of human activities include fossil fuel consumption, pesticide use, use of wood preservatives, and manufacturing (smelting) of copper and other metals. Possible sources of arsenic at the site include former steel-making activities, fossil fuel combustion, and any wood-preserving activities that may occur at an adjacent lumber yard.

Potential exposure routes for PAHs are inhalation, ingestion, and dermal contact. PAHs enter the body rapidly and are metabolized through the action of enzymes to produce chemically reactive compounds potentially capable of inducing cancer. Although it has not been proven that PAHs are human carcinogens, several of these compounds are among the most potent animal carcinogens known to exist (Santodonato *et al.* 1979).

Ingestion and inhalation of cadmium are the major routes of exposure. Once in the body, cadmium has a somewhat long half-life that causes the accumulation of this metal over the lifetime of an organism. This accumulation occurs chiefly in soft tissue such as the kidneys and lungs. Renal dysfunction is the major adverse health effect from chronic exposure to cadmium. Chronic exposure via inhalation causes emphysema and bronchitis (Grant *et al.* 1981, Sittig 1985).

Chromium may enter the body through inhalation, ingestion, and eye and skin contact. Chromium and chromium compounds may induce irritant effects on skin and respiratory passages, leading to ulcerations. Oral ingestion may lead to severe irritation of the gastrointestinal tract,

circulatory shock, and renal damage. Numerous chromium compounds are known or suspected animal carcinogens. An increased incidence of lung cancer has been noted among workers in some chromium-related industries. Toxic effects vary greatly with the valence state of chromium and the ionic elements or compounds forming chromium compounds (Sittig 1985).

Lead adversely affects survival, growth, reproduction, development, and metabolism of most species under controlled conditions, but its effects are substantially modified by numerous physical, chemical, and biological variables. Biomagnification of lead is negligible, and younger, immature organisms are most susceptible. Uptake of lead by terrestrial plants is limited by the low bioavailability of lead from soils, and adverse effects to plants occur at total lead concentrations of several hundred mg/kg in soils.

Human health may be jeopardized by excessive exposure to lead. Persons with hepatitis, anemia, and nervous disorders are particularly susceptible to lead poisoning. Lead is not considered carcinogenic to humans; however, reports of chromosomal abnormalities in human blood suggest that lead is a probable mutagen (Eisler 1988). Concentrations of lead in soil or dust greater than 500 to 1,000 ppm could lead to elevated blood lead levels in children inhaling and/or swallowing the soil (ATSDR 1988).

The U.S. Department of the Interior (1988) reports that arsenic metabolism and toxicity vary greatly among species, and that effects are significantly altered by numerous physical, chemical, and biological modifiers. Adverse health effects, for example, may involve respiratory, gastrointestinal, cardiovascular, and hematopoietic systems, and may range from reversible effects to cancer and death, depending partly on the physical and chemical forms of arsenic, the route of exposure, and dose.

4.6 CONCLUSIONS AND RECOMMENDATIONS

Minimal possible threats to human health and the environment posed by the Hartwell Street Landfill site include direct dermal contact and indirect ingestion of contaminated shallow soil at the site. Contaminants detected (i.e., PAHs, heavy metals, etc.) are consistent with those expected based on the site's former heavy industrial use.

Considering these facts and in the absence of documented hazardous waste disposal at this site, it is recommended that the Hartwell Street site be referred to the NYSDEC's Division of Solid Waste for appropriate action. The following paragraphs recommend measures for consideration to mitigate the risk associated with the site.

Some portions of the site are fenced while others are open. Local residents have been observed using this area as a shortcut and as a playground. The installation of a fence around the site would prevent unauthorized access.

Any future action at the site should include consideration of the proposed future land use. Commercial and residential uses have been mentioned for the site. Evaluation of site contamination and exposure potential should take into consideration future land use.

In summary, proper closure under 6 NY Part 360 including an upgrading of the site's cover material is recommended. Proper closure would alleviate contaminant migration and further reduce or eliminate any threats caused by the site. To this end, NYSDEC should work toward delisting this site from the Registry of Inactive Hazardous Waste Disposal Sites in New York State.

Table 4-1
SURFACE SOIL ORGANIC ANALYSIS*

Compound	Sample Concentration ($\mu\text{g}/\text{kg}$)	
Naphthalene	S-6	10,000
2-Methylnaphthalene	S-6	3,600
Acenaphthene	S-6	7,400
Dibenzofuran	S-6	5,700
Fluorene	S-6	7,500
Phenanthrene	S-1	2,200
	S-5	960
	S-6	47,000
	S-8	13,000
	S-9	680**
Anthracene	S-6	9,800
	S-8	4,000
Fluoranthene	S-1	3,100
	S-5	1,500
	S-6	49,000
	S-8	16,000
	S-9	410**
Pyrene	S-1	4,500
	S-5	1,800
	S-6	42,000
	S-8	16,000
	S-9	1,300**
Benzo(a)anthracene	S-1	2,200
	S-5	1,100
	S-6	26,000
	S-8	8,600
Chrysene	S-1	2,200
	S-5	1,400
	S-6	25,000
	S-8	8,600
Benzo(b)fluoranthene	S-1	4,100
	S-5	3,400
	S-6	43,000
	S-8	15,000
	S-9	730**
Benzo(a)pyrene	S-1	2,000
	S-5	1,800
	S-6	28,000
	S-8	9,500
Indeno(1,2,3-cd)pyrene	S-1	1,800
	S-5	1,600
	S-6	12,000
	S-8	6,800
	S-9	570**

02(UZ)YP7080:D3136/6040/36

Key at end of table.

Table -1 (Cont.)

Compound	Sample Concentration ($\mu\text{g}/\text{kg}$)	
Dibenz(a,h)anthracene	S-5	480
	S-6	5,700
	S-8	3,000
Benzo(g,h,i)perylene	S-1	1,700
	S-5	1,400
	S-6	11,000
	S-8	5,800
	S-9	510**

02[UZ]YP7080:D3136/6040/36

*No volatile organics, pesticides, or PCBs detected in surface soil samples.

**Result considered as low estimate due to low internal standard areas.

Table 4-2
SURFACE SOIL INORGANIC ANALYSIS

Analyte	Range (mg/kg)	Range (mg/kg)	Estimated Mean (mg/kg)	Samples Exceeding Range	
				Location	Concentration (mg/kg)
Aluminum	2,080 - 18,400	7,000 - >100,000	57,000		
Antimony+	ND - 15.3	<1 - 8.6	NA	S-5	15.3
Arsenic+	4.7 - 75.2	<1.1 - 73	7.4	S-8	75.2
Barium	33.5 - 171	10 - 1,500	420	.	
Beryllium	ND - 0.99	<1 - 7	0.85		
Cadmium**+	2.0 - 54.5	0.01 - 0.70	NA	S-1 S-4 S-5 S-6 S-7 S-8 S-9	5.0 54.5 2.0 9.0 4.4 5.5 7.7
Calcium	2,110 - 152,000	10 - 280,000	630		
Chromium	14.4 - 1,740	1 - 1,000	52	S-4	1,740
Cobalt	4.2 - 15.5	<0.1 - 70	9.2		
Copper++	41.8 - 601	<1- 700	22		
Iron	17,600 - 260,000	10 - >100,000	2,500	S-4 S-6	260,000 110,000
Lead	82.4 - 3,070	<10 - 300	17	S-4 S-8	3,070 525
Magnesium	593 - 17,100	50 - 50,000	460		
Manganese	421 - 12,900	<2 - 7,000	640	S-4	12,900
Mercury	ND - 0.66	0.01 - 3.4	.12		
Nickel+	22.2 - 450	<5 - 700	18		
Potassium	169 - 2,069	50 - 3,700	NA		
Silver**	ND - 6.7	0.01 - 5	NA	S-4	6.7

02[UZ]YP7080:D3136/6041/16

Key at end of table.

Table 4-2 (Cont.)

Analyte	Guidelines for Soils/ Surface Materials of Eastern United States*			Samples Exceeding Range	
	Range (mg/kg)	Range (mg/kg)	Estimated Mean (mg/kg)	Location	Concentration (mg/kg)
Sodium	ND - 526	<500 - 50,000	780	.	.
Vanadium+	7.5 - 101	<7 - 300	66		
Zinc	157 - 5,720	<5 - 2,900	52	S-4	5,720

02[UZ]YP7080:D3136/6041/16

*Shacklette and Boerngen, 1984, "Element Concentrations in Soils and Other Surficial Materials of The Conterminous United States," U.S.G.S. Professional Paper 1270.

**Lindsay, 1979, Chemical Equilibria in Soils, John Wiley and Sons.

+Results and quantitation limits are considered low estimates due to low spike recoveries.

++Estimated values due to unacceptable precision. Results considered low estimates due to low spike recoveries.

Key:

ND = Not detected.

Table 4-3
WASTE SAMPLE ORGANIC ANALYSIS*

Compound	Sample	Concentration ($\mu\text{g}/\text{kg}$)
Naphthalene	W-3	830
Acenaphthene	W-3	850
Dibenzofuran	W-3	580
Fluorene	W-3	810
Phenanthrene	W-1 W-2 W-3	550 640 4,300
Anthracene	W-3	1,300
Fluoranthene	W-1 W-2 W-3	860 730 3,700
Pyrene	W-1 W-2 W-3	1,000 830 5,100
Benzo(a)anthracene	W-1 W-3	510 2,300
Chrysene	W-1 W-2 W-3	570 420 2,200
Benzo(b)fluoranthene	W-1 W-2 W-3	1,200 810 3,700
Benzo(a)pyrene	W-1 W-2 W-3	660 460 2,500
Indeno(1,2,3-cd)pyrene	W-1 W-3	440 1,700
Dibenz(a,h)anthracene	W-3	550
Benzo(g,h,i)perylene	W-1 W-3	440 1,400

02[UZ]YP7080:D3136/6042/36

*No volatile organics, pesticides, or PCBs
detected in waste samples.

Table 4-4
WASTE SAMPLE INORGANIC ANALYSIS

Analyte	Guidelines for Soils/ Surface Materials of Eastern United States*			Samples Exceeding Range	
	Range (mg/kg)	Range (mg/kg)	Estimated Mean (mg/kg)	Location	Concentration (mg/kg)
Aluminum	801 - 2,230	7,000 - >100,000	57,000		
Arsenic+	3.6 - 18.9	<1.1 - 75	7.4		
Barium	10.2 - 19.6	10 - 1,500	420		
Cadmium**+	1.7 - 12.5	0.01 - 0.70	NA	W-1 W-2 W-3	12.5 9.1 1.7
Calcium	1,300 - 5,030	10 - 280,000	630		
Chromium	26.1 - 253	1 - 1,000	52		
Cobalt	ND - 13.2	<0.1 - 70	9.2		
Copper++	30.8 - 295	<1 - 700	22		
Iron	16,500 - 147,000	10 - >100,000	2,500	W-1	147,000
Lead	30.4 - 147	<10 - 300	17		
Magnesium	488 - 1,640	50 - 50,000	460		
Manganese	357 - 1,900	<2 - 7,000	640		
Nickel+	18.3 - 145	<5 - 700	18		
Potassium	ND - 294	50 - 3,700	NA		
Sodium	ND - 132	<500 - 50,000	780		
Vanadium+	ND - 46.3	<7 - 300	66		
Zinc	39.1 - 198	<5 - 2,900	52		

02[UZ]YP7080:3136/6043/19

*Shacklette and Boerngen, 1984, "Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States," U.S.G.S. Professional Paper 1270.

**Lindsay, 1979, Chemical Equilibria in Soils, John Wiley and Sons.

+Results and quantitation limits are considered low estimates due to low spike recoveries.

++Estimated values due to unacceptable precision. Results considered low estimates due to low spike recoveries.

Key:

ND = Not detected.

Table 4-5
SUBSURFACE SOIL ORGANIC ANALYSIS*

Compound	Range. ($\mu\text{g}/\text{kg}$)	Sample Concentration ($\mu\text{g}/\text{kg}$)	
Volatile Organics			
Chloroform	ND - 8	GW-7 (0-20)	7
		GW-8 (4-26)	6
Semivolatile Organics			
Acenaphthene	ND - 1,300	GW-5 (0-4)	1,300
Fluorene	ND - 1,300	GW-5 (0-4)	1,300
Phenanthrene	ND - 14,000	GW-2 (0-4) GW-5 (0-4) GW-8 (0-4)	1,400 9,000 14,000
Anthracene	ND - 3,000	GW-2 (0-4) GW-5 (0-4)	420 3,000
Fluoranthene	ND - 15,000	GW-2 (0-4) GW-5 (0-4) GW-8 (0-4)	1,100 12,000 15,000
Pyrene	ND - 11,000	GW-2 (0-4) GW-5 (0-4) GW-8 (0-4)	920 10,000 11,000
Benzo(a)anthracene	ND - 7,100	GW-2 (0-4) GW-5 (0-4) GW-8 (0-4)	580 6,200 7,100
Chrysene	ND - 7,000	GW-2 (0-4) GW-5 (0-4) GW-8 (0-4)	540 5,200 7,000
Benzo(b)fluoranthene	ND - 12,000	GW-2 (0-4) GW-5 (0-4) GW-8 (0-4)	670 7,700 12,000
Benzo(k)fluoranthene	ND - 4,100	GW-8 (0-4)	4,100
Benzo(a)pyrene	ND - 6,300	GW-2 (0-4) GW-5 (0-4) GW-8 (0-4)	480 4,900 6,300
Indeno(1,2,3-cd)pyrene	ND - 2,400	GW-5 (0-4) GW-8 (0-4)	3,000 5,900
Dibenz(a,h)anthracene	ND - 2,400	GW-5 (0-4) GW-8 (0-4)	750 2,400
Benzo(g,h,i)perylene	ND - 4,100	GW-5 (0-4) GW-8 (0-4)	2,800 4,100

02[UZ]YP7080:D3136/6044/27

*No pesticides or PCBs were detected in subsurface soil samples.

Key:

ND = Not detected.

Table 4-6
SUBSURFACE SOIL INORGANIC ANALYSIS

Analyte	Guidelines for Soils/ Surface Materials of Eastern United States*			Samples Exceeding Range	
	Range (mg/kg)	Range (mg/kg)	Estimated Mean (mg/kg)	Location	Concentration (mg/kg)
Aluminum	6,230 - 14,000	7,000 - >100,000	57,000		
Arsenic+	0.98 - 18.7	<1.1 - 73	7.4		
Barium	41.1 - 160	10 - 1,500	420		
Beryllium	ND - 1.3	<1 - 7	0.85		
Cadmium***++	1.4 - 5.9	0.01 - 0.70	NA	GW-1 (0-20) GW-1 (20-40) GW-2 (0-4) GW-2 (4-20) GW-3 GW-3 GW-4 GW-4 GW-5 (0-4) GW-6 (0-4) GW-6 (4-26) GW-7 (0-20) GW-7 (20-40) GW-8 (0-4) GW-8 (9-26)	1.8 1.7 2.3 1.9 3.0 1.6 1.8 2.0 3.7 2.5 1.7 1.9 1.4 5.8 2.3
Calcium	5,510 - 66,900	10 - 280,000	630		
Chromium	11.8 - 40.5	1 - 1,000	52		
Cobalt	6.2 - 17.7	<0.1 - 70	9.2		
Copper+++	14.3 - 122	<1 - 700	22		
Iron	16,600 - 68,800	10 - >100,000	2,500		
Lead	8.6 - 175	<10 - 300	17		
Magnesium	1,100 - 22,700	50 - 50,000	460		
Manganese+	395 - 2,790	<2 - 7,000	640		
Mercury	ND - 0.22	0.01 - 3.4	.12		
Nickel	15.9 - 112	<5 - 700	18		
Potassium	578 - 2,190	50 - 3,700	NA		
Sodium	ND - 564	<500 - 50,000	7,800		

02(UZ)YP7080:D3136/6045/16

Key at end of table.

Table 4-6 (Cont.)

Analyte	Guidelines for Soils/ Surface Materials of Eastern United States*		Samples Exceeding Range		Concentration (mg/kg)
	Range (mg/kg)	Range (mg/kg)	Estimated Mean (mg/kg)	Location	
Vanadium++	16.7 - 28.1	<7 - 300	66		
Zinc	58.0 - 159	<5 - 2,900	52		

[UZ]YP7080:D3136/6045/16

*Shacklette and Boerngen 1984, "Element Concentrations in Soils and Other Surficial Materials in the Conterminous United States," U.S.G.S. Professional Paper 1270.

**Lindsay 1979, Chemical Equilibria in Soils, John Wiley and Sons.

+Results are considered as low estimates due to low spike recoveries.

++Results for GW-2 and GW-5 samples are considered low estimates due to low spike recoveries.

+++GW-2 and GW-5 values are estimates due to unacceptable precision. Results for GW-2 and GW-5 are considered low estimates due to low spike recoveries.

Key:

ND = Not detected

Table 4-7
SEDIMENT SAMPLE ORGANIC ANALYSIS*

Compound	Sample Number	Sample Concentration ($\mu\text{g}/\text{kg}$)
Semivolatile Organics		
Acenaphthene	SED-4	2,000
Dibenzofuran	SED-4	1,300
Fluorene	SED-4	1,800
Phenanthrene	SED-3 SED-4	1,600 12,000
Anthracene	SED-4	4,200
Fluoranthene	SED-3 SED-4	1,900 33,000
Pyrene	SED-3 SED-4	2,300 35,000
Benzo(a)anthracene	SED-3 SED-4	1,100 22,000
Chrysene	SED-3 SED-4	1,300 22,000
Benzo(b)fluoranthene	SED-3 SED-4	1,900 42,000
Benzo(a)pyrene	SED-3 SED-4	1,300 25,000
Indeno(1,2,3-cd)pyrene	SED-3 SED-4	960 14,000
Dibenz(a,h)anthracene	SED-4	1,300
Benzo(g,h,i)perylene	SED-3 SED-4	870 12,000

02[UZ]YP7080:D3136/6046/29

*No volatile organics, pesticides, or PCBs detected in sediment samples.

Table 4-8
SEDIMENT SAMPLE INORGANIC ANALYSIS

Analyte	SED-3 Concentration (mg/kg)	SED-4 Concentration (mg/kg)	Range (mg/kg)	Guidelines for Soils/ Surface Materials of Eastern United States*	
				Estimated Mean (mg/kg)	Samples Exceeding Range
Aluminum	5,250	13,100	7,000 - 100,000	57,000	
Antimony+	ND	19.4	<1 - 8.8	0.76	SED-4
Arsenic+	14.0	109	<1.1 - 73	7.4	SED-4
Barium	103	167	10 - 1,500	420	
Cadmium+	7.7	4.6	0.01 - 0.70**	NA	SED-3 SED-4
Calcium	6,270	39,200	10 - 280,000	630	
Chromium	22.1	35.9	1 - 1,000	52	
Cobalt	4.5	12.7	<0.1 - 70	9.2	
Copper++	245+	113	<1 - 700	22	
Iron	57,200	44,000	10 - >100,000	2,500	
Lead	222	979	<10 - 300	17	SED-4
Magnesium	1,190	11,700	50 - 50,000	460	
Manganese	151	1,000	<2 - 7,000	640	
Mercury	0.26	0.23	0.01 - 3.4	0.12	

02(UZ)YP7080:3136/6047/20

Table 4-8 (Cont.)

Analyte	Guidelines for Soils/ Surface Materials of Eastern United States*				Samples Exceeding Range
	SED-3 Concentration (mg/kg)	SED-4 Concentration (mg/kg)	Range (mg/kg)	Estimated Mean (mg/kg)	
Nickel+	35.5	42.4	<5 - 700	18	
Potassium	453	2,158	50 - 3,700	NA	
Selenium++	1.3	ND	<0.1 - 3.9	0.45	
Sodium	ND	187	<500 - 50,000	7,800	
Vanadium+	19.2	34.1	<7 - 300	66	
Zinc	560	350	<5 - 2,900	52	

02[UZ]YP7080:3136/6047/20

*Shacklette and Boerngen, 1984, "Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States," U.S.G.S. Professional Paper 1270.

**Lindsay, 1979, Chemical Equilibria in Soils, John Wiley and Sons.

+Results and quantitation limits are considered low estimates due to low spike recoveries.

++Estimated values due to unacceptable precision. Results are considered low estimates due to low spike recoveries.

Key:

ND = Not detected.

ATTACMENT B
2010 NYSDEC Letter

New York State Department of Environmental Conservation

Regional Engineer, Region 9

270 Michigan Avenue, Buffalo, New York 14203-2915

Phone: (716) 851-7130 • Fax: (716) 851-7009

Website: www.dec.ny.gov



Alexander B. Grannis
Commissioner

September 17, 2010

Ms. Erin Heaney
Executive Director
Clean Air Coalition of WNY
1250 Niagara Street
Buffalo, New York 14213

Dear Ms. Heaney:

Botsford Place, Buffalo, Erie County

This letter is in follow-up to our August 31, 2010 meeting regarding the status of various Department activities in the vicinity of Botsford Place in the City of Buffalo. Also in attendance at the meeting were Mrs. Renata and Mr. Bob Pokrasky, residents of the neighborhood adjacent to and east of Botsford Place.

The following is offered for your information as it pertains to the Department's jurisdiction in matters involving the Botsford Place area:

Petroleum Bulk Storage

Two groups of DEC regulated petroleum bulk storage tanks exist along Botsford Place. The tank systems are underground and are operated by First Student (at 118 Botsford) and Marshall Kimmins (at 51 Botsford). Both facilities are currently registered pursuant to the Petroleum Bulk Storage (PBS) program.

First Student entered into an Order on Consent with the Department which in part required that the tank system at 118 Botsford be evaluated by an independent third party for compliance with mandates of the PBS program. This evaluation has been completed and non-compliant items identified have been corrected.

On January 11, 2010, the USEPA conducted an inspection of the tank system at 51 Botsford. The issuance of a Notice of Violation by USEPA for non-compliant items is currently awaited. DEC staff will conduct a follow-up inspection this fall to confirm corrective action has been taken or determine if more formal enforcement is required.

Ms. Erin Heaney
September 17, 2010
Page 2

Dust and Fumes from Bus Parking

Mr. Alan Zylinski, of our Regional Division of Air, conducted an inspection of the bus parking areas along Botsford on August 3, 2010. The parking areas from 118 Botsford to 51 Botsford were found to be covered with asphalt millings or were paved. As part of the inspection, AI attempted to generate dust from these areas with his vehicle but was unable to do so. However, the potential for dust generation exists in the lot adjacent to and north of the paved area at 118 Botsford, as several busses were parked in this area of exposed soil (no paving).

As part of this inspection, idling restrictions were discussed with Mr. Rob Hummel, Contract Manager for First Student. Mr. Hummel advised that First Student utilizes a 3 minute idling restriction for its busses and pointed out a sign at the site so stating this requirement. Diesel idling limitations established by DEC are a maximum of 5 minutes.

At the August 31, 2010 meeting, we discussed the means through which area residents could contact the Department should diesel idling at the facility become a nuisance to the residents. Evaluation of these log sheets will over time aid in determining the nature and extent of such issues. If residents wish to do so, the use of a log to document and/or report problems observed would be acceptable to this office. A log sheet is enclosed for your information. I suggest that these sheets be compiled and submitted to this office on a routine (weekly/monthly) basis a single submission. Electronic scanning of the individual log sheets with e-mail transmission to this office (Larry Sitzman) is acceptable.

Wood Theaters' of Buffalo

On August 3, 2010, Mr. Tom Robinson, of our Regional Solid & Hazardous Waste Unit, conducted a cursory inspection of the former wood treating facility at 100 Botsford. Our records indicate that this facility conducted wood treatment utilizing chrome & copper blends until approximately 2004, when it converted to a copper only based preservative to meet upgraded regulations. At the time of the August 2010 inspection, the facility was closed and appeared that no production at the site had taken place in recent years. The Department is currently pursuing access to the building to conduct a more detailed inspection to determine if clean-up and/or other remedial actions are needed at this site.

Ms. Erin Heaney
September 17, 2010
Page 3

Hartwell Street Landfill

In 1992, the Department completed a study of the landfill area (formerly Atlas Steel) which confirmed that site soils contained contaminants consistent with the past industrial use of the area. However, the presence of hazardous wastes posing a significant threat to public health or the environment was not identified at the site, and remedial action in this regard was deemed unnecessary. The area has now been re-developed as commercial property.

Industrial Heritage Soils

As suggested above, the properties along Botsford and adjacent properties to the west have a long history of industrial use, and impacts to soils on these properties likely reflect, at least in part, these past uses. However, the various activities as outlined above have not revealed contamination levels requiring remedial action. Based on the information available to the Department at this time, exposure pathways for materials which may be found in these soils appear likely limited to direct contact and direct ingestion.

I trust the above will aid in understanding the Department's involvement with the Botsford area. Should you have any questions regarding the above, please do not hesitate to contact me.

Sincerely,



Daniel K. King, P.E.
Acting Regional Engineer

DKK/tml

Enclosure

cc: Rob & Renata Pokrasky, w/enc.
James Comerford, City of Buffalo, w/enc.
ec: Terri Mucha, w/o enc.
Jim Strickland, w/o enc.
Larry Sitzman, w/o enc.
Greg Sutton, w/o enc.
Martin Doster, w/o enc.
Mark Hans, w/o enc.
Thomas Robinson, w/o enc.
Alan Zylinski, w/o enc.
Andrea Skalski, w/o enc.

ATTACMENT C

Draft HEI Information

Table 1
 Analytical Sample Summary Table
 1959 Elmwood Avenue
 Buffalo, New York
 January 2016

Location	Depth/ Interval (feet bgs)	VOCs EPA Method 8260 TCL + STARS	SVOCs EPA Method 8270 TCL	Metals EPA Method 6010 TAL	PCBs EPA Method 8082A TCL	Selection
Soil Samples						
TP1	2-4	X	X	X	X	Black soil, odor
TP2	2-4	X	X	X	X	Black soil, historic industrial fill
TP3	2-4	X	X	X	X	Odor, ovm of 105 ppm
TP4	1-3	X	X	X	X	Black soil; historic industrial fill
TP5	4-8	X	X	X	X	general site coverage
TP6	1-5	X	X	X	X	Black soil, historic industrial fill
TP7	4-8	X	X	X	X	Sheen, odor
TP9	1-4	X	X	X	X	Interior location
TP11	3-4	X	X	X	X	Historic industrial fill
TP12	3-6	X	X	X	X	Odor, ovm of 18 ppm
TP13	2-4	X	X	X	X	Historic industrial fill

Notes:

1. STARS= Spills Technology and Remediation Series
2. bgs = below ground surface
3. VOCs = Volatile Organic Compounds
4. SVOCs = Semi-Volatile Organic Compounds
5. TCL = Target Compound List
6. TAL = Total Analyte List

Table 2
 Soil Analytical Testing Results Summary
 1959 Elmwood Avenue
 Buffalo, New York
 January 2016

Parameter	TP1 (2-4')	TP2 (2-4')	TP3 (2-4')	TP4 (1-3')	TP5 (4-8')	TP6 (1-5')	TP7 (4-8')	TP9 (1-4')	TP11 (3-4')	TP12 (3-6')	TP13 (2-4')	Unrestricted Use	Restricted Residential Use	Commercial Use	Industrial Use
GC/MS Volatiles 8260C Analysis (ug/kg)															
Acetone	ND	23	ND	120	41	120	5.5J	46	1000J	250J	63	50	100,000	500,000	1,000,000
2-Butanone (MEK)	ND	4.6J	ND	16	3.8J	22	ND	4J	ND	ND	6.5J	120	100,000	500,000	1,000,000
Carbon disulfide	ND	ND	ND	1.8J	ND	ND	ND	ND	ND	ND	ND	NV	NV	NV	NV
1,2-Dichlorobenzene	ND	ND	ND	ND	62	0.38J	ND	0.25J	ND	ND	ND	1,100	100,000	500,000	1,000,000
1,3-Dichlorobenzene	ND	ND	ND	ND	0.48J	ND	ND	ND	ND	ND	ND	2,400	49,000	280,000	560,000
Isopropylbenzene	ND	ND	16J	ND	ND	ND	ND	ND	ND	ND	ND	NV	NV	NV	NV
p-Isopropyltoluene	ND	ND	ND	0.27J	ND	ND	ND	1.3	71J	38J	1.1J	NV	NV	NV	NV
Methyl Acetate	ND	ND	120J	ND	ND	ND	ND	ND	ND	ND	ND	NV	NV	NV	NV
Methyl cyclohexane	ND	ND	77J	ND	ND	ND	ND	ND	ND	ND	ND	NV	NV	NV	NV
Naphthalene	3,100	4.9J	670	17	1.5J	ND	1.1J	39	32,000	5,000	160	12,000	100,000	500,000	1,000,000
n-Propylbenzene	ND	ND	37J	ND	ND	ND	ND	ND	ND	ND	ND	3,900	100,000	500,000	1,000,000
sec-Butylbenzene	ND	ND	52J	ND	ND	ND	ND	ND	ND	ND	ND	11,000	100,000	500,000	1,000,000
Toluene	9.7J	ND	20J	ND	ND	ND	ND	ND	ND	ND	ND	700	100,000	500,000	1,000,000
1,2,4-Trimethylbenzene	11J	ND	ND	0.40J	ND	ND	ND	0.50J	140J	ND	0.55J	3,600	52,000	190,000	380,000
1,3,5-Trimethylbenzene	ND	60J	ND	0.24J	8,400	52,000	190,000	380,000							
m,p-Xylene	12J	ND	ND	0.29J	ND	ND	ND	ND	140J	ND	0.37J	260	100,000	500,000	1,000,000
o-Xylene	7.5J	ND	45J	ND	ND	260	100,000	500,000	1,000,000						
Xylene (total)	20J	ND	ND	0.29J	ND	ND	ND	ND	190J	ND	0.37J	260	100,000	500,000	1,000,000
Total TIC	NA	NA	NA	NA	NA	NA	3,000J	NA	NA	NA	NA	NV	NV	NV	NV
GC/MS Semi-volatiles 8270D Analysis (ug/kg)															
2,4-Dimethylphenol	680J	ND	ND	ND	NV	NV	NV	NV							
2-Methylphenol	410J	ND	350J	ND	NV	NV	NV	NV	NV						
3&4-Methylphenol	1000J	ND	ND	160J	ND	ND	ND	ND	110J	860J	79J	NV	NV	NV	NV
Pentachlorophenol	ND	ND	ND	800	6,700	6,700	55,000								
Phenol	600J	ND	500J	ND	330	100,000	500,000	1,000,000							
Acenaphthene	17,000	110J	590	31,000	410	1,700	100J	460	3,000	27,000	1,700	20,000	100,000	500,000	1,000,000
Acenaphthylene	3,000	ND	ND	ND	340	200J	69J	470	1,600	3,100	350	100,000	100,000	500,000	1,000,000
Anthracene	40,000	290	1,200	54,000	1,300	2,800	280	1,400	10,000	74,000	3,700	100,000	100,000	500,000	1,000,000
Benzo(a)anthracene	49,000	600	2,100	66,000	2,900	37,000	790	3,000	16,000	74,000	5,800	1,000	1,000	5,600	11,000
Benzo(a)pyrene	42,000	500	1,800	56,000	2,600	58,000	760	2,800	15,000	63,000	5,200	1,000	1,000	1,000	1,100
Benzo(b)fluoranthene	52,000	680	2,700	70,000	3,700	75,000	960	4,000	19,000	82,000	6,800	1,000	1,000	5,600	11,000
Benzo(g,h,i)perylene	21,000	280	1,100	30,000	1,600	38,000	420	1,700	7,800	45,000	3,000	100,000	100,000	500,000	1,000,000
Benzo(k)fluoranthene	16,000	240	770	24,000	1,300	25,000	360	1,200	7,500	43,000	2,600	800	3,900	56,000	110,000
Biphenyl	2000J	ND	ND	580J	62J	ND	ND	70J	940	2900J	220J	NV	NV	NV	NV
Carbazole	21,000	160J	ND	28,000	540	3,700	100J	510	4,000	34,000	2,400	NV	NV	NV	NV
Chrysene	46,000	530	2,100	61,000	2,500	48,000	740	2,600	16,000	68,000	5,700	1,000	3,900	56,000	110,000
Dibenzo(a,h)anthracene	4,500	82J	250	6,500	360	8,400	100J	380	2,200	12,000	740	330	330	560	1,100
Dibenzofuran	16,000	78J	470	13,000	300	260J	62J	400	5,800	24,000	1,600	7,000	59,000	350,000	1,000,000
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	130J	ND	ND	ND	ND	ND	ND	NV	NV	NV	NV
Fluoranthene	140,000	1,300	5,500	19,000	7,300	66,000	1,600	6,300	40,000	200,000	13,000	100,000	100,000	500,000	1,000,000
Fluorene	28,000	150J	790	28,000	520	650J	120J	730	7,900	42,000	2,600	30,000	100,000	500,000	1,000,000
Indeno(1,2,3-cd)pyrene	26,000	330	1,200	39,000	2,000	41,000	440	2,100	9,200	55,000	3,300	500	500	5,600	11,000
2-Methylnaphthalene	7,700	34J	300	1,600	310	240J	43J	360	4,400	10,000	820	NV	NV	NV	NV
Naphthalene	29,000	100J	480	2,100	540	260J	99J	1,100	15,000	33,000	2,300	12,000	100,000	500,000	1,000,000
Phenanthrene	140,000	1,000	5,400	180,000	4,200	14,000	980	4,900	34,000	190,000	15,000	100,000	100,000	500,000	1,000,000
Pyrene	110,000	1,000	4,800	140,000	5,900	65,000	1,500	6,200	35,000	150,000	13,000	100,000	100,000	500,000	1,000,000
Total TIC	NA	NA	NA	NA	NA	NA	2,910J	NA	NA	NA	NA	NV	NV	NV	NV

Table 2
 Soil Analytical Testing Results Summary
 1959 Elmwood Avenue
 Buffalo, New York
 January 2016

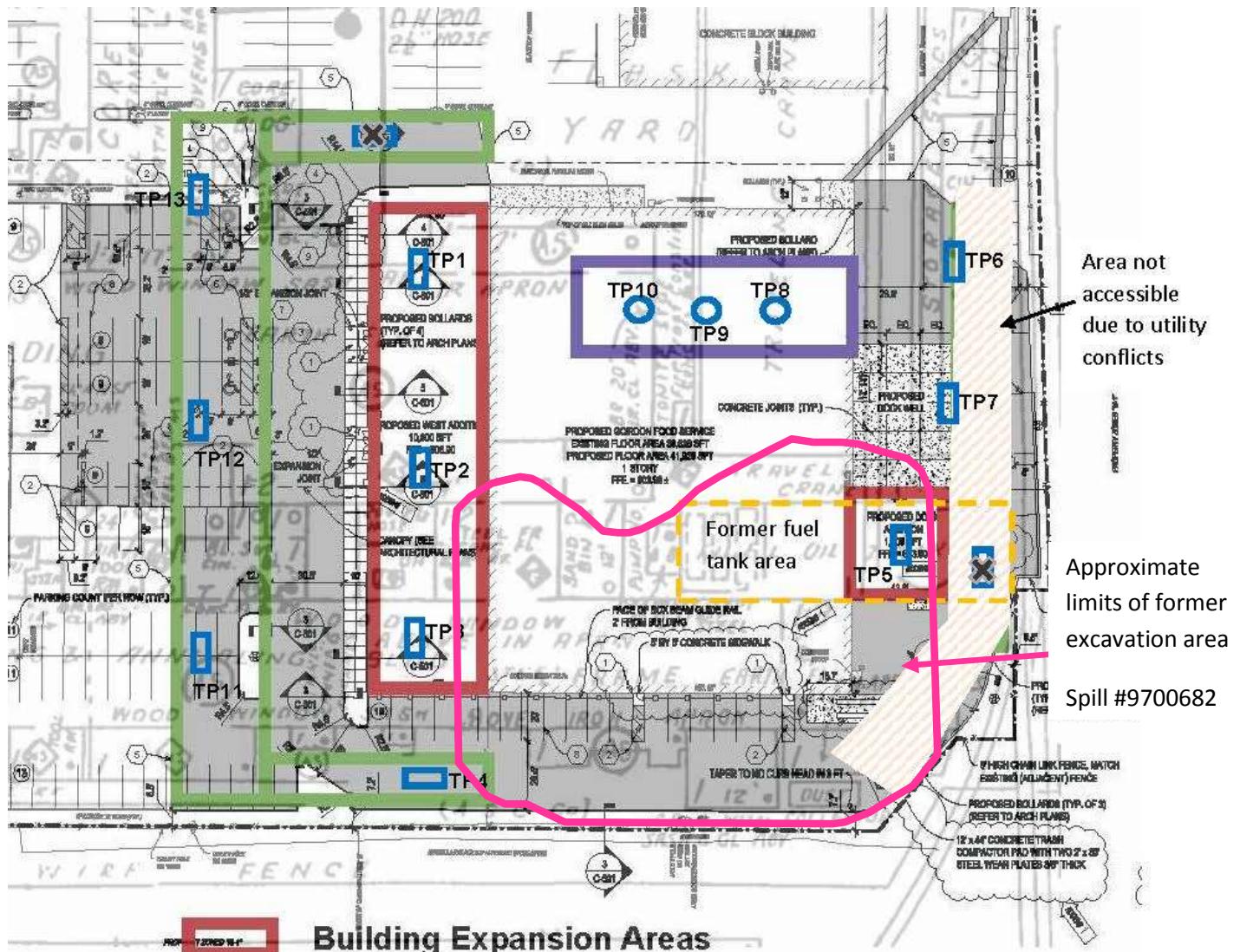
Parameter	TP1 (2-4')	TP2 (2-4')	TP3 (2-4')	TP4 (1-3')	TP5 (4-8')	TP6 (1-5')	TP7 (4-8')	TP9 (1-4')	TP11 (3-4')	TP12 (3-6')	TP 13 (2-4')	Unrestricted Use	Restricted Residential Use	Commercial Use	Industrial Use
Metals Analysis (mg/kg)															
Aluminum	5,300	7,400	9,200	4,100	11,000	14,000	16,000	13,000	6,900	6,000	5,500	NV	NV	NV	NV
Arsenic	4.4	3.9	5.3	8.5	8.2	9.4	64	8.1	18	26	14	13	16	16	16
Barium	45	53	68	49	95	78	110	120	46	63	57	350	400	400	10,000
Beryllium	0.33J	0.25J	0.44J	0.18J	0.54	0.85	2.4	0.66	0.346J	0.446J	0.228J	7.2	72	590	2,700
Calcium	20,000	3,000	26,000	5,600	32,000	8,400	37,000	33,000	14,000	75,000	17,000	NV	NV	NV	NV
Chromium	38	14	15	69	18	20	42	27	16	52	32	30	180	1,500	6,800
Cobalt	3.6	7.2	5.4	7	7.5	9.2	10	8.2	5.4	7	3.4	NV	NV	NV	NV
Copper	38	37	43	110	40	24	38	46	76	130	65	50	270	270	10,000
Iron	24,000	23,000	17,000	83,000	21,000	21,000	29,000	29,000	25,000	39,000	20,000	NV	NV	NV	NV
Lead	26	27	45	27	50	13	18	37	15	47	49	63	400	1,000	3,900
Magnesium	3,400	1,700	5,000	870	6,700	3,200	3,200	8,400	3,000	5,900	3,400	NV	NV	NV	NV
Manganese	1,700	820	640	1,300	480	350	980	920	560	1,800	800	1,600	2,000	10,000	10,000
Mercury	0.07J	0.1	0.07J	0.14	0.15	0.06J	0.25	0.08	0.04J	0.22	0.12	0.18	0.81	2.8	5.7
Nickel	20	10.0	14	55	21	16	30	24	17	30	18	30	310	310	10,000
Potassium	640	880	1,200	530	1,200	1,100	1,400	1,600	840	600	660	NV	NV	NV	NV
Selenium	ND	ND	ND	ND	ND	0.37J	0.91J	ND	ND	ND	ND	3.9	180	1,500	6,800
Silver	0.2J	ND	0.2J	ND	2	180	1,500	6,800							
Sodium	900	560	500	500	180	760	1,100	250	400	500	410	NV	NV	NV	NV
Vanadium	9.9	11	15	11	21	32	80	22	14	15	10	NV	NV	NV	NV
Zinc	120	80	84	85	80	83	64	82	54	170	110	109	10,000	10,000	10,000
PCBs Analysis (ug/kg)															
Aroclor 1242	ND	ND	195	NV	NV	NV	NV								
Aroclor 1248	46.6	18.8J	77.5	21J	39.7	ND	24.6J	128	125	466	ND	NV	NV	NV	NV
Aroclor 1254	58.9	6.52J	82.5	10.7J	56.6	ND	12.7J	160	53.8	292	58.5	NV	NV	NV	NV
Aroclor 1260	132	5.44J	246	12.5J	101	ND	11.4J	143	ND	595	162	NV	NV	NV	NV
Aroclor 1262	ND	ND	ND	NV	NV	NV	NV								
Aroclor 1268	ND	ND	ND	NV	NV	NV	NV								
Total PCBs	238	30.8J	406	42.2J	197	ND	48.7J	431	179	1,350	416	100	1,000	1,000	25,000

Notes:

- Analytical testing performed by Alpha Analytical. Compounds detected in one or more samples are presented in this table. Refer to Appendix for the full analytical report.
- ug/Kg = parts per billion; mg/kg= parts per million
- ND = not detected; NT = Not tested; NV = no value; NA=not applicable
- J = Estimated value. The target analyte is below the reporting limit (RL), but above the method detection limit (MDL).
- TIC= Tentatively Identified Compounds; (TP7 only)
- Analytical results compared to NYSDEC Part 375-6; Remedial Program Soil Cleanup Objectives, Table 375-(a) Unrestricted Use Soil Cleanup Objective; and Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

7. Shading indicates:

- = detected concentration above unrestricted use soil cleanup objective
- = detected concentration above restricted residential use soil cleanup objective
- = detected concentration above commercial use soil cleanup objective
- = detected concentration above industrial use soil cleanup objective



Building Expansion Areas

Building Slab Removal Area (12"-18" depth)

Utility Trenching Areas (5'-6' depth)

Exterior Test Pit Location

Interior Test Pit Location

DRAFT

HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

TEST PIT LOCATION PLAN

DEVELOPMENT PROPERTY

1959 ELMWOOD AVE.

BUFFALO, NEW YORK

NARDIN ACADEMY

BUFFALO, NEW YORK

DRAWN BY: MMW

SCALE: NOT TO SCALE

PROJECT: 97302

CHECKED BY:

DATE: 1/16

FIGURE NO: 1

N



ANALYTICAL REPORT

Lab Number:	L1600224
Client:	Hazard Evaluations, Inc. 3752 North Buffalo Road Orchard Park, NY 14127
ATTN:	Michele Wittman
Phone:	(716) 667-3130
Project Name:	PINNACLE REALTY ENV. SERVICES
Project Number:	97301
Report Date:	01/12/16

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

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1600224-01	TP-1 (2-4')	SOIL	BUFFALO, NY	01/05/16 08:30	01/05/16
L1600224-02	TP-2 (2-4')	SOIL	BUFFALO, NY	01/05/16 09:00	01/05/16
L1600224-03	TP-3 (2-4')	SOIL	BUFFALO, NY	01/05/16 10:00	01/05/16
L1600224-04	TP-4 (1-3')	SOIL	BUFFALO, NY	01/05/16 11:30	01/05/16
L1600224-05	TP-5 (4-8')	SOIL	BUFFALO, NY	01/05/16 12:00	01/05/16
L1600224-06	TP-6 (1-5')	SOIL	BUFFALO, NY	01/05/16 13:00	01/05/16
L1600224-07	TP-9 (1-4')	SOIL	BUFFALO, NY	01/05/16 13:30	01/05/16
L1600224-08	TP-7 (4-8')	SOIL	BUFFALO, NY	01/05/16 15:30	01/05/16

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

HOLD POLICY

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

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

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Case Narrative (continued)

Report Submission

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

Volatile Organics

L1600224-03: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

Semivolatile Organics

L1600224-08: The surrogate recoveries were outside the acceptance criteria for 2-fluorophenol (20%) and 2,4,6-tribromophenol (1%); however, re-extraction achieved similar results: 2,4,6-tribromophenol (7%). The results of both extractions are reported.

Metals

L1600224-01 through -08: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG855049-4 MS recoveries for aluminum (1050%), calcium (0%), iron (1110%) and manganese (0%), performed on L1600224-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG855049-4 MS recovery, performed on L1600224-01, is outside the acceptance criteria for potassium (151%). A post digestion spike was performed and was within acceptance criteria.

The WG855049-4 MS recoveries, performed on L1600224-01, are outside the acceptance criteria for magnesium (133%) and thallium (72%). A post digestion spike was performed and yielded unacceptable recoveries for magnesium (67%) and thallium (68%). This has been attributed to sample matrix.

The WG855049-3 Laboratory Duplicate RPD, performed on L1600224-01, is outside the acceptance criteria for manganese (83%). The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

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

Authorized Signature:


 Cristin Walker

Title: Technical Director/Representative

Date: 01/12/16

ORGANICS



VOLATILES



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-01	D	Date Collected:	01/05/16 08:30
Client ID:	TP-1 (2-4')		Date Received:	01/05/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified
Matrix:	Soil			
Analytical Method:	1,8260C			
Analytical Date:	01/10/16 11:32			
Analyst:	BN			
Percent Solids:	88%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	330	36.	50
1,1-Dichloroethane	ND		ug/kg	50	2.8	50
Chloroform	ND		ug/kg	50	12.	50
Carbon tetrachloride	ND		ug/kg	33	6.9	50
1,2-Dichloropropane	ND		ug/kg	120	7.5	50
Dibromochloromethane	ND		ug/kg	33	5.1	50
1,1,2-Trichloroethane	ND		ug/kg	50	10.	50
Tetrachloroethene	ND		ug/kg	33	4.6	50
Chlorobenzene	ND		ug/kg	33	12.	50
Trichlorofluoromethane	ND		ug/kg	160	13.	50
1,2-Dichloroethane	ND		ug/kg	33	3.8	50
1,1,1-Trichloroethane	ND		ug/kg	33	3.7	50
Bromodichloromethane	ND		ug/kg	33	5.7	50
trans-1,3-Dichloropropene	ND		ug/kg	33	4.0	50
cis-1,3-Dichloropropene	ND		ug/kg	33	3.9	50
1,3-Dichloropropene, Total	ND		ug/kg	33	3.9	50
Bromoform	ND		ug/kg	130	7.8	50
1,1,2,2-Tetrachloroethane	ND		ug/kg	33	3.3	50
Benzene	ND		ug/kg	33	3.9	50
Toluene	9.7	J	ug/kg	50	6.4	50
Ethylbenzene	ND		ug/kg	33	4.2	50
Chloromethane	ND		ug/kg	160	9.7	50
Bromomethane	ND		ug/kg	66	11.	50
Vinyl chloride	ND		ug/kg	66	3.9	50
Chloroethane	ND		ug/kg	66	10.	50
1,1-Dichloroethene	ND		ug/kg	33	8.7	50
trans-1,2-Dichloroethene	ND		ug/kg	50	7.0	50
Trichloroethene	ND		ug/kg	33	4.1	50
1,2-Dichlorobenzene	ND		ug/kg	160	5.1	50
1,3-Dichlorobenzene	ND		ug/kg	160	4.5	50



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-01	D		Date Collected:	01/05/16 08:30	
Client ID:	TP-1 (2-4')			Date Received:	01/05/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	160	4.6	50
Methyl tert butyl ether	ND		ug/kg	66	2.8	50
p/m-Xylene	12	J	ug/kg	66	6.5	50
o-Xylene	7.5	J	ug/kg	66	5.7	50
Xylenes, Total	20	J	ug/kg	66	5.7	50
cis-1,2-Dichloroethene	ND		ug/kg	33	4.7	50
1,2-Dichloroethene, Total	ND		ug/kg	33	4.7	50
Styrene	ND		ug/kg	66	13.	50
Dichlorodifluoromethane	ND		ug/kg	330	6.3	50
Acetone	ND		ug/kg	330	34.	50
Carbon disulfide	ND		ug/kg	330	36.	50
2-Butanone	ND		ug/kg	330	9.0	50
4-Methyl-2-pentanone	ND		ug/kg	330	8.1	50
2-Hexanone	ND		ug/kg	330	22.	50
Bromochloromethane	ND		ug/kg	160	9.1	50
1,2-Dibromoethane	ND		ug/kg	130	5.8	50
n-Butylbenzene	ND		ug/kg	33	3.8	50
sec-Butylbenzene	ND		ug/kg	33	4.0	50
tert-Butylbenzene	ND		ug/kg	160	4.5	50
1,2-Dibromo-3-chloropropane	ND		ug/kg	160	13.	50
Isopropylbenzene	ND		ug/kg	33	3.4	50
p-Isopropyltoluene	ND		ug/kg	33	4.1	50
Naphthalene	3100		ug/kg	160	4.6	50
n-Propylbenzene	ND		ug/kg	33	3.6	50
1,2,3-Trichlorobenzene	ND		ug/kg	160	4.9	50
1,2,4-Trichlorobenzene	ND		ug/kg	160	6.0	50
1,3,5-Trimethylbenzene	ND		ug/kg	160	4.7	50
1,2,4-Trimethylbenzene	11	J	ug/kg	160	4.7	50
Methyl Acetate	ND		ug/kg	660	8.9	50
Cyclohexane	ND		ug/kg	660	4.8	50
1,4-Dioxane	ND		ug/kg	3300	480	50
Freon-113	ND		ug/kg	660	9.1	50
Methyl cyclohexane	ND		ug/kg	130	5.1	50

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-01	D	Date Collected:	01/05/16 08:30
Client ID:	TP-1 (2-4')		Date Received:	01/05/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	100		70-130

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-02	Date Collected:	01/05/16 09:00
Client ID:	TP-2 (2-4')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	01/10/16 11:58		
Analyst:	BN		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/kg	12	1.3	1	
1,1-Dichloroethane	ND	ug/kg	1.8	0.10	1	
Chloroform	ND	ug/kg	1.8	0.45	1	
Carbon tetrachloride	ND	ug/kg	1.2	0.25	1	
1,2-Dichloropropane	ND	ug/kg	4.2	0.28	1	
Dibromochloromethane	ND	ug/kg	1.2	0.19	1	
1,1,2-Trichloroethane	ND	ug/kg	1.8	0.37	1	
Tetrachloroethene	ND	ug/kg	1.2	0.17	1	
Chlorobenzene	ND	ug/kg	1.2	0.42	1	
Trichlorofluoromethane	ND	ug/kg	6.1	0.47	1	
1,2-Dichloroethane	ND	ug/kg	1.2	0.14	1	
1,1,1-Trichloroethane	ND	ug/kg	1.2	0.13	1	
Bromodichloromethane	ND	ug/kg	1.2	0.21	1	
trans-1,3-Dichloropropene	ND	ug/kg	1.2	0.15	1	
cis-1,3-Dichloropropene	ND	ug/kg	1.2	0.14	1	
1,3-Dichloropropene, Total	ND	ug/kg	1.2	0.14	1	
Bromoform	ND	ug/kg	4.8	0.29	1	
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.2	0.12	1	
Benzene	ND	ug/kg	1.2	0.14	1	
Toluene	ND	ug/kg	1.8	0.24	1	
Ethylbenzene	ND	ug/kg	1.2	0.15	1	
Chloromethane	ND	ug/kg	6.1	0.36	1	
Bromomethane	ND	ug/kg	2.4	0.41	1	
Vinyl chloride	ND	ug/kg	2.4	0.14	1	
Chloroethane	ND	ug/kg	2.4	0.38	1	
1,1-Dichloroethene	ND	ug/kg	1.2	0.32	1	
trans-1,2-Dichloroethene	ND	ug/kg	1.8	0.26	1	
Trichloroethene	ND	ug/kg	1.2	0.15	1	
1,2-Dichlorobenzene	ND	ug/kg	6.1	0.18	1	
1,3-Dichlorobenzene	ND	ug/kg	6.1	0.16	1	



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-02		Date Collected:	01/05/16 09:00		
Client ID:	TP-2 (2-4')		Date Received:	01/05/16		
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	6.1	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.10	1
p/m-Xylene	ND		ug/kg	2.4	0.24	1
o-Xylene	ND		ug/kg	2.4	0.21	1
Xylenes, Total	ND		ug/kg	2.4	0.21	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Styrene	ND		ug/kg	2.4	0.49	1
Dichlorodifluoromethane	ND		ug/kg	12	0.23	1
Acetone	23		ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	4.6	J	ug/kg	12	0.33	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.30	1
2-Hexanone	ND		ug/kg	12	0.81	1
Bromochloromethane	ND		ug/kg	6.1	0.33	1
1,2-Dibromoethane	ND		ug/kg	4.8	0.21	1
n-Butylbenzene	ND		ug/kg	1.2	0.14	1
sec-Butylbenzene	ND		ug/kg	1.2	0.15	1
tert-Butylbenzene	ND		ug/kg	6.1	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.1	0.48	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.15	1
Naphthalene	4.9	J	ug/kg	6.1	0.17	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.1	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.1	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.1	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.1	0.17	1
Methyl Acetate	ND		ug/kg	24	0.33	1
Cyclohexane	ND		ug/kg	24	0.18	1
1,4-Dioxane	ND		ug/kg	120	17.	1
Freon-113	ND		ug/kg	24	0.33	1
Methyl cyclohexane	ND		ug/kg	4.8	0.19	1

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-02

Date Collected: 01/05/16 09:00

Client ID: TP-2 (2-4')

Date Received: 01/05/16

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	103		70-130

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-03	D	Date Collected:	01/05/16 10:00
Client ID:	TP-3 (2-4')		Date Received:	01/05/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified
Matrix:	Soil			
Analytical Method:	1,8260C			
Analytical Date:	01/10/16 12:24			
Analyst:	BN			
Percent Solids:	85%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	570	63.	50
1,1-Dichloroethane	ND		ug/kg	85	4.9	50
Chloroform	ND		ug/kg	85	21.	50
Carbon tetrachloride	ND		ug/kg	57	12.	50
1,2-Dichloropropane	ND		ug/kg	200	13.	50
Dibromochloromethane	ND		ug/kg	57	8.7	50
1,1,2-Trichloroethane	ND		ug/kg	85	17.	50
Tetrachloroethene	ND		ug/kg	57	8.0	50
Chlorobenzene	ND		ug/kg	57	20.	50
Trichlorofluoromethane	ND		ug/kg	280	22.	50
1,2-Dichloroethane	ND		ug/kg	57	6.4	50
1,1,1-Trichloroethane	ND		ug/kg	57	6.3	50
Bromodichloromethane	ND		ug/kg	57	9.8	50
trans-1,3-Dichloropropene	ND		ug/kg	57	6.9	50
cis-1,3-Dichloropropene	ND		ug/kg	57	6.7	50
1,3-Dichloropropene, Total	ND		ug/kg	57	6.7	50
Bromoform	ND		ug/kg	230	13.	50
1,1,2,2-Tetrachloroethane	ND		ug/kg	57	5.7	50
Benzene	ND		ug/kg	57	6.7	50
Toluene	20	J	ug/kg	85	11.	50
Ethylbenzene	ND		ug/kg	57	7.2	50
Chloromethane	ND		ug/kg	280	17.	50
Bromomethane	ND		ug/kg	110	19.	50
Vinyl chloride	ND		ug/kg	110	6.7	50
Chloroethane	ND		ug/kg	110	18.	50
1,1-Dichloroethene	ND		ug/kg	57	15.	50
trans-1,2-Dichloroethene	ND		ug/kg	85	12.	50
Trichloroethene	ND		ug/kg	57	7.1	50
1,2-Dichlorobenzene	ND		ug/kg	280	8.7	50
1,3-Dichlorobenzene	ND		ug/kg	280	7.7	50



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-03	D		Date Collected:	01/05/16 10:00	
Client ID:	TP-3 (2-4')			Date Received:	01/05/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	280	7.9	50
Methyl tert butyl ether	ND		ug/kg	110	4.8	50
p/m-Xylene	ND		ug/kg	110	11.	50
o-Xylene	ND		ug/kg	110	9.8	50
Xylenes, Total	ND		ug/kg	110	9.8	50
cis-1,2-Dichloroethene	ND		ug/kg	57	8.1	50
1,2-Dichloroethene, Total	ND		ug/kg	57	8.1	50
Styrene	ND		ug/kg	110	23.	50
Dichlorodifluoromethane	ND		ug/kg	570	11.	50
Acetone	ND		ug/kg	570	59.	50
Carbon disulfide	ND		ug/kg	570	63.	50
2-Butanone	ND		ug/kg	570	15.	50
4-Methyl-2-pentanone	ND		ug/kg	570	14.	50
2-Hexanone	ND		ug/kg	570	38.	50
Bromochloromethane	ND		ug/kg	280	16.	50
1,2-Dibromoethane	ND		ug/kg	230	9.9	50
n-Butylbenzene	ND		ug/kg	57	6.5	50
sec-Butylbenzene	52	J	ug/kg	57	6.9	50
tert-Butylbenzene	ND		ug/kg	280	7.7	50
1,2-Dibromo-3-chloropropane	ND		ug/kg	280	22.	50
Isopropylbenzene	16	J	ug/kg	57	5.9	50
p-Isopropyltoluene	ND		ug/kg	57	7.1	50
Naphthalene	670		ug/kg	280	7.9	50
n-Propylbenzene	37	J	ug/kg	57	6.2	50
1,2,3-Trichlorobenzene	ND		ug/kg	280	8.4	50
1,2,4-Trichlorobenzene	ND		ug/kg	280	10.	50
1,3,5-Trimethylbenzene	ND		ug/kg	280	8.2	50
1,2,4-Trimethylbenzene	ND		ug/kg	280	8.0	50
Methyl Acetate	120	J	ug/kg	1100	15.	50
Cyclohexane	ND		ug/kg	1100	8.3	50
1,4-Dioxane	ND		ug/kg	5700	820	50
Freon-113	ND		ug/kg	1100	16.	50
Methyl cyclohexane	77	J	ug/kg	230	8.8	50

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-03	D	Date Collected:	01/05/16 10:00
Client ID:	TP-3 (2-4')		Date Received:	01/05/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	118		70-130
Dibromofluoromethane	95		70-130

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-04
 Client ID: TP-4 (1-3')
 Sample Location: BUFFALO, NY
 Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/16 07:01
 Analyst: BN
 Percent Solids: 82%

Date Collected: 01/05/16 11:30
 Date Received: 01/05/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.10	1
Chloroform	ND		ug/kg	1.8	0.45	1
Carbon tetrachloride	ND		ug/kg	1.2	0.26	1
1,2-Dichloropropane	ND		ug/kg	4.3	0.28	1
Dibromochloromethane	ND		ug/kg	1.2	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.37	1
Tetrachloroethene	ND		ug/kg	1.2	0.17	1
Chlorobenzene	ND		ug/kg	1.2	0.42	1
Trichlorofluoromethane	ND		ug/kg	6.1	0.47	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.14	1
Bromodichloromethane	ND		ug/kg	1.2	0.21	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.15	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.14	1
Bromoform	ND		ug/kg	4.9	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.8	0.24	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	6.1	0.36	1
Bromomethane	ND		ug/kg	2.4	0.41	1
Vinyl chloride	ND		ug/kg	2.4	0.14	1
Chloroethane	ND		ug/kg	2.4	0.39	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.26	1
Trichloroethene	ND		ug/kg	1.2	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	6.1	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	6.1	0.16	1



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-04			Date Collected:	01/05/16 11:30	
Client ID:	TP-4 (1-3')			Date Received:	01/05/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	6.1	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.10	1
p/m-Xylene	0.29	J	ug/kg	2.4	0.24	1
o-Xylene	ND		ug/kg	2.4	0.21	1
Xylenes, Total	0.29	J	ug/kg	2.4	0.21	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Styrene	ND		ug/kg	2.4	0.49	1
Dichlorodifluoromethane	ND		ug/kg	12	0.23	1
Acetone	120		ug/kg	12	1.3	1
Carbon disulfide	1.8	J	ug/kg	12	1.3	1
2-Butanone	16		ug/kg	12	0.33	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.30	1
2-Hexanone	ND		ug/kg	12	0.81	1
Bromochloromethane	ND		ug/kg	6.1	0.34	1
1,2-Dibromoethane	ND		ug/kg	4.9	0.21	1
n-Butylbenzene	ND		ug/kg	1.2	0.14	1
sec-Butylbenzene	ND		ug/kg	1.2	0.15	1
tert-Butylbenzene	ND		ug/kg	6.1	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.1	0.48	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	0.27	J	ug/kg	1.2	0.15	1
Naphthalene	17		ug/kg	6.1	0.17	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.1	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.1	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.1	0.18	1
1,2,4-Trimethylbenzene	0.40	J	ug/kg	6.1	0.17	1
Methyl Acetate	ND		ug/kg	24	0.33	1
Cyclohexane	ND		ug/kg	24	0.18	1
1,4-Dioxane	ND		ug/kg	120	18.	1
Freon-113	ND		ug/kg	24	0.33	1
Methyl cyclohexane	ND		ug/kg	4.9	0.19	1

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-04

Date Collected: 01/05/16 11:30

Client ID: TP-4 (1-3')

Date Received: 01/05/16

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	95		70-130

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-05	Date Collected:	01/05/16 12:00
Client ID:	TP-5 (4-8')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	01/11/16 07:27		
Analyst:	BN		
Percent Solids:	86%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.43	1
Carbon tetrachloride	ND		ug/kg	1.2	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.1	0.26	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.35	1
Tetrachloroethene	ND		ug/kg	1.2	0.16	1
Chlorobenzene	ND		ug/kg	1.2	0.40	1
Trichlorofluoromethane	ND		ug/kg	5.8	0.45	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.14	1
Bromoform	ND		ug/kg	4.6	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.7	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.15	1
Chloromethane	ND		ug/kg	5.8	0.34	1
Bromomethane	ND		ug/kg	2.3	0.39	1
Vinyl chloride	ND		ug/kg	2.3	0.14	1
Chloroethane	ND		ug/kg	2.3	0.37	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.25	1
Trichloroethene	ND		ug/kg	1.2	0.14	1
1,2-Dichlorobenzene	62		ug/kg	5.8	0.18	1
1,3-Dichlorobenzene	0.48	J	ug/kg	5.8	0.16	1



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-05		Date Collected:	01/05/16 12:00		
Client ID:	TP-5 (4-8')		Date Received:	01/05/16		
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	5.8	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	ND		ug/kg	2.3	0.23	1
o-Xylene	ND		ug/kg	2.3	0.20	1
Xylenes, Total	ND		ug/kg	2.3	0.20	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Styrene	ND		ug/kg	2.3	0.47	1
Dichlorodifluoromethane	ND		ug/kg	12	0.22	1
Acetone	41		ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	3.8	J	ug/kg	12	0.32	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.28	1
2-Hexanone	ND		ug/kg	12	0.77	1
Bromochloromethane	ND		ug/kg	5.8	0.32	1
1,2-Dibromoethane	ND		ug/kg	4.6	0.20	1
n-Butylbenzene	ND		ug/kg	1.2	0.13	1
sec-Butylbenzene	ND		ug/kg	1.2	0.14	1
tert-Butylbenzene	ND		ug/kg	5.8	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.8	0.46	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	1.5	J	ug/kg	5.8	0.16	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.8	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.8	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.8	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.8	0.16	1
Methyl Acetate	ND		ug/kg	23	0.31	1
Cyclohexane	ND		ug/kg	23	0.17	1
1,4-Dioxane	ND		ug/kg	120	17.	1
Freon-113	ND		ug/kg	23	0.32	1
Methyl cyclohexane	ND		ug/kg	4.6	0.18	1

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-05

Date Collected: 01/05/16 12:00

Client ID: TP-5 (4-8')

Date Received: 01/05/16

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	97		70-130

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-06
 Client ID: TP-6 (1-5')
 Sample Location: BUFFALO, NY
 Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/16 07:53
 Analyst: BN
 Percent Solids: 77%

Date Collected: 01/05/16 13:00
 Date Received: 01/05/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	13	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.9	0.11	1
Chloroform	ND		ug/kg	1.9	0.48	1
Carbon tetrachloride	ND		ug/kg	1.3	0.27	1
1,2-Dichloropropane	ND		ug/kg	4.5	0.30	1
Dibromochloromethane	ND		ug/kg	1.3	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.9	0.39	1
Tetrachloroethene	ND		ug/kg	1.3	0.18	1
Chlorobenzene	ND		ug/kg	1.3	0.45	1
Trichlorofluoromethane	ND		ug/kg	6.5	0.50	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.15	1
1,1,1-Trichloroethane	ND		ug/kg	1.3	0.14	1
Bromodichloromethane	ND		ug/kg	1.3	0.22	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.16	1
cis-1,3-Dichloropropene	ND		ug/kg	1.3	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	1.3	0.15	1
Bromoform	ND		ug/kg	5.2	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.3	0.13	1
Benzene	ND		ug/kg	1.3	0.15	1
Toluene	ND		ug/kg	1.9	0.25	1
Ethylbenzene	ND		ug/kg	1.3	0.16	1
Chloromethane	ND		ug/kg	6.5	0.38	1
Bromomethane	ND		ug/kg	2.6	0.44	1
Vinyl chloride	ND		ug/kg	2.6	0.15	1
Chloroethane	ND		ug/kg	2.6	0.41	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.28	1
Trichloroethene	ND		ug/kg	1.3	0.16	1
1,2-Dichlorobenzene	0.38	J	ug/kg	6.5	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	6.5	0.18	1



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-06			Date Collected:	01/05/16 13:00	
Client ID:	TP-6 (1-5')			Date Received:	01/05/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND	ug/kg	6.5	0.18	1	
Methyl tert butyl ether	ND	ug/kg	2.6	0.11	1	
p/m-Xylene	ND	ug/kg	2.6	0.26	1	
o-Xylene	ND	ug/kg	2.6	0.22	1	
Xylenes, Total	ND	ug/kg	2.6	0.22	1	
cis-1,2-Dichloroethene	ND	ug/kg	1.3	0.18	1	
1,2-Dichloroethene, Total	ND	ug/kg	1.3	0.18	1	
Styrene	ND	ug/kg	2.6	0.52	1	
Dichlorodifluoromethane	ND	ug/kg	13	0.25	1	
Acetone	120	ug/kg	13	1.3	1	
Carbon disulfide	ND	ug/kg	13	1.4	1	
2-Butanone	22	ug/kg	13	0.35	1	
4-Methyl-2-pentanone	ND	ug/kg	13	0.32	1	
2-Hexanone	ND	ug/kg	13	0.86	1	
Bromochloromethane	ND	ug/kg	6.5	0.36	1	
1,2-Dibromoethane	ND	ug/kg	5.2	0.23	1	
n-Butylbenzene	ND	ug/kg	1.3	0.15	1	
sec-Butylbenzene	ND	ug/kg	1.3	0.16	1	
tert-Butylbenzene	ND	ug/kg	6.5	0.18	1	
1,2-Dibromo-3-chloropropane	ND	ug/kg	6.5	0.51	1	
Isopropylbenzene	ND	ug/kg	1.3	0.13	1	
p-Isopropyltoluene	ND	ug/kg	1.3	0.16	1	
Naphthalene	ND	ug/kg	6.5	0.18	1	
n-Propylbenzene	ND	ug/kg	1.3	0.14	1	
1,2,3-Trichlorobenzene	ND	ug/kg	6.5	0.19	1	
1,2,4-Trichlorobenzene	ND	ug/kg	6.5	0.24	1	
1,3,5-Trimethylbenzene	ND	ug/kg	6.5	0.19	1	
1,2,4-Trimethylbenzene	ND	ug/kg	6.5	0.18	1	
Methyl Acetate	ND	ug/kg	26	0.35	1	
Cyclohexane	ND	ug/kg	26	0.19	1	
1,4-Dioxane	ND	ug/kg	130	19.	1	
Freon-113	ND	ug/kg	26	0.36	1	
Methyl cyclohexane	ND	ug/kg	5.2	0.20	1	

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-06

Date Collected: 01/05/16 13:00

Client ID: TP-6 (1-5')

Date Received: 01/05/16

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	95		70-130

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-07	Date Collected:	01/05/16 13:30
Client ID:	TP-9 (1-4')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	01/11/16 08:20		
Analyst:	BN		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.10	1
Chloroform	ND		ug/kg	1.8	0.44	1
Carbon tetrachloride	ND		ug/kg	1.2	0.25	1
1,2-Dichloropropane	ND		ug/kg	4.2	0.27	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.36	1
Tetrachloroethene	ND		ug/kg	1.2	0.17	1
Chlorobenzene	ND		ug/kg	1.2	0.41	1
Trichlorofluoromethane	ND		ug/kg	6.0	0.46	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.21	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.14	1
Bromoform	ND		ug/kg	4.8	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.8	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.15	1
Chloromethane	ND		ug/kg	6.0	0.35	1
Bromomethane	ND		ug/kg	2.4	0.40	1
Vinyl chloride	ND		ug/kg	2.4	0.14	1
Chloroethane	ND		ug/kg	2.4	0.38	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.25	1
Trichloroethene	ND		ug/kg	1.2	0.15	1
1,2-Dichlorobenzene	0.25	J	ug/kg	6.0	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	6.0	0.16	1



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-07		Date Collected:	01/05/16 13:30		
Client ID:	TP-9 (1-4')		Date Received:	01/05/16		
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	6.0	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.10	1
p/m-Xylene	ND		ug/kg	2.4	0.24	1
o-Xylene	ND		ug/kg	2.4	0.20	1
Xylenes, Total	ND		ug/kg	2.4	0.20	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Styrene	ND		ug/kg	2.4	0.48	1
Dichlorodifluoromethane	ND		ug/kg	12	0.23	1
Acetone	46		ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	4.0	J	ug/kg	12	0.32	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.29	1
2-Hexanone	ND		ug/kg	12	0.79	1
Bromochloromethane	ND		ug/kg	6.0	0.33	1
1,2-Dibromoethane	ND		ug/kg	4.8	0.21	1
n-Butylbenzene	ND		ug/kg	1.2	0.14	1
sec-Butylbenzene	ND		ug/kg	1.2	0.14	1
tert-Butylbenzene	ND		ug/kg	6.0	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.0	0.47	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	1.3		ug/kg	1.2	0.15	1
Naphthalene	39		ug/kg	6.0	0.16	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.0	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.0	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.0	0.17	1
1,2,4-Trimethylbenzene	0.50	J	ug/kg	6.0	0.17	1
Methyl Acetate	ND		ug/kg	24	0.32	1
Cyclohexane	ND		ug/kg	24	0.17	1
1,4-Dioxane	ND		ug/kg	120	17.	1
Freon-113	ND		ug/kg	24	0.33	1
Methyl cyclohexane	ND		ug/kg	4.8	0.18	1



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-07

Date Collected: 01/05/16 13:30

Client ID: TP-9 (1-4')

Date Received: 01/05/16

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	96		70-130

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-08	Date Collected:	01/05/16 15:30
Client ID:	TP-7 (4-8')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	01/11/16 08:46		
Analyst:	BN		
Percent Solids:	60%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/kg	16	1.8	1	
1,1-Dichloroethane	ND	ug/kg	2.5	0.14	1	
Chloroform	ND	ug/kg	2.5	0.61	1	
Carbon tetrachloride	ND	ug/kg	1.6	0.35	1	
1,2-Dichloropropane	ND	ug/kg	5.8	0.38	1	
Dibromochloromethane	ND	ug/kg	1.6	0.25	1	
1,1,2-Trichloroethane	ND	ug/kg	2.5	0.50	1	
Tetrachloroethene	ND	ug/kg	1.6	0.23	1	
Chlorobenzene	ND	ug/kg	1.6	0.58	1	
Trichlorofluoromethane	ND	ug/kg	8.3	0.64	1	
1,2-Dichloroethane	ND	ug/kg	1.6	0.19	1	
1,1,1-Trichloroethane	ND	ug/kg	1.6	0.18	1	
Bromodichloromethane	ND	ug/kg	1.6	0.29	1	
trans-1,3-Dichloropropene	ND	ug/kg	1.6	0.20	1	
cis-1,3-Dichloropropene	ND	ug/kg	1.6	0.20	1	
1,3-Dichloropropene, Total	ND	ug/kg	1.6	0.20	1	
Bromoform	ND	ug/kg	6.6	0.39	1	
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.6	0.17	1	
Benzene	ND	ug/kg	1.6	0.20	1	
Toluene	ND	ug/kg	2.5	0.32	1	
Ethylbenzene	ND	ug/kg	1.6	0.21	1	
Chloromethane	ND	ug/kg	8.3	0.49	1	
Bromomethane	ND	ug/kg	3.3	0.56	1	
Vinyl chloride	ND	ug/kg	3.3	0.19	1	
Chloroethane	ND	ug/kg	3.3	0.52	1	
1,1-Dichloroethene	ND	ug/kg	1.6	0.43	1	
trans-1,2-Dichloroethene	ND	ug/kg	2.5	0.35	1	
Trichloroethene	ND	ug/kg	1.6	0.21	1	
1,2-Dichlorobenzene	ND	ug/kg	8.3	0.25	1	
1,3-Dichlorobenzene	ND	ug/kg	8.3	0.22	1	



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-08		Date Collected:	01/05/16 15:30		
Client ID:	TP-7 (4-8')		Date Received:	01/05/16		
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	8.3	0.23	1
Methyl tert butyl ether	ND		ug/kg	3.3	0.14	1
p/m-Xylene	ND		ug/kg	3.3	0.33	1
o-Xylene	ND		ug/kg	3.3	0.28	1
Xylenes, Total	ND		ug/kg	3.3	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	1.6	0.24	1
1,2-Dichloroethene, Total	ND		ug/kg	1.6	0.24	1
Styrene	ND		ug/kg	3.3	0.67	1
Dichlorodifluoromethane	ND		ug/kg	16	0.32	1
Acetone	5.5	J	ug/kg	16	1.7	1
Carbon disulfide	ND		ug/kg	16	1.8	1
2-Butanone	ND		ug/kg	16	0.45	1
4-Methyl-2-pentanone	ND		ug/kg	16	0.40	1
2-Hexanone	ND		ug/kg	16	1.1	1
Bromochloromethane	ND		ug/kg	8.3	0.46	1
1,2-Dibromoethane	ND		ug/kg	6.6	0.29	1
n-Butylbenzene	ND		ug/kg	1.6	0.19	1
sec-Butylbenzene	ND		ug/kg	1.6	0.20	1
tert-Butylbenzene	ND		ug/kg	8.3	0.22	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	8.3	0.66	1
Isopropylbenzene	ND		ug/kg	1.6	0.17	1
p-Isopropyltoluene	ND		ug/kg	1.6	0.21	1
Naphthalene	1.1	J	ug/kg	8.3	0.23	1
n-Propylbenzene	ND		ug/kg	1.6	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	8.3	0.24	1
1,2,4-Trichlorobenzene	ND		ug/kg	8.3	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	8.3	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	8.3	0.23	1
Methyl Acetate	ND		ug/kg	33	0.45	1
Cyclohexane	ND		ug/kg	33	0.24	1
1,4-Dioxane	ND		ug/kg	160	24.	1
Freon-113	ND		ug/kg	33	0.45	1
Methyl cyclohexane	ND		ug/kg	6.6	0.26	1

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-08
 Client ID: TP-7 (4-8')
 Sample Location: BUFFALO, NY

Date Collected: 01/05/16 15:30
 Date Received: 01/05/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Total TIC Compounds	3000	J	ug/kg	1
Unknown	72	J	ug/kg	1
Unknown	100	J	ug/kg	1
Unknown	84	J	ug/kg	1
Unknown	78	J	ug/kg	1
Unknown	85	J	ug/kg	1
Unknown	210	J	ug/kg	1
1-Octanol, 2-butyl-	150	NJ	ug/kg	1
Unknown	330	J	ug/kg	1
Unknown	340	J	ug/kg	1
Unknown	490	J	ug/kg	1
Unknown	440	J	ug/kg	1
Unknown Alkane	130	J	ug/kg	1
Unknown	290	J	ug/kg	1
Unknown	150	J	ug/kg	1
Unknown	100	J	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	90		70-130

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/10/16 11:07
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG856331-3					
Methylene chloride	ND		ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	ND		ug/kg	5.0	0.29
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.12
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/10/16 11:07
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG856331-3					
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.20
o-Xylene	ND		ug/kg	2.0	0.17
Xylenes, Total	ND		ug/kg	2.0	0.17
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	ND		ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
tert-Butylbenzene	ND		ug/kg	5.0	0.14
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.14



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/10/16 11:07
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	01-03	Batch:	WG856331-3		
Methyl Acetate	ND		ug/kg	20	0.27
Cyclohexane	ND		ug/kg	20	0.15
1,4-Dioxane	ND		ug/kg	100	14.
Freon-113	ND		ug/kg	20	0.27
Methyl cyclohexane	ND		ug/kg	4.0	0.15

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	121		70-130
4-Bromofluorobenzene	84		70-130
Dibromofluoromethane	99		70-130

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/11/16 03:29
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-08 Batch: WG856505-3					
Methylene chloride	1.2	J	ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	ND		ug/kg	5.0	0.29
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.12
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/11/16 03:29
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-08 Batch: WG856505-3					
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.20
o-Xylene	ND		ug/kg	2.0	0.17
Xylenes, Total	ND		ug/kg	2.0	0.17
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	ND		ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
tert-Butylbenzene	ND		ug/kg	5.0	0.14
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.14



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/11/16 03:29
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	04-08		Batch:	WG856505-3	
Methyl Acetate	ND		ug/kg	20	0.27
Cyclohexane	ND		ug/kg	20	0.15
1,4-Dioxane	ND		ug/kg	100	14.
Freon-113	ND		ug/kg	20	0.27
Methyl cyclohexane	ND		ug/kg	4.0	0.15

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG856331-1 WG856331-2								
Methylene chloride	105		105		70-130	0		30
1,1-Dichloroethane	107		100		70-130	7		30
Chloroform	104		102		70-130	2		30
Carbon tetrachloride	114		104		70-130	9		30
1,2-Dichloropropane	102		95		70-130	7		30
Dibromochloromethane	98		95		70-130	3		30
2-Chloroethylvinyl ether	80		62	Q	70-130	25		30
1,1,2-Trichloroethane	102		100		70-130	2		30
Tetrachloroethene	120		99		70-130	19		30
Chlorobenzene	106		100		70-130	6		30
Trichlorofluoromethane	120		105		70-139	13		30
1,2-Dichloroethane	116		111		70-130	4		30
1,1,1-Trichloroethane	114		104		70-130	9		30
Bromodichloromethane	104		103		70-130	1		30
trans-1,3-Dichloropropene	108		106		70-130	2		30
cis-1,3-Dichloropropene	99		80		70-130	21		30
1,1-Dichloropropene	107		97		70-130	10		30
Bromoform	99		108		70-130	9		30
1,1,2,2-Tetrachloroethane	98		109		70-130	11		30
Benzene	108		98		70-130	10		30
Toluene	93		87		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG856331-1 WG856331-2								
Ethylbenzene	109		100		70-130	9		30
Chloromethane	73		83		52-130	13		30
Bromomethane	66		59		57-147	11		30
Vinyl chloride	56	Q	75		67-130	29		30
Chloroethane	64		55		50-151	15		30
1,1-Dichloroethene	86		94		65-135	9		30
trans-1,2-Dichloroethene	103		96		70-130	7		30
Trichloroethene	113		99		70-130	13		30
1,2-Dichlorobenzene	114		104		70-130	9		30
1,3-Dichlorobenzene	113		108		70-130	5		30
1,4-Dichlorobenzene	109		99		70-130	10		30
Methyl tert butyl ether	101		100		66-130	1		30
p/m-Xylene	121		110		70-130	10		30
o-Xylene	116		108		70-130	7		30
cis-1,2-Dichloroethene	103		98		70-130	5		30
Dibromomethane	103		103		70-130	0		30
Styrene	119		111		70-130	7		30
Dichlorodifluoromethane	88		73		30-146	19		30
Acetone	104		103		54-140	1		30
Carbon disulfide	82		93		59-130	13		30
2-Butanone	95		100		70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG856331-1 WG856331-2								
Vinyl acetate	120		119		70-130	1		30
4-Methyl-2-pentanone	90		82		70-130	9		30
1,2,3-Trichloropropane	82		113		68-130	32	Q	30
2-Hexanone	86		84		70-130	2		30
Bromochloromethane	98		104		70-130	6		30
2,2-Dichloropropane	116		104		70-130	11		30
1,2-Dibromoethane	103		100		70-130	3		30
1,3-Dichloropropane	100		96		69-130	4		30
1,1,1,2-Tetrachloroethane	118		111		70-130	6		30
Bromobenzene	109		115		70-130	5		30
n-Butylbenzene	126		93		70-130	30		30
sec-Butylbenzene	107		95		70-130	12		30
tert-Butylbenzene	95		90		70-130	5		30
o-Chlorotoluene	107		111		70-130	4		30
p-Chlorotoluene	86		113		70-130	27		30
1,2-Dibromo-3-chloropropane	79		69		68-130	14		30
Hexachlorobutadiene	128		95		67-130	30		30
Isopropylbenzene	116		103		70-130	12		30
p-Isopropyltoluene	113		99		70-130	13		30
Naphthalene	104		79		70-130	27		30
Acrylonitrile	103		99		70-130	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG856331-1 WG856331-2								
Isopropyl Ether	115		110		66-130	4		30
tert-Butyl Alcohol	91		86		70-130	6		30
n-Propylbenzene	114		114		70-130	0		30
1,2,3-Trichlorobenzene	117		92		70-130	24		30
1,2,4-Trichlorobenzene	121		96		70-130	23		30
1,3,5-Trimethylbenzene	89		114		70-130	25		30
1,2,4-Trimethylbenzene	103		96		70-130	7		30
Methyl Acetate	103		102		51-146	1		30
Ethyl Acetate	91		97		70-130	6		30
Acrolein	79		94		70-130	17		30
Cyclohexane	102		94		59-142	8		30
1,4-Dioxane	90		79		65-136	13		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	96		94		50-139	2		30
p-Diethylbenzene	127		87		70-130	37	Q	30
p-Ethyltoluene	125		112		70-130	11		30
1,2,4,5-Tetramethylbenzene	127		111		70-130	13		30
Tetrahydrofuran	81		108		66-130	29		30
Ethyl ether	78		97		67-130	22		30
trans-1,4-Dichloro-2-butene	90		116		70-130	25		30
Methyl cyclohexane	118		93		70-130	24		30
Ethyl-Tert-Butyl-Ether	106		105		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG856331-1 WG856331-2								
Tertiary-Amyl Methyl Ether	103		100		70-130	3		30

Surrogate	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
1,2-Dichloroethane-d4	115		114		70-130
Toluene-d8	89		84		70-130
4-Bromofluorobenzene	92		102		70-130
Dibromofluoromethane	95		112		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-08 Batch: WG856505-1 WG856505-2								
Methylene chloride	105		103		70-130	2		30
1,1-Dichloroethane	97		94		70-130	3		30
Chloroform	94		92		70-130	2		30
Carbon tetrachloride	98		91		70-130	7		30
1,2-Dichloropropane	101		100		70-130	1		30
Dibromochloromethane	100		102		70-130	2		30
2-Chloroethylvinyl ether	106		111		70-130	5		30
1,1,2-Trichloroethane	99		101		70-130	2		30
Tetrachloroethene	91		87		70-130	4		30
Chlorobenzene	95		95		70-130	0		30
Trichlorofluoromethane	128		117		70-139	9		30
1,2-Dichloroethane	98		99		70-130	1		30
1,1,1-Trichloroethane	93		86		70-130	8		30
Bromodichloromethane	96		96		70-130	0		30
trans-1,3-Dichloropropene	100		101		70-130	1		30
cis-1,3-Dichloropropene	96		96		70-130	0		30
1,1-Dichloropropene	92		87		70-130	6		30
Bromoform	90		93		70-130	3		30
1,1,2,2-Tetrachloroethane	102		104		70-130	2		30
Benzene	94	Q	63	Q	70-130	3		30
Toluene	66					5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-08 Batch: WG856505-1 WG856505-2								
Ethylbenzene	96		92		70-130	4		30
Chloromethane	114		103		52-130	10		30
Bromomethane	113		109		57-147	4		30
Vinyl chloride	112		102		67-130	9		30
Chloroethane	126		117		50-151	7		30
1,1-Dichloroethene	90		83		65-135	8		30
trans-1,2-Dichloroethene	90		86		70-130	5		30
Trichloroethene	91		87		70-130	4		30
1,2-Dichlorobenzene	97		96		70-130	1		30
1,3-Dichlorobenzene	98		96		70-130	2		30
1,4-Dichlorobenzene	97		97		70-130	0		30
Methyl tert butyl ether	94		95		66-130	1		30
p/m-Xylene	94		91		70-130	3		30
o-Xylene	93		91		70-130	2		30
cis-1,2-Dichloroethene	95		92		70-130	3		30
Dibromomethane	96		96		70-130	0		30
Styrene	94		92		70-130	2		30
Dichlorodifluoromethane	134		118		30-146	13		30
Acetone	125		127		54-140	2		30
Carbon disulfide	88		81		59-130	8		30
2-Butanone	103		106		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-08 Batch: WG856505-1 WG856505-2								
Vinyl acetate	110		111		70-130	1		30
4-Methyl-2-pentanone	92		95		70-130	3		30
1,2,3-Trichloropropane	101		105		68-130	4		30
2-Hexanone	110		117		70-130	6		30
Bromochloromethane	94		94		70-130	0		30
2,2-Dichloropropane	92		86		70-130	7		30
1,2-Dibromoethane	97		98		70-130	1		30
1,3-Dichloropropane	100		102		69-130	2		30
1,1,1,2-Tetrachloroethane	99		99		70-130	0		30
Bromobenzene	95		95		70-130	0		30
n-Butylbenzene	101		95		70-130	6		30
sec-Butylbenzene	97		92		70-130	5		30
tert-Butylbenzene	94		90		70-130	4		30
o-Chlorotoluene	99		99		70-130	0		30
p-Chlorotoluene	99		99		70-130	0		30
1,2-Dibromo-3-chloropropane	92		93		68-130	1		30
Hexachlorobutadiene	93		87		67-130	7		30
Isopropylbenzene	95		92		70-130	3		30
p-Isopropyltoluene	96		92		70-130	4		30
Naphthalene	94		96		70-130	2		30
Acrylonitrile	103		106		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-08 Batch: WG856505-1 WG856505-2								
Isopropyl Ether	112		113		66-130	1		30
tert-Butyl Alcohol	97		98		70-130	1		30
n-Propylbenzene	97		94		70-130	3		30
1,2,3-Trichlorobenzene	95		96		70-130	1		30
1,2,4-Trichlorobenzene	97		96		70-130	1		30
1,3,5-Trimethylbenzene	97		95		70-130	2		30
1,2,4-Trimethylbenzene	98		96		70-130	2		30
Methyl Acetate	116		120		51-146	3		30
Ethyl Acetate	115		117		70-130	2		30
Acrolein	95		99		70-130	4		30
Cyclohexane	110		100		59-142	10		30
1,4-Dioxane	106		105		65-136	1		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	100		89		50-139	12		30
p-Diethylbenzene	101		95		70-130	6		30
p-Ethyltoluene	99		97		70-130	2		30
1,2,4,5-Tetramethylbenzene	100		97		70-130	3		30
Tetrahydrofuran	113		118		66-130	4		30
Ethyl ether	110		101		67-130	9		30
trans-1,4-Dichloro-2-butene	113		117		70-130	3		30
Methyl cyclohexane	102		92		70-130	10		30
Ethyl-Tert-Butyl-Ether	102		103		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-08 Batch: WG856505-1 WG856505-2								
Tertiary-Amyl Methyl Ether	96		97		70-130	1		30

Surrogate	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
1,2-Dichloroethane-d4	109		101		70-130
Toluene-d8	103		104		70-130
4-Bromofluorobenzene	104		105		70-130
Dibromofluoromethane	99		97		70-130

SEMIVOLATILES



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-01	D2	Date Collected:	01/05/16 08:30
Client ID:	TP-1 (2-4')		Date Received:	01/05/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8270D		Extraction Date:	01/08/16 04:51
Analytical Date:	01/11/16 13:56			
Analyst:	JB			
Percent Solids:	88%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	140000		ug/kg	2800	530	25
Benzo(a)anthracene	49000		ug/kg	2800	520	25
Benzo(a)pyrene	42000		ug/kg	3700	1100	25
Benzo(b)fluoranthene	52000		ug/kg	2800	780	25
Chrysene	46000		ug/kg	2800	480	25
Anthracene	40000		ug/kg	2800	900	25
Phenanthrene	140000		ug/kg	2800	560	25
Pyrene	110000		ug/kg	2800	460	25

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01121616:56

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-01	D	Date Collected:	01/05/16 08:30
Client ID:	TP-1 (2-4')		Date Received:	01/05/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8270D		Extraction Date:	01/08/16 04:51
Analytical Date:	01/09/16 17:44			
Analyst:	JB			
Percent Solids:	88%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	17000		ug/kg	740	96.	5
Hexachlorobenzene	ND		ug/kg	560	100	5
Bis(2-chloroethyl)ether	ND		ug/kg	840	120	5
2-Chloronaphthalene	ND		ug/kg	930	92.	5
3,3'-Dichlorobenzidine	ND		ug/kg	930	250	5
2,4-Dinitrotoluene	ND		ug/kg	930	180	5
2,6-Dinitrotoluene	ND		ug/kg	930	160	5
Fluoranthene	100000	E	ug/kg	560	110	5
4-Chlorophenyl phenyl ether	ND		ug/kg	930	99.	5
4-Bromophenyl phenyl ether	ND		ug/kg	930	140	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1100	160	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1000	93.	5
Hexachlorobutadiene	ND		ug/kg	930	140	5
Hexachlorocyclopentadiene	ND		ug/kg	2600	840	5
Hexachloroethane	ND		ug/kg	740	150	5
Isophorone	ND		ug/kg	840	120	5
Naphthalene	29000		ug/kg	930	110	5
Nitrobenzene	ND		ug/kg	840	140	5
NDPA/DPA	ND		ug/kg	740	100	5
n-Nitrosodi-n-propylamine	ND		ug/kg	930	140	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	930	320	5
Butyl benzyl phthalate	ND		ug/kg	930	230	5
Di-n-butylphthalate	ND		ug/kg	930	180	5
Di-n-octylphthalate	ND		ug/kg	930	320	5
Diethyl phthalate	ND		ug/kg	930	86.	5
Dimethyl phthalate	ND		ug/kg	930	190	5
Benzo(a)anthracene	49000	E	ug/kg	560	100	5
Benzo(a)pyrene	46000	E	ug/kg	740	230	5
Benzo(b)fluoranthene	67000	E	ug/kg	560	160	5
Benzo(k)fluoranthene	16000		ug/kg	560	150	5



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-01	D		Date Collected:	01/05/16 08:30	
Client ID:	TP-1 (2-4')			Date Received:	01/05/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	38000	E	ug/kg	560	96.	5
Acenaphthylene	3000		ug/kg	740	140	5
Anthracene	44000	E	ug/kg	560	180	5
Benzo(ghi)perylene	21000		ug/kg	740	110	5
Fluorene	28000		ug/kg	930	90.	5
Phenanthrene	96000	E	ug/kg	560	110	5
Dibenzo(a,h)anthracene	4500		ug/kg	560	110	5
Indeno(1,2,3-cd)pyrene	26000		ug/kg	740	130	5
Pyrene	90000	E	ug/kg	560	92.	5
Biphenyl	2000	J	ug/kg	2100	220	5
4-Chloroaniline	ND		ug/kg	930	170	5
2-Nitroaniline	ND		ug/kg	930	180	5
3-Nitroaniline	ND		ug/kg	930	180	5
4-Nitroaniline	ND		ug/kg	930	380	5
Dibenzofuran	16000		ug/kg	930	88.	5
2-Methylnaphthalene	7700		ug/kg	1100	110	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	930	97.	5
Acetophenone	ND		ug/kg	930	110	5
2,4,6-Trichlorophenol	ND		ug/kg	560	180	5
p-Chloro-m-cresol	ND		ug/kg	930	140	5
2-Chlorophenol	ND		ug/kg	930	110	5
2,4-Dichlorophenol	ND		ug/kg	840	150	5
2,4-Dimethylphenol	680	J	ug/kg	930	310	5
2-Nitrophenol	ND		ug/kg	2000	350	5
4-Nitrophenol	ND		ug/kg	1300	380	5
2,4-Dinitrophenol	ND		ug/kg	4400	430	5
4,6-Dinitro-o-cresol	ND		ug/kg	2400	440	5
Pentachlorophenol	ND		ug/kg	740	200	5
Phenol	600	J	ug/kg	930	140	5
2-Methylphenol	410	J	ug/kg	930	140	5
3-Methylphenol/4-Methylphenol	1000	J	ug/kg	1300	140	5
2,4,5-Trichlorophenol	ND		ug/kg	930	180	5
Carbazole	21000		ug/kg	930	90.	5
Benzaldehyde	ND		ug/kg	1200	250	5
Caprolactam	ND		ug/kg	930	280	5
Atrazine	ND		ug/kg	740	320	5
2,3,4,6-Tetrachlorophenol	ND		ug/kg	930	190	5

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-01	D	Date Collected:	01/05/16 08:30
Client ID:	TP-1 (2-4')		Date Received:	01/05/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		25-120
Phenol-d6	45		10-120
Nitrobenzene-d5	47		23-120
2-Fluorobiphenyl	51		30-120
2,4,6-Tribromophenol	48		10-136
4-Terphenyl-d14	48		18-120

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01121616:56

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-02
Client ID: TP-2 (2-4')
Sample Location: BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/09/16 15:10
Analyst: JB
Percent Solids: 83%

Date Collected: 01/05/16 09:00
Date Received: 01/05/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 01/08/16 04:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	110	J	ug/kg	160	21.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	1300		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	100	J	ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	68.	1
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	600		ug/kg	120	23.	1
Benzo(a)pyrene	500		ug/kg	160	49.	1
Benzo(b)fluoranthene	680		ug/kg	120	34.	1
Benzo(k)fluoranthene	240		ug/kg	120	32.	1



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-02		Date Collected:	01/05/16 09:00		
Client ID:	TP-2 (2-4')		Date Received:	01/05/16		
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	530		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	290		ug/kg	120	39.	1
Benzo(ghi)perylene	280		ug/kg	160	24.	1
Fluorene	150	J	ug/kg	200	20.	1
Phenanthrene	1000		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	82	J	ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	330		ug/kg	160	28.	1
Pyrene	1000		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	47.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	83.	1
Dibenzofuran	78	J	ug/kg	200	19.	1
2-Methylnaphthalene	34	J	ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	430	76.	1
4-Nitrophenol	ND		ug/kg	280	82.	1
2,4-Dinitrophenol	ND		ug/kg	960	94.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	96.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	31.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Carbazole	160	J	ug/kg	200	20.	1
Benzaldehyde	ND		ug/kg	260	54.	1
Caprolactam	ND		ug/kg	200	61.	1
Atrazine	ND		ug/kg	160	70.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	200	41.	1

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-02

Date Collected: 01/05/16 09:00

Client ID: TP-2 (2-4')

Date Received: 01/05/16

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	80		18-120

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01121616:56

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-03
Client ID: TP-3 (2-4')
Sample Location: BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/09/16 15:36
Analyst: JB
Percent Solids: 85%

Date Collected: 01/05/16 10:00
Date Received: 01/05/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 01/08/16 04:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	590	ug/kg	150	20.	1	
Hexachlorobenzene	ND	ug/kg	120	22.	1	
Bis(2-chloroethyl)ether	ND	ug/kg	170	26.	1	
2-Chloronaphthalene	ND	ug/kg	190	19.	1	
3,3'-Dichlorobenzidine	ND	ug/kg	190	52.	1	
2,4-Dinitrotoluene	ND	ug/kg	190	39.	1	
2,6-Dinitrotoluene	ND	ug/kg	190	33.	1	
Fluoranthene	5500	ug/kg	120	22.	1	
4-Chlorophenyl phenyl ether	ND	ug/kg	190	21.	1	
4-Bromophenyl phenyl ether	ND	ug/kg	190	30.	1	
Bis(2-chloroisopropyl)ether	ND	ug/kg	230	33.	1	
Bis(2-chloroethoxy)methane	ND	ug/kg	210	19.	1	
Hexachlorobutadiene	ND	ug/kg	190	28.	1	
Hexachlorocyclopentadiene	ND	ug/kg	550	180	1	
Hexachloroethane	ND	ug/kg	150	31.	1	
Isophorone	ND	ug/kg	170	25.	1	
Naphthalene	480	ug/kg	190	24.	1	
Nitrobenzene	ND	ug/kg	170	29.	1	
NDPA/DPA	ND	ug/kg	150	22.	1	
n-Nitrosodi-n-propylamine	ND	ug/kg	190	30.	1	
Bis(2-ethylhexyl)phthalate	ND	ug/kg	190	67.	1	
Butyl benzyl phthalate	ND	ug/kg	190	49.	1	
Di-n-butylphthalate	ND	ug/kg	190	37.	1	
Di-n-octylphthalate	ND	ug/kg	190	66.	1	
Diethyl phthalate	ND	ug/kg	190	18.	1	
Dimethyl phthalate	ND	ug/kg	190	41.	1	
Benzo(a)anthracene	2100	ug/kg	120	22.	1	
Benzo(a)pyrene	1800	ug/kg	150	47.	1	
Benzo(b)fluoranthene	2700	ug/kg	120	33.	1	
Benzo(k)fluoranthene	770	ug/kg	120	31.	1	



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-03	Date Collected:	01/05/16 10:00			
Client ID:	TP-3 (2-4')	Date Received:	01/05/16			
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified			
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	2100	ug/kg	120	20.	1	
Acenaphthylene	ND	ug/kg	150	30.	1	
Anthracene	1200	ug/kg	120	38.	1	
Benzo(ghi)perylene	1100	ug/kg	150	23.	1	
Fluorene	790	ug/kg	190	19.	1	
Phenanthrene	5400	ug/kg	120	24.	1	
Dibenzo(a,h)anthracene	250	ug/kg	120	22.	1	
Indeno(1,2,3-cd)pyrene	1200	ug/kg	150	27.	1	
Pyrene	4800	ug/kg	120	19.	1	
Biphenyl	ND	ug/kg	440	45.	1	
4-Chloroaniline	ND	ug/kg	190	35.	1	
2-Nitroaniline	ND	ug/kg	190	37.	1	
3-Nitroaniline	ND	ug/kg	190	36.	1	
4-Nitroaniline	ND	ug/kg	190	80.	1	
Dibenzofuran	470	ug/kg	190	18.	1	
2-Methylnaphthalene	300	ug/kg	230	23.	1	
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	190	20.	1	
Acetophenone	ND	ug/kg	190	24.	1	
2,4,6-Trichlorophenol	ND	ug/kg	120	37.	1	
p-Chloro-m-cresol	ND	ug/kg	190	29.	1	
2-Chlorophenol	ND	ug/kg	190	23.	1	
2,4-Dichlorophenol	ND	ug/kg	170	31.	1	
2,4-Dimethylphenol	ND	ug/kg	190	64.	1	
2-Nitrophenol	ND	ug/kg	420	73.	1	
4-Nitrophenol	ND	ug/kg	270	79.	1	
2,4-Dinitrophenol	ND	ug/kg	930	90.	1	
4,6-Dinitro-o-cresol	ND	ug/kg	500	93.	1	
Pentachlorophenol	ND	ug/kg	150	43.	1	
Phenol	ND	ug/kg	190	29.	1	
2-Methylphenol	ND	ug/kg	190	30.	1	
3-Methylphenol/4-Methylphenol	ND	ug/kg	280	30.	1	
2,4,5-Trichlorophenol	ND	ug/kg	190	37.	1	
Carbazole	ND	ug/kg	190	19.	1	
Benzaldehyde	ND	ug/kg	260	52.	1	
Caprolactam	ND	ug/kg	190	59.	1	
Atrazine	ND	ug/kg	150	68.	1	
2,3,4,6-Tetrachlorophenol	ND	ug/kg	190	39.	1	

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-03

Date Collected: 01/05/16 10:00

Client ID: TP-3 (2-4')

Date Received: 01/05/16

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	88		25-120
Phenol-d6	86		10-120
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	106		30-120
2,4,6-Tribromophenol	97		10-136
4-Terphenyl-d14	90		18-120

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-04	D2	Date Collected:	01/05/16 11:30
Client ID:	TP-4 (1-3')		Date Received:	01/05/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8270D		Extraction Date:	01/08/16 04:51
Analytical Date:	01/11/16 14:21			
Analyst:	JB			
Percent Solids:	82%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	190000		ug/kg	6000	1200	50
Benzo(a)anthracene	66000		ug/kg	6000	1100	50
Benzo(a)pyrene	56000		ug/kg	8000	2400	50
Benzo(b)fluoranthene	70000		ug/kg	6000	1700	50
Chrysene	61000		ug/kg	6000	1000	50
Anthracene	54000		ug/kg	6000	2000	50
Phenanthrene	180000		ug/kg	6000	1200	50
Pyrene	140000		ug/kg	6000	1000	50

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01121616:56

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-04 D
Client ID: TP-4 (1-3')
Sample Location: BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/09/16 18:09
Analyst: JB
Percent Solids: 82%

Date Collected: 01/05/16 11:30
Date Received: 01/05/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 01/08/16 04:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	31000		ug/kg	800	100	5
Hexachlorobenzene	ND		ug/kg	600	110	5
Bis(2-chloroethyl)ether	ND		ug/kg	900	140	5
2-Chloronaphthalene	ND		ug/kg	1000	100	5
3,3'-Dichlorobenzidine	ND		ug/kg	1000	270	5
2,4-Dinitrotoluene	ND		ug/kg	1000	200	5
2,6-Dinitrotoluene	ND		ug/kg	1000	170	5
Fluoranthene	150000	E	ug/kg	600	120	5
4-Chlorophenyl phenyl ether	ND		ug/kg	1000	110	5
4-Bromophenyl phenyl ether	ND		ug/kg	1000	150	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1200	170	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1100	100	5
Hexachlorobutadiene	ND		ug/kg	1000	150	5
Hexachlorocyclopentadiene	ND		ug/kg	2900	910	5
Hexachloroethane	ND		ug/kg	800	160	5
Isophorone	ND		ug/kg	900	130	5
Naphthalene	2100		ug/kg	1000	120	5
Nitrobenzene	ND		ug/kg	900	150	5
NDPA/DPA	ND		ug/kg	800	110	5
n-Nitrosodi-n-propylamine	ND		ug/kg	1000	160	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1000	350	5
Butyl benzyl phthalate	ND		ug/kg	1000	250	5
Di-n-butylphthalate	ND		ug/kg	1000	190	5
Di-n-octylphthalate	ND		ug/kg	1000	340	5
Diethyl phthalate	ND		ug/kg	1000	93.	5
Dimethyl phthalate	ND		ug/kg	1000	210	5
Benzo(a)anthracene	71000	E	ug/kg	600	110	5
Benzo(a)pyrene	70000	E	ug/kg	800	240	5
Benzo(b)fluoranthene	100000	E	ug/kg	600	170	5
Benzo(k)fluoranthene	24000		ug/kg	600	160	5



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-04	D		Date Collected:	01/05/16 11:30	
Client ID:	TP-4 (1-3')			Date Received:	01/05/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	52000	E	ug/kg	600	100	5
Acenaphthylene	ND		ug/kg	800	160	5
Anthracene	62000	E	ug/kg	600	200	5
Benzo(ghi)perylene	30000		ug/kg	800	120	5
Fluorene	28000		ug/kg	1000	98.	5
Phenanthrene	130000	E	ug/kg	600	120	5
Dibenzo(a,h)anthracene	6500		ug/kg	600	120	5
Indeno(1,2,3-cd)pyrene	39000		ug/kg	800	140	5
Pyrene	130000	E	ug/kg	600	100	5
Biphenyl	580	J	ug/kg	2300	230	5
4-Chloroaniline	ND		ug/kg	1000	180	5
2-Nitroaniline	ND		ug/kg	1000	190	5
3-Nitroaniline	ND		ug/kg	1000	190	5
4-Nitroaniline	ND		ug/kg	1000	420	5
Dibenzofuran	13000		ug/kg	1000	95.	5
2-Methylnaphthalene	1600		ug/kg	1200	120	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1000	100	5
Acetophenone	ND		ug/kg	1000	120	5
2,4,6-Trichlorophenol	ND		ug/kg	600	190	5
p-Chloro-m-cresol	ND		ug/kg	1000	150	5
2-Chlorophenol	ND		ug/kg	1000	120	5
2,4-Dichlorophenol	ND		ug/kg	900	160	5
2,4-Dimethylphenol	ND		ug/kg	1000	330	5
2-Nitrophenol	ND		ug/kg	2200	380	5
4-Nitrophenol	ND		ug/kg	1400	410	5
2,4-Dinitrophenol	ND		ug/kg	4800	470	5
4,6-Dinitro-o-cresol	ND		ug/kg	2600	480	5
Pentachlorophenol	ND		ug/kg	800	220	5
Phenol	ND		ug/kg	1000	150	5
2-Methylphenol	ND		ug/kg	1000	160	5
3-Methylphenol/4-Methylphenol	160	J	ug/kg	1400	160	5
2,4,5-Trichlorophenol	ND		ug/kg	1000	190	5
Carbazole	28000		ug/kg	1000	98.	5
Benzaldehyde	ND		ug/kg	1300	270	5
Caprolactam	ND		ug/kg	1000	300	5
Atrazine	ND		ug/kg	800	350	5
2,3,4,6-Tetrachlorophenol	ND		ug/kg	1000	200	5

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-04

D

Date Collected: 01/05/16 11:30

Client ID: TP-4 (1-3')

Date Received: 01/05/16

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		25-120
Phenol-d6	61		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	65		18-120

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01121616:56

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-05
Client ID: TP-5 (4-8')
Sample Location: BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/09/16 16:01
Analyst: JB
Percent Solids: 86%

Date Collected: 01/05/16 12:00
Date Received: 01/05/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 01/08/16 04:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	410		ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	7300		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	540		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	130	J	ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	2900		ug/kg	110	22.	1
Benzo(a)pyrene	2600		ug/kg	150	47.	1
Benzo(b)fluoranthene	3700		ug/kg	110	32.	1
Benzo(k)fluoranthene	1300		ug/kg	110	31.	1



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-05		Date Collected:	01/05/16 12:00		
Client ID:	TP-5 (4-8')		Date Received:	01/05/16		
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	2500		ug/kg	110	20.	1
Acenaphthylene	340		ug/kg	150	30.	1
Anthracene	1300		ug/kg	110	37.	1
Benzo(ghi)perylene	1600		ug/kg	150	22.	1
Fluorene	520		ug/kg	190	19.	1
Phenanthrene	4200		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	360		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	2000		ug/kg	150	27.	1
Pyrene	5900		ug/kg	110	19.	1
Biphenyl	62	J	ug/kg	440	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	300		ug/kg	190	18.	1
2-Methylnaphthalene	310		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Carbazole	540		ug/kg	190	19.	1
Benzaldehyde	ND		ug/kg	250	52.	1
Caprolactam	ND		ug/kg	190	58.	1
Atrazine	ND		ug/kg	150	67.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	39.	1

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-05

Date Collected: 01/05/16 12:00

Client ID: TP-5 (4-8')

Date Received: 01/05/16

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	120		25-120
Phenol-d6	114		10-120
Nitrobenzene-d5	116		23-120
2-Fluorobiphenyl	119		30-120
2,4,6-Tribromophenol	127		10-136
4-Terphenyl-d14	126	Q	18-120

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-06	D2	Date Collected:	01/05/16 13:00
Client ID:	TP-6 (1-5')		Date Received:	01/05/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8270D		Extraction Date:	01/08/16 04:51
Analytical Date:	01/11/16 14:47			
Analyst:	JB			
Percent Solids:	77%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	66000		ug/kg	3200	610	25
Benzo(a)pyrene	58000		ug/kg	4300	1300	25
Benzo(b)fluoranthene	75000		ug/kg	3200	900	25
Chrysene	48000		ug/kg	3200	550	25
Indeno(1,2,3-cd)pyrene	41000		ug/kg	4300	740	25
Pyrene	65000		ug/kg	3200	530	25

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01121616:56

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-06 D
Client ID: TP-6 (1-5')
Sample Location: BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/09/16 18:35
Analyst: JB
Percent Solids: 77%

Date Collected: 01/05/16 13:00
Date Received: 01/05/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 01/08/16 04:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	1700		ug/kg	850	110	5
Hexachlorobenzene	ND		ug/kg	640	120	5
Bis(2-chloroethyl)ether	ND		ug/kg	960	140	5
2-Chloronaphthalene	ND		ug/kg	1100	100	5
3,3'-Dichlorobenzidine	ND		ug/kg	1100	280	5
2,4-Dinitrotoluene	ND		ug/kg	1100	210	5
2,6-Dinitrotoluene	ND		ug/kg	1100	180	5
Fluoranthene	76000	E	ug/kg	640	120	5
4-Chlorophenyl phenyl ether	ND		ug/kg	1100	110	5
4-Bromophenyl phenyl ether	ND		ug/kg	1100	160	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1300	180	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1200	110	5
Hexachlorobutadiene	ND		ug/kg	1100	160	5
Hexachlorocyclopentadiene	ND		ug/kg	3000	960	5
Hexachloroethane	ND		ug/kg	850	170	5
Isophorone	ND		ug/kg	960	140	5
Naphthalene	260	J	ug/kg	1100	130	5
Nitrobenzene	ND		ug/kg	960	160	5
NDPA/DPA	ND		ug/kg	850	120	5
n-Nitrosodi-n-propylamine	ND		ug/kg	1100	160	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1100	370	5
Butyl benzyl phthalate	ND		ug/kg	1100	270	5
Di-n-butylphthalate	ND		ug/kg	1100	200	5
Di-n-octylphthalate	ND		ug/kg	1100	360	5
Diethyl phthalate	ND		ug/kg	1100	99.	5
Dimethyl phthalate	ND		ug/kg	1100	220	5
Benzo(a)anthracene	37000		ug/kg	640	120	5
Benzo(a)pyrene	67000	E	ug/kg	850	260	5
Benzo(b)fluoranthene	93000	E	ug/kg	640	180	5
Benzo(k)fluoranthene	25000		ug/kg	640	170	5



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-06	D		Date Collected:	01/05/16 13:00	
Client ID:	TP-6 (1-5')			Date Received:	01/05/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	48000	E	ug/kg	640	110	5
Acenaphthylene	200	J	ug/kg	850	160	5
Anthracene	2800		ug/kg	640	210	5
Benzo(ghi)perylene	38000		ug/kg	850	120	5
Fluorene	650	J	ug/kg	1100	100	5
Phenanthrene	14000		ug/kg	640	130	5
Dibenzo(a,h)anthracene	8400		ug/kg	640	120	5
Indeno(1,2,3-cd)pyrene	44000	E	ug/kg	850	150	5
Pyrene	78000	E	ug/kg	640	100	5
Biphenyl	ND		ug/kg	2400	250	5
4-Chloroaniline	ND		ug/kg	1100	190	5
2-Nitroaniline	ND		ug/kg	1100	200	5
3-Nitroaniline	ND		ug/kg	1100	200	5
4-Nitroaniline	ND		ug/kg	1100	440	5
Dibenzofuran	260	J	ug/kg	1100	100	5
2-Methylnaphthalene	240	J	ug/kg	1300	130	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1100	110	5
Acetophenone	ND		ug/kg	1100	130	5
2,4,6-Trichlorophenol	ND		ug/kg	640	200	5
p-Chloro-m-cresol	ND		ug/kg	1100	160	5
2-Chlorophenol	ND		ug/kg	1100	120	5
2,4-Dichlorophenol	ND		ug/kg	960	170	5
2,4-Dimethylphenol	ND		ug/kg	1100	350	5
2-Nitrophenol	ND		ug/kg	2300	400	5
4-Nitrophenol	ND		ug/kg	1500	430	5
2,4-Dinitrophenol	ND		ug/kg	5100	500	5
4,6-Dinitro-o-cresol	ND		ug/kg	2800	510	5
Pentachlorophenol	ND		ug/kg	850	230	5
Phenol	ND		ug/kg	1100	160	5
2-Methylphenol	ND		ug/kg	1100	160	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1500	170	5
2,4,5-Trichlorophenol	ND		ug/kg	1100	200	5
Carbazole	3700		ug/kg	1100	100	5
Benzaldehyde	ND		ug/kg	1400	290	5
Caprolactam	ND		ug/kg	1100	320	5
Atrazine	ND		ug/kg	850	370	5
2,3,4,6-Tetrachlorophenol	ND		ug/kg	1100	220	5

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-06	D	Date Collected:	01/05/16 13:00
Client ID:	TP-6 (1-5')		Date Received:	01/05/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	85		30-120
2,4,6-Tribromophenol	91		10-136
4-Terphenyl-d14	90		18-120

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01121616:56

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-07
Client ID: TP-9 (1-4')
Sample Location: BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/09/16 16:27
Analyst: JB
Percent Solids: 84%

Date Collected: 01/05/16 13:30
Date Received: 01/05/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 01/08/16 04:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	460		ug/kg	160	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	26.	1
2-Chloronaphthalene	ND		ug/kg	200	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	33.	1
Fluoranthene	8000	E	ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	25.	1
Naphthalene	1100		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	67.	1
Butyl benzyl phthalate	ND		ug/kg	200	49.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	66.	1
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	3000		ug/kg	120	22.	1
Benzo(a)pyrene	2800		ug/kg	160	48.	1
Benzo(b)fluoranthene	4000		ug/kg	120	33.	1
Benzo(k)fluoranthene	1200		ug/kg	120	31.	1



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-07		Date Collected:	01/05/16 13:30		
Client ID:	TP-9 (1-4')		Date Received:	01/05/16		
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	2600		ug/kg	120	20.	1
Acenaphthylene	470		ug/kg	160	30.	1
Anthracene	1400		ug/kg	120	38.	1
Benzo(ghi)perylene	1700		ug/kg	160	23.	1
Fluorene	730		ug/kg	200	19.	1
Phenanthrene	4900		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	380		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	2100		ug/kg	160	27.	1
Pyrene	6200		ug/kg	120	19.	1
Biphenyl	70	J	ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	81.	1
Dibenzofuran	400		ug/kg	200	18.	1
2-Methylnaphthalene	360		ug/kg	230	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	31.	1
2,4-Dimethylphenol	ND		ug/kg	200	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	91.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	29.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	37.	1
Carbazole	510		ug/kg	200	19.	1
Benzaldehyde	ND		ug/kg	260	53.	1
Caprolactam	ND		ug/kg	200	59.	1
Atrazine	ND		ug/kg	160	68.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	200	39.	1

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-07

Date Collected: 01/05/16 13:30

Client ID: TP-9 (1-4')

Date Received: 01/05/16

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	96		30-120
2,4,6-Tribromophenol	97		10-136
4-Terphenyl-d14	90		18-120

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01121616:56

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-07 D Date Collected: 01/05/16 13:30
Client ID: TP-9 (1-4') Date Received: 01/05/16
Sample Location: BUFFALO, NY Field Prep: Not Specified
Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 01/08/16 04:51
Analytical Date: 01/11/16 13:30
Analyst: JB
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	6300		ug/kg	230	45.	2

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01121616:56

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-08
Client ID: TP-7 (4-8')
Sample Location: BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/09/16 16:52
Analyst: PS
Percent Solids: 60%

Date Collected: 01/05/16 15:30
Date Received: 01/05/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 01/08/16 04:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	57	J	ug/kg	220	28.	1
Hexachlorobenzene	ND		ug/kg	160	31.	1
Bis(2-chloroethyl)ether	ND		ug/kg	250	37.	1
2-Chloronaphthalene	ND		ug/kg	270	27.	1
3,3'-Dichlorobenzidine	ND		ug/kg	270	73.	1
2,4-Dinitrotoluene	ND		ug/kg	270	55.	1
2,6-Dinitrotoluene	ND		ug/kg	270	47.	1
Fluoranthene	850		ug/kg	160	31.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	270	29.	1
4-Bromophenyl phenyl ether	ND		ug/kg	270	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	330	47.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	300	27.	1
Hexachlorobutadiene	ND		ug/kg	270	40.	1
Hexachlorocyclopentadiene	ND		ug/kg	780	250	1
Hexachloroethane	ND		ug/kg	220	44.	1
Isophorone	ND		ug/kg	250	35.	1
Naphthalene	63	J	ug/kg	270	33.	1
Nitrobenzene	ND		ug/kg	250	40.	1
NDPA/DPA	ND		ug/kg	220	31.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	270	42.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	270	94.	1
Butyl benzyl phthalate	ND		ug/kg	270	69.	1
Di-n-butylphthalate	ND		ug/kg	270	52.	1
Di-n-octylphthalate	ND		ug/kg	270	93.	1
Diethyl phthalate	ND		ug/kg	270	25.	1
Dimethyl phthalate	ND		ug/kg	270	57.	1
Benzo(a)anthracene	420		ug/kg	160	31.	1
Benzo(a)pyrene	370		ug/kg	220	67.	1
Benzo(b)fluoranthene	540		ug/kg	160	46.	1
Benzo(k)fluoranthene	150	J	ug/kg	160	44.	1



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-08	Date Collected:	01/05/16 15:30			
Client ID:	TP-7 (4-8')	Date Received:	01/05/16			
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified			
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	380		ug/kg	160	28.	1
Acenaphthylene	ND		ug/kg	220	42.	1
Anthracene	180		ug/kg	160	53.	1
Benzo(ghi)perylene	240		ug/kg	220	32.	1
Fluorene	90	J	ug/kg	270	26.	1
Phenanthrene	500		ug/kg	160	33.	1
Dibenzo(a,h)anthracene	68	J	ug/kg	160	32.	1
Indeno(1,2,3-cd)pyrene	260		ug/kg	220	38.	1
Pyrene	710		ug/kg	160	27.	1
Biphenyl	ND		ug/kg	620	63.	1
4-Chloroaniline	ND		ug/kg	270	50.	1
2-Nitroaniline	ND		ug/kg	270	53.	1
3-Nitroaniline	ND		ug/kg	270	52.	1
4-Nitroaniline	ND		ug/kg	270	110	1
Dibenzofuran	48	J	ug/kg	270	26.	1
2-Methylnaphthalene	38	J	ug/kg	330	33.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	270	28.	1
Acetophenone	ND		ug/kg	270	34.	1
2,4,6-Trichlorophenol	ND		ug/kg	160	52.	1
p-Chloro-m-cresol	ND		ug/kg	270	41.	1
2-Chlorophenol	ND		ug/kg	270	32.	1
2,4-Dichlorophenol	ND		ug/kg	250	44.	1
2,4-Dimethylphenol	ND		ug/kg	270	90.	1
2-Nitrophenol	ND		ug/kg	590	100	1
4-Nitrophenol	ND		ug/kg	380	110	1
2,4-Dinitrophenol	ND		ug/kg	1300	130	1
4,6-Dinitro-o-cresol	ND		ug/kg	710	130	1
Pentachlorophenol	ND		ug/kg	220	60.	1
Phenol	ND		ug/kg	270	41.	1
2-Methylphenol	ND		ug/kg	270	42.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	390	43.	1
2,4,5-Trichlorophenol	ND		ug/kg	270	52.	1
Carbazole	ND		ug/kg	270	26.	1
Benzaldehyde	ND		ug/kg	360	74.	1
Caprolactam	ND		ug/kg	270	83.	1
Atrazine	ND		ug/kg	220	96.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	270	55.	1

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-08
 Client ID: TP-7 (4-8')
 Sample Location: BUFFALO, NY

Date Collected: 01/05/16 15:30
 Date Received: 01/05/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/kg	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	20	Q	25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	102		23-120
2-Fluorobiphenyl	112		30-120
2,4,6-Tribromophenol	1	Q	10-136
4-Terphenyl-d14	70		18-120

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01121616:56

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-08 RE
Client ID: TP-7 (4-8')
Sample Location: BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/11/16 17:49
Analyst: PS
Percent Solids: 60%

Date Collected: 01/05/16 15:30
Date Received: 01/05/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 01/11/16 09:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	100	J	ug/kg	220	28.	1
Hexachlorobenzene	ND		ug/kg	160	30.	1
Bis(2-chloroethyl)ether	ND		ug/kg	240	37.	1
2-Chloronaphthalene	ND		ug/kg	270	27.	1
3,3'-Dichlorobenzidine	ND		ug/kg	270	72.	1
2,4-Dinitrotoluene	ND		ug/kg	270	54.	1
2,6-Dinitrotoluene	ND		ug/kg	270	47.	1
Fluoranthene	1600		ug/kg	160	31.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	270	29.	1
4-Bromophenyl phenyl ether	ND		ug/kg	270	41.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	330	46.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	290	27.	1
Hexachlorobutadiene	ND		ug/kg	270	40.	1
Hexachlorocyclopentadiene	ND		ug/kg	780	250	1
Hexachloroethane	ND		ug/kg	220	44.	1
Isophorone	ND		ug/kg	240	35.	1
Naphthalene	99	J	ug/kg	270	33.	1
Nitrobenzene	ND		ug/kg	240	40.	1
NDPA/DPA	ND		ug/kg	220	31.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	270	42.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	270	94.	1
Butyl benzyl phthalate	ND		ug/kg	270	68.	1
Di-n-butylphthalate	ND		ug/kg	270	52.	1
Di-n-octylphthalate	ND		ug/kg	270	92.	1
Diethyl phthalate	ND		ug/kg	270	25.	1
Dimethyl phthalate	ND		ug/kg	270	57.	1
Benzo(a)anthracene	790		ug/kg	160	31.	1
Benzo(a)pyrene	760		ug/kg	220	66.	1
Benzo(b)fluoranthene	960		ug/kg	160	46.	1
Benzo(k)fluoranthene	360		ug/kg	160	43.	1



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-08	RE		Date Collected:	01/05/16 15:30	
Client ID:	TP-7 (4-8')			Date Received:	01/05/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	740		ug/kg	160	28.	1
Acenaphthylene	69	J	ug/kg	220	42.	1
Anthracene	280		ug/kg	160	53.	1
Benzo(ghi)perylene	420		ug/kg	220	32.	1
Fluorene	120	J	ug/kg	270	26.	1
Phenanthrene	980		ug/kg	160	33.	1
Dibenzo(a,h)anthracene	100	J	ug/kg	160	31.	1
Indeno(1,2,3-cd)pyrene	440		ug/kg	220	38.	1
Pyrene	1500		ug/kg	160	27.	1
Biphenyl	ND		ug/kg	620	63.	1
4-Chloroaniline	ND		ug/kg	270	49.	1
2-Nitroaniline	ND		ug/kg	270	52.	1
3-Nitroaniline	ND		ug/kg	270	51.	1
4-Nitroaniline	ND		ug/kg	270	110	1
Dibenzofuran	62	J	ug/kg	270	26.	1
2-Methylnaphthalene	43	J	ug/kg	330	33.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	270	28.	1
Acetophenone	ND		ug/kg	270	34.	1
2,4,6-Trichlorophenol	ND		ug/kg	160	52.	1
p-Chloro-m-cresol	ND		ug/kg	270	40.	1
2-Chlorophenol	ND		ug/kg	270	32.	1
2,4-Dichlorophenol	ND		ug/kg	240	44.	1
2,4-Dimethylphenol	ND		ug/kg	270	90.	1
2-Nitrophenol	ND		ug/kg	590	100	1
4-Nitrophenol	ND		ug/kg	380	110	1
2,4-Dinitrophenol	ND		ug/kg	1300	130	1
4,6-Dinitro-o-cresol	ND		ug/kg	710	130	1
Pentachlorophenol	ND		ug/kg	220	60.	1
Phenol	ND		ug/kg	270	41.	1
2-Methylphenol	ND		ug/kg	270	42.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	390	42.	1
2,4,5-Trichlorophenol	ND		ug/kg	270	52.	1
Carbazole	100	J	ug/kg	270	26.	1
Benzaldehyde	ND		ug/kg	360	73.	1
Caprolactam	ND		ug/kg	270	83.	1
Atrazine	ND		ug/kg	220	95.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	270	55.	1

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-08	RE	Date Collected:	01/05/16 15:30
Client ID:	TP-7 (4-8')		Date Received:	01/05/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Tentatively Identified Compounds

Unknown	1200	J	ug/kg	1
Unknown	540	J	ug/kg	1
Unknown	470	J	ug/kg	1
Unknown	400	J	ug/kg	1
Benzo(e)Pyrene	300	NJ	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	33		25-120
Phenol-d6	72		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	53		30-120
2,4,6-Tribromophenol	7	Q	10-136
4-Terphenyl-d14	29		18-120

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/11/16 10:06
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 01/08/16 04:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	01-08		Batch:	WG855695-1	
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/11/16 10:06
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 01/08/16 04:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	01-08			Batch:	WG855695-1
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/11/16 10:06
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 01/08/16 04:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	01-08		Batch:	WG855695-1	
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
Atrazine	ND		ug/kg	130	57.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	79		18-120

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/11/16 16:32
Analyst: PS

Extraction Method: EPA 3546
Extraction Date: 01/11/16 09:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG856230-1					
Acenaphthene	ND	ug/kg	130	17.	
Benzidine	ND	ug/kg	540	180	
n-Nitrosodimethylamine	ND	ug/kg	330	32.	
1,2,4-Trichlorobenzene	ND	ug/kg	160	19.	
Hexachlorobenzene	ND	ug/kg	99	18.	
Bis(2-chloroethyl)ether	ND	ug/kg	150	22.	
2-Chloronaphthalene	ND	ug/kg	160	16.	
1,2-Dichlorobenzene	ND	ug/kg	160	30.	
1,3-Dichlorobenzene	ND	ug/kg	160	28.	
1,4-Dichlorobenzene	ND	ug/kg	160	29.	
3,3'-Dichlorobenzidine	ND	ug/kg	160	44.	
2,4-Dinitrotoluene	ND	ug/kg	160	33.	
2,6-Dinitrotoluene	ND	ug/kg	160	28.	
Fluoranthene	ND	ug/kg	99	19.	
4-Chlorophenyl phenyl ether	ND	ug/kg	160	18.	
4-Bromophenyl phenyl ether	ND	ug/kg	160	25.	
Azobenzene	ND	ug/kg	160	16.	
Bis(2-chloroisopropyl)ether	ND	ug/kg	200	28.	
Bis(2-chloroethoxy)methane	ND	ug/kg	180	16.	
Hexachlorobutadiene	ND	ug/kg	160	24.	
Hexachlorocyclopentadiene	ND	ug/kg	470	150	
Hexachloroethane	ND	ug/kg	130	27.	
Isophorone	ND	ug/kg	150	21.	
Naphthalene	ND	ug/kg	160	20.	
Nitrobenzene	ND	ug/kg	150	24.	
NitrosoDiPhenylAmine(NDPA)/DPA	ND	ug/kg	130	19.	
n-Nitrosodi-n-propylamine	ND	ug/kg	160	25.	
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	160	57.	
Butyl benzyl phthalate	ND	ug/kg	160	42.	



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/11/16 16:32
Analyst: PS

Extraction Method: EPA 3546
Extraction Date: 01/11/16 09:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG856230-1					
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
Aniline	ND		ug/kg	200	78.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
P-Chloro-M-Cresol	ND		ug/kg	160	24.



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/11/16 16:32
Analyst: PS

Extraction Method: EPA 3546
Extraction Date: 01/11/16 09:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG856230-1					
2-Chlorophenol	ND	ug/kg	160	20.	
2,4-Dichlorophenol	ND	ug/kg	150	26.	
2,4-Dimethylphenol	ND	ug/kg	160	54.	
2-Nitrophenol	ND	ug/kg	360	62.	
4-Nitrophenol	ND	ug/kg	230	67.	
2,4-Dinitrophenol	ND	ug/kg	790	77.	
4,6-Dinitro-o-cresol	ND	ug/kg	430	79.	
Pentachlorophenol	ND	ug/kg	130	36.	
Phenol	ND	ug/kg	160	25.	
2-Methylphenol	ND	ug/kg	160	26.	
3-Methylphenol/4-Methylphenol	ND	ug/kg	240	26.	
2,4,5-Trichlorophenol	ND	ug/kg	160	32.	
Benzoic Acid	ND	ug/kg	530	170	
Benzyl Alcohol	ND	ug/kg	160	50.	
Carbazole	ND	ug/kg	160	16.	
Benzaldehyde	ND	ug/kg	220	44.	
Caprolactam	ND	ug/kg	160	50.	
Atrazine	ND	ug/kg	130	58.	
2,3,4,6-Tetrachlorophenol	ND	ug/kg	160	33.	
Pyridine	ND	ug/kg	660	63.	
Parathion, ethyl	ND	ug/kg	160	100	
1-Methylnaphthalene	ND	ug/kg	160	19.	

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis

Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/11/16 16:32
Analyst: PS

Extraction Method: EPA 3546
Extraction Date: 01/11/16 09:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG856230-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	82		30-120
2,4,6-Tribromophenol	69		10-136
4-Terphenyl-d14	82		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG855695-2 WG855695-3								
Acenaphthene	75		88		31-137	16		50
Benzidine	70	Q	70	Q	10-66	0		50
n-Nitrosodimethylamine	55		62		22-100	12		50
1,2,4-Trichlorobenzene	73		85		38-107	15		50
Hexachlorobenzene	89		101		40-140	13		50
Bis(2-chloroethyl)ether	59		71		40-140	18		50
2-Chloronaphthalene	78		98		40-140	23		50
1,2-Dichlorobenzene	63		74		40-140	16		50
1,3-Dichlorobenzene	61		74		40-140	19		50
1,4-Dichlorobenzene	62		75		28-104	19		50
3,3'-Dichlorobenzidine	51		63		40-140	21		50
2,4-Dinitrotoluene	81		101	Q	28-89	22		50
2,6-Dinitrotoluene	82		105		40-140	25		50
Fluoranthene	79		94		40-140	17		50
4-Chlorophenyl phenyl ether	83		95		40-140	13		50
4-Bromophenyl phenyl ether	88		100		40-140	13		50
Azobenzene	98		109		40-140	11		50
Bis(2-chloroisopropyl)ether	62		75		40-140	19		50
Bis(2-chloroethoxy)methane	62		77		40-117	22		50
Hexachlorobutadiene	85		93		40-140	9		50
Hexachlorocyclopentadiene	86		110		40-140	24		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG855695-2 WG855695-3								
Hexachloroethane	74		84		40-140	13		50
Isophorone	68		84		40-140	21		50
Naphthalene	67		80		40-140	18		50
Nitrobenzene	80		89		40-140	11		50
NitrosoDiPhenylAmine(NDPA)/DPA	84		96		36-157	13		50
n-Nitrosodi-n-propylamine	69		84		32-121	20		50
Bis(2-Ethylhexyl)phthalate	80		101		40-140	23		50
Butyl benzyl phthalate	89		100		40-140	12		50
Di-n-butylphthalate	86		100		40-140	15		50
Di-n-octylphthalate	86		104		40-140	19		50
Diethyl phthalate	92		101		40-140	9		50
Dimethyl phthalate	84		98		40-140	15		50
Benzo(a)anthracene	82		95		40-140	15		50
Benzo(a)pyrene	84		100		40-140	17		50
Benzo(b)fluoranthene	80		93		40-140	15		50
Benzo(k)fluoranthene	80		93		40-140	15		50
Chrysene	72		93		40-140	25		50
Acenaphthylene	83		102		40-140	21		50
Anthracene	81		97		40-140	18		50
Benzo(ghi)perylene	77		93		40-140	19		50
Fluorene	80		96		40-140	18		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG855695-2 WG855695-3								
Phenanthrene	75		90		40-140	18		50
Dibenzo(a,h)anthracene	76		96		40-140	23		50
Indeno(1,2,3-cd)Pyrene	81		96		40-140	17		50
Pyrene	80		94		35-142	16		50
Biphenyl	76		89		54-104	16		50
Aniline	48		60		40-140	22		50
4-Chloroaniline	104		124		40-140	18		50
2-Nitroaniline	80		105		47-134	27		50
3-Nitroaniline	62		82		26-129	28		50
4-Nitroaniline	75		96		41-125	25		50
Dibenzofuran	76		90		40-140	17		50
2-Methylnaphthalene	103		128		40-140	22		50
1,2,4,5-Tetrachlorobenzene	79		90		40-117	13		50
Acetophenone	75		89		14-144	17		50
2,4,6-Trichlorophenol	87		109		30-130	22		50
P-Chloro-M-Cresol	82		102		26-103	22		50
2-Chlorophenol	67		80		25-102	18		50
2,4-Dichlorophenol	83		98		30-130	17		50
2,4-Dimethylphenol	89		108		30-130	19		50
2-Nitrophenol	71		86		30-130	19		50
4-Nitrophenol	99		100		11-114	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG855695-2 WG855695-3								
2,4-Dinitrophenol	49		77		4-130	44		50
4,6-Dinitro-o-cresol	65		92		10-130	34		50
Pentachlorophenol	75		82		17-109	9		50
Phenol	66		81		26-90	20		50
2-Methylphenol	67		84		30-130.	23		50
3-Methylphenol/4-Methylphenol	65		88		30-130	30		50
2,4,5-Trichlorophenol	90		109		30-130	19		50
Benzoic Acid	31		30		10-66	3		50
Benzyl Alcohol	77		90		40-140	16		50
Carbazole	76		92		54-128	19		50
Benzaldehyde	56		66		40-140	16		50
Caprolactam	86		112		15-130	26		50
Atrazine	117		133		40-140	13		50
2,3,4,6-Tetrachlorophenol	88		102		40-140	15		50
Pyridine	51		61		10-93	18		50
Parathion, ethyl	101		119		40-140	16		50
1-Methylnaphthalene	100		109		26-130	9		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG855695-2 WG855695-3								
Surrogate	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>			
2-Fluorophenol	61		68		25-120			
Phenol-d6	61		73		10-120			
Nitrobenzene-d5	68		78		23-120			
2-Fluorobiphenyl	68		87		30-120			
2,4,6-Tribromophenol	76		89		10-136			
4-Terphenyl-d14	70		80		18-120			

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG856230-2 WG856230-3								
Acenaphthene	85		86		31-137	1		50
Benzidine	44		38		10-66	15		50
n-Nitrosodimethylamine	70		76		22-100	8		50
1,2,4-Trichlorobenzene	78		78		38-107	0		50
Hexachlorobenzene	72		79		40-140	9		50
Bis(2-chloroethyl)ether	82		76		40-140	8		50
2-Chloronaphthalene	84		84		40-140	0		50
1,2-Dichlorobenzene	82		79		40-140	4		50
1,3-Dichlorobenzene	76		72		40-140	5		50
1,4-Dichlorobenzene	77		78		28-104	1		50
3,3'-Dichlorobenzidine	43		48		40-140	11		50
2,4-Dinitrotoluene	90	Q	99	Q	28-89	10		50
2,6-Dinitrotoluene	90		90		40-140	0		50
Fluoranthene	92		85		40-140	8		50
4-Chlorophenyl phenyl ether	76		84		40-140	10		50
4-Bromophenyl phenyl ether	72		80		40-140	11		50
Azobenzene	86		95		40-140	10		50
Bis(2-chloroisopropyl)ether	67		68		40-140	1		50
Bis(2-chloroethoxy)methane	99		102		40-117	3		50
Hexachlorobutadiene	77		79		40-140	3		50
Hexachlorocyclopentadiene	71		73		40-140	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG856230-2 WG856230-3								
Hexachloroethane	83		88		40-140	6		50
Isophorone	87		98		40-140	12		50
Naphthalene	84		84		40-140	0		50
Nitrobenzene	77		80		40-140	4		50
NitrosoDiPhenylAmine(NDPA)/DPA	77		84		36-157	9		50
n-Nitrosodi-n-propylamine	90		89		32-121	1		50
Bis(2-Ethylhexyl)phthalate	100		101		40-140	1		50
Butyl benzyl phthalate	105		93		40-140	12		50
Di-n-butylphthalate	96		96		40-140	0		50
Di-n-octylphthalate	101		103		40-140	2		50
Diethyl phthalate	84		92		40-140	9		50
Dimethyl phthalate	88		89		40-140	1		50
Benzo(a)anthracene	91		92		40-140	1		50
Benzo(a)pyrene	92		101		40-140	9		50
Benzo(b)fluoranthene	88		94		40-140	7		50
Benzo(k)fluoranthene	92		91		40-140	1		50
Chrysene	84		86		40-140	2		50
Acenaphthylene	88		88		40-140	0		50
Anthracene	91		91		40-140	0		50
Benzo(ghi)perylene	94		82		40-140	14		50
Fluorene	82		89		40-140	8		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG856230-2 WG856230-3								
Phenanthrene	89		88		40-140	1		50
Dibenzo(a,h)anthracene	96		92		40-140	4		50
Indeno(1,2,3-cd)Pyrene	93		90		40-140	3		50
Pyrene	92		83		35-142	10		50
Biphenyl	84		86		54-104	2		50
Aniline	48		54		40-140	12		50
4-Chloroaniline	97		94		40-140	3		50
2-Nitroaniline	94		96		47-134	2		50
3-Nitroaniline	65		72		26-129	10		50
4-Nitroaniline	82		91		41-125	10		50
Dibenzofuran	82		87		40-140	6		50
2-Methylnaphthalene	85		85		40-140	0		50
1,2,4,5-Tetrachlorobenzene	77		79		40-117	3		50
Acetophenone	92		91		14-144	1		50
2,4,6-Trichlorophenol	86		87		30-130	1		50
P-Chloro-M-Cresol	96		97		26-103	1		50
2-Chlorophenol	87		79		25-102	10		50
2,4-Dichlorophenol	92		91		30-130	1		50
2,4-Dimethylphenol	112		112		30-130	0		50
2-Nitrophenol	102		104		30-130	2		50
4-Nitrophenol	100		105		11-114	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG856230-2 WG856230-3								
2,4-Dinitrophenol	85		88		4-130	3		50
4,6-Dinitro-o-cresol	80		87		10-130	8		50
Pentachlorophenol	86		85		17-109	1		50
Phenol	87		80		26-90	8		50
2-Methylphenol	91		92		30-130.	1		50
3-Methylphenol/4-Methylphenol	95		103		30-130	8		50
2,4,5-Trichlorophenol	88		87		30-130	1		50
Benzoic Acid	90	Q	89	Q	10-66	1		50
Benzyl Alcohol	98		104		40-140	6		50
Carbazole	92		93		54-128	1		50
Benzaldehyde	73		68		40-140	7		50
Caprolactam	88		87		15-130	1		50
Atrazine	102		101		40-140	1		50
2,3,4,6-Tetrachlorophenol	81		89		40-140	9		50
Pyridine	60		65		10-93	8		50
Parathion, ethyl	124		123		40-140	1		50
1-Methylnaphthalene	93		94		26-130	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG856230-2 WG856230-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	82		93		25-120
Phenol-d6	89		83		10-120
Nitrobenzene-d5	89		95		23-120
2-Fluorobiphenyl	83		83		30-120
2,4,6-Tribromophenol	78		78		10-136
4-Terphenyl-d14	86		76		18-120

PCBS



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-01
 Client ID: TP-1 (2-4')
 Sample Location: BUFFALO, NY
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/16 18:57
 Analyst: JT
 Percent Solids: 88%

Date Collected: 01/05/16 08:30
 Date Received: 01/05/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 01/06/16 14:20
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/06/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/07/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.9	2.84	1	A
Aroclor 1221	ND		ug/kg	35.9	3.31	1	A
Aroclor 1232	ND		ug/kg	35.9	4.21	1	A
Aroclor 1242	ND		ug/kg	35.9	4.40	1	A
Aroclor 1248	46.6		ug/kg	35.9	3.03	1	B
Aroclor 1254	58.9		ug/kg	35.9	2.95	1	A
Aroclor 1260	132		ug/kg	35.9	2.74	1	B
Aroclor 1262	ND		ug/kg	35.9	1.78	1	A
Aroclor 1268	ND		ug/kg	35.9	5.21	1	A
PCBs, Total	238		ug/kg	35.9	1.78	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	107		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	112		30-150	B

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-02
 Client ID: TP-2 (2-4')
 Sample Location: BUFFALO, NY
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/16 19:11
 Analyst: JT
 Percent Solids: 83%

Date Collected: 01/05/16 09:00
 Date Received: 01/05/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 01/06/16 14:20
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/06/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/07/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.1	3.09	1	A
Aroclor 1221	ND		ug/kg	39.1	3.61	1	A
Aroclor 1232	ND		ug/kg	39.1	4.58	1	A
Aroclor 1242	ND		ug/kg	39.1	4.79	1	A
Aroclor 1248	18.8	J	ug/kg	39.1	3.30	1	B
Aroclor 1254	6.52	J	ug/kg	39.1	3.22	1	A
Aroclor 1260	5.44	J	ug/kg	39.1	2.98	1	B
Aroclor 1262	ND		ug/kg	39.1	1.94	1	A
Aroclor 1268	ND		ug/kg	39.1	5.67	1	A
PCBs, Total	30.8	J	ug/kg	39.1	1.94	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	87		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	103		30-150	B

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-03
 Client ID: TP-3 (2-4')
 Sample Location: BUFFALO, NY
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/16 19:24
 Analyst: JT
 Percent Solids: 85%

Date Collected: 01/05/16 10:00
 Date Received: 01/05/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 01/06/16 14:20
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/06/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/07/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.9	3.08	1	A
Aroclor 1221	ND		ug/kg	38.9	3.59	1	A
Aroclor 1232	ND		ug/kg	38.9	4.56	1	A
Aroclor 1242	ND		ug/kg	38.9	4.76	1	A
Aroclor 1248	77.5		ug/kg	38.9	3.28	1	B
Aroclor 1254	82.5		ug/kg	38.9	3.20	1	B
Aroclor 1260	246		ug/kg	38.9	2.97	1	B
Aroclor 1262	ND		ug/kg	38.9	1.93	1	A
Aroclor 1268	ND		ug/kg	38.9	5.64	1	A
PCBs, Total	406		ug/kg	38.9	2.97	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	119		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	142		30-150	B

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-04
 Client ID: TP-4 (1-3')
 Sample Location: BUFFALO, NY
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/16 19:38
 Analyst: JT
 Percent Solids: 82%

Date Collected: 01/05/16 11:30
 Date Received: 01/05/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 01/06/16 14:20
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/06/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/07/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.8	3.15	1	A
Aroclor 1221	ND		ug/kg	39.8	3.67	1	A
Aroclor 1232	ND		ug/kg	39.8	4.67	1	A
Aroclor 1242	ND		ug/kg	39.8	4.88	1	A
Aroclor 1248	21.0	J	ug/kg	39.8	3.36	1	B
Aroclor 1254	10.7	J	ug/kg	39.8	3.28	1	A
Aroclor 1260	12.5	J	ug/kg	39.8	3.04	1	B
Aroclor 1262	ND		ug/kg	39.8	1.98	1	A
Aroclor 1268	ND		ug/kg	39.8	5.78	1	A
PCBs, Total	44.2	J	ug/kg	39.8	3.04	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	99		30-150	B

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-05
 Client ID: TP-5 (4-8')
 Sample Location: BUFFALO, NY
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/16 19:52
 Analyst: JT
 Percent Solids: 86%

Date Collected: 01/05/16 12:00
 Date Received: 01/05/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 01/06/16 14:20
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/06/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/07/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.7	2.98	1	A
Aroclor 1221	ND		ug/kg	37.7	3.48	1	A
Aroclor 1232	ND		ug/kg	37.7	4.42	1	A
Aroclor 1242	ND		ug/kg	37.7	4.62	1	A
Aroclor 1248	39.7		ug/kg	37.7	3.18	1	B
Aroclor 1254	56.6		ug/kg	37.7	3.10	1	B
Aroclor 1260	101		ug/kg	37.7	2.88	1	B
Aroclor 1262	ND		ug/kg	37.7	1.87	1	A
Aroclor 1268	ND		ug/kg	37.7	5.47	1	A
PCBs, Total	197		ug/kg	37.7	2.88	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	97		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	125		30-150	B

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-06
 Client ID: TP-6 (1-5')
 Sample Location: BUFFALO, NY
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/16 20:06
 Analyst: JT
 Percent Solids: 77%

Date Collected: 01/05/16 13:00
 Date Received: 01/05/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 01/06/16 14:20
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/06/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/07/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	41.8	3.30	1	A
Aroclor 1221	ND		ug/kg	41.8	3.85	1	A
Aroclor 1232	ND		ug/kg	41.8	4.90	1	A
Aroclor 1242	ND		ug/kg	41.8	5.11	1	A
Aroclor 1248	ND		ug/kg	41.8	3.53	1	A
Aroclor 1254	ND		ug/kg	41.8	3.43	1	A
Aroclor 1260	ND		ug/kg	41.8	3.18	1	A
Aroclor 1262	ND		ug/kg	41.8	2.07	1	A
Aroclor 1268	ND		ug/kg	41.8	6.06	1	A
PCBs, Total	ND		ug/kg	41.8	2.07	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	102		30-150	B

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-07
 Client ID: TP-9 (1-4')
 Sample Location: BUFFALO, NY
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/16 20:19
 Analyst: JT
 Percent Solids: 84%

Date Collected: 01/05/16 13:30
 Date Received: 01/05/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 01/06/16 14:20
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/06/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/07/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.5	3.12	1	A
Aroclor 1221	ND		ug/kg	39.5	3.64	1	A
Aroclor 1232	ND		ug/kg	39.5	4.62	1	A
Aroclor 1242	ND		ug/kg	39.5	4.83	1	A
Aroclor 1248	128		ug/kg	39.5	3.33	1	B
Aroclor 1254	160		ug/kg	39.5	3.24	1	B
Aroclor 1260	143		ug/kg	39.5	3.01	1	B
Aroclor 1262	ND		ug/kg	39.5	1.96	1	A
Aroclor 1268	ND		ug/kg	39.5	5.72	1	A
PCBs, Total	431		ug/kg	39.5	1.96	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	101		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	123		30-150	B

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-08
 Client ID: TP-7 (4-8')
 Sample Location: BUFFALO, NY
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/16 20:33
 Analyst: JT
 Percent Solids: 60%

Date Collected: 01/05/16 15:30
 Date Received: 01/05/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 01/06/16 14:20
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/06/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/07/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	54.3	4.29	1	A
Aroclor 1221	ND		ug/kg	54.3	5.00	1	A
Aroclor 1232	ND		ug/kg	54.3	6.36	1	A
Aroclor 1242	ND		ug/kg	54.3	6.64	1	A
Aroclor 1248	24.6	J	ug/kg	54.3	4.58	1	B
Aroclor 1254	12.7	J	ug/kg	54.3	4.46	1	B
Aroclor 1260	11.4	J	ug/kg	54.3	4.14	1	A
Aroclor 1262	ND		ug/kg	54.3	2.69	1	A
Aroclor 1268	ND		ug/kg	54.3	7.87	1	A
PCBs, Total	48.7	J	ug/kg	54.3	2.69	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	99		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	120		30-150	B

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 01/07/16 00:34
Analyst: JT

Extraction Method: EPA 3546
Extraction Date: 01/06/16 14:20
Cleanup Method: EPA 3665A
Cleanup Date: 01/06/16
Cleanup Method: EPA 3660B
Cleanup Date: 01/06/16

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s):	01-08			Batch:	WG855239-1	
Aroclor 1016	ND		ug/kg	33.2	2.62	A
Aroclor 1221	ND		ug/kg	33.2	3.06	A
Aroclor 1232	ND		ug/kg	33.2	3.88	A
Aroclor 1242	ND		ug/kg	33.2	4.06	A
Aroclor 1248	ND		ug/kg	33.2	2.80	A
Aroclor 1254	ND		ug/kg	33.2	2.72	A
Aroclor 1260	ND		ug/kg	33.2	2.53	A
Aroclor 1262	ND		ug/kg	33.2	1.64	A
Aroclor 1268	ND		ug/kg	33.2	4.81	A
PCBs, Total	ND		ug/kg	33.2	1.64	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	106		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	115		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	<i>LCS</i>	<i>LCSD</i>	%Recovery		%Recovery	<i>RPD</i>	<i>Qual</i>	<i>RPD</i>	<i>Column</i>
	%Recovery	Qual	%Recovery	Qual	Limits			Limits	
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-08 Batch: WG855239-2 WG855239-3									
Aroclor 1016	77		82		40-140	6		50	A
Aroclor 1260	88		92		40-140	4		50	A

Surrogate	<i>LCS</i>	<i>LCSD</i>			<i>Acceptance</i>	<i>Column</i>
	%Recovery	Qual	%Recovery	Qual	Criteria	
2,4,5,6-Tetrachloro-m-xylene	79		81		30-150	A
Decachlorobiphenyl	116		113		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		86		30-150	B
Decachlorobiphenyl	123		122		30-150	B

METALS



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-01	Date Collected:	01/05/16 08:30
Client ID:	TP-1 (2-4')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
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Total Metals - Westborough Lab

Aluminum, Total	5300		mg/kg	8.9	1.8	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Antimony, Total	ND		mg/kg	4.4	0.71	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Arsenic, Total	4.4		mg/kg	0.89	0.18	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Barium, Total	45		mg/kg	0.89	0.27	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Beryllium, Total	0.33	J	mg/kg	0.44	0.09	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.89	0.06	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Calcium, Total	20000		mg/kg	8.9	2.7	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Chromium, Total	38		mg/kg	0.89	0.18	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Cobalt, Total	3.6		mg/kg	1.8	0.44	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Copper, Total	38		mg/kg	0.89	0.18	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Iron, Total	24000		mg/kg	4.4	1.8	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Lead, Total	26		mg/kg	4.4	0.18	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Magnesium, Total	3400		mg/kg	8.9	0.89	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Manganese, Total	1700		mg/kg	0.89	0.18	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Mercury, Total	0.07	J	mg/kg	0.08	0.02	1	01/06/16 07:55	01/06/16 12:51	EPA 7471B	1,7471B	DB
Nickel, Total	20		mg/kg	2.2	0.36	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Potassium, Total	640		mg/kg	220	36.	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Selenium, Total	ND		mg/kg	1.8	0.27	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Silver, Total	0.20	J	mg/kg	0.89	0.18	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Sodium, Total	900		mg/kg	180	27.	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Thallium, Total	ND		mg/kg	1.8	0.36	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Vanadium, Total	9.9		mg/kg	0.89	0.09	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH
Zinc, Total	120		mg/kg	4.4	0.62	2	01/06/16 03:40	01/06/16 11:42	EPA 3050B	1,6010C	JH



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-02 Date Collected: 01/05/16 09:00
Client ID: TP-2 (2-4') Date Received: 01/05/16
Sample Location: BUFFALO, NY Field Prep: Not Specified
Matrix: Soil
Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
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Total Metals - Westborough Lab

Aluminum, Total	7400		mg/kg	9.7	1.9	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Antimony, Total	ND		mg/kg	4.8	0.77	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Arsenic, Total	3.9		mg/kg	0.97	0.19	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Barium, Total	53		mg/kg	0.97	0.29	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Beryllium, Total	0.25	J	mg/kg	0.48	0.10	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.97	0.07	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Calcium, Total	3000		mg/kg	9.7	2.9	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Chromium, Total	14		mg/kg	0.97	0.19	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Cobalt, Total	7.2		mg/kg	1.9	0.48	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Copper, Total	37		mg/kg	0.97	0.19	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Iron, Total	23000		mg/kg	4.8	1.9	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Lead, Total	27		mg/kg	4.8	0.19	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Magnesium, Total	1700		mg/kg	9.7	0.97	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Manganese, Total	820		mg/kg	0.97	0.19	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Mercury, Total	0.10		mg/kg	0.08	0.02	1	01/06/16 07:55	01/06/16 12:53	EPA 7471B	1,7471B	DB
Nickel, Total	10		mg/kg	2.4	0.39	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Potassium, Total	880		mg/kg	240	39.	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Selenium, Total	ND		mg/kg	1.9	0.29	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	0.97	0.19	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Sodium, Total	560		mg/kg	190	29.	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Thallium, Total	ND		mg/kg	1.9	0.39	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Vanadium, Total	11		mg/kg	0.97	0.10	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH
Zinc, Total	80		mg/kg	4.8	0.68	2	01/06/16 03:40	01/06/16 13:47	EPA 3050B	1,6010C	JH



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-03	Date Collected:	01/05/16 10:00
Client ID:	TP-3 (2-4')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	9200		mg/kg	9.3	1.9	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Antimony, Total	ND		mg/kg	4.7	0.75	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Arsenic, Total	5.3		mg/kg	0.93	0.19	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Barium, Total	68		mg/kg	0.93	0.28	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Beryllium, Total	0.44	J	mg/kg	0.47	0.09	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.93	0.07	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Calcium, Total	26000		mg/kg	9.3	2.8	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Chromium, Total	15		mg/kg	0.93	0.19	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Cobalt, Total	5.4		mg/kg	1.9	0.47	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Copper, Total	43		mg/kg	0.93	0.19	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Iron, Total	17000		mg/kg	4.7	1.9	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Lead, Total	45		mg/kg	4.7	0.19	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Magnesium, Total	5000		mg/kg	9.3	0.93	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Manganese, Total	640		mg/kg	0.93	0.19	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Mercury, Total	0.07	J	mg/kg	0.08	0.02	1	01/06/16 07:55	01/06/16 12:55	EPA 7471B	1,7471B	DB
Nickel, Total	14		mg/kg	2.3	0.37	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Potassium, Total	1200		mg/kg	230	37.	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Selenium, Total	ND		mg/kg	1.9	0.28	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	0.93	0.19	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Sodium, Total	500		mg/kg	190	28.	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Thallium, Total	ND		mg/kg	1.9	0.37	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Vanadium, Total	15		mg/kg	0.93	0.09	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH
Zinc, Total	84		mg/kg	4.7	0.65	2	01/06/16 03:40	01/06/16 13:50	EPA 3050B	1,6010C	JH



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-04	Date Collected:	01/05/16 11:30
Client ID:	TP-4 (1-3')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	82%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	4100		mg/kg	9.7	1.9	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Antimony, Total	ND		mg/kg	4.8	0.77	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Arsenic, Total	8.5		mg/kg	0.97	0.19	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Barium, Total	49		mg/kg	0.97	0.29	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Beryllium, Total	0.18	J	mg/kg	0.48	0.10	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.97	0.07	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Calcium, Total	5600		mg/kg	9.7	2.9	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Chromium, Total	69		mg/kg	0.97	0.19	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Cobalt, Total	7.0		mg/kg	1.9	0.48	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Copper, Total	110		mg/kg	0.97	0.19	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Iron, Total	83000		mg/kg	48	19.	20	01/06/16 03:40	01/06/16 16:06	EPA 3050B	1,6010C	JH
Lead, Total	27		mg/kg	4.8	0.19	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Magnesium, Total	870		mg/kg	9.7	0.97	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Manganese, Total	1300		mg/kg	0.97	0.19	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Mercury, Total	0.14		mg/kg	0.08	0.02	1	01/06/16 07:55	01/06/16 12:56	EPA 7471B	1,7471B	DB
Nickel, Total	55		mg/kg	2.4	0.39	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Potassium, Total	530		mg/kg	240	39.	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Selenium, Total	ND		mg/kg	1.9	0.29	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	0.97	0.19	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Sodium, Total	500		mg/kg	190	29.	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Thallium, Total	ND		mg/kg	1.9	0.39	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Vanadium, Total	11		mg/kg	0.97	0.10	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH
Zinc, Total	85		mg/kg	4.8	0.68	2	01/06/16 03:40	01/06/16 13:55	EPA 3050B	1,6010C	JH



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-05	Date Collected:	01/05/16 12:00
Client ID:	TP-5 (4-8')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	86%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	11000		mg/kg	9.2	1.8	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Antimony, Total	ND		mg/kg	4.6	0.74	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Arsenic, Total	8.2		mg/kg	0.92	0.18	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Barium, Total	95		mg/kg	0.92	0.28	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Beryllium, Total	0.54		mg/kg	0.46	0.09	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.92	0.07	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Calcium, Total	32000		mg/kg	9.2	2.8	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Chromium, Total	18		mg/kg	0.92	0.18	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Cobalt, Total	7.5		mg/kg	1.8	0.46	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Copper, Total	40		mg/kg	0.92	0.18	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Iron, Total	21000		mg/kg	4.6	1.8	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Lead, Total	50		mg/kg	4.6	0.18	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Magnesium, Total	6700		mg/kg	9.2	0.92	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Manganese, Total	480		mg/kg	0.92	0.18	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Mercury, Total	0.15		mg/kg	0.08	0.02	1	01/06/16 07:55	01/06/16 12:58	EPA 7471B	1,7471B	DB
Nickel, Total	21		mg/kg	2.3	0.37	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Potassium, Total	1200		mg/kg	230	37.	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Selenium, Total	ND		mg/kg	1.8	0.28	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	0.92	0.18	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Sodium, Total	180		mg/kg	180	28.	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Thallium, Total	ND		mg/kg	1.8	0.37	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Vanadium, Total	21		mg/kg	0.92	0.09	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH
Zinc, Total	80		mg/kg	4.6	0.65	2	01/06/16 03:40	01/06/16 13:58	EPA 3050B	1,6010C	JH



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-06 Date Collected: 01/05/16 13:00
Client ID: TP-6 (1-5') Date Received: 01/05/16
Sample Location: BUFFALO, NY Field Prep: Not Specified
Matrix: Soil
Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	14000		mg/kg	10	2.0	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Antimony, Total	ND		mg/kg	5.0	0.80	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Arsenic, Total	9.4		mg/kg	1.0	0.20	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Barium, Total	78		mg/kg	1.0	0.30	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Beryllium, Total	0.85		mg/kg	0.50	0.10	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	1.0	0.07	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Calcium, Total	8400		mg/kg	10	3.0	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Chromium, Total	20		mg/kg	1.0	0.20	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Cobalt, Total	9.2		mg/kg	2.0	0.50	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Copper, Total	24		mg/kg	1.0	0.20	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Iron, Total	21000		mg/kg	5.0	2.0	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Lead, Total	13		mg/kg	5.0	0.20	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Magnesium, Total	3200		mg/kg	10	1.0	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Manganese, Total	350		mg/kg	1.0	0.20	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Mercury, Total	0.06	J	mg/kg	0.08	0.02	1	01/06/16 07:55	01/06/16 13:04	EPA 7471B	1,7471B	DB
Nickel, Total	16		mg/kg	2.5	0.40	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Potassium, Total	1100		mg/kg	250	40.	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Selenium, Total	0.37	J	mg/kg	2.0	0.30	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	1.0	0.20	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Sodium, Total	760		mg/kg	200	30.	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Thallium, Total	ND		mg/kg	2.0	0.40	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Vanadium, Total	32		mg/kg	1.0	0.10	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH
Zinc, Total	83		mg/kg	5.0	0.70	2	01/06/16 03:40	01/06/16 14:03	EPA 3050B	1,6010C	JH



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-07	Date Collected:	01/05/16 13:30
Client ID:	TP-9 (1-4')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	13000		mg/kg	9.3	1.9	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Antimony, Total	ND		mg/kg	4.7	0.75	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Arsenic, Total	8.1		mg/kg	0.93	0.19	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Barium, Total	120		mg/kg	0.93	0.28	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Beryllium, Total	0.66		mg/kg	0.47	0.09	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.93	0.07	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Calcium, Total	33000		mg/kg	9.3	2.8	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Chromium, Total	27		mg/kg	0.93	0.19	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Cobalt, Total	8.2		mg/kg	1.9	0.47	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Copper, Total	46		mg/kg	0.93	0.19	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Iron, Total	29000		mg/kg	4.7	1.9	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Lead, Total	37		mg/kg	4.7	0.19	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Magnesium, Total	8400		mg/kg	9.3	0.93	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Manganese, Total	920		mg/kg	0.93	0.19	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Mercury, Total	0.08		mg/kg	0.08	0.02	1	01/06/16 07:55	01/06/16 13:06	EPA 7471B	1,7471B	DB
Nickel, Total	24		mg/kg	2.3	0.37	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Potassium, Total	1600		mg/kg	230	37.	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Selenium, Total	ND		mg/kg	1.9	0.28	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	0.93	0.19	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Sodium, Total	250		mg/kg	190	28.	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Thallium, Total	ND		mg/kg	1.9	0.37	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Vanadium, Total	22		mg/kg	0.93	0.09	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH
Zinc, Total	82		mg/kg	4.7	0.65	2	01/06/16 03:40	01/06/16 14:06	EPA 3050B	1,6010C	JH



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-08	Date Collected:	01/05/16 15:30
Client ID:	TP-7 (4-8')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	60%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	16000		mg/kg	13	2.6	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Antimony, Total	ND		mg/kg	6.4	1.0	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Arsenic, Total	64		mg/kg	1.3	0.26	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Barium, Total	110		mg/kg	1.3	0.38	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Beryllium, Total	2.4		mg/kg	0.64	0.13	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	1.3	0.09	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Calcium, Total	37000		mg/kg	13	3.8	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Chromium, Total	42		mg/kg	1.3	0.26	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Cobalt, Total	10		mg/kg	2.6	0.64	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Copper, Total	38		mg/kg	1.3	0.26	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Iron, Total	29000		mg/kg	6.4	2.6	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Lead, Total	18		mg/kg	6.4	0.26	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Magnesium, Total	3200		mg/kg	13	1.3	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Manganese, Total	980		mg/kg	1.3	0.26	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Mercury, Total	0.25		mg/kg	0.11	0.02	1	01/06/16 07:55	01/06/16 13:08	EPA 7471B	1,7471B	DB
Nickel, Total	30		mg/kg	3.2	0.51	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Potassium, Total	1400		mg/kg	320	51.	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Selenium, Total	0.91	J	mg/kg	2.6	0.38	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	1.3	0.26	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Sodium, Total	1100		mg/kg	260	38.	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Thallium, Total	ND		mg/kg	2.6	0.51	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Vanadium, Total	80		mg/kg	1.3	0.13	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH
Zinc, Total	64		mg/kg	6.4	0.90	2	01/06/16 03:40	01/06/16 14:12	EPA 3050B	1,6010C	JH



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-08 Batch: WG855040-1									
Mercury, Total	ND	mg/kg	0.08	0.02	1	01/06/16 07:55	01/06/16 12:12	1,7471B	DB

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-08 Batch: WG855049-1									
Aluminum, Total	ND	mg/kg	4.0	0.80	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Antimony, Total	ND	mg/kg	2.0	0.32	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Arsenic, Total	ND	mg/kg	0.40	0.08	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Barium, Total	ND	mg/kg	0.40	0.12	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Beryllium, Total	ND	mg/kg	0.20	0.04	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Cadmium, Total	ND	mg/kg	0.40	0.03	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Calcium, Total	ND	mg/kg	4.0	1.2	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Chromium, Total	ND	mg/kg	0.40	0.08	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Cobalt, Total	ND	mg/kg	0.80	0.20	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Copper, Total	ND	mg/kg	0.40	0.08	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Iron, Total	ND	mg/kg	2.0	0.80	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Lead, Total	ND	mg/kg	2.0	0.08	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Magnesium, Total	ND	mg/kg	4.0	0.40	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Manganese, Total	ND	mg/kg	0.40	0.08	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Nickel, Total	ND	mg/kg	1.0	0.16	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Potassium, Total	ND	mg/kg	100	16.	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Selenium, Total	ND	mg/kg	0.80	0.12	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Silver, Total	ND	mg/kg	0.40	0.08	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Sodium, Total	ND	mg/kg	80	12.	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Thallium, Total	ND	mg/kg	0.80	0.16	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Vanadium, Total	ND	mg/kg	0.40	0.04	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH
Zinc, Total	ND	mg/kg	2.0	0.28	1	01/06/16 03:40	01/06/16 11:33	1,6010C	JH



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600224

Project Number: 97301

Report Date: 01/12/16

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B



Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS	LCSD	%Recovery		RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual			
Total Metals - Westborough Lab Associated sample(s): 01-08 Batch: WG855040-2 SRM Lot Number: D088-540							
Mercury, Total	118	-	-	-	72-128	-	-

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-08 Batch: WG855049-2 SRM Lot Number: D088-540					
Aluminum, Total	79	-	48-151	-	
Antimony, Total	159	-	1-208	-	
Arsenic, Total	96	-	79-121	-	
Barium, Total	88	-	83-117	-	
Beryllium, Total	86	-	83-117	-	
Cadmium, Total	88	-	83-117	-	
Calcium, Total	87	-	81-119	-	
Chromium, Total	86	-	80-120	-	
Cobalt, Total	87	-	84-115	-	
Copper, Total	90	-	81-118	-	
Iron, Total	96	-	45-155	-	
Lead, Total	82	-	81-117	-	
Magnesium, Total	81	-	76-124	-	
Manganese, Total	86	-	81-118	-	
Nickel, Total	86	-	83-117	-	
Potassium, Total	89	-	71-129	-	
Selenium, Total	91	-	78-122	-	
Silver, Total	91	-	75-124	-	
Sodium, Total	88	-	72-127	-	
Thallium, Total	90	-	80-120	-	
Vanadium, Total	91	-	78-122	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-08 Batch: WG855049-2 SRM Lot Number: D088-540					
Zinc, Total	88	-	82-118	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG855040-4 QC Sample: L1600207-01 Client ID: MS Sample												
Mercury, Total	0.26	0.152	0.49	152	Q	-	-	-	80-120	-	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG855049-4 QC Sample: L1600224-01 Client ID: TP-1 (2-4')									
Aluminum, Total	5300	180	7200	1050	Q	-	75-125	-	20
Antimony, Total	ND	45.1	40	89	-	-	75-125	-	20
Arsenic, Total	4.4	10.8	14	89	-	-	75-125	-	20
Barium, Total	45.	180	230	102	-	-	75-125	-	20
Beryllium, Total	0.33J	4.51	4.4	97	-	-	75-125	-	20
Cadmium, Total	ND	4.6	4.2	91	-	-	75-125	-	20
Calcium, Total	20000	903	20000	0	Q	-	75-125	-	20
Chromium, Total	38.	18	54	89	-	-	75-125	-	20
Cobalt, Total	3.6	45.1	44	89	-	-	75-125	-	20
Copper, Total	38.	22.6	65	120	-	-	75-125	-	20
Iron, Total	24000	90.3	25000	1110	Q	-	75-125	-	20
Lead, Total	26.	46	69	93	-	-	75-125	-	20
Magnesium, Total	3400	903	4600	133	Q	-	75-125	-	20
Manganese, Total	1700	45.1	1100	0	Q	-	75-125	-	20
Nickel, Total	20.	45.1	62	93	-	-	75-125	-	20
Potassium, Total	640	903	2000	151	Q	-	75-125	-	20
Selenium, Total	ND	10.8	11	102	-	-	75-125	-	20
Silver, Total	0.20J	27.1	29	107	-	-	75-125	-	20
Sodium, Total	900	903	1900	111	-	-	75-125	-	20
Thallium, Total	ND	10.8	7.8	72	Q	-	75-125	-	20
Vanadium, Total	9.9	45.1	56	102	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG855049-4 QC Sample: L1600224-01 Client ID: TP-1 (2-4')									
Zinc, Total	120	45.1	160	89	-	-	75-125	-	20

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1600224
Report Date: 01/12/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG855040-3 QC Sample: L1600207-01 Client ID: DUP Sample						
Mercury, Total	0.26	0.29	mg/kg	11		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG855049-3 QC Sample: L1600224-01 Client ID: TP-1 (2-4')					
Aluminum, Total	5300	5400	mg/kg	2	20
Antimony, Total	ND	ND	mg/kg	NC	20
Arsenic, Total	4.4	4.5	mg/kg	2	20
Barium, Total	45.	43	mg/kg	5	20
Beryllium, Total	0.33J	0.33J	mg/kg	NC	20
Cadmium, Total	ND	ND	mg/kg	NC	20
Calcium, Total	20000	19000	mg/kg	5	20
Chromium, Total	38.	31	mg/kg	20	20
Cobalt, Total	3.6	3.8	mg/kg	5	20
Copper, Total	38.	39	mg/kg	3	20
Iron, Total	24000	20000	mg/kg	18	20
Lead, Total	26.	27	mg/kg	4	20
Magnesium, Total	3400	3700	mg/kg	8	20
Manganese, Total	1700	700	mg/kg	83	Q
Nickel, Total	20.	21	mg/kg	5	20
Potassium, Total	640	720	mg/kg	12	20
Selenium, Total	ND	0.30J	mg/kg	NC	20
Silver, Total	0.20J	ND	mg/kg	NC	20
Sodium, Total	900	880	mg/kg	2	20

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1600224
Report Date: 01/12/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG855049-3 QC Sample: L1600224-01 Client ID: TP-1 (2-4')					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	9.9	8.9	mg/kg	11	20
Zinc, Total	120	110	mg/kg	9	20

INORGANICS & MISCELLANEOUS



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-01	Date Collected:	01/05/16 08:30
Client ID:	TP-1 (2-4')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.9		%	0.100	NA	1	-	01/06/16 01:48	30,2540G	RT



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-02	Date Collected:	01/05/16 09:00
Client ID:	TP-2 (2-4')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.5		%	0.100	NA	1	-	01/06/16 01:48	30,2540G	RT

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-03
Client ID: TP-3 (2-4')
Sample Location: BUFFALO, NY
Matrix: Soil

Date Collected: 01/05/16 10:00
Date Received: 01/05/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.5		%	0.100	NA	1	-	01/06/16 01:48	30,2540G	RT

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-04
Client ID: TP-4 (1-3')
Sample Location: BUFFALO, NY
Matrix: Soil

Date Collected: 01/05/16 11:30
Date Received: 01/05/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.8		%	0.100	NA	1	-	01/06/16 01:48	30,2540G	RT



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-05	Date Collected:	01/05/16 12:00
Client ID:	TP-5 (4-8')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.1		%	0.100	NA	1	-	01/06/16 01:48	30,2540G	RT



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-06	Date Collected:	01/05/16 13:00
Client ID:	TP-6 (1-5')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77.0		%	0.100	NA	1	-	01/06/16 01:48	30,2540G	RT

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID: L1600224-07
Client ID: TP-9 (1-4')
Sample Location: BUFFALO, NY
Matrix: Soil

Date Collected: 01/05/16 13:30
Date Received: 01/05/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.9		%	0.100	NA	1	-	01/06/16 01:48	30,2540G	RT



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

SAMPLE RESULTS

Lab ID:	L1600224-08	Date Collected:	01/05/16 15:30
Client ID:	TP-7 (4-8')	Date Received:	01/05/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	60.3		%	0.100	NA	1	-	01/06/16 01:48	30,2540G	RT

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1600224
Report Date: 01/12/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG855037-1 QC Sample: L1600224-01 Client ID: TP-1 (2-4')						
Solids, Total	87.9	87.7	%	0		20

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1600224-01A	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(7)
L1600224-01A9	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(14)
L1600224-01B	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8270(14),NYTCL-8082(14)
L1600224-01C	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1600224-02A	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(7)
L1600224-02A9	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(14)
L1600224-02B	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8270(14),NYTCL-8082(14)
L1600224-02C	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1600224-03A	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(7)
L1600224-03A9	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(14)
L1600224-03B	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8270(14),NYTCL-8082(14)
L1600224-03C	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

*Values in parentheses indicate holding time in days

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1600224-04A	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(7)
L1600224-04A9	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(14)
L1600224-04B	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8270(14),NYTCL-8082(14)
L1600224-04C	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1600224-05A	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(7)
L1600224-05A9	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(14)
L1600224-05B	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8270(14),NYTCL-8082(14)
L1600224-05C	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1600224-06A	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(7)
L1600224-06A9	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(14)
L1600224-06B	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8270(14),NYTCL-8082(14)
L1600224-06C	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1600224-07A	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(7)
L1600224-07A9	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(14)
L1600224-07B	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8270(14),NYTCL-8082(14)

*Values in parentheses indicate holding time in days

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1600224-07C	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1600224-08A	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(7)
L1600224-08A9	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NYTCL-8260-R2(14)
L1600224-08B	Glass 120ml/4oz unpreserved	A	N/A	2.2	Y	Absent	NYTCL-8270(14),NYTCL-8082(14)
L1600224-08C	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

*Values in parentheses indicate holding time in days

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A - Spectra identified as "Aldol Condensation Product".
- B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: DU Report with 'J' Qualifiers



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

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Data Qualifiers

- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600224
Report Date: 01/12/16

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

EPA 8270D: NPW: Biphenyl; SCM: Biphenyl
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water

EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1**: Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C**, **SM4500CN-CE**, **EPA 180.1**, **SM2130B**, **SM4500CI-D**, **SM2320B**, **SM2540C**, **SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B**; **SM9223-P/A**, **SM9223B-Colilert-QT**, **Enterolert-QT**.

Non-Potable Water

EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, **SM4500H,B**, **EPA 120.1**, **SM2510B**, **SM2540C**, **SM2340B**, **SM2320B**, **SM4500CL-E**, **SM4500F-BC**, **SM426C**, **SM4500NH3-BH**, **EPA 350.1**: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, **SM4500NO3-F**,
EPA 353.2: Nitrate-N, **SM4500NH3-BC-NES**, **EPA 351.1**, **SM4500P-E**, **SM4500P-B**, **E**, **SM5220D**, **EPA 410.4**,
SM5210B, **SM5310C**, **SM4500CL-D**, **EPA 1664**, **SM14 510AC**, **EPA 420.1**, **SM4500-CN-CE**, **SM2540D**.
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT**; **Enterolert-QT**, **SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	1/6/16	ALPHA Job # L1600224		
			1 of 1					
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Project Information		Deliverables	Billing Information			
		Project Name: Pinnacle Realty Env. Services	Project Location: Buffalo, NY	<input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other	<input type="checkbox"/> Same as Client Info PO #			
Client Information		Project # 97301	(Use Project name as Project #) <input type="checkbox"/>	Regulatory Requirement		Disposal Site Information		
Client: Hazard Evaluations Inc.		Project Manager: Candy Fox	ALPHAQuote #:	<input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge	Please identify below location of applicable disposal facilities.			
Address: 3152 N. Buffalo Road		Phone: 716-667-3130	Turn-Around Time	Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:				
Fax: 716-667-3156		Fax: 716-667-3156	Standard <input checked="" type="checkbox"/> Due Date:					
Email: mwithmura@hazarevaluations.com		Rush (only if pre approved) <input type="checkbox"/>	# of Days: 5					
These samples have been previously analyzed by Alpha <input type="checkbox"/>				ANALYSIS		Sample Filtration		
Other project specific requirements/comments:						<input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)		
Please specify Metals or TAL.						Sample Specific Comments		
ALPHA Lab ID (Lab Use Only) 00224 - C1	Sample ID TP1 (2-4') TP2 (2-4') TP3 (2-4') TP4 (1-3') TP5 (4-8') TP6 (1-5') ES-TP13 (1-4') TP9 (1-4') ES-TP15 (1-4') TP7 (4-8')	Collection		Sample Matrix SO	Sampler's Initials EG	TAL Metals VOC 8260 TCE + STAB SDOC 8270 TCE	PCBs	Total Bottles
		Date	Time					
		1/5/16	8:30 am					
			9:00 am					
			10:00 am					
			11:30 am					
			12:00 pm					
			1:00 pm					
			1:15 pm					
02								
03								
04								
05								
06								
07								
08								
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other	Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle	Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type G G G G				Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)
				Preservative A A A A				
Relinquished By: Maria J. Ruffo 1/5/16		Date/Time 1/5/16 1630	Received By: John P. O'Halloran 1/6/16 0000	Date/Time				
Form No: 01-25 HC (rev. 30-Sept-2013)								



ANALYTICAL REPORT

Lab Number:	L1600305
Client:	Hazard Evaluations, Inc. 3752 North Buffalo Road Orchard Park, NY 14127
ATTN:	Michele Wittman
Phone:	(716) 667-3130
Project Name:	PINNACLE REALTY ENV. SERVICES
Project Number:	97301
Report Date:	01/13/16

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

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1600305-01	TP 11 (3-4')	SOIL	BUFFALO, NY	01/06/16 08:30	01/06/16
L1600305-02	TP 12 (3-6')	SOIL	BUFFALO, NY	01/06/16 09:00	01/06/16
L1600305-03	TP 13 (2-4')	SOIL	BUFFALO, NY	01/06/16 10:00	01/06/16

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

HOLD POLICY

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

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

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Case Narrative (continued)

Report Submission

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

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

Metals

L1600305-01, -02, and -03: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG855387-4 MS recovery, performed on L1600305-01, is outside the acceptance criteria for mercury (169%). A post digestion spike was performed and was within acceptance criteria.

The WG855398-4 MS recoveries for aluminum (0%), calcium (0%), and iron (22700%), performed on L1600305-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG855398-4 MS recoveries, performed on L1600305-01, are outside the acceptance criteria for cadmium (61%), chromium (67%), lead (52%), magnesium (0%) and zinc (41%). A post digestion spike was performed and yielded unacceptable recoveries for cadmium (78%); all other compounds were within acceptance criteria. This has been attributed to sample matrix.

The WG855398-3 Laboratory Duplicate RPDs, performed on L1600305-01, are outside the acceptance criteria for aluminum (26%), arsenic (32%), barium (33%), chromium (37%), cobalt (25%), copper (43%), lead (51%), magnesium (40%), nickel (58%), potassium (29%), sodium (29%), vanadium (38%) and zinc (30%). The elevated RPDs have been attributed to the non-homogeneous nature of the native sample.

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

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 01/13/16

ORGANICS

VOLATILES



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01131615:50

Lab Number: L1600305
Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-01	D	Date Collected:	01/06/16 08:30
Client ID:	TP 11 (3-4')		Date Received:	01/06/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified
Matrix:	Soil			
Analytical Method:	1,8260C			
Analytical Date:	01/11/16 20:43			
Analyst:	MV			
Percent Solids:	81%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/kg	2200	250	200	
1,1-Dichloroethane	ND	ug/kg	340	19.	200	
Chloroform	ND	ug/kg	340	83.	200	
Carbon tetrachloride	ND	ug/kg	220	47.	200	
1,2-Dichloropropane	ND	ug/kg	780	51.	200	
Dibromochloromethane	ND	ug/kg	220	34.	200	
1,1,2-Trichloroethane	ND	ug/kg	340	68.	200	
Tetrachloroethene	ND	ug/kg	220	31.	200	
Chlorobenzene	ND	ug/kg	220	78.	200	
Trichlorofluoromethane	ND	ug/kg	1100	87.	200	
1,2-Dichloroethane	ND	ug/kg	220	25.	200	
1,1,1-Trichloroethane	ND	ug/kg	220	25.	200	
Bromodichloromethane	ND	ug/kg	220	39.	200	
trans-1,3-Dichloropropene	ND	ug/kg	220	27.	200	
cis-1,3-Dichloropropene	ND	ug/kg	220	26.	200	
1,3-Dichloropropene, Total	ND	ug/kg	220	26.	200	
Bromoform	ND	ug/kg	900	53.	200	
1,1,2,2-Tetrachloroethane	ND	ug/kg	220	22.	200	
Benzene	ND	ug/kg	220	26.	200	
Toluene	ND	ug/kg	340	44.	200	
Ethylbenzene	ND	ug/kg	220	28.	200	
Chloromethane	ND	ug/kg	1100	66.	200	
Bromomethane	ND	ug/kg	450	76.	200	
Vinyl chloride	ND	ug/kg	450	26.	200	
Chloroethane	ND	ug/kg	450	71.	200	
1,1-Dichloroethene	ND	ug/kg	220	59.	200	
trans-1,2-Dichloroethene	ND	ug/kg	340	47.	200	
Trichloroethene	ND	ug/kg	220	28.	200	
1,2-Dichlorobenzene	ND	ug/kg	1100	34.	200	
1,3-Dichlorobenzene	ND	ug/kg	1100	30.	200	



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-01	D		Date Collected:	01/06/16 08:30	
Client ID:	TP 11 (3-4')			Date Received:	01/06/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	1100	31.	200
Methyl tert butyl ether	ND		ug/kg	450	19.	200
p/m-Xylene	140	J	ug/kg	450	44.	200
o-Xylene	45	J	ug/kg	450	38.	200
Xylenes, Total	190	J	ug/kg	450	38.	200
cis-1,2-Dichloroethene	ND		ug/kg	220	32.	200
1,2-Dichloroethene, Total	ND		ug/kg	220	32.	200
Styrene	ND		ug/kg	450	90.	200
Dichlorodifluoromethane	ND		ug/kg	2200	43.	200
Acetone	1000	J	ug/kg	2200	230	200
Carbon disulfide	ND		ug/kg	2200	250	200
2-Butanone	ND		ug/kg	2200	61.	200
4-Methyl-2-pentanone	ND		ug/kg	2200	55.	200
2-Hexanone	ND		ug/kg	2200	150	200
Bromochloromethane	ND		ug/kg	1100	62.	200
1,2-Dibromoethane	ND		ug/kg	900	39.	200
n-Butylbenzene	ND		ug/kg	220	26.	200
sec-Butylbenzene	ND		ug/kg	220	27.	200
tert-Butylbenzene	ND		ug/kg	1100	30.	200
1,2-Dibromo-3-chloropropane	ND		ug/kg	1100	89.	200
Isopropylbenzene	ND		ug/kg	220	23.	200
p-Isopropyltoluene	71	J	ug/kg	220	28.	200
Naphthalene	32000		ug/kg	1100	31.	200
n-Propylbenzene	ND		ug/kg	220	24.	200
1,2,3-Trichlorobenzene	ND		ug/kg	1100	33.	200
1,2,4-Trichlorobenzene	ND		ug/kg	1100	41.	200
1,3,5-Trimethylbenzene	60	J	ug/kg	1100	32.	200
1,2,4-Trimethylbenzene	140	J	ug/kg	1100	32.	200
Methyl Acetate	ND		ug/kg	4500	60.	200
Cyclohexane	ND		ug/kg	4500	33.	200
1,4-Dioxane	ND		ug/kg	22000	3200	200
Freon-113	ND		ug/kg	4500	61.	200
Methyl cyclohexane	ND		ug/kg	900	35.	200

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID: L1600305-01 D
 Client ID: TP 11 (3-4')
 Sample Location: BUFFALO, NY

Date Collected: 01/06/16 08:30
 Date Received: 01/06/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	95		70-130

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-02	D	Date Collected:	01/06/16 09:00
Client ID:	TP 12 (3-6')		Date Received:	01/06/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified
Matrix:	Soil			
Analytical Method:	1,8260C			
Analytical Date:	01/12/16 15:07			
Analyst:	BN			
Percent Solids:	84%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	590	65.	50
1,1-Dichloroethane	ND		ug/kg	89	5.1	50
Chloroform	ND		ug/kg	89	22.	50
Carbon tetrachloride	ND		ug/kg	59	12.	50
1,2-Dichloropropane	ND		ug/kg	210	14.	50
Dibromochloromethane	ND		ug/kg	59	9.1	50
1,1,2-Trichloroethane	ND		ug/kg	89	18.	50
Tetrachloroethene	ND		ug/kg	59	8.3	50
Chlorobenzene	ND		ug/kg	59	21.	50
Trichlorofluoromethane	ND		ug/kg	300	23.	50
1,2-Dichloroethane	ND		ug/kg	59	6.7	50
1,1,1-Trichloroethane	ND		ug/kg	59	6.6	50
Bromodichloromethane	ND		ug/kg	59	10.	50
trans-1,3-Dichloropropene	ND		ug/kg	59	7.2	50
cis-1,3-Dichloropropene	ND		ug/kg	59	7.0	50
1,3-Dichloropropene, Total	ND		ug/kg	59	7.0	50
Bromoform	ND		ug/kg	240	14.	50
1,1,2,2-Tetrachloroethane	ND		ug/kg	59	6.0	50
Benzene	ND		ug/kg	59	7.0	50
Toluene	ND		ug/kg	89	12.	50
Ethylbenzene	ND		ug/kg	59	7.5	50
Chloromethane	ND		ug/kg	300	17.	50
Bromomethane	ND		ug/kg	120	20.	50
Vinyl chloride	ND		ug/kg	120	7.0	50
Chloroethane	ND		ug/kg	120	19.	50
1,1-Dichloroethene	ND		ug/kg	59	16.	50
trans-1,2-Dichloroethene	ND		ug/kg	89	12.	50
Trichloroethene	ND		ug/kg	59	7.4	50
1,2-Dichlorobenzene	ND		ug/kg	300	9.1	50
1,3-Dichlorobenzene	ND		ug/kg	300	8.0	50



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-02	D		Date Collected:	01/06/16 09:00	
Client ID:	TP 12 (3-6')			Date Received:	01/06/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	300	8.2	50
Methyl tert butyl ether	ND		ug/kg	120	5.0	50
p/m-Xylene	ND		ug/kg	120	12.	50
o-Xylene	ND		ug/kg	120	10.	50
Xylenes, Total	ND		ug/kg	120	10.	50
cis-1,2-Dichloroethene	ND		ug/kg	59	8.4	50
1,2-Dichloroethene, Total	ND		ug/kg	59	8.4	50
Styrene	ND		ug/kg	120	24.	50
Dichlorodifluoromethane	ND		ug/kg	590	11.	50
Acetone	250	J	ug/kg	590	61.	50
Carbon disulfide	ND		ug/kg	590	65.	50
2-Butanone	ND		ug/kg	590	16.	50
4-Methyl-2-pentanone	ND		ug/kg	590	14.	50
2-Hexanone	ND		ug/kg	590	39.	50
Bromochloromethane	ND		ug/kg	300	16.	50
1,2-Dibromoethane	ND		ug/kg	240	10.	50
n-Butylbenzene	ND		ug/kg	59	6.8	50
sec-Butylbenzene	ND		ug/kg	59	7.2	50
tert-Butylbenzene	ND		ug/kg	300	8.0	50
1,2-Dibromo-3-chloropropane	ND		ug/kg	300	23.	50
Isopropylbenzene	ND		ug/kg	59	6.1	50
p-Isopropyltoluene	38	J	ug/kg	59	7.4	50
Naphthalene	5000		ug/kg	300	8.2	50
n-Propylbenzene	ND		ug/kg	59	6.5	50
1,2,3-Trichlorobenzene	ND		ug/kg	300	8.7	50
1,2,4-Trichlorobenzene	ND		ug/kg	300	11.	50
1,3,5-Trimethylbenzene	ND		ug/kg	300	8.5	50
1,2,4-Trimethylbenzene	ND		ug/kg	300	8.4	50
Methyl Acetate	ND		ug/kg	1200	16.	50
Cyclohexane	ND		ug/kg	1200	8.6	50
1,4-Dioxane	ND		ug/kg	5900	850	50
Freon-113	ND		ug/kg	1200	16.	50
Methyl cyclohexane	ND		ug/kg	240	9.2	50

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID: L1600305-02 D
 Client ID: TP 12 (3-6')
 Sample Location: BUFFALO, NY

Date Collected: 01/06/16 09:00
 Date Received: 01/06/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	91		70-130

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-03	Date Collected:	01/06/16 10:00
Client ID:	TP 13 (2-4')	Date Received:	01/06/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	01/11/16 21:35		
Analyst:	MV		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/kg	12	1.3	1	
1,1-Dichloroethane	ND	ug/kg	1.8	0.10	1	
Chloroform	ND	ug/kg	1.8	0.43	1	
Carbon tetrachloride	ND	ug/kg	1.2	0.25	1	
1,2-Dichloropropane	ND	ug/kg	4.1	0.27	1	
Dibromochloromethane	ND	ug/kg	1.2	0.18	1	
1,1,2-Trichloroethane	ND	ug/kg	1.8	0.36	1	
Tetrachloroethene	ND	ug/kg	1.2	0.16	1	
Chlorobenzene	ND	ug/kg	1.2	0.41	1	
Trichlorofluoromethane	ND	ug/kg	5.9	0.46	1	
1,2-Dichloroethane	ND	ug/kg	1.2	0.13	1	
1,1,1-Trichloroethane	ND	ug/kg	1.2	0.13	1	
Bromodichloromethane	ND	ug/kg	1.2	0.20	1	
trans-1,3-Dichloropropene	ND	ug/kg	1.2	0.14	1	
cis-1,3-Dichloropropene	ND	ug/kg	1.2	0.14	1	
1,3-Dichloropropene, Total	ND	ug/kg	1.2	0.14	1	
Bromoform	ND	ug/kg	4.7	0.28	1	
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.2	0.12	1	
Benzene	ND	ug/kg	1.2	0.14	1	
Toluene	ND	ug/kg	1.8	0.23	1	
Ethylbenzene	ND	ug/kg	1.2	0.15	1	
Chloromethane	ND	ug/kg	5.9	0.34	1	
Bromomethane	ND	ug/kg	2.3	0.40	1	
Vinyl chloride	ND	ug/kg	2.3	0.14	1	
Chloroethane	ND	ug/kg	2.3	0.37	1	
1,1-Dichloroethene	ND	ug/kg	1.2	0.31	1	
trans-1,2-Dichloroethene	ND	ug/kg	1.8	0.25	1	
Trichloroethene	ND	ug/kg	1.2	0.15	1	
1,2-Dichlorobenzene	ND	ug/kg	5.9	0.18	1	
1,3-Dichlorobenzene	ND	ug/kg	5.9	0.16	1	



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-03			Date Collected:	01/06/16 10:00	
Client ID:	TP 13 (2-4')			Date Received:	01/06/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	5.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	0.37	J	ug/kg	2.3	0.23	1
o-Xylene	ND		ug/kg	2.3	0.20	1
Xylenes, Total	0.37	J	ug/kg	2.3	0.20	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Styrene	ND		ug/kg	2.3	0.47	1
Dichlorodifluoromethane	ND		ug/kg	12	0.22	1
Acetone	63		ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	6.5	J	ug/kg	12	0.32	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.29	1
2-Hexanone	ND		ug/kg	12	0.78	1
Bromochloromethane	ND		ug/kg	5.9	0.32	1
1,2-Dibromoethane	ND		ug/kg	4.7	0.20	1
n-Butylbenzene	ND		ug/kg	1.2	0.13	1
sec-Butylbenzene	ND		ug/kg	1.2	0.14	1
tert-Butylbenzene	ND		ug/kg	5.9	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.9	0.46	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	1.1	J	ug/kg	1.2	0.15	1
Naphthalene	160		ug/kg	5.9	0.16	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.9	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.9	0.21	1
1,3,5-Trimethylbenzene	0.24	J	ug/kg	5.9	0.17	1
1,2,4-Trimethylbenzene	0.55	J	ug/kg	5.9	0.16	1
Methyl Acetate	ND		ug/kg	23	0.32	1
Cyclohexane	ND		ug/kg	23	0.17	1
1,4-Dioxane	ND		ug/kg	120	17.	1
Freon-113	ND		ug/kg	23	0.32	1
Methyl cyclohexane	ND		ug/kg	4.7	0.18	1

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID: L1600305-03

Date Collected: 01/06/16 10:00

Client ID: TP 13 (2-4')

Date Received: 01/06/16

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	95		70-130

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/11/16 15:00
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG856597-3					
Methylene chloride	ND		ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	0.59	J	ug/kg	5.0	0.29
Bromomethane	0.54	J	ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.12
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/11/16 15:00
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG856597-3					
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.20
o-Xylene	ND		ug/kg	2.0	0.17
Xylenes, Total	ND		ug/kg	2.0	0.17
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	ND		ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
tert-Butylbenzene	ND		ug/kg	5.0	0.14
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.14



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Method Blank Analysis

Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/11/16 15:00
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	01,03		Batch:	WG856597-3	
Methyl Acetate	ND		ug/kg	20	0.27
Cyclohexane	ND		ug/kg	20	0.15
1,4-Dioxane	ND		ug/kg	100	14.
Freon-113	ND		ug/kg	20	0.27
Methyl cyclohexane	ND		ug/kg	4.0	0.15

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	91		70-130

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/12/16 08:57
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG856729-3					
Methylene chloride	ND		ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	ND		ug/kg	5.0	0.29
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.12
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/12/16 08:57
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG856729-3					
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.20
o-Xylene	ND		ug/kg	2.0	0.17
Xylenes, Total	ND		ug/kg	2.0	0.17
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	2.9	J	ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
tert-Butylbenzene	ND		ug/kg	5.0	0.14
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.14



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Method Blank Analysis

Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/12/16 08:57
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG856729-3					
Methyl Acetate	ND		ug/kg	20	0.27
Cyclohexane	ND		ug/kg	20	0.15
1,4-Dioxane	ND		ug/kg	100	14.
Freon-113	ND		ug/kg	20	0.27
Methyl cyclohexane	ND		ug/kg	4.0	0.15

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	93		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG856597-1 WG856597-2								
Methylene chloride	108		107		70-130	1		30
1,1-Dichloroethane	106		106		70-130	0		30
Chloroform	102		102		70-130	0		30
Carbon tetrachloride	106		106		70-130	0		30
1,2-Dichloropropane	108		108		70-130	0		30
Dibromochloromethane	101		103		70-130	2		30
2-Chloroethylvinyl ether	122		115		70-130	6		30
1,1,2-Trichloroethane	103		102		70-130	1		30
Tetrachloroethene	99		99		70-130	0		30
Chlorobenzene	102		100		70-130	2		30
Trichlorofluoromethane	135		136		70-139	1		30
1,2-Dichloroethane	105		105		70-130	0		30
1,1,1-Trichloroethane	103		101		70-130	2		30
Bromodichloromethane	101		103		70-130	2		30
trans-1,3-Dichloropropene	103		105		70-130	2		30
cis-1,3-Dichloropropene	102		103		70-130	1		30
1,1-Dichloropropene	105		103		70-130	2		30
Bromoform	88		92		70-130	4		30
1,1,2,2-Tetrachloroethane	106		105		70-130	1		30
Benzene	103		103		70-130	0		30
Toluene	74		72		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG856597-1 WG856597-2								
Ethylbenzene	105		103		70-130	2		30
Chloromethane	123		120		52-130	2		30
Bromomethane	119		118		57-147	1		30
Vinyl chloride	127		125		67-130	2		30
Chloroethane	130		131		50-151	1		30
1,1-Dichloroethene	101		98		65-135	3		30
trans-1,2-Dichloroethene	100		99		70-130	1		30
Trichloroethene	101		101		70-130	0		30
1,2-Dichlorobenzene	103		102		70-130	1		30
1,3-Dichlorobenzene	104		103		70-130	1		30
1,4-Dichlorobenzene	104		102		70-130	2		30
Methyl tert butyl ether	100		100		66-130	0		30
p/m-Xylene	102		100		70-130	2		30
o-Xylene	101		100		70-130	1		30
cis-1,2-Dichloroethene	101		101		70-130	0		30
Dibromomethane	101		100		70-130	1		30
Styrene	101		99		70-130	2		30
Dichlorodifluoromethane	146		141		30-146	3		30
Acetone	126		123		54-140	2		30
Carbon disulfide	100		99		59-130	1		30
2-Butanone	104		105		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG856597-1 WG856597-2								
Vinyl acetate	116		116		70-130	0		30
4-Methyl-2-pentanone	100		99		70-130	1		30
1,2,3-Trichloropropane	106		105		68-130	1		30
2-Hexanone	120		116		70-130	3		30
Bromochloromethane	100		98		70-130	2		30
2,2-Dichloropropane	104		102		70-130	2		30
1,2-Dibromoethane	100		102		70-130	2		30
1,3-Dichloropropane	105		104		69-130	1		30
1,1,1,2-Tetrachloroethane	104		104		70-130	0		30
Bromobenzene	102		100		70-130	2		30
n-Butylbenzene	114		110		70-130	4		30
sec-Butylbenzene	110		106		70-130	4		30
tert-Butylbenzene	107		104		70-130	3		30
o-Chlorotoluene	110		108		70-130	2		30
p-Chlorotoluene	110		108		70-130	2		30
1,2-Dibromo-3-chloropropane	94		91		68-130	3		30
Hexachlorobutadiene	105		101		67-130	4		30
Isopropylbenzene	107		105		70-130	2		30
p-Isopropyltoluene	109		106		70-130	3		30
Naphthalene	100		98		70-130	2		30
Acrylonitrile	107		108		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG856597-1 WG856597-2								
Isopropyl Ether	121		121		66-130	0		30
tert-Butyl Alcohol	103		100		70-130	3		30
n-Propylbenzene	110		107		70-130	3		30
1,2,3-Trichlorobenzene	103		100		70-130	3		30
1,2,4-Trichlorobenzene	104		100		70-130	4		30
1,3,5-Trimethylbenzene	108		106		70-130	2		30
1,2,4-Trimethylbenzene	109		107		70-130	2		30
Methyl Acetate	123		123		51-146	0		30
Ethyl Acetate	122		121		70-130	1		30
Acrolein	92		99		70-130	7		30
Cyclohexane	123		124		59-142	1		30
1,4-Dioxane	107		105		65-136	2		30
Freon-113	110		109		50-139	1		30
1,4-Diethylbenzene	114		111		70-130	3		30
4-Ethyltoluene	112		110		70-130	2		30
1,2,4,5-Tetramethylbenzene	109		108		70-130	1		30
Tetrahydrofuran	119		118		66-130	1		30
Ethyl ether	109		112		67-130	3		30
trans-1,4-Dichloro-2-butene	119		119		70-130	0		30
Methyl cyclohexane	116		115		70-130	1		30
Ethyl-Tert-Butyl-Ether	109		108		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG856597-1 WG856597-2								
Tertiary-Amyl Methyl Ether	102		102		70-130	0		30

Surrogate	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
1,2-Dichloroethane-d4	102		102		70-130
Toluene-d8	104		103		70-130
4-Bromofluorobenzene	105		106		70-130
Dibromofluoromethane	98		98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG856729-1 WG856729-2								
Methylene chloride	104		104		70-130	0		30
1,1-Dichloroethane	100		98		70-130	2		30
Chloroform	96		94		70-130	2		30
Carbon tetrachloride	97		95		70-130	2		30
1,2-Dichloropropane	101		101		70-130	0		30
Dibromochloromethane	92		95		70-130	3		30
2-Chloroethylvinyl ether	103		109		70-130	6		30
1,1,2-Trichloroethane	94		97		70-130	3		30
Tetrachloroethene	91		88		70-130	3		30
Chlorobenzene	94		93		70-130	1		30
Trichlorofluoromethane	128		120		70-139	6		30
1,2-Dichloroethane	96		99		70-130	3		30
1,1,1-Trichloroethane	96		92		70-130	4		30
Bromodichloromethane	93		96		70-130	3		30
trans-1,3-Dichloropropene	94		97		70-130	3		30
cis-1,3-Dichloropropene	94		97		70-130	3		30
1,1-Dichloropropene	98		92		70-130	6		30
Bromoform	79		86		70-130	8		30
1,1,2,2-Tetrachloroethane	93		101		70-130	8		30
Benzene	98		96		70-130	2		30
Toluene	66	Q	63	Q	70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG856729-1 WG856729-2								
Ethylbenzene	97		95		70-130	2		30
Chloromethane	116		109		52-130	6		30
Bromomethane	120		112		57-147	7		30
Vinyl chloride	113		105		67-130	7		30
Chloroethane	117		112		50-151	4		30
1,1-Dichloroethene	94		90		65-135	4		30
trans-1,2-Dichloroethene	94		90		70-130	4		30
Trichloroethene	94		93		70-130	1		30
1,2-Dichlorobenzene	95		97		70-130	2		30
1,3-Dichlorobenzene	95		96		70-130	1		30
1,4-Dichlorobenzene	96		97		70-130	1		30
Methyl tert butyl ether	92		95		66-130	3		30
p/m-Xylene	94		92		70-130	2		30
o-Xylene	93		91		70-130	2		30
cis-1,2-Dichloroethene	95		94		70-130	1		30
Dibromomethane	94		97		70-130	3		30
Styrene	92		92		70-130	0		30
Dichlorodifluoromethane	140		126		30-146	11		30
Acetone	119		130		54-140	9		30
Carbon disulfide	89		85		59-130	5		30
2-Butanone	95		101		70-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG856729-1 WG856729-2								
Vinyl acetate	104		109		70-130	5		30
4-Methyl-2-pentanone	86		97		70-130	12		30
1,2,3-Trichloropropane	94		103		68-130	9		30
2-Hexanone	98		109		70-130	11		30
Bromochloromethane	93		96		70-130	3		30
2,2-Dichloropropane	98		94		70-130	4		30
1,2-Dibromoethane	92		96		70-130	4		30
1,3-Dichloropropane	95		98		69-130	3		30
1,1,1,2-Tetrachloroethane	95		97		70-130	2		30
Bromobenzene	93		95		70-130	2		30
n-Butylbenzene	103		101		70-130	2		30
sec-Butylbenzene	100		98		70-130	2		30
tert-Butylbenzene	97		96		70-130	1		30
o-Chlorotoluene	100		101		70-130	1		30
p-Chlorotoluene	100		101		70-130	1		30
1,2-Dibromo-3-chloropropane	75		86		68-130	14		30
Hexachlorobutadiene	91		91		67-130	0		30
Isopropylbenzene	97		97		70-130	0		30
p-Isopropyltoluene	98		96		70-130	2		30
Naphthalene	87		95		70-130	9		30
Acrylonitrile	94		104		70-130	10		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG856729-1 WG856729-2								
Isopropyl Ether	111		111		66-130	0		30
tert-Butyl Alcohol	84		99		70-130	16		30
n-Propylbenzene	99		98		70-130	1		30
1,2,3-Trichlorobenzene	91		95		70-130	4		30
1,2,4-Trichlorobenzene	93		95		70-130	2		30
1,3,5-Trimethylbenzene	99		99		70-130	0		30
1,2,4-Trimethylbenzene	100		99		70-130	1		30
Methyl Acetate	106		116		51-146	9		30
Ethyl Acetate	105		117		70-130	11		30
Acrolein	88		92		70-130	4		30
Cyclohexane	115		108		59-142	6		30
1,4-Dioxane	100		113		65-136	12		30
Freon-113	103		97		50-139	6		30
1,4-Diethylbenzene	100		98		70-130	2		30
4-Ethyltoluene	100		99		70-130	1		30
1,2,4,5-Tetramethylbenzene	99		99		70-130	0		30
Tetrahydrofuran	103		116		66-130	12		30
Ethyl ether	96		117		67-130	20		30
trans-1,4-Dichloro-2-butene	101		113		70-130	11		30
Methyl cyclohexane	107		100		70-130	7		30
Ethyl-Tert-Butyl-Ether	101		102		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	<i>LCS</i>		<i>LCSD</i>		<i>%Recovery</i>		<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
	<i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i>	<i>Qual</i>	<i>Limits</i>				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG856729-1 WG856729-2									
Tertiary-Amyl Methyl Ether	94		96		70-130		2		30

Surrogate	<i>LCS</i>		<i>LCSD</i>		<i>Acceptance Criteria</i>
	<i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i>	<i>Qual</i>	
1,2-Dichloroethane-d4	101		103		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	105		107		70-130
Dibromofluoromethane	99		100		70-130

SEMIVOLATILES



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-01	D2	Date Collected:	01/06/16 08:30
Client ID:	TP 11 (3-4')		Date Received:	01/06/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8270D		Extraction Date:	01/08/16 20:06
Analytical Date:	01/12/16 23:35			
Analyst:	AL			
Percent Solids:	81%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	40000		ug/kg	1200	230	10
Benzo(a)anthracene	16000		ug/kg	1200	220	10
Benzo(b)fluoranthene	19000		ug/kg	1200	340	10
Phenanthrene	34000		ug/kg	1200	240	10
Pyrene	35000		ug/kg	1200	200	10

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01131615:50

Lab Number: L1600305
Report Date: 01/13/16

SAMPLE RESULTS

Lab ID: L1600305-01 D Date Collected: 01/06/16 08:30
Client ID: TP 11 (3-4') Date Received: 01/06/16
Sample Location: BUFFALO, NY Field Prep: Not Specified
Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 01/08/16 20:06
Analytical Date: 01/11/16 03:47
Analyst: AL
Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	3000		ug/kg	320	41.	2
Hexachlorobenzene	ND		ug/kg	240	45.	2
Bis(2-chloroethyl)ether	ND		ug/kg	360	54.	2
2-Chloronaphthalene	ND		ug/kg	400	40.	2
3,3'-Dichlorobenzidine	ND		ug/kg	400	110	2
2,4-Dinitrotoluene	ND		ug/kg	400	80.	2
2,6-Dinitrotoluene	ND		ug/kg	400	69.	2
Fluoranthene	34000	E	ug/kg	240	46.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	400	43.	2
4-Bromophenyl phenyl ether	ND		ug/kg	400	61.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	480	68.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	430	40.	2
Hexachlorobutadiene	ND		ug/kg	400	58.	2
Hexachlorocyclopentadiene	ND		ug/kg	1100	360	2
Hexachloroethane	ND		ug/kg	320	65.	2
Isophorone	ND		ug/kg	360	52.	2
Naphthalene	15000		ug/kg	400	49.	2
Nitrobenzene	ND		ug/kg	360	59.	2
NDPA/DPA	ND		ug/kg	320	46.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	400	62.	2
Bis(2-ethylhexyl)phthalate	ND		ug/kg	400	140	2
Butyl benzyl phthalate	ND		ug/kg	400	100	2
Di-n-butylphthalate	ND		ug/kg	400	76.	2
Di-n-octylphthalate	ND		ug/kg	400	140	2
Diethyl phthalate	ND		ug/kg	400	37.	2
Dimethyl phthalate	ND		ug/kg	400	84.	2
Benzo(a)anthracene	16000	E	ug/kg	240	45.	2
Benzo(a)pyrene	15000		ug/kg	320	98.	2
Benzo(b)fluoranthene	21000	E	ug/kg	240	67.	2
Benzo(k)fluoranthene	7500		ug/kg	240	64.	2



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-01	D		Date Collected:	01/06/16 08:30	
Client ID:	TP 11 (3-4')			Date Received:	01/06/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	16000		ug/kg	240	42.	2
Acenaphthylene	1600		ug/kg	320	62.	2
Anthracene	10000		ug/kg	240	78.	2
Benzo(ghi)perylene	7800		ug/kg	320	47.	2
Fluorene	7900		ug/kg	400	39.	2
Phenanthrene	29000	E	ug/kg	240	49.	2
Dibenzo(a,h)anthracene	2200		ug/kg	240	46.	2
Indeno(1,2,3-cd)pyrene	9200		ug/kg	320	56.	2
Pyrene	31000	E	ug/kg	240	40.	2
Biphenyl	940		ug/kg	910	93.	2
4-Chloroaniline	ND		ug/kg	400	73.	2
2-Nitroaniline	ND		ug/kg	400	77.	2
3-Nitroaniline	ND		ug/kg	400	75.	2
4-Nitroaniline	ND		ug/kg	400	160	2
Dibenzofuran	5800		ug/kg	400	38.	2
2-Methylnaphthalene	4400		ug/kg	480	48.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	400	42.	2
Acetophenone	ND		ug/kg	400	50.	2
2,4,6-Trichlorophenol	ND		ug/kg	240	76.	2
p-Chloro-m-cresol	ND		ug/kg	400	60.	2
2-Chlorophenol	ND		ug/kg	400	47.	2
2,4-Dichlorophenol	ND		ug/kg	360	64.	2
2,4-Dimethylphenol	ND		ug/kg	400	130	2
2-Nitrophenol	ND		ug/kg	860	150	2
4-Nitrophenol	ND		ug/kg	560	160	2
2,4-Dinitrophenol	ND		ug/kg	1900	190	2
4,6-Dinitro-o-cresol	ND		ug/kg	1000	190	2
Pentachlorophenol	ND		ug/kg	320	88.	2
Phenol	ND		ug/kg	400	60.	2
2-Methylphenol	ND		ug/kg	400	62.	2
3-Methylphenol/4-Methylphenol	110	J	ug/kg	580	63.	2
2,4,5-Trichlorophenol	ND		ug/kg	400	77.	2
Carbazole	4000		ug/kg	400	39.	2
Benzaldehyde	ND		ug/kg	530	110	2
Caprolactam	ND		ug/kg	400	120	2
Atrazine	ND		ug/kg	320	140	2
2,3,4,6-Tetrachlorophenol	ND		ug/kg	400	81.	2

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-01	D	Date Collected:	01/06/16 08:30
Client ID:	TP 11 (3-4')		Date Received:	01/06/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		25-120
Phenol-d6	58		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	73		10-136
4-Terphenyl-d14	73		18-120

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-02	D2	Date Collected:	01/06/16 09:00
Client ID:	TP 12 (3-6')		Date Received:	01/06/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8270D		Extraction Date:	01/08/16 20:06
Analytical Date:	01/13/16 12:47			
Analyst:	AL			
Percent Solids:	84%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	200000		ug/kg	5900	1100	50
Benzo(a)anthracene	74000		ug/kg	5900	1100	50
Benzo(a)pyrene	63000		ug/kg	7800	2400	50
Benzo(b)fluoranthene	82000		ug/kg	5900	1600	50
Chrysene	68000		ug/kg	5900	1000	50
Phenanthrene	190000		ug/kg	5900	1200	50
Pyrene	150000		ug/kg	5900	970	50

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01131615:50

Lab Number: L1600305
Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-02	D	Date Collected:	01/06/16 09:00
Client ID:	TP 12 (3-6')		Date Received:	01/06/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8270D		Extraction Date:	01/08/16 20:06
Analytical Date:	01/11/16 04:39			
Analyst:	AL			
Percent Solids:	84%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	27000		ug/kg	1600	200	10
Hexachlorobenzene	ND		ug/kg	1200	220	10
Bis(2-chloroethyl)ether	ND		ug/kg	1800	260	10
2-Chloronaphthalene	ND		ug/kg	2000	190	10
3,3'-Dichlorobenzidine	ND		ug/kg	2000	520	10
2,4-Dinitrotoluene	ND		ug/kg	2000	390	10
2,6-Dinitrotoluene	ND		ug/kg	2000	340	10
Fluoranthene	260000	E	ug/kg	1200	220	10
4-Chlorophenyl phenyl ether	ND		ug/kg	2000	210	10
4-Bromophenyl phenyl ether	ND		ug/kg	2000	300	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2300	330	10
Bis(2-chloroethoxy)methane	ND		ug/kg	2100	200	10
Hexachlorobutadiene	ND		ug/kg	2000	290	10
Hexachlorocyclopentadiene	ND		ug/kg	5600	1800	10
Hexachloroethane	ND		ug/kg	1600	320	10
Isophorone	ND		ug/kg	1800	250	10
Naphthalene	33000		ug/kg	2000	240	10
Nitrobenzene	ND		ug/kg	1800	290	10
NDPA/DPA	ND		ug/kg	1600	220	10
n-Nitrosodi-n-propylamine	ND		ug/kg	2000	300	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	2000	680	10
Butyl benzyl phthalate	ND		ug/kg	2000	490	10
Di-n-butylphthalate	ND		ug/kg	2000	370	10
Di-n-octylphthalate	ND		ug/kg	2000	660	10
Diethyl phthalate	ND		ug/kg	2000	180	10
Dimethyl phthalate	ND		ug/kg	2000	410	10
Benzo(a)anthracene	95000	E	ug/kg	1200	220	10
Benzo(a)pyrene	89000	E	ug/kg	1600	480	10
Benzo(b)fluoranthene	110000	E	ug/kg	1200	330	10
Benzo(k)fluoranthene	43000		ug/kg	1200	310	10



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-02	D		Date Collected:	01/06/16 09:00	
Client ID:	TP 12 (3-6')			Date Received:	01/06/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	92000	E	ug/kg	1200	200	10
Acenaphthylene	3100		ug/kg	1600	300	10
Anthracene	74000		ug/kg	1200	380	10
Benzo(ghi)perylene	45000		ug/kg	1600	230	10
Fluorene	42000		ug/kg	2000	190	10
Phenanthrene	240000	E	ug/kg	1200	240	10
Dibenzo(a,h)anthracene	12000		ug/kg	1200	230	10
Indeno(1,2,3-cd)pyrene	55000		ug/kg	1600	270	10
Pyrene	210000	E	ug/kg	1200	190	10
Biphenyl	2900	J	ug/kg	4400	450	10
4-Chloroaniline	ND		ug/kg	2000	360	10
2-Nitroaniline	ND		ug/kg	2000	380	10
3-Nitroaniline	ND		ug/kg	2000	370	10
4-Nitroaniline	ND		ug/kg	2000	810	10
Dibenzofuran	24000		ug/kg	2000	180	10
2-Methylnaphthalene	10000		ug/kg	2300	240	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	2000	200	10
Acetophenone	ND		ug/kg	2000	240	10
2,4,6-Trichlorophenol	ND		ug/kg	1200	370	10
p-Chloro-m-cresol	ND		ug/kg	2000	290	10
2-Chlorophenol	ND		ug/kg	2000	230	10
2,4-Dichlorophenol	ND		ug/kg	1800	310	10
2,4-Dimethylphenol	ND		ug/kg	2000	640	10
2-Nitrophenol	ND		ug/kg	4200	740	10
4-Nitrophenol	ND		ug/kg	2700	800	10
2,4-Dinitrophenol	ND		ug/kg	9400	910	10
4,6-Dinitro-o-cresol	ND		ug/kg	5100	940	10
Pentachlorophenol	ND		ug/kg	1600	430	10
Phenol	500	J	ug/kg	2000	300	10
2-Methylphenol	350	J	ug/kg	2000	300	10
3-Methylphenol/4-Methylphenol	860	J	ug/kg	2800	310	10
2,4,5-Trichlorophenol	ND		ug/kg	2000	370	10
Carbazole	34000		ug/kg	2000	190	10
Benzaldehyde	ND		ug/kg	2600	530	10
Caprolactam	ND		ug/kg	2000	590	10
Atrazine	ND		ug/kg	1600	680	10
2,3,4,6-Tetrachlorophenol	ND		ug/kg	2000	390	10

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-02	D	Date Collected:	01/06/16 09:00
Client ID:	TP 12 (3-6')		Date Received:	01/06/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		25-120
Phenol-d6	52		10-120
Nitrobenzene-d5	52		23-120
2-Fluorobiphenyl	49		30-120
2,4,6-Tribromophenol	56		10-136
4-Terphenyl-d14	59		18-120

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Serial_No:01131615:50

Lab Number: L1600305
Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-03	D2	Date Collected:	01/06/16 10:00
Client ID:	TP 13 (2-4')		Date Received:	01/06/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8270D		Extraction Date:	01/08/16 20:06
Analytical Date:	01/13/16 00:30			
Analyst:	AL			
Percent Solids:	85%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	13000		ug/kg	2300	450	20

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-03	D	Date Collected:	01/06/16 10:00
Client ID:	TP 13 (2-4')		Date Received:	01/06/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified
Matrix:	Soil		Extraction Method:	EPA 3546
Analytical Method:	1,8270D		Extraction Date:	01/08/16 20:06
Analytical Date:	01/11/16 04:13			
Analyst:	AL			
Percent Solids:	85%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	1700		ug/kg	310	40.	2
Hexachlorobenzene	ND		ug/kg	230	44.	2
Bis(2-chloroethyl)ether	ND		ug/kg	350	53.	2
2-Chloronaphthalene	ND		ug/kg	390	38.	2
3,3'-Dichlorobenzidine	ND		ug/kg	390	100	2
2,4-Dinitrotoluene	ND		ug/kg	390	78.	2
2,6-Dinitrotoluene	ND		ug/kg	390	67.	2
Fluoranthene	17000	E	ug/kg	230	45.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	390	42.	2
4-Bromophenyl phenyl ether	ND		ug/kg	390	59.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	470	66.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	420	39.	2
Hexachlorobutadiene	ND		ug/kg	390	57.	2
Hexachlorocyclopentadiene	ND		ug/kg	1100	350	2
Hexachloroethane	ND		ug/kg	310	63.	2
Isophorone	ND		ug/kg	350	50.	2
Naphthalene	2300		ug/kg	390	47.	2
Nitrobenzene	ND		ug/kg	350	58.	2
NDPA/DPA	ND		ug/kg	310	44.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	390	60.	2
Bis(2-ethylhexyl)phthalate	ND		ug/kg	390	130	2
Butyl benzyl phthalate	ND		ug/kg	390	98.	2
Di-n-butylphthalate	ND		ug/kg	390	74.	2
Di-n-octylphthalate	ND		ug/kg	390	130	2
Diethyl phthalate	ND		ug/kg	390	36.	2
Dimethyl phthalate	ND		ug/kg	390	82.	2
Benzo(a)anthracene	5800		ug/kg	230	44.	2
Benzo(a)pyrene	5200		ug/kg	310	95.	2
Benzo(b)fluoranthene	6800		ug/kg	230	65.	2
Benzo(k)fluoranthene	2600		ug/kg	230	62.	2



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-03	D		Date Collected:	01/06/16 10:00	
Client ID:	TP 13 (2-4')			Date Received:	01/06/16	
Sample Location:	BUFFALO, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	5700		ug/kg	230	40.	2
Acenaphthylene	350		ug/kg	310	60.	2
Anthracene	3700		ug/kg	230	76.	2
Benzo(ghi)perylene	3000		ug/kg	310	46.	2
Fluorene	2600		ug/kg	390	38.	2
Phenanthrene	15000		ug/kg	230	47.	2
Dibenzo(a,h)anthracene	740		ug/kg	230	45.	2
Indeno(1,2,3-cd)pyrene	3300		ug/kg	310	54.	2
Pyrene	13000		ug/kg	230	39.	2
Biphenyl	220	J	ug/kg	890	90.	2
4-Chloroaniline	ND		ug/kg	390	71.	2
2-Nitroaniline	ND		ug/kg	390	75.	2
3-Nitroaniline	ND		ug/kg	390	73.	2
4-Nitroaniline	ND		ug/kg	390	160	2
Dibenzofuran	1600		ug/kg	390	37.	2
2-Methylnaphthalene	820		ug/kg	470	47.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	390	40.	2
Acetophenone	ND		ug/kg	390	48.	2
2,4,6-Trichlorophenol	ND		ug/kg	230	74.	2
p-Chloro-m-cresol	ND		ug/kg	390	58.	2
2-Chlorophenol	ND		ug/kg	390	46.	2
2,4-Dichlorophenol	ND		ug/kg	350	62.	2
2,4-Dimethylphenol	ND		ug/kg	390	130	2
2-Nitrophenol	ND		ug/kg	840	150	2
4-Nitrophenol	ND		ug/kg	540	160	2
2,4-Dinitrophenol	ND		ug/kg	1900	180	2
4,6-Dinitro-o-cresol	ND		ug/kg	1000	190	2
Pentachlorophenol	ND		ug/kg	310	86.	2
Phenol	ND		ug/kg	390	59.	2
2-Methylphenol	ND		ug/kg	390	60.	2
3-Methylphenol/4-Methylphenol	79	J	ug/kg	560	61.	2
2,4,5-Trichlorophenol	ND		ug/kg	390	74.	2
Carbazole	2400		ug/kg	390	38.	2
Benzaldehyde	ND		ug/kg	510	100	2
Caprolactam	ND		ug/kg	390	120	2
Atrazine	ND		ug/kg	310	140	2
2,3,4,6-Tetrachlorophenol	ND		ug/kg	390	78.	2

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-03	D	Date Collected:	01/06/16 10:00
Client ID:	TP 13 (2-4')		Date Received:	01/06/16
Sample Location:	BUFFALO, NY		Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	79		10-136
4-Terphenyl-d14	54		18-120

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/10/16 20:54
Analyst: AL

Extraction Method: EPA 3546
Extraction Date: 01/08/16 20:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	01-03			Batch:	WG855936-1
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/10/16 20:54
Analyst: AL

Extraction Method: EPA 3546
Extraction Date: 01/08/16 20:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	01-03			Batch:	WG855936-1
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/10/16 20:54
Analyst: AL

Extraction Method: EPA 3546
Extraction Date: 01/08/16 20:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	01-03			Batch:	WG855936-1
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
Atrazine	ND		ug/kg	130	57.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	90		25-120
Phenol-d6	98		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	103		30-120
2,4,6-Tribromophenol	115		10-136
4-Terphenyl-d14	118		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG855936-2 WG855936-3								
Acenaphthene	76		97		31-137	24		50
Benzidine	67	Q	54		10-66	21		50
n-Nitrosodimethylamine	52		81		22-100	44		50
1,2,4-Trichlorobenzene	63		95		38-107	41		50
Hexachlorobenzene	98		109		40-140	11		50
Bis(2-chloroethyl)ether	60		87		40-140	37		50
2-Chloronaphthalene	78		106		40-140	30		50
1,2-Dichlorobenzene	58		88		40-140	41		50
1,3-Dichlorobenzene	54		85		40-140	45		50
1,4-Dichlorobenzene	54		86		28-104	46		50
3,3'-Dichlorobenzidine	66		69		40-140	4		50
2,4-Dinitrotoluene	100	Q	112	Q	28-89	11		50
2,6-Dinitrotoluene	106		119		40-140	12		50
Fluoranthene	92		103		40-140	11		50
4-Chlorophenyl phenyl ether	86		103		40-140	18		50
4-Bromophenyl phenyl ether	93		107		40-140	14		50
Azobenzene	84		98		40-140	15		50
Bis(2-chloroisopropyl)ether	59		84		40-140	35		50
Bis(2-chloroethoxy)methane	72		100		40-117	33		50
Hexachlorobutadiene	63		94		40-140	39		50
Hexachlorocyclopentadiene	68		99		40-140	37		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG855936-2 WG855936-3								
Hexachloroethane	56		87		40-140	43		50
Isophorone	73		97		40-140	28		50
Naphthalene	63		91		40-140	36		50
Nitrobenzene	62		91		40-140	38		50
NitrosoDiPhenylAmine(NDPA)/DPA	92		103		36-157	11		50
n-Nitrosodi-n-propylamine	70		97		32-121	32		50
Bis(2-Ethylhexyl)phthalate	93		101		40-140	8		50
Butyl benzyl phthalate	93		107		40-140	14		50
Di-n-butylphthalate	92		102		40-140	10		50
Di-n-octylphthalate	91		100		40-140	9		50
Diethyl phthalate	93		104		40-140	11		50
Dimethyl phthalate	88		102		40-140	15		50
Benzo(a)anthracene	89		96		40-140	8		50
Benzo(a)pyrene	96		105		40-140	9		50
Benzo(b)fluoranthene	92		100		40-140	8		50
Benzo(k)fluoranthene	90		99		40-140	10		50
Chrysene	90		99		40-140	10		50
Acenaphthylene	83		106		40-140	24		50
Anthracene	88		100		40-140	13		50
Benzo(ghi)perylene	84		92		40-140	9		50
Fluorene	85		102		40-140	18		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG855936-2 WG855936-3								
Phenanthrene	87		98		40-140	12		50
Dibenzo(a,h)anthracene	83		92		40-140	10		50
Indeno(1,2,3-cd)Pyrene	84		92		40-140	9		50
Pyrene	91		102		35-142	11		50
Biphenyl	71		96		54-104	30		50
Aniline	54		67		40-140	21		50
4-Chloroaniline	67		83		40-140	21		50
2-Nitroaniline	96		113		47-134	16		50
3-Nitroaniline	81		80		26-129	1		50
4-Nitroaniline	95		105		41-125	10		50
Dibenzofuran	80		99		40-140	21		50
2-Methylnaphthalene	70		101		40-140	36		50
1,2,4,5-Tetrachlorobenzene	67		94		40-117	34		50
Acetophenone	69		98		14-144	35		50
2,4,6-Trichlorophenol	85		108		30-130	24		50
P-Chloro-M-Cresol	87		106	Q	26-103	20		50
2-Chlorophenol	65		94		25-102	36		50
2,4-Dichlorophenol	73		101		30-130	32		50
2,4-Dimethylphenol	75		104		30-130	32		50
2-Nitrophenol	74		106		30-130	36		50
4-Nitrophenol	99		111		11-114	11		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	<i>LCS</i> %Recovery	<i>LCS</i> %Recovery	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG855936-2 WG855936-3								
2,4-Dinitrophenol	81	87			4-130	7		50
4,6-Dinitro-o-cresol	97	108			10-130	11		50
Pentachlorophenol	93	106			17-109	13		50
Phenol	66	92		Q	26-90	33		50
2-Methylphenol	69	98			30-130.	35		50
3-Methylphenol/4-Methylphenol	73	100			30-130	31		50
2,4,5-Trichlorophenol	93	113			30-130	19		50
Benzoic Acid	48	53			10-66	10		50
Benzyl Alcohol	69	96			40-140	33		50
Carbazole	91	100			54-128	9		50
Benzaldehyde	55	67			40-140	20		50
Caprolactam	92	104			15-130	12		50
Atrazine	125	136			40-140	8		50
2,3,4,6-Tetrachlorophenol	98	112			40-140	13		50
Pyridine	37	65			10-93	55	Q	50
Parathion, ethyl	164	Q	173	Q	40-140	5		50
1-Methylnaphthalene	71	99			26-130	33		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG855936-2 WG855936-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	62		86		25-120
Phenol-d6	69		91		10-120
Nitrobenzene-d5	67		92		23-120
2-Fluorobiphenyl	76		98		30-120
2,4,6-Tribromophenol	97		105		10-136
4-Terphenyl-d14	91		96		18-120

PCBS



Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID: L1600305-01
 Client ID: TP 11 (3-4')
 Sample Location: BUFFALO, NY
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/08/16 20:13
 Analyst: JW
 Percent Solids: 81%

Date Collected: 01/06/16 08:30
 Date Received: 01/06/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 01/07/16 23:42
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/07/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	40.1	3.17	1	A
Aroclor 1221	ND		ug/kg	40.1	3.70	1	A
Aroclor 1232	ND		ug/kg	40.1	4.70	1	A
Aroclor 1242	ND		ug/kg	40.1	4.91	1	A
Aroclor 1248	125		ug/kg	40.1	3.38	1	B
Aroclor 1254	53.8		ug/kg	40.1	3.30	1	B
Aroclor 1260	ND		ug/kg	40.1	3.05	1	A
Aroclor 1262	ND		ug/kg	40.1	1.99	1	A
Aroclor 1268	ND		ug/kg	40.1	5.81	1	A
PCBs, Total	179		ug/kg	40.1	1.99	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	91		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	105		30-150	B

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID: L1600305-02 D
 Client ID: TP 12 (3-6')
 Sample Location: BUFFALO, NY
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/12/16 13:59
 Analyst: JW
 Percent Solids: 84%

Date Collected: 01/06/16 09:00
 Date Received: 01/06/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 01/07/16 23:42
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/07/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	75.1	5.94	2	A
Aroclor 1221	ND		ug/kg	75.1	6.93	2	A
Aroclor 1232	ND		ug/kg	75.1	8.80	2	A
Aroclor 1242	ND		ug/kg	75.1	9.20	2	A
Aroclor 1248	466		ug/kg	75.1	6.34	2	A
Aroclor 1254	292		ug/kg	75.1	6.18	2	A
Aroclor 1260	595		ug/kg	75.1	5.72	2	B
Aroclor 1262	ND		ug/kg	75.1	3.73	2	A
Aroclor 1268	ND		ug/kg	75.1	10.9	2	A
PCBs, Total	1350		ug/kg	75.1	3.73	2	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	A
Decachlorobiphenyl	48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: PINNACLE REALTY ENV. SERVICES

Lab Number: L1600305

Project Number: 97301

Report Date: 01/13/16

SAMPLE RESULTS

Lab ID: L1600305-03
 Client ID: TP 13 (2-4')
 Sample Location: BUFFALO, NY
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/08/16 20:41
 Analyst: JW
 Percent Solids: 85%

Date Collected: 01/06/16 10:00
 Date Received: 01/06/16
 Field Prep: Not Specified
 Extraction Method: EPA 3546
 Extraction Date: 01/07/16 23:42
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/16
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/07/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.9	2.99	1	A
Aroclor 1221	ND		ug/kg	37.9	3.49	1	A
Aroclor 1232	ND		ug/kg	37.9	4.44	1	A
Aroclor 1242	195		ug/kg	37.9	4.64	1	B
Aroclor 1248	ND		ug/kg	37.9	3.20	1	A
Aroclor 1254	58.5		ug/kg	37.9	3.11	1	B
Aroclor 1260	162		ug/kg	37.9	2.89	1	B
Aroclor 1262	ND		ug/kg	37.9	1.88	1	A
Aroclor 1268	ND		ug/kg	37.9	5.49	1	A
PCBs, Total	416		ug/kg	37.9	1.88	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	92		30-150	B

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 01/08/16 22:31
Analyst: JW

Extraction Method: EPA 3546
Extraction Date: 01/07/16 23:42
Cleanup Method: EPA 3665A
Cleanup Date: 01/08/16
Cleanup Method: EPA 3660B
Cleanup Date: 01/07/16

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s):	01-03			Batch:	WG855647-1	
Aroclor 1016	ND		ug/kg	32.2	2.55	A
Aroclor 1221	ND		ug/kg	32.2	2.97	A
Aroclor 1232	ND		ug/kg	32.2	3.78	A
Aroclor 1242	ND		ug/kg	32.2	3.94	A
Aroclor 1248	ND		ug/kg	32.2	2.72	A
Aroclor 1254	ND		ug/kg	32.2	2.65	A
Aroclor 1260	ND		ug/kg	32.2	2.46	A
Aroclor 1262	ND		ug/kg	32.2	1.60	A
Aroclor 1268	ND		ug/kg	32.2	4.67	A
PCBs, Total	ND		ug/kg	32.2	1.60	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	51		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	54		30-150	B
Decachlorobiphenyl	66		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	<i>LCS</i>	<i>LCSD</i>	%Recovery		%Recovery	<i>RPD</i>	<i>Qual</i>	<i>RPD</i>	<i>Column</i>
	<i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i>	<i>Qual</i>	<i>Limits</i>			<i>Limits</i>	
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG855647-2 WG855647-3									
Aroclor 1016	60		57		40-140	5		50	A
Aroclor 1260	65		61		40-140	6		50	A

Surrogate	<i>LCS</i>	<i>LCSD</i>	%Recovery		<i>Qual</i>	<i>Acceptance Criteria</i>	<i>Column</i>
	<i>%Recovery</i>	<i>%Recovery</i>	<i>Qual</i>	<i>Qual</i>	<i>Limits</i>	<i>Limits</i>	
2,4,5,6-Tetrachloro-m-xylene	58		55		30-150		A
Decachlorobiphenyl	70		64		30-150		A
2,4,5,6-Tetrachloro-m-xylene	61		57		30-150		B
Decachlorobiphenyl	77		71		30-150		B

METALS



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

SAMPLE RESULTS

Lab ID: L1600305-01 Date Collected: 01/06/16 08:30
Client ID: TP 11 (3-4') Date Received: 01/06/16
Sample Location: BUFFALO, NY Field Prep: Not Specified
Matrix: Soil
Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	6900		mg/kg	9.6	1.9	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Antimony, Total	ND		mg/kg	4.8	0.77	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Arsenic, Total	18		mg/kg	0.96	0.19	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Barium, Total	46		mg/kg	0.96	0.29	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Beryllium, Total	0.346	J	mg/kg	0.480	0.096	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Cadmium, Total	ND		mg/kg	0.96	0.07	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Calcium, Total	14000		mg/kg	9.6	2.9	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Chromium, Total	16		mg/kg	0.96	0.19	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Cobalt, Total	5.4		mg/kg	1.9	0.48	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Copper, Total	76		mg/kg	0.96	0.19	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Iron, Total	25000		mg/kg	4.8	1.9	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Lead, Total	15		mg/kg	4.8	0.19	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Magnesium, Total	3000		mg/kg	9.6	0.96	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Manganese, Total	560		mg/kg	0.96	0.19	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Mercury, Total	0.04	J	mg/kg	0.08	0.02	1	01/07/16 08:25	01/07/16 13:18	EPA 7471B	1,7471B	DB
Nickel, Total	17		mg/kg	2.4	0.38	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Potassium, Total	840		mg/kg	240	38.	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Selenium, Total	ND		mg/kg	1.9	0.29	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Silver, Total	ND		mg/kg	0.96	0.19	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Sodium, Total	400		mg/kg	190	29.	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Thallium, Total	ND		mg/kg	1.9	0.38	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Vanadium, Total	14		mg/kg	0.96	0.10	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS
Zinc, Total	54		mg/kg	4.8	0.67	2	01/07/16 08:40	01/12/16 22:59	EPA 3050B	1,6010C	PS



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

SAMPLE RESULTS

Lab ID: L1600305-02 Date Collected: 01/06/16 09:00
Client ID: TP 12 (3-6') Date Received: 01/06/16
Sample Location: BUFFALO, NY Field Prep: Not Specified
Matrix: Soil
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
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Total Metals - Westborough Lab

Aluminum, Total	6000		mg/kg	9.3	1.8	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Antimony, Total	ND		mg/kg	4.6	0.74	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Arsenic, Total	26		mg/kg	0.93	0.18	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Barium, Total	63		mg/kg	0.93	0.28	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Beryllium, Total	0.4460	J	mg/kg	0.4646	0.0929	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Cadmium, Total	ND		mg/kg	0.93	0.07	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Calcium, Total	75000		mg/kg	9.3	2.8	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Chromium, Total	52		mg/kg	0.93	0.18	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Cobalt, Total	7.0		mg/kg	1.8	0.46	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Copper, Total	130		mg/kg	0.93	0.18	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Iron, Total	39000		mg/kg	4.6	1.8	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Lead, Total	47		mg/kg	4.6	0.18	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Magnesium, Total	5900		mg/kg	9.3	0.93	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Manganese, Total	1800		mg/kg	0.93	0.18	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Mercury, Total	0.22		mg/kg	0.08	0.02	1	01/07/16 08:25	01/07/16 13:26	EPA 7471B	1,7471B	DB
Nickel, Total	30		mg/kg	2.3	0.37	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Potassium, Total	600		mg/kg	230	37.	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Selenium, Total	ND		mg/kg	1.8	0.28	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Silver, Total	0.20	J	mg/kg	0.93	0.18	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Sodium, Total	500		mg/kg	180	28.	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Thallium, Total	ND		mg/kg	1.8	0.37	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Vanadium, Total	15		mg/kg	0.93	0.09	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS
Zinc, Total	170		mg/kg	4.6	0.65	2	01/07/16 08:40	01/12/16 23:36	EPA 3050B	1,6010C	PS



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

SAMPLE RESULTS

Lab ID: L1600305-03 Date Collected: 01/06/16 10:00
Client ID: TP 13 (2-4') Date Received: 01/06/16
Sample Location: BUFFALO, NY Field Prep: Not Specified
Matrix: Soil
Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
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Total Metals - Westborough Lab

Aluminum, Total	5500		mg/kg	9.1	1.8	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Antimony, Total	ND		mg/kg	4.6	0.73	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Arsenic, Total	14		mg/kg	0.91	0.18	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Barium, Total	57		mg/kg	0.91	0.27	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Beryllium, Total	0.228	J	mg/kg	0.457	0.091	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Cadmium, Total	ND		mg/kg	0.91	0.06	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Calcium, Total	17000		mg/kg	9.1	2.7	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Chromium, Total	32		mg/kg	0.91	0.18	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Cobalt, Total	3.4		mg/kg	1.8	0.46	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Copper, Total	65		mg/kg	0.91	0.18	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Iron, Total	20000		mg/kg	4.6	1.8	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Lead, Total	49		mg/kg	4.6	0.18	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Magnesium, Total	3400		mg/kg	9.1	0.91	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Manganese, Total	800		mg/kg	0.91	0.18	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Mercury, Total	0.12		mg/kg	0.08	0.02	1	01/07/16 08:25	01/07/16 13:28	EPA 7471B	1,7471B	DB
Nickel, Total	18		mg/kg	2.3	0.36	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Potassium, Total	660		mg/kg	230	36.	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Selenium, Total	ND		mg/kg	1.8	0.27	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Silver, Total	ND		mg/kg	0.91	0.18	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Sodium, Total	410		mg/kg	180	27.	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Thallium, Total	ND		mg/kg	1.8	0.36	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Vanadium, Total	10		mg/kg	0.91	0.09	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS
Zinc, Total	110		mg/kg	4.6	0.64	2	01/07/16 08:40	01/12/16 23:48	EPA 3050B	1,6010C	PS



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-03 Batch: WG855387-1									
Mercury, Total	ND	mg/kg	0.08	0.02	1	01/07/16 08:25	01/07/16 13:14	1,7471B	DB

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-03 Batch: WG855398-1									
Aluminum, Total	ND	mg/kg	4.0	0.80	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Antimony, Total	ND	mg/kg	2.0	0.32	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Arsenic, Total	ND	mg/kg	0.40	0.08	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Barium, Total	ND	mg/kg	0.40	0.12	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Beryllium, Total	ND	mg/kg	0.20	0.04	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Cadmium, Total	ND	mg/kg	0.40	0.03	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Calcium, Total	ND	mg/kg	4.0	1.2	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Chromium, Total	ND	mg/kg	0.40	0.08	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Cobalt, Total	ND	mg/kg	0.80	0.20	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Copper, Total	ND	mg/kg	0.40	0.08	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Iron, Total	ND	mg/kg	2.0	0.80	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Lead, Total	ND	mg/kg	2.0	0.08	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Magnesium, Total	ND	mg/kg	4.0	0.40	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Manganese, Total	ND	mg/kg	0.40	0.08	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Nickel, Total	ND	mg/kg	1.0	0.16	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Potassium, Total	ND	mg/kg	100	16.	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Selenium, Total	ND	mg/kg	0.80	0.12	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Silver, Total	ND	mg/kg	0.40	0.08	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Sodium, Total	ND	mg/kg	80	12.	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Thallium, Total	ND	mg/kg	0.80	0.16	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Vanadium, Total	ND	mg/kg	0.40	0.04	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS
Zinc, Total	ND	mg/kg	2.0	0.28	1	01/07/16 08:04	01/12/16 22:39	1,6010C	PS



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B



Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS	LCSD	%Recovery		RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual			
Total Metals - Westborough Lab Associated sample(s): 01-03 Batch: WG855387-2 SRM Lot Number: D088-540							
Mercury, Total	118	-	-	-	72-128	-	-

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03 Batch: WG855398-2 SRM Lot Number: D088-540					
Aluminum, Total	83	-	48-151	-	
Antimony, Total	140	-	1-208	-	
Arsenic, Total	105	-	79-121	-	
Barium, Total	99	-	83-117	-	
Beryllium, Total	94	-	83-117	-	
Cadmium, Total	91	-	83-117	-	
Calcium, Total	90	-	81-119	-	
Chromium, Total	92	-	80-120	-	
Cobalt, Total	92	-	84-115	-	
Copper, Total	98	-	81-118	-	
Iron, Total	103	-	45-155	-	
Lead, Total	84	-	81-117	-	
Magnesium, Total	88	-	76-124	-	
Manganese, Total	93	-	81-118	-	
Nickel, Total	93	-	83-117	-	
Potassium, Total	93	-	71-129	-	
Selenium, Total	86	-	78-122	-	
Silver, Total	93	-	75-124	-	
Sodium, Total	95	-	72-127	-	
Thallium, Total	95	-	80-120	-	
Vanadium, Total	96	-	78-122	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03 Batch: WG855398-2 SRM Lot Number: D088-540					
Zinc, Total	92	-	82-118	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG855387-4 QC Sample: L1600305-01 Client ID: TP 11 (3-4')												
Mercury, Total	0.04J	0.166	0.28	169	Q	-	-	-	80-120	-	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD RPD	RPD Limits	
Total Metals - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG855398-4 QC Sample: L1600305-01 Client ID: TP 11 (3-4')										
Aluminum, Total	6900	194	5600	0	Q	-	-	75-125	-	20
Antimony, Total	ND	48.5	37	76	-	-	-	75-125	-	20
Arsenic, Total	18.	11.6	37	163	Q	-	-	75-125	-	20
Barium, Total	46.	194	230	95	-	-	-	75-125	-	20
Beryllium, Total	0.346J	4.85	5.0	103	-	-	-	75-125	-	20
Cadmium, Total	ND	4.95	3.0	61	Q	-	-	75-125	-	20
Calcium, Total	14000	970	6000	0	Q	-	-	75-125	-	20
Chromium, Total	16.	19.4	29	67	Q	-	-	75-125	-	20
Cobalt, Total	5.4	48.5	54	100	-	-	-	75-125	-	20
Copper, Total	76.	24.3	96	82	-	-	-	75-125	-	20
Iron, Total	25000	97	47000	22700	Q	-	-	75-125	-	20
Lead, Total	15.	49.5	41	52	Q	-	-	75-125	-	20
Magnesium, Total	3000	970	2100	0	Q	-	-	75-125	-	20
Manganese, Total	560	48.5	620	124	-	-	-	75-125	-	20
Nickel, Total	17.	48.5	56	80	-	-	-	75-125	-	20
Potassium, Total	840	970	1600	78	-	-	-	75-125	-	20
Selenium, Total	ND	11.6	10	86	-	-	-	75-125	-	20
Silver, Total	ND	29.1	30	103	-	-	-	75-125	-	20
Sodium, Total	400	970	1300	93	-	-	-	75-125	-	20
Thallium, Total	ND	11.6	9.8	84	-	-	-	75-125	-	20
Vanadium, Total	14.	48.5	57	89	-	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG855398-4 QC Sample: L1600305-01 Client ID: TP 11 (3-4')									
Zinc, Total	54.	48.5	74	41	Q	-	75-125	-	20

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1600305
Report Date: 01/13/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG855387-3 QC Sample: L1600305-01 Client ID: TP 11 (3-4')						
Mercury, Total	0.04J	0.03J	mg/kg	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG855398-3 QC Sample: L1600305-01 Client ID: TP 11 (3-4')					
Aluminum, Total	6900	5300	mg/kg	26	Q 20
Antimony, Total	ND	ND	mg/kg	NC	20
Arsenic, Total	18.	13	mg/kg	32	Q 20
Barium, Total	46.	33	mg/kg	33	Q 20
Beryllium, Total	0.346J	0.24J	mg/kg	NC	20
Cadmium, Total	ND	ND	mg/kg	NC	20
Calcium, Total	14000	13000	mg/kg	7	20
Chromium, Total	16.	11	mg/kg	37	Q 20
Cobalt, Total	5.4	4.2	mg/kg	25	Q 20
Copper, Total	76.	49	mg/kg	43	Q 20
Iron, Total	25000	22000	mg/kg	13	20
Lead, Total	15.	8.9	mg/kg	51	Q 20
Magnesium, Total	3000	2000	mg/kg	40	Q 20
Manganese, Total	560	490	mg/kg	13	20
Nickel, Total	17.	9.4	mg/kg	58	Q 20
Potassium, Total	840	630	mg/kg	29	Q 20
Selenium, Total	ND	ND	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	400	300	mg/kg	29	Q 20

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1600305
Report Date: 01/13/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG855398-3 QC Sample: L1600305-01 Client ID: TP 11 (3-4')					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	14.	9.5	mg/kg	38	Q 20
Zinc, Total	54.	40	mg/kg	30	Q 20

INORGANICS & MISCELLANEOUS



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

SAMPLE RESULTS

Lab ID:	L1600305-01	Date Collected:	01/06/16 08:30
Client ID:	TP 11 (3-4')	Date Received:	01/06/16
Sample Location:	BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.2		%	0.100	NA	1	-	01/07/16 13:55	30,2540G	RI



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

SAMPLE RESULTS

Lab ID: L1600305-02
Client ID: TP 12 (3-6')
Sample Location: BUFFALO, NY
Matrix: Soil

Date Collected: 01/06/16 09:00
Date Received: 01/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.4		%	0.100	NA	1	-	01/07/16 13:55	30,2540G	RI



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

SAMPLE RESULTS

Lab ID: L1600305-03
Client ID: TP 13 (2-4')
Sample Location: BUFFALO, NY
Matrix: Soil

Date Collected: 01/06/16 10:00
Date Received: 01/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.2		%	0.100	NA	1	-	01/07/16 13:55	30,2540G	RI



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1600305
Report Date: 01/13/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG855532-1 QC Sample: L1600305-03 Client ID: TP 13 (2-4')						
Solids, Total	85.2	86.3	%	1		20

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1600305-01A	Glass 120ml/4oz unpreserved	A	N/A	2.3	Y	Absent	NYTCL-8260-R2(7)
L1600305-01A9	Vial MeOH preserved split	A	N/A	2.3	Y	Absent	NYTCL-8260-R2(14)
L1600305-01B	Glass 120ml/4oz unpreserved	A	N/A	2.3	Y	Absent	NYTCL-8270(14),TS(7),NYTCL-8082(14)
L1600305-01C	Glass 250ml/8oz unpreserved	A	N/A	2.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1600305-02A	Glass 120ml/4oz unpreserved	A	N/A	2.3	Y	Absent	NYTCL-8260-R2(7)
L1600305-02A9	Vial MeOH preserved split	A	N/A	2.3	Y	Absent	NYTCL-8260-R2(14)
L1600305-02B	Glass 120ml/4oz unpreserved	A	N/A	2.3	Y	Absent	NYTCL-8270(14),TS(7),NYTCL-8082(14)
L1600305-02C	Glass 250ml/8oz unpreserved	A	N/A	2.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1600305-03A	Glass 120ml/4oz unpreserved	A	N/A	2.3	Y	Absent	NYTCL-8260-R2(7)
L1600305-03A9	Vial MeOH preserved split	A	N/A	2.3	Y	Absent	NYTCL-8260-R2(14)
L1600305-03B	Glass 120ml/4oz unpreserved	A	N/A	2.3	Y	Absent	NYTCL-8270(14),TS(7),NYTCL-8082(14)

*Values in parentheses indicate holding time in days

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1600305-03C	Glass 250ml/8oz unpreserved	A	N/A	2.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

*Values in parentheses indicate holding time in days

Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

GLOSSARY

Acronyms

- EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
- EPA - Environmental Protection Agency.
- LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD - Laboratory Control Sample Duplicate: Refer to LCS.
- LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
- MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD - Matrix Spike Sample Duplicate: Refer to MS.
- NA - Not Applicable.
- NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
- NI - Not Ignitable.
- NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
- RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
- RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
- SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
- STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
- TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A - Spectra identified as "Aldol Condensation Product".
- B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: DU Report with 'J' Qualifiers



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
Report Date: 01/13/16

Data Qualifiers

- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: PINNACLE REALTY ENV. SERVICES
Project Number: 97301

Lab Number: L1600305
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REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

EPA 8270D: NPW: Biphenyl; SCM: Biphenyl
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water

EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1**: Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C**, **SM4500CN-CE**, **EPA 180.1**, **SM2130B**, **SM4500CI-D**, **SM2320B**, **SM2540C**, **SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B**; **SM9223-P/A**, **SM9223B-Colilert-QT**, **Enterolert-QT**.

Non-Potable Water

EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, **SM4500H,B**, **EPA 120.1**, **SM2510B**, **SM2540C**, **SM2340B**, **SM2320B**, **SM4500CL-E**, **SM4500F-BC**, **SM426C**, **SM4500NH3-BH**, **EPA 350.1**: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, **SM4500NO3-F**,
EPA 353.2: Nitrate-N, **SM4500NH3-BC-NES**, **EPA 351.1**, **SM4500P-E**, **SM4500P-B**, **E**, **SM5220D**, **EPA 410.4**,
SM5210B, **SM5310C**, **SM4500CL-D**, **EPA 1664**, **SM14 510AC**, **EPA 420.1**, **SM4500-CN-CE**, **SM2540D**.
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT**; **Enterolert-QT**, **SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

