# Remedial Investigation Work Plan

BCP Site #C819021

Location:

Ellicott Station 40-52 Ellicott Street Batavia, New York

Prepared for:

Ellicott Station, LLC c/o Batavia Development Corp. One Batavia City Centre Batavia, New York 14020

LaBella Project No. 2151319 May 2016

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#### 1.0 Introduction

LaBella Associates, D.P.C. (LaBella) is pleased to submit this Remedial Investigation Work Plan (RIWP) to conduct additional investigation at Ellicott Station, 40-52 Ellicott Street, City of Batavia, Genesee County, New York, herein after referred to as the "Site." The Site was entered into the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) in July 2015 as Site #C819021. A Site Location Map is included as Figure 1. LaBella is submitting this RI Work Plan on behalf of Ellicott Station, LLC to define the nature and extent of contamination at the Site.

Information gathered from previous investigations have identified the presence of petroleum-related volatile organic compounds and semi-volatile organic compounds at the Site. Implementation of this RIWP will support existing information and fill in data gaps to identify the extent to which remediation is warranted. The activities in this RIWP will be carried out in accordance with the NYSDEC's Department of Environmental Remedial (DER)-10 (*Technical Guidance for Site Investigation and Remediation*) issued May 3, 2010.

## 2.0 Site Description and History

#### 2.1 Site Description and Surrounding Properties

The Site boundary, herein after referred to as "the Site", is comprised of an approximately 1.132± acre tax parcel (SBL 84.015-1-2). Attached Figure 2 illustrates the location and surrounding area of the Site. Current Site features include a primary brick building of approximately 19,142 square feet ("main building" and a garage outbuilding of 4,250 square feet ("garage building"). The buildings are currently unoccupied. The balance of the one-acre property is covered by asphalt and bordered by chain link fencing.

The Site is bounded by Ellicott Street to the northeast, a commercial office building to the northwest, a floral shop to the southeast and vacant real property and a parking lot to the southwest.

#### 2.2 Site History

The Site appears to have been historically utilized for various residential, commercial and industrial purposes. Historical mapping indicates that between at least 1884 and 1919 the property was developed with various dwellings, cooper shops and was also used for lumber storage. Electricity generation organizations appear to have occupied the western portion of the tax parcel from approximately 1912 to approximately 1975. Based on historical mapping, electricity generation operations appear to have included use for transformer storage and as a transformer repair shop (refer to Figures 4A through 4E). The property appears to have been utilized by a paving contractor and for commercial office space from approximately 1988 until as late as 2005. The Project Site has reportedly been vacant since approximately 2005.

Adjacent properties appear to have included a coal gasification plant located adjacent to the southwest of the Site from at least 1884 until approximately 1901. In addition, the property adjacent to the southwest was historically utilized as an auto repair facility and gasoline filling station.

## 3.0 Previous Investigations

The following environmental reports exist for the Site and were used in developing this RI Work Plan:

- Phase I Environmental Site Assessment (ESA), 40-52 Ellicott Street prepared by LaBella Associates, D.P.C. ("LaBella"), April 2013; and,
- *Phase II ESA*, 40-52 *Ellicott Street* completed by LaBella, June 2013

A summary of environmental work completed at the Site to data is as follows:

#### Phase I ESA, 40-52 Ellicott Street, prepared by LaBella and dated April 2013

The Phase I ESA completed by LaBella in April 2013 identified several Recognized Environmental Concerns (RECs) associated with the Site. RECs identified in the report are summarized below:

#### NYSDEC Spill #0509078

Based on the review of active NYSDEC Spill Report #0509078, a subsurface investigation appears to have been previously conducted at the Site and gasoline impacted soil was reportedly encountered. However, a copy of the subsurface investigation report was not obtained by the NYSDEC or LaBella. In addition, two existing groundwater monitoring wells were observed at the Site to the southwest of the Main Building during the Phase I site visit, as depicted on Figure 3. Although the nature of the groundwater monitoring wells cannot be confirmed, these wells may be associated with the investigation referenced within the Spill report form. As such, LaBella's Phase I ESA identified the potential for subsurface petroleum impacts to be present at the Site.

#### **Underground Storage Tanks**

The following information regarding underground storage tanks (USTs) at the Site was identified through the completion of the Phase I ESA. The below information indicates the potential for petroleum impacts to be present at the subject parcel. Relevant Sanborn Fire Insurance Mapping is overlaid on a Site map in Figures 4A through 4E.

- One 10,000-gallon diesel UST was installed at the Site in 1982 and removed in 1995. Tank closure documentation (i.e. tank closure report, confirmatory soil sampling results, etc.) has not been identified.
- Sanborn maps depict a large oil UST located on the southwestern adjacent property from between at least 1890 to 1901 (this is the property previously utilized as a coal gasification plant). Although on an adjacent property, this UST is depicted to border the Site's southwestern property line.
- The 1931 and 1948 Sanborn maps depict two gasoline USTs located on the subject parcel.
- An abandoned UST was removed from the subject parcel in October 1979. Additional information was not identified regarding the UST.
- One 300-gallon gasoline UST and one 500-gallon diesel UST were installed at the Site northeast
  of the Main Building in 1995. In addition, a large concrete patch consistent with a pump island
  is located proximate this historical tank location. No additional information was identified
  regarding the tanks.
- An asphalt patch is located southeast of the vacant garage building on the Site. The nature of the patch is unknown.

- An oil burner and gas stand were historically utilized at the subject parcel, reportedly associated
  with former fueling sources. No additional information was obtained regarding the gas stand or
  oil burner.
- A suspect pipe of unknown origin is located in the northwestern interior corner of the vacant garage. Although the position and type of the pipe suggests a possible association with a UST, it should be noted that no other evidence of a UST was identified proximate the pipe within the vacant garage or exterior of this structure.

#### Phase II ESA, 40-52 Ellicott Street, prepared by LaBella and dated June 2013

Based on the RECs identified in the Phase I ESA, LaBella completed a Phase II ESA at the 40-52 Ellicott Street property in June 2013. The Phase II investigation generally consisted of the completion of the following activities:

- Advancement of 16 soil borings (designated BH1 through BH16) and installation of four (4) temporary groundwater monitoring wells. Soil boring and well locations are depicted on attached Figure 3.
- Laboratory analysis of soil and groundwater samples for the following parameters:
  - United States Environmental Protection Agency (USEPA) Target Compound List (TCL) and NYSDEC Commissioner Policy 51 (CP-51) list volatile organic compounds (VOCs);
  - USEPA TCL semi-volatile organic compounds (SVOCs);
  - o Resource Conservation and Recovery Act (RCRA) metals; and,
  - Cyanide

Evidence of impairment (i.e., elevated photoionization detection (PID) meter readings, suspicious staining, odors, sheens, etc.) were identified in eight (8) of the 16 borings. Specifically, evidence of impairment was observed in borings BH2, BH3, BH7 and BH9-BH13.

VOCs and SVOCs were identified in soil and groundwater samples at concentrations exceeding the appropriate regulatory comparison criteria. Specifically, one (1) VOC was detected above New York Codes, Rules and Regulations (NYCRR) Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives (SCOs) in sample BH7 and two (2) SVOCs were detected above Unrestricted Use SCOs in sample BH13. These compounds were not detected above Part 375-6.8(b) Commercial Use SCOs. The analytical results are further described in Table A, below.

VOCs and SVOCs were identified above NYSDEC Part 703 Groundwater Standards in three (3) of the four (4) groundwater samples submitted for laboratory analysis. The elevated compounds appear to be generally associated with petroleum products and coal tar. The analytical results are further described in the following table.

Table A – Summary of Impacts Identified by LaBella's Phase II ESA

SOIL SAMPLES							
Boring ID	Sample Collection Depth (ft. bgs)	Contaminant of Concern					
BH7	6' - 8'	VOCs (methylene chloride)					
BH13	9'-11'	SVOCs (benzo(b)fluoranthene & indeno(1,2,3-					
		cd)pyrene)					
GROUNDWATER SAMPLES							
Well ID	Well Screen Depth (ft. bgs)	Contaminant of Concern					
TPMW1	7' – 12'	Petroleum-related VOCs & SVOCs					
TPMW2	6.5' – 11.5'	Petroleum-related VOCs					
TPMW4	7.8' – 12.8'	Petroleum-related VOCs & SVOCs					

Based on analytical results and field observations, "worst-case" impacts appear to be between 6-ft. and 12-ft. bgs. In borings in which impacts were identified, the severity of impacts appear to decrease with depth below 12-ft. bgs.

The soil and groundwater impacts were generally located in two (2) areas; on the southern portion of the Site in the vicinity of the former gas works and oil UST; and, in the location of former/current USTs in the northern portion of the Site, to the east of the main building. These locations are depicted on attached Figure 5. Based on the Phase II ESA, contaminants of concern at the Site appear to be limited to VOCs and SVOCs.

#### Site Visit completed by LaBella, October 13, 2015

A site visit was completed by LaBella on October 13, 2015, to assess conditions within the Site buildings (the building interiors were inaccessible during the previous work completed at the Site by LaBella in 2013). It should be noted that access was not available to the garage building located to the southeast of the main building at this time. However, during LaBella's site visit, two (2) apparent hydraulic lifts with underground components were observed in a portion of the main building (refer to Figure 6). In addition, three (3) aboveground storage tanks (ASTs) labeled "ATF", "Motor Oil", and "Hoist" were observed in an elevated area in close proximity to the lifts, as depicted on Figure 6. Each AST appeared to be approximately 250-gallons in capacity. These ASTs are located approximately 10-ft. above the floor surface on a ledge and thus could not be accessed during the site visit to assess the tank contents.

Although access to the garage building was unavailable at the time of the October 13, 2015, site visit, broken windows in the bay doors of this building allowed a limited visual inspection of the building. Scars associated with hydraulic lifts and/or other features potentially associated with petroleum products and/or hazardous substances were not observed; however, debris located on the floor further limited the visual inspection. Based on the historical use of the Site for industrial purposes, hydraulic lifts with underground components may be or may have previously been present in this building.

Finally, it should be noted that the four (4) wells installed during LaBella's 2013 Phase II ESA (i.e., TPMW1 through TPMW4) appear to have been removed by an unknown party subsequent to the completion of that investigation. Refer to Figure 3 for the former well locations.

## 4.0 Standards, Criteria and Guidelines

This section identifies the Standards, Criteria and Guidelines (SCGs) for the Site. The SCGs identified are used in order to quantify the extent of contamination at the Site that require remedial work based on the cleanup goal. The SCGs to be utilized as part of the implementation of this RI Work Plan are identified below:

**Soil SCGs**: The following SCGs for soil were used in developing this RI Work Plan:

- NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (RPSCOs) for the Protection of Groundwater;
- NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (RPSCOs) for Unrestricted Use; and,
- NYCRR Subpart 375-6 RPSCOs for the Protection of Public Health/Restricted Residential Use.

**Groundwater SCGs**: The following SCGs for groundwater were used in developing this RI Work Plan:

- NYSDEC Part 703 Groundwater Standards; and,
- Technical and Operational Guidance Series (TOGS) 1.1.1 Water Quality Standards and Guidance Values.

**Soil Gas SCGs:** Currently, no state regulatory (NYSDEC or NYSDOH) guidance values exist for soil gas.

## 5.0 Objectives and Rationale

The objective of this RI is to determine the nature and extent of contamination at the BCP Site and provide a qualitative risk assessment for any contaminants migrating off-site. In addition, the BCP general requirements (e.g., "full suite" testing, soil gas sampling, quality assurance/ quality control (QA/QC), etc.) will also be fulfilled.

#### **Areas of Concern**

Based on the completion of the Phase II ESA in June 2013, there appear to be two (2) areas of known subsurface impairment at the Project Site. Specifically, these areas are located along the southern border of the parcel and in the northern, central portion of the parcel, to the west of the main building (refer to Figure 3). In addition to the known areas of contamination, a third area of concern (AOC) associated with the central portion of the main building was identified during a site visit completed in October 2015 (refer to Section 3.0). The AOCs are described further below and depicted on Figure 6.

Southern Impacts ("AOC 1"): Contaminants on this portion of the Site appear associated with weathered petroleum and potentially coal tar. It should be noted that a chlorinated VOC (methylene chloride) was detected in one (1) soil sample from this area; however, the concentration detected was flagged by the lab as estimated and this compound was not identified in the groundwater sample

collected from the same borehole as the soil sample; as such, the detection of methylene chloride in this soil sample may not be representative of field conditions.

Based on the review of 1890 and 1901 Sanborn Fire Insurance Mapping, a large underground oil tank was previously located adjacent to the southern-most portion of the Site, in the area where weathered petroleum constituents have been identified. Additional information regarding this tank (e.g., capacity, current status, etc.) has not been identified.

In addition to the large oil UST, structures associated with the former gas works facility were historically located immediately to the south of the Project Site (refer to Figures 4A through 4E). Manufactured gas plants were common in New York State from the mid-1800's to early 1900's. A common byproduct of the gas manufacturing process was coal tar, a viscous material primarily comprised of polyaromatic hydrocarbons (PAHs) such as those identified in soil and groundwater in this portion of the Site during LaBella's 2013 Phase II ESA. PAHs are relatively insoluble in water, stable and thus tend to persist in the environment and typically do not migrate far from their source.

"Worst-case" impacts in AOC 1 were generally identified at approximately 10-12-ft. bgs. Field readings indicate impacts decrease with depth to equipment refusal (generally between 15-16-ft. bgs in this AOC).

The source of the impacts on the southern portion of the Site appears associated with the former large underground oil tank and/or the former adjacent gas works operations. However, it should be noted that transformer repair and storage areas were historically located on the southwestern portion of the property, in the vicinity of the observed petroleum impacts. As such, PCB impacts may be comingled in the area of petroleum impairment. The 2013 Phase II ESA did not include analysis of samples for PCBs.

Northern-Central Impacts ("AOC 2"): Based on field conditions and analytical data, impacts identified in this portion of the Project Site appear associated with weathered petroleum. Two (2) gasoline USTs were historically located in this area of the property as early as 1931. A concrete pad consistent with a former pump island was observed in the vicinity of these historical UST locations. Although records have been identified associated with UST removals at this property, records specifically pertaining to the removal(s) of these two (2) USTs were not identified within the scope of work of LaBella's Phase I ESA. It should also be noted that one (1) 300-gallon gasoline UST and one (1) 500-gallon diesel UST were reportedly installed in this area of the Site in 1995 and are currently in use. In addition, one (1) 10,000-gallon diesel UST was reportedly installed at this property in 1982 and removed in 1995. Additional information regarding this diesel UST (e.g., location, closure documentation) was not identified within the scope of work of LaBella's Phase I ESA.

"Worst-case" impacts in AOC 2 were generally identified at approximately 12-ft. bgs. Field readings indicate impacts decrease with depth to equipment refusal (generally between 15-16-ft. bgs in this AOC).

Based on the apparent weathered petroleum constituents identified in groundwater samples from this portion of the Site and petroleum odors and staining observed during the field work, the former use of USTs for petroleum storage appears to be the source of subsurface impairment in the northern-central portion of this parcel.

Hydraulic Lifts ("AOC 3"): Subsurface data has not been previously collected within the footprint of the site buildings and as such, subsurface conditions in the vicinity of the hydraulic lifts observed during the October 13, 2015 site visit are unknown. However, based on the presence of the two (2) lifts with apparent underground components as well as three (3) ASTs in the vicinity of the lifts observed by LaBella during the site visit described in Section 3.0, subsurface impacts may exist in this area of the Site. As such, this area has been identified as an AOC. It should be noted that hydraulic lifts may be present or may have been present within the garage building as well as the main building (refer to Section 3.0). As such, AOC 3 also includes the footprint of the garage building.

## **6.0** Remedial Investigation Scope

The proposed remedial investigation field activities to be completed as part of the work plan have been separated into tasks and are presented in this section. A list with contact information for the anticipated personnel involved with the project is included in Appendix 4. Qualifications for the personnel are also included.

During all ground intrusive work conducted at the Site, air monitoring will be conducted in accordance with the NYSDOH Generic Community Air Monitoring Plan (CAMP). A copy of this plan is included as Appendix 1.

#### **6.1** Remedial Investigation Tasks

The RI Field Plan is detailed below:

<u>Task 1: Surface Soil Sampling</u>- This task is a program requirement and based on the limited area of surface soils present at the Site is not anticipated to provide beneficial information on nature and extent of contamination at the Site; however, this task will be completed to evaluate the potential for human exposure as well as the suitability of the soil cover for compliance with the Soil Cleanup Objectives.

<u>Task 2: Soil Vapor Intrusion Evaluation</u>- This task is to be completed prior to overburden soil and groundwater sampling in the event that soil vapor intrusion sampling identifies areas which warrant additional overburden soil and/or groundwater sampling.

<u>Task 3: Overburden Soil and Groundwater Sampling</u>— This task is proposed to better define the edges of the groundwater contaminant plume depicted on Figures 3 and 5 developed from existing data, as well as better define the source area and assess subsurface conditions in AOC 3. In addition, this task is intended to complete the testing required of each AOC per DER-10 requirements.

<u>Task 4: Fish and Wildlife Resources Impact Analysis (FWRIA) Part 1: Resource</u>
<u>Characterization-</u> A Site characterization will be conducted to identify all fish and wildlife resources in accordance with DER-10 Section 3.10.1. If the results of the characterization indicate the need for further assessment, a FWRIA Part 2: Ecological Impact Assessment will be conducted in accordance with DER-10 Section 3.10.2.

<u>Task 5: Hydraulic Conductivity Testing</u>- This task is intended to better understand hydrology at the Site. Slug testing will be conducted to measure hydraulic conductivity of select wells.

Sampling procedures that require full suite parameters will include the following analyses:

- USEPA Target Compound List (TCL) VOCs including tentatively identified compounds (TICs) using United States Environmental Protection Agency (USEPA) Method 8260;
- USEPA TCL SVOCs including TICs using USEPA Method 8270;
- Target Analyte List (TAL) metals using USEPA Methods 6010/7470/7471;
- Cyanide using USEPA Method 9012;
- PCBs using USEPA Method 8082; and
- Pesticides using USEPA Method 8081.

QA/QC samples will also be collected and analyzed (e.g., trip blank, duplicate sample, matrix spike/matrix spike duplicate (MS/MSD)). The specific QA/QC program is detailed in Section 6.4. The soil samples will be delivered under chain of custody procedures to an ELAP-certified laboratory. The laboratory will provide a NYSDEC Analytical Services Protocol (ASP) Category B Deliverables data package and a Data Usability Summary Report (DUSR) will be completed.

#### 6.1.1 Task 1: Surface Soil Sampling

A program requirement of the BCP is the collection and analysis of surface soil samples to evaluate the potential for human exposure to contaminants as well as to evaluate the suitability of the soil cover for compliance with SCOs. The majority of the Site is covered with impervious surfaces including buildings, concrete slabs and asphalt paving. As such, surface soil sampling will be limited to an approximately 60-sq. ft. area to the southwest of the main building and an approximately 2-ft. wide strip of surface soils along a portion of the southeastern property line (refer to Figure 6). One (1) set of surface samples (i.e., same location, multiple depths) will be collected from each location and analyzed for "full suite" parameters in comparison to the anticipated use of the property.

The proposed surface soil sample locations are shown on Figure 6. These locations were selected to evaluate the limited surface soils across the Site (i.e., the approximately 60-sq. ft. area to the southwest of the main building and the strip along the southeastern property line). The following methods will be used to collect surface soil samples:

- Any sod/vegetative material will be removed with a clean shovel/trowel. Samples will be collected from 0 to 2-in. below any sod/vegetative material and from 2-in. to 2-ft. below any sod/vegetative material.
- The samples will be collected using new sterile sampling spoons or a clean shovel/trowel to prevent cross-contamination. Soils from 2-in to 2-ft bgs will be placed in a plastic Ziploc bag to collect headspace readings, with the exception of the VOC sample which will be immediately containerized to eliminate potential volatilization. The VOC sample will be collected utilizing USEPA Method 5035 (i.e., closed-system purge-and-trap).
- The portion of the sample which will not be analyzed for VOCs will be thoroughly mixed within the bag and allowed to reach ambient temperature.
- The soil will then be screened using a PID and the readings will be recorded.
- Additionally, olfactory indications of impairment will be observed during surface soil sampling
- Surface soil samples will be analyzed for full-suite parameters.

#### 6.1.2 Task 2: Soil Vapor Intrusion Evaluation

Five (5) sets of soil vapor intrusion (SVI) samples will be collected from the Site buildings, as depicted on attached Figure 6. Each SVI sampling location will include the collection of one (1) sub-slab vapor and one (1) indoor air sample. In addition, one (1) ambient (i.e., exterior) air sample will also be collected for control purposes. The ambient air sample will be collected from an upwind location of the buildings and as such this sample location will be selected on the day of sampling.

Sub-slab vapor samples will be collected from beneath the concrete floor slab by coring an approximately 1.5" diameter hole approximately 2" into the floor in each sampling location. Subsequently, a 5/8" diameter hole will be drilled through the slab to approximately 1-2 inches beneath the floor slab. A 5/8" diameter polyethylene tube and barbed fitting will be inserted into the corehole. Tubing will connect a Summa® canister with a pre-set regulator to the barbed fitting for sub-slab soil vapor collection. Helium testing will be conducted in each sub-slab vapor location to ensure the integrity of the seal between the sub-slab and indoor air prior to sampling.

Concurrently, an indoor air sample will be set-up for collection within the immediate vicinity (i.e., approximately 15-ft.) of each sub-slab vapor sample. Indoor air samples will also be collected using a Summa® canister with a pre-set regulator for sample collection.

Each sample will have a collection time of approximately 8-hours. The ambient air sample will be collected concurrently with the sub-slab vapor and indoor air samples. Following the collection period, the sampling location will be capped.

Samples will be sent under standard chain of custody procedures to a NYSDOH Environmental Laboratory Accreditation Program (ELAP) certified laboratory for VOC analysis using United States Environmental Protection Agency (USEPA) Method TO-15 for standard laboratory turnaround time (approximately 5 business days) with a minimum detection limit of 1  $\mu$ g/m3 with 0.25  $\mu$ g/m3 for TCE and vinyl chloride.

In addition, a NYSDOH Indoor Air Quality Questionnaire and Building Inventory will be completed in each building as part of the SVI study. Materials containing potential contaminants of concern (e.g., cleaning chemicals, etc.) will be listed to identify any potential indoor air sources of impacts.

#### 6.1.3 Task 3: Overburden Soil and Groundwater Sampling

This task will involve collection of overburden soil and groundwater samples to further delineate the horizontal extent of subsurface contamination and to collect any additional sampling requirements to assess each AOC in accordance with DER-10. This work will be completed in accordance with NYSDEC DER-10 as well as Section 5 and 6 of the Quality Control Plan (QCP) included as Appendix 3. It is proposed that thirteen (13) soil borings will be advanced (four (4) interior and nine (9) exterior). Two (2) of the interior and eight (8) of the exterior borings are planned to be converted to groundwater monitoring wells. The eight (8) exterior borings include three (3) to be advanced in the former locations of the three (3) wells previously installed during LaBella's 2013 Phase II ESA (TPMW1, TPMW3 and TPMW4). These wells appear to have been removed by another party subsequent to the completion of that investigation. Prior investigation locations are depicted on Figure 3. Proposed Remedial Investigation boring and well locations are depicted on Figure 6.

Overburden soil borings/groundwater monitoring wells will be advanced in the following locations. These locations may vary slightly based on field conditions (e.g., accessibility) and additional borings may be completed based on evidence of impairment.

- Four (4) on the southern and western portions of the Site (AOC 1)
- Three (3) on the northern-central portion of the Site (AOC 2)
- Two (2) in the vicinity of the hydraulic lifts and ASTs observed in the main building (AOC 3).
- Three (3) to replace monitoring wells TPMW1 (AOC 2), TPMW3 (AOC 1) and TPMW4 (AOC 1), which were installed during LaBella's 2013 Phase II ESA but appear to have been subsequently removed.

The following methods will be followed to complete this task:

- A Dig Safely New York stakeout will be conducted at the Site to locate any subsurface
  utilities in the areas where the subsurface assessment and delineation will take place. In
  addition, any available utility drawings provided by the owner will be reviewed to identify
  any subsurface utilities located within the footprint of the Site buildings. In the event that
  utilities appear to represent a subsurface issue, compressed air may be utilized to remove
  subsurface material up to 4-ft. bgs.
- Borings will be advanced with a "Geoprobe" direct push sampling system. The use of direct push technology allows for rapid sampling, observation, and characterization of relatively shallow overburden soils. The Geoprobe utilizes a 4-ft. or 5-ft. macrocore sampler, with disposable polyethylene sleeves. Soil cores will be retrieved in 4-ft. or 5-ft. sections, and can be easily cut from the polyethylene sleeves for observation and sampling.
- Based on the geology at the Site, each boring implemented at the Site will be advanced until equipment refusal is encountered (previously 15-ft. to 16-ft. bgs). Approximate proposed soil boring locations are depicted on Figure 6. These locations may vary slightly based on field conditions (e.g., accessibility) and additional borings may be completed based on evidence of impairment.
- Drilling equipment will be decontaminated prior to use and between boring locations, using an Alconox and potable water solution. Refer to Section 12 of the QCP included as Appendix 3 for additional details regarding decontamination procedures.
- Soils from the borings will be continuously screened in the field for visible impairment, olfactory indications of impairment, evidence of NAPLs, and/or indication of detectable VOCs with a PID collectively referred to as "evidence of impairment." Field screening findings will be recorded soil boring logs and included in the RI Report.
- Soil generated during soil sampling activities will be containerized in 55-gallon drums, characterized, and disposed of off-Site in accordance with applicable regulations. Refer to Section 9 of the QCP included as Appendix 3 for additional details regarding the management of investigation-derived waste.
- Soil sample locations will be selected based on evidence of impairment and geographical distribution. The following table indicates which samples are planned to be collected from which AOC. Soil samples for VOC analysis will be collected via USEPA Method 5035.

Area of Concern	Analyses	Number of
		Soil Samples
	Full Suite	1
AOC 1	TCL VOCs including TICs	4
	CP-51 SVOCs	4
	Full Suite	1
AOC 2	TCL VOCs including TICs	2
	CP-51 SVOCs	2
	Full Suite	2
AOC 3	TCL VOCs including TICs	1
	PCBs	1

Note: "CP-51" refers to NYSDEC Commissioner Policy 51 list. "Full Suite" refers to the list of parameters noted in Section 6.1.

- Groundwater monitoring wells are planned to be installed in nine (9) of the thirteen (13) planned boring locations (including replacement wells for TPMW1, TPMW3 and TPMW4). Monitoring wells will be completed with 2-in diameter PVC wells. Monitoring wells will be constructed using a 5-ft. to 10-ft. long 0.010-inch slotted PVC well screen finished with a PVC riser to the ground surface. The screened section will be placed to intersect the water table as observed in the boring. In the event that groundwater is not observed, the screened section will be placed at the same depth as the nearest well in which groundwater was encountered. The annulus will be filled with sand to approximately 1-ft above the top of the screen, and filled with bentonite to approximately 6-in. bgs. Each well will be completed with flush-mount curb boxes.
- Groundwater samples will be collected from each of the nine (9) wells and analyzed for USEPA TCL VOCs and TICs using USEPA Method 8260 and NYSDEC CP-51 List SVOCs using USEPA Method 8270. "Full-suite" analyses as listed in Section 6.1 of select groundwater samples will also be completed as part of Task 3. The following table summarizes the proposal groundwater sampling plan:

Area of	Number of Wells	Analyses	Number of
Concern			Groundwater
			Samples
		Full Suite	1
AOC 1	4	TCL VOCs including TICs	3
		CP-51 SVOCs	3
		Full Suite	1
AOC 2	4	TCL VOCs including TICs	3
		CP-51 SVOCs	3
AOC 3	1	Full Suite	1

Groundwater sampling procedures are as follows:

• Wells will be developed until dry or until at least three (3) well volumes have been removed using a dedicated bailer or peristaltic pump. Development water will be containerized in 55-gallon drums, characterized, and disposed of off-Site in accordance with applicable

- regulations. Refer to Section 9 of the QCP included as Appendix 3 for additional details regarding the management of investigation-derived waste.
- Following development, the wells will be allowed to recharge for a minimum of 48-hours prior to sampling. Samples from exterior wells will be collected using low-flow techniques. During sampling, the following parameters will be measured and recorded at three (3) to five (5) minute intervals from exterior wells:
  - Water level drawdown (<0.3')
  - O Temperature (+/- 3%)
  - o pH (+/- 0.1 unit)
  - o Dissolved oxygen (+/- 10%)
  - o Specific conductance (+/- 3%)
  - Oxidation reduction potential (+/- 10 millivolts)
  - o Turbidity (+/- 10%, <50 NTU for metals)
- Samples will be collected when the parameters have stabilized within the specified range for at least three (3) consecutive intervals.
- In the event of insufficient sample volume for full suite parameters, samples will be analyzed for as many of the listed parameters as possible, in the below listed order:
  - o USEPA TCL VOCs including TICs using USEPA Method 8260;
  - o USEPA TCL SVOCs including TICs using USEPA Method 8270;
  - o TAL metals using USEPA Methods 6010/7470/7471;
  - o PCBs using USEPA Method 8082;
  - o Pesticides using USEPA Method 8081; and,
  - o Cyanide using USEPA Method 9012.
- In addition, all existing and accessible wells will be surveyed (latitude, longitude, and elevation) following installation of proposed wells. Subsequently, one (1) year of quarterly static water level measurements will be collected and recorded to determine groundwater flow direction seasonally. Static water level measurements will be recorded from all existing accessible wells and groundwater flow direction maps will be produced.

# 6.1.4 Task 4: Fish and Wildlife Resources Impact Analysis (FWRIA) Part 1: Resource Characterization

A Site characterization will be conducted to identify all fish and wildlife resources within 0.25 miles of the Site in accordance with DER-10 Section 3.10.1. If there are no resources identified, no further assessment will be conducted in regards to the FWRIA. If resources are identified, they will be depicted on a map to be included in the Remedial Investigation Report. In addition, contaminant migration pathways and contaminants of ecological concern will be identified, and conclusions will be made as to the potential adverse effects to fish and wildlife.

If the results of the characterization indicate the need for further assessment, a FWRIA Part 2: Ecological Impact Assessment will be conducted in accordance with DER-10 Section 3.10.2.

#### 6.1.5 Task 5: Hydraulic Conductivity Testing

Task 5 will consist of hydraulic conductivity testing to comply with with DER-10 section 3.7.2. Hydraulic conductivity testing will be completed in one (1) well in each of the two (2) AOCs, for a total of two (2) wells. Specific wells will be determined subsequent to the completion of Tasks 3 and 4 and with approval from the NYSDEC.

Methods for conducting hydraulic conductivity testing are as follows:

- Static water level of the well being tested will be measured and recorded prior to initiating the test
- A pressure transducer will be placed in the targeted wells, one well at a time, to record water level measurements over time.
- A slug will be dropped in the well with the pressure transducer to quickly displace a volume of water. The slug will consist of one of the following:
  - o a solid PVC cylinder capped at each end with a known mass and volume; or,
  - o a known volume of distilled or deionized water.
- A static water level meter will be used periodically to confirm pressure transducer measurements.
- The slug (if applicable) and pressure transducer will be removed from the well once at least 37% of the displaced water has subsided.
- The test will be repeated for each of the wells listed above using the same procedures.
- Hydraulic conductivity will be calculated for each well tested using the Hvorslev Method.

Tasks will be conducted in accordance with the QCP (refer to Section 6.4 and Appendix 3).

#### 6.2 Health and Safety and Community Air Monitoring

LaBella's Health and Safety Plan (HASP) for this project is included as Appendix 2. The NYSDOH Generic Community Air Monitoring Plan (CAMP) and Fugitive Dust and Particulate Monitoring will be utilized for this RI and is included as Appendix 1. It should be noted that during work completed within the building with powered equipment (e.g., Geoprobe), exhaust will be vented to the exterior and/or adequate ventilation will be provided.

#### 6.3 Housekeeping and Investigation Derived Waste

Good housekeeping practices will be followed to prevent leaving contaminated material on the ground or floor surface (e.g., precautions will be taken to prevent impacts to the ground surface due to material spilled during soil sampling, etc.). Any material that does spill on to the ground/floor surface will be promptly picked up and placed in an appropriate location and the ground/floor surface will be cleaned.

Waste materials anticipated to be generated during the implementation of this RI Work Plan include soil generated from soil borings and groundwater generated from development and sampling of the wells. These waste materials will be containerized in 55-gallon drums and stored at the Site for characterization and future disposal.

Additional information regarding Investigation Derived Waste is included in Section 9 of the QCP, included in Appendix 3.

#### 6.4 Quality Assurance/Quality Control Plan

Activities completed at the Site will be managed under LaBella's Quality Control Program, which is included in Appendix 3. Laboratory QA/QC sampling will include analysis of one (1) trip blank and one (1) duplicate sample for each matrix type (i.e., soil, air/vapor and groundwater) at a rate of one per 20 samples collected for each parameter group, or one per shipment, whichever is greater. Additionally, one (1) Matrix Spike/Matrix Spike Duplicate (MS/MSD) will be collected and analyzed for each twenty samples collected for each parameter group, or one per shipment, whichever is greater. The MS/MSD will be analyzed for the same parameters as that of the field samples. The samples will be delivered under Chain of Custody procedures to an ELAP-certified laboratory. The laboratory will provide a NYSDEC ASP Category B Deliverables data package for all samples except the TO-15 samples (indoor air, outdoor air, sub-slab soil vapor). For the TO-15 samples, the laboratory will provide a data package using the ASP Category B format. A DUSR will be completed for all ASP-B and ASP-B format laboratory data packages per DER-10. The DUSRs will include the laboratory data summary pages showing corrections made by the data validator and each page will be initialed by the data validator. The laboratory data summary pages will be included even if no changes were made.

## 7.0 RI Schedule and Reporting – Deliverables

The information and laboratory analytical data obtained during the RI will be included in a RI Report, completed in accordance with DER-10.

Implementation of the RI Work Plan will begin within 60 days after NYSDEC approval of this work plan and the standard three-day Dig Safely New York waiting period. The field work is anticipated to require approximately 30 days to complete subsequent to implementation of the RIWP (*Note: this timeframe does not include laboratory analysis or data validation*). The RI Report will be submitted within two (2) months of receipt of DUSRs. It should be noted that, based on timing, the RI Report may not include all quarterly static water level data; this data will be submitted in a separate letter once completed.

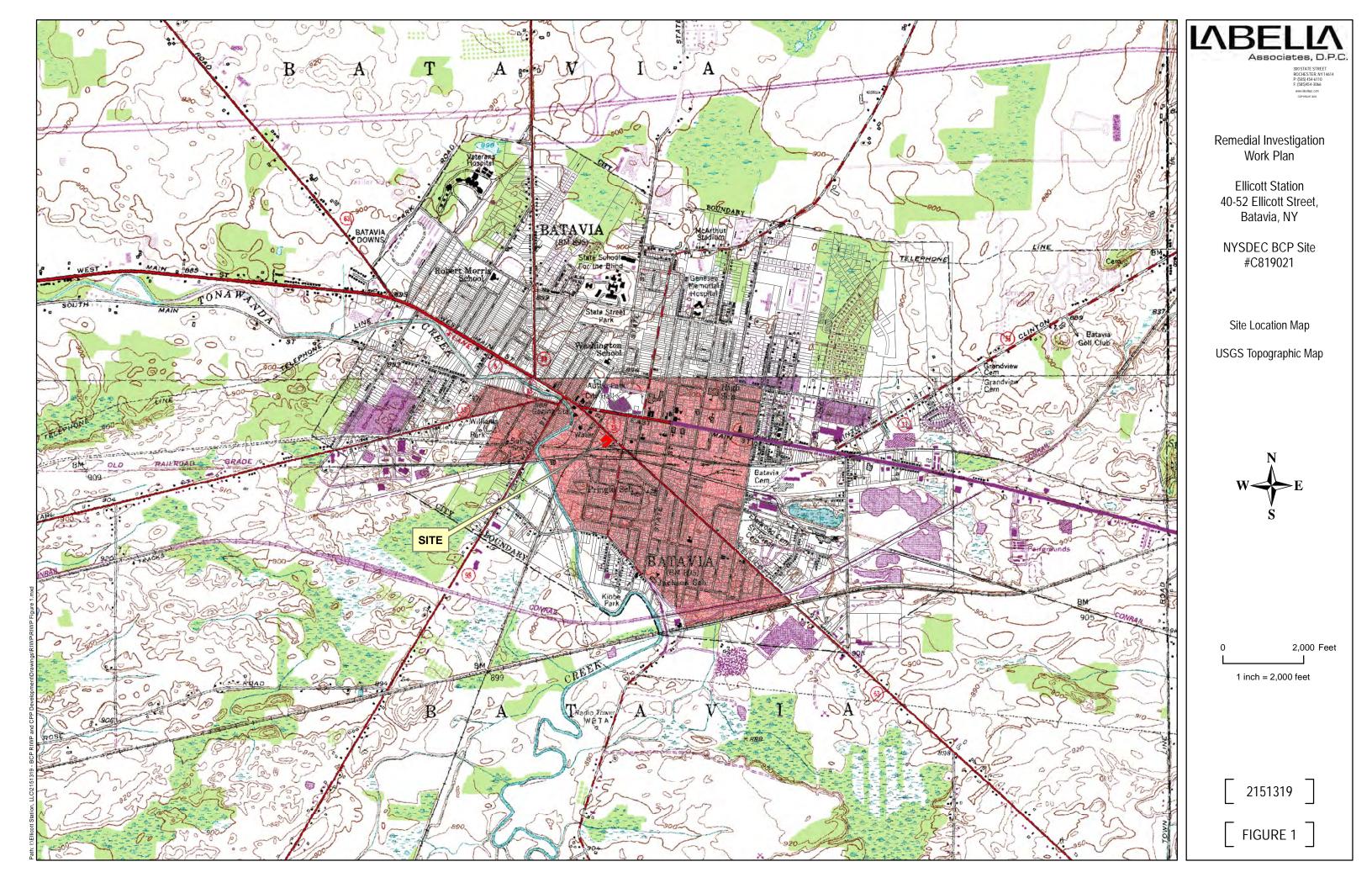
The above schedule assumes that an addendum to the RI Work Plan will not be required. If an RI Work Plan addendum is required, it will be submitted as the need is identified and it will include a revised schedule.

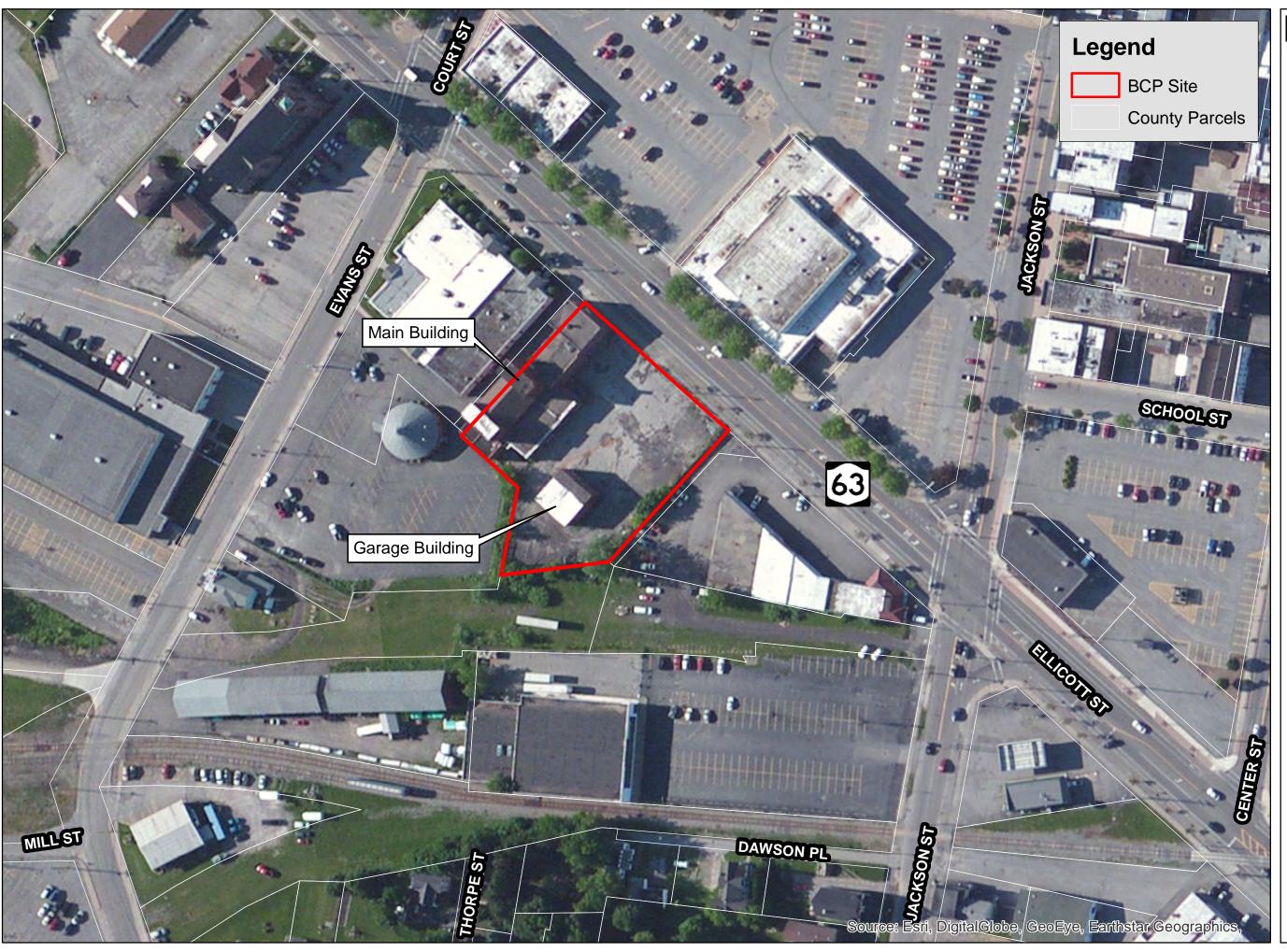
All data will also be submitted in the NYSDEC-approved EDD format. The data will be submitted on a continuous basis immediately after data validation occurs.

I:\ELLICOTT STATION, LLC\2151319 - BCP RIWP AND CPP DEVELOPMENT\REPORTS\RIWP\REVISED MARCH 2016\RIWP.3.25.2016.ELLICOTTSTATION.DOCX

# **FIGURES**









300 STATE STREET ROCHESTER, NY 1461 P: (585) 454-6110 F: (585) 454-3066 www.labellapc.com

Remedial Investigation Work Plan

Ellicott Station 40-52 Ellicott Street, Batavia, NY

NYSDEC BCP Site #C819021

Site and Surrounding Area

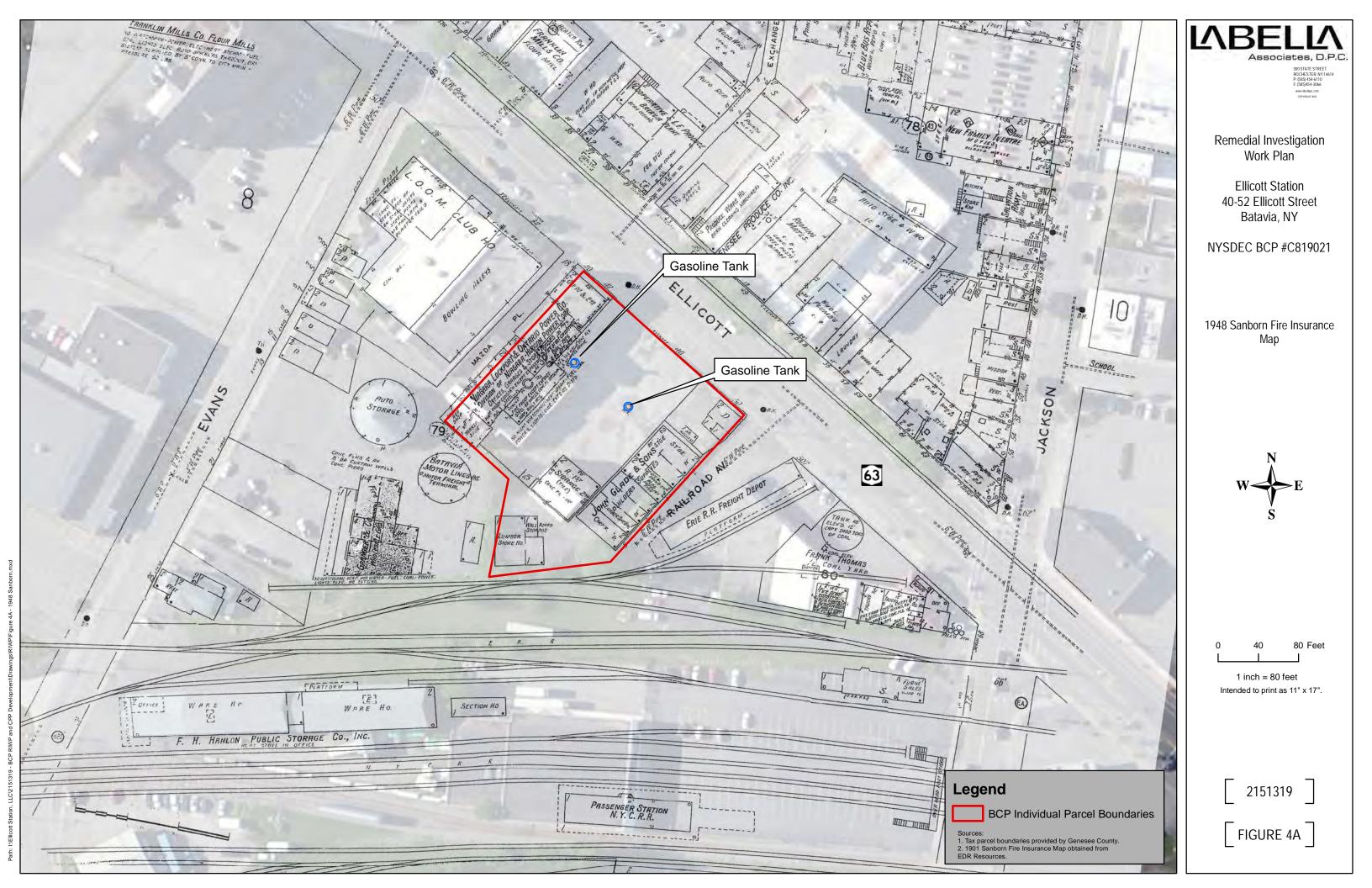


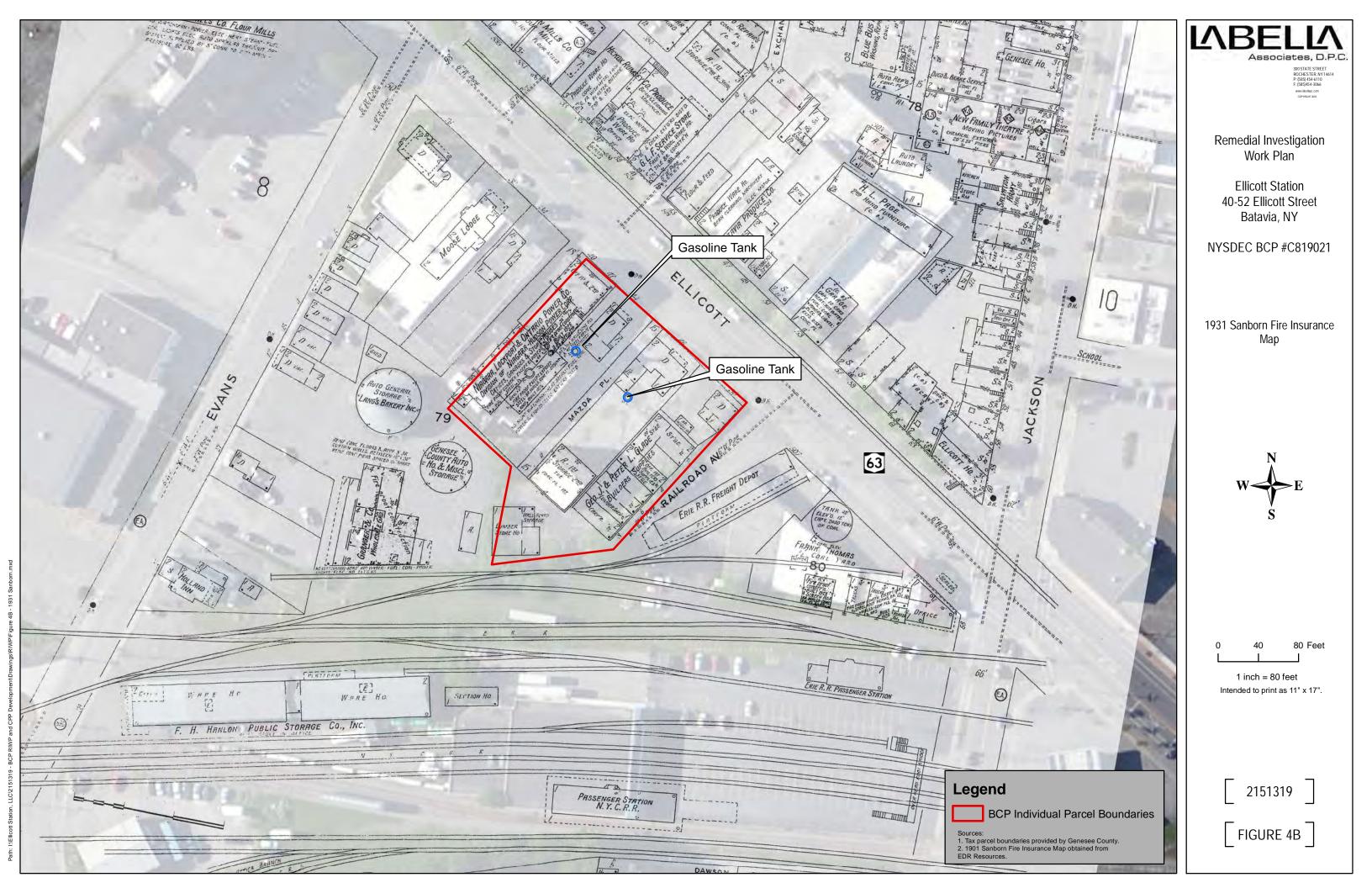
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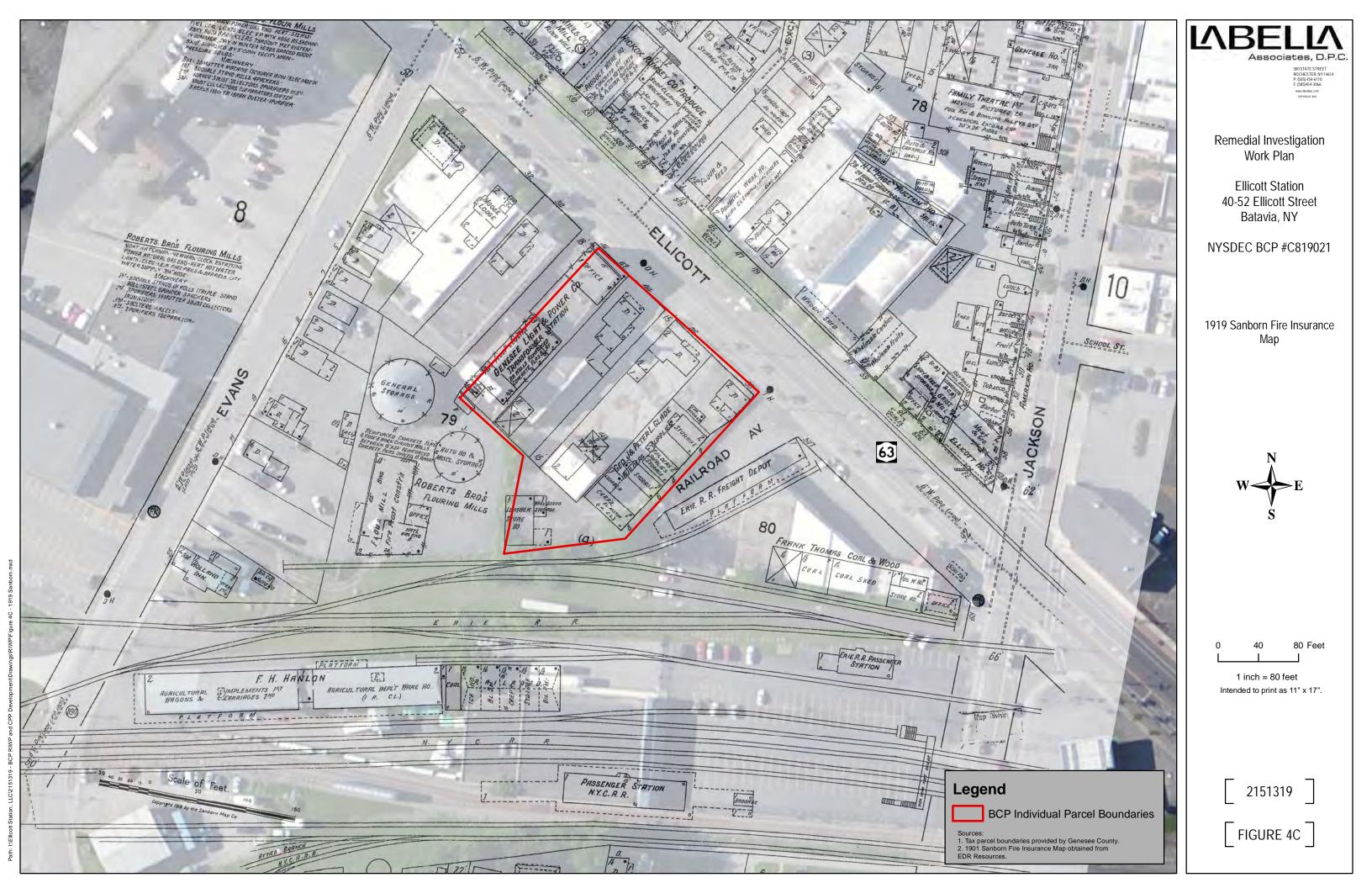
FIGURE 2

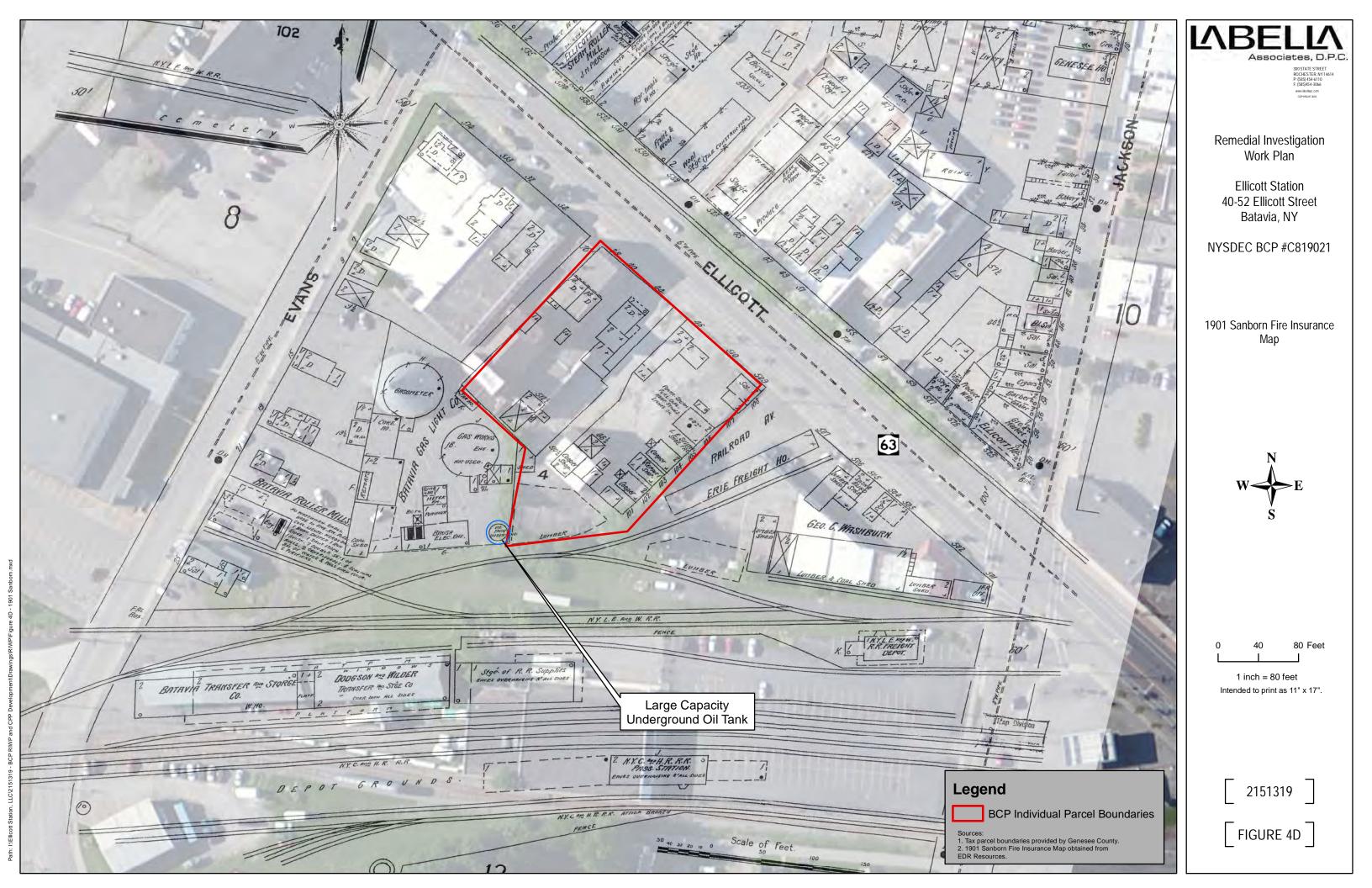


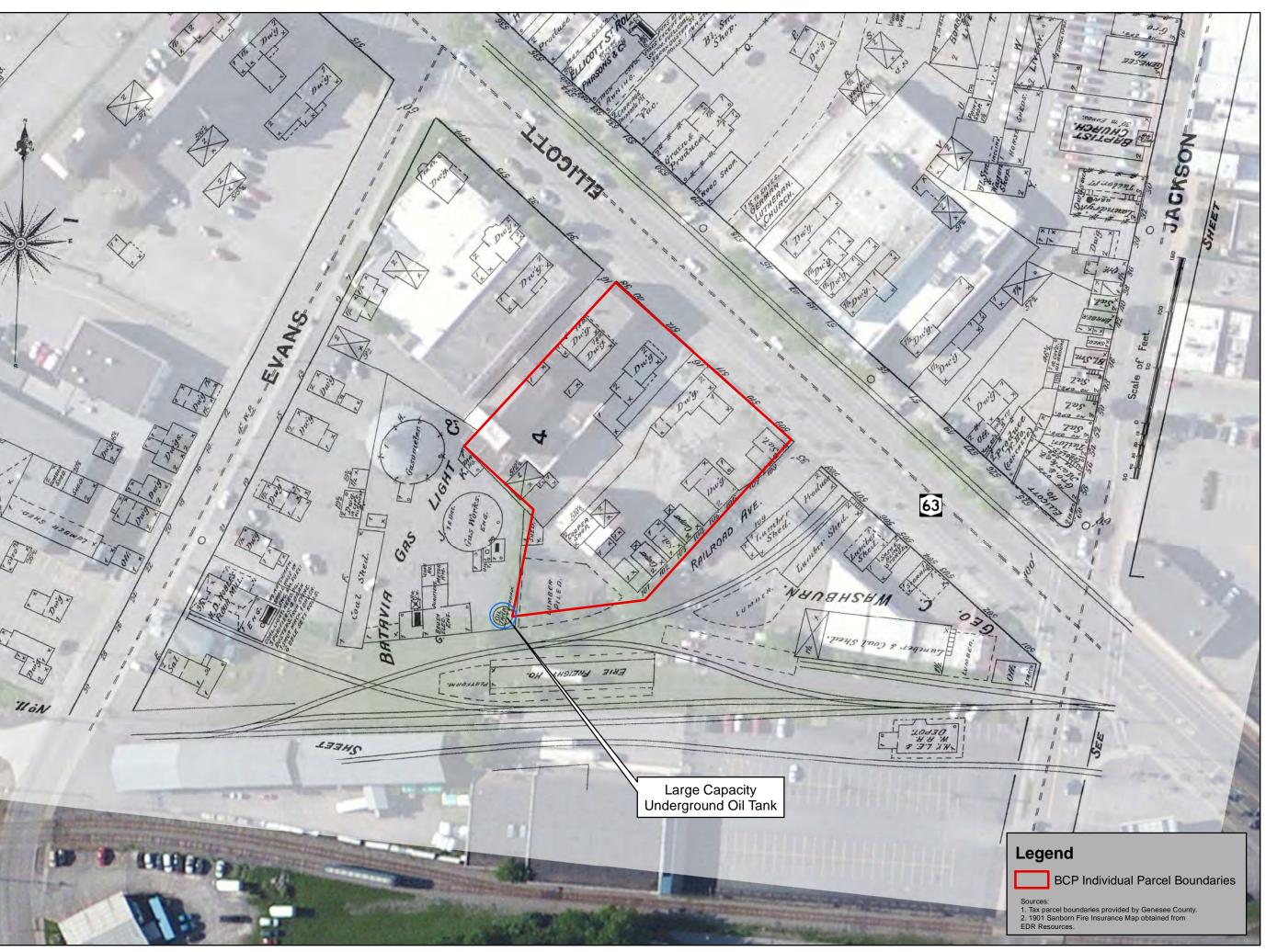
on, LLC\2151319 - BCP RIWP and CPP Development\Drawings\RIWP\Figure 3 - Prev Inv.mxd











Associates, D.P.C.

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Remedial Investigation Work Plan

Ellicott Station 40-52 Ellicott Street Batavia, NY

NYSDEC BCP #C819021

1890 Sanborn Fire Insurance Map

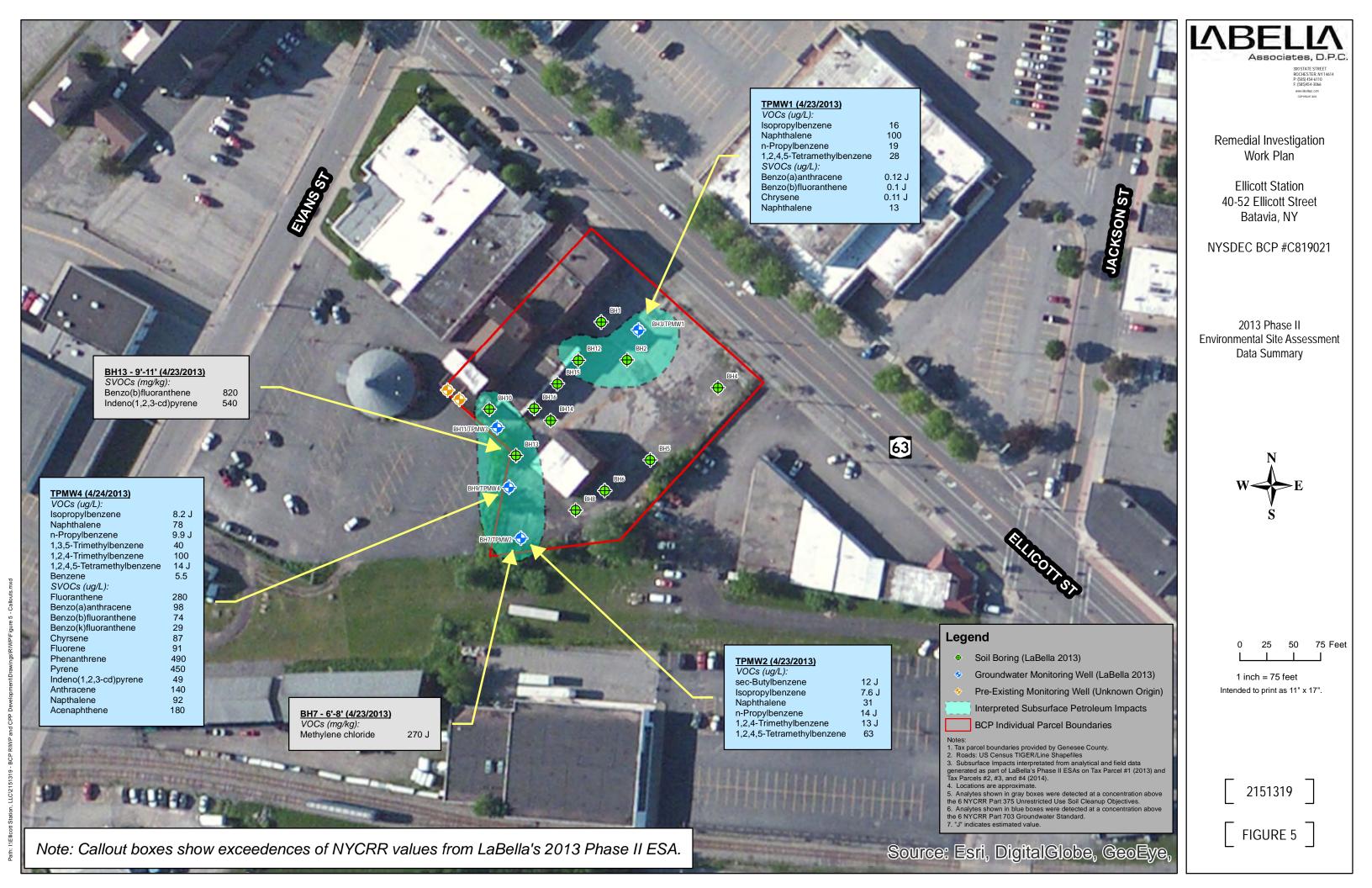


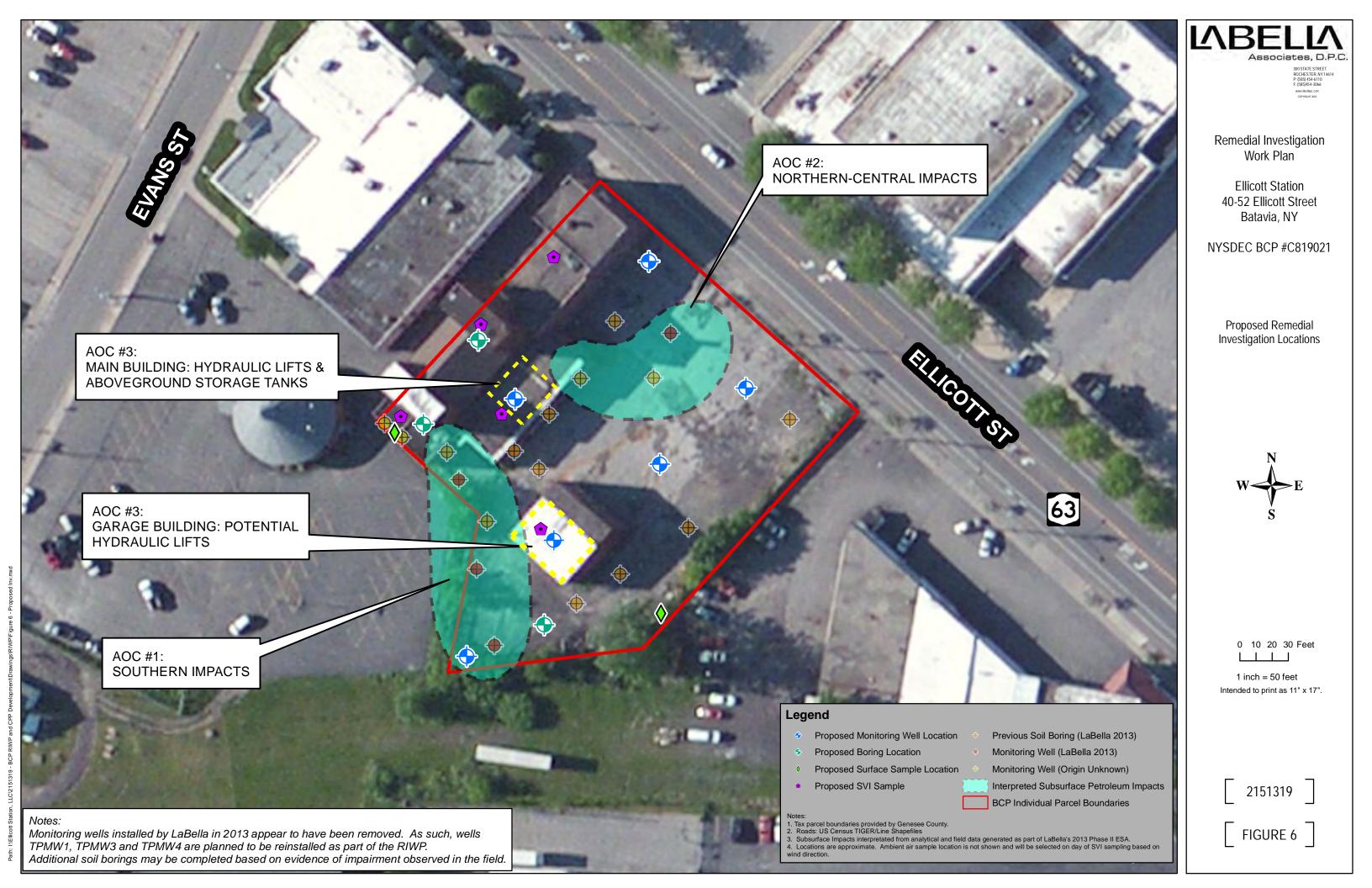
0 40 80 Feet

1 inch = 80 feet
Intended to print as 11" x 17".

[ 2151319 ]

FIGURE 4E





# **TABLES**



# Table 1 40-52 Ellicott Road, Batavia, New York Phase II Environmental Site Assessment Summary of Soil Analytical Results (Detected Compounds Only)

Sample ID	BH2	BH7	BH9	BH12	BH13				
Depth	10-12 ft. bgs	6-8 ft. bgs	8-10 ft. bgs	6-8 ft. bgs	9-11 ft. bgs	CP-51	Part 375 Industrial Soil	Part 375 Commercial Soil	Part 375 Unrestricted Soil
Sample Date	4/23/2013	4/23/2013	4/24/2013	4/24/2013	4/24/2013		Cleanup Objectives	Cleanup Objectives	Cleanup Objectives
Volatile Organic Compounds (ug/kg)									
sec-Butylbenzene	<0.22	200	160	<0.22	260	11,000	1,000,000	500,000	11,000
Acetone	<3.4	<360	<180	12	<170	NL	1,000,000	500,000	50
p-Isopropyltoluene	<0.21	<22	160	<0.21	<10	10,000	NL	NL	NL
Carbon Disulfide	<2.2	<240	<120	5.8 J	<110	NL	NL	NL	NL
n-Propylbenzene	<0.14	180	380	<0.14	190	3,900	1,000,000	500,000	3,900
Chlorobenzene	<0.38	<41	<20	<0.38	400	NL	1,000,000	500,000	1,100
Naphthalene	<0.84	<90	1.200	4.1 J	920	12.000	NL	NL	NL NL
4-Ethyltoluene	<0.13	<14	57 J	<0.13	<6.4	NL	NL	NL	NL
Isopropylbenzene	<0.18	<20	<9.8	200	140	2,300	NL	NL	NL
p/m-Xylene	< 0.35	<38	36 J	<0.35	<18	260	1,000,000	500,000	260
n-Butylbenzene	<0.22	100 J	78	<0.22	240	12.000	NL	NL	12,000
Methylene Chloride	<2.2	270 J	<120	<2.2	<110	NL	1,000,000	500,000	50
1.2-Dichlorobenzene	<0.2	<22	<11	1 J	<10	NL	1,000,000	500,000	1,100
1,3,5-Trimethylbenzene	<0.16	<17	1,400	<0.16	<7.9	8,400	380,000	190,000	8,400
1.2.4-Trimethylbenzene	< 0.63	<67	3,400	<0.62	<32	3,600	380,000	190,000	3,600
1,2,4,5-Tetramethylbenzene	0.27 J	1,000	780	< 0.14	1,000	NL	NL	NL	NL
1.4-Diethylbenzene	0.28 J	<19	1.700	<0.17	280	NL	NL	NL	NL
Semi-Volatile Organic Compour			_,						
Anthracene	70 J	<32	750	170 J	610	100.000	1.000.000	500.000	100.000
Acenaphthylene	<34	<36	140 J	<170	<34	100,000	1.000.000	500,000	100,000
Acenaphthene	<37	<40	850	<180	920	20,000	1,000,000	500,000	20,000
Benzo(a)anthracene	150	<38	520	230 J	1.000	1,000	11.000	5,600	1,000
Benzo(a)pyrene	180	<47	520	<220	1,000	1,000	1,100	1,000	1,000
Benzo(k)fluoranthene	120	<37	150	<170	320	800	110,000	56,000	800
Benzo(b)fluoranthene	130	<39	410	190 J	820	1,000	11.000	5,600	800
Benzo(g,h,i)perylene	140	<40	320	<180	620	100.000	1.000.000	500.000	100,000
2-Methylnaphthalene	<58	<62	480	<280	64 J	NL	NL	NL	NL
Chrysene	130	<38	480	200 J	920	1.000	110.000	56.000	1.000
Dibenzo(a,h)anthracene	53 J	<37	38 J	<170	81 J	330	1.100	560	330
Naphthalene	<60	<64	480	<300	300	12.000	1,000,000	500,000	12.000
Di-n-octylphthalate	<45	74 J	<47	<220	<45	NL	NL	NL	NL
Fluorene	<52	<55	340	<250	440	30,000	1,000,000	500,000	30,000
Fluoranthene	320	<35	1.500	580	2.500	100,000	1,000,000	500,000	100.000
Indeno(1,2,3-cd)pyrene	180	<43	250	<200	540	500	11,000	5,600	500
Phenanthrene	210	<38	2,300	680	1,400	100,000	1,000,000	500,000	100,000
Pyrene	250	<38	2,200	450 J	4,000	100,000	1,000,000	500,000	100,000
Metals (mg/kg)	1					· · · · · · · · · · · · · · · · · · ·			•
Arsenic	2.9	6.2	2.7	3.6	5.5	NL	16	16	13
Barium	22	16	20	9.5	10	NL	10,000	400	350
Cadmium	0.15 J	0.1 J	0.21 J	0.12 J	0.15 J	NL	60	9.3	2.5
Chromium	7	8.8	9.9	4.2	4.8	NL	800/6,800*	400/1,500*	1/30*
Lead	26	8	7.7	4.7	3.7	NL	3,900	1,000	63
Mercury	0.02 J	<0.02	<0.02	<0.02	<0.02	NL	5.7	2.8	0.18
Selenium	0.5 J	0.32 J	0.49 J	0.93	0.25 J	NL	6,800	1,500	3.9
Silver	<0.08	<0.09	<0.09	<0.08	<0.09	NL	6,800	1,500	2

NYSDEC Part 375 Soil Cleanup Objectives (December 2006)

NYSDEC Soil Cleanup Policy (CP) 51 (October 2010)

NL=Not listed

Analyte detected above Unrestricted SCOs

Bold = Analyte detected above CP-51

It should be noted that no detectable concentrations of PCBs were identied in any of the soil samples submitted for analysis.

J=The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.

<sup>\*</sup>hexavalent/trivalent chromium

### Table 2

#### **Della Penna Site**

# 40-52 Ellicott Street, Batavia, New York Phase II Environmental Site Assessment

#### **Summary of Groundwater Analytical Results**

(Detected Compounds Only)

Sample ID	TPMW1	TPMW2	TPMW3	TPMW4				
Sample Date					TOGS*			
Sample Date   4/23/2013   4/23/2013   4/24/2013   4/24/2013   TOGS*  Volatile Organic Compounds (ug/l)								
Acetone	4.5 J	16 J	3.4 J	<10	50			
sec-Butylbenzene	1.8 J	12 J	<0.7	<7	5			
Isopropylbenzene	16	7.6 J	<0.7	8.2 J	5			
Naphthalene	100	31	0.7 J	78	10			
n-Propylbenzene	19	14 J	<0.7	9.9 J	5			
1,4-Diethylbenzene	4.9 J	<7	<0.7	24	NL			
1,3,5-Trimethylbenzene	<1.8	<7	<0.7	40	5			
1,2,4-Trimethylbenzene	<1.8	13 J	<0.7	100	5			
Toluene	<1.8	<7	0.76 J	<7	5			
1,2,4,5-Tetramethylbenzene	28	63	0.65 J	14 J	5			
2-Butanone	3.5 J	<10	<1	<10	NL			
Benzene	0.93 J	<1.9	0.54	5.5	1			
Semi-Volatile Organic Compou	nds (ug/l)							
Dibenzofuran	2.4	<0.47	<0.47	<2.4	NL			
Fluoranthene	0.72	0.32	0.22	280	50			
Benzo(a)anthracene	0.12 J	<0.06	0.12 J	98	0.002			
Benzo(a)pyrene	0.07 J	<0.07	0.08 J	92	NL			
Benzo(b)fluoranthene	0.1 J	<0.07	0.12 J	74	0.002			
Benzo(k)fluoranthene	<0.07	<0.07	<0.07	29	0.002			
Chrysene	0.11 J	<0.05	0.11 J	87	0.002			
Fluorene	2.7	0.51	0.14 J	91	50			
Biphenyl	<0.5	<0.5	<0.5	17	NL			
Benzo(ghi)perylene	< 0.07	<0.07	<0.07	61	NL			
Phenanthrene	3	0.95	0.21	490	50			
Dibenzo(a,h)anthracene	< 0.07	<0.07	<0.07	7.4	NL			
Pentachlorophenol	<0.19	0.53 J	<0.19	<2.6	1			
Pyrene	0.45	0.2	0.21	450	50			
Indeno(1,2,3-cd)pyrene	<0.08	<0.08	<0.08	49	0.002			
2-Chloronaphthalene	<0.07	0.59	<0.07	<0.92	10			
2-Methylnaphthalene	2.2	0.23	<0.06	18	NL			
Anthracene	0.99	0.14 J	<0.06	140	50			
Naphthalene	13	1.2	0.08 J	92	10			
Acenaphthylene	< 0.05	0.13 J	0.11 J	26	NL			
Acenaphthene	2.5	0.13 J	0.13 J	180	20			
Carbazole	3.9	<0.53	<0.53	<2.6	NL			
Metals (mg/l)								
Arsenic	0.12	0.08	0.03	0.01	25			
Barium	1.07	1.75	0.59	0.43	1,000			
Cadmium	0.002	0.02	0.003	<0.0002	5.0			
Chromium	0.19	0.37	0.04	0.01	50			
Lead	0.3	0.79	0.17	0.01	25			
Mercury	0.002	0.01	0.01	0.001 J	0.7			
Selenium	0.01 J	0.03 J	0.002 J	<0.002	10			
Silver	<0.001	0.002 J	<0.001	<0.001	50.0			

<sup>\*</sup>Division of Technical and Operational Series (TOGS) (1.1.1), Ambient Water Quality Standards and

Guidance Values and Groundwater Effluent Limitations

NL=Not listed

J=The analyte was positively identified; the associated numerical value is an approximate

concentration of the analyte in the sample.

Analyte detected above NYSDEC Groundwater Standards

# **APPENDIX 1**

Community Air Monitoring Plan



#### APPENDIX 1A

## New York State Department of Health Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

#### **Community Air Monitoring Plan**

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

**Continuous monitoring** will be required for all <u>ground intrusive</u> activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

**Periodic monitoring** for VOCs will be required during <u>non-intrusive</u> activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

#### **VOC Monitoring, Response Levels, and Actions**

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

#### Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m³ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m³ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m³ of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.

# **APPENDIX 2**

Health and Safety Plan



## Site Health and Safety Plan

Location:

Ellicott Station 40-52 Ellicott Street Batavia, New York 14020

Prepared For:

Ellicott Station, LLC c/o Batavia Development Corporation One City Centre Batavia, New York 14020

LaBella Project No. 2151319

October 2015

## Site Health and Safety Plan

## Location:

Ellicott Station 40-52 Ellicott Street Batavia, New York 14020

## Prepared For:

Ellicott Station, LLC c/o Batavia Development Corporation One City Centre Batavia, New York 14020

LaBella Project No. 2151319

October 2015

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Table 1 Exposure Limits and Recognition Qualities

## SITE HEALTH AND SAFETY PLAN

**Project Title:** Ellicott Station - Brownfield Cleanup Program

**Project Number:** 2151319

**Project Location (Site):** 40-52 Ellicott Street, Batavia, New York 14020

**Environmental Director:** To Be Determined

**Project Manager:** To Be Determined

Plan Review Date: October 5, 2015

Plan Approval Date: October 12, 2015

Plan Approved By:

Mr. Richard Rote, CIH

**Site Safety Supervisor:** To Be Determined

**Site Contact:** Julie Pacatte

**Safety Director:** To Be Determined

**Proposed Date(s) of Field** 

**Activities:** 

To Be Determined

**Site Conditions:** 1.132 acres; Current Site features include a primary brick building of

approximately 19,142 square feet and a garage outbuilding of 4,250 square feet. The balance of the one-acre property is covered by asphalt

and bordered by chain link fencing.

Site Environmental

**Information Provided By:** 

□ Phase I Environmental Site Assessment, 40-52 Ellicott Street, Rochester, New York, prepared by LaBella Associates, D.P.C.

dated October 2012

□ Phase II Environmental Site Assessment, 40-52 Ellicott Street,

Rochester, New York, prepared by LaBella Associates, D.P.C.

dated July 2013

**Air Monitoring Provided By:** To Be Determined

**Site Control Provided By:** Contractor(s)

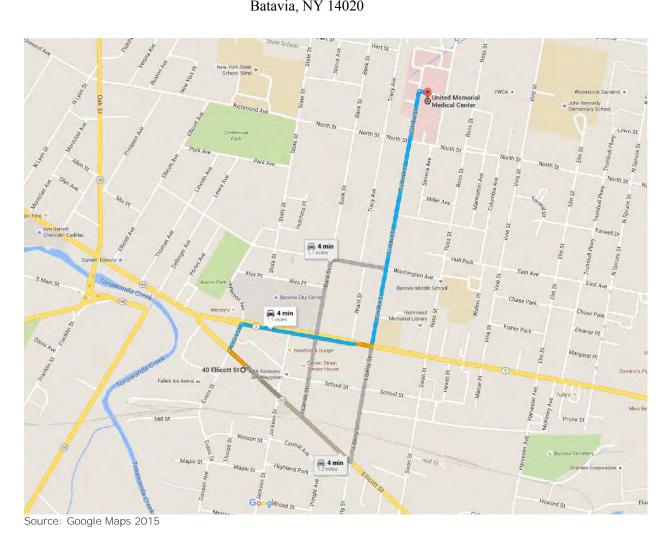
## **EMERGENCY CONTACTS**

	Name	<b>Phone Number</b>
Ambulance:	As Per Emergency Service	911
Hospital Emergency:	United Memorial Medical Center	585-343-6030
Poison Control Center:	Finger Lakes Poison Control	716-275-5151
Police (local, state):	Genesee County Sheriff	911
Fire Department:	Batavia Fire Department	911
Site Contact:	Julie Pacatte	585-345-6380
Agency Contact:	NYSDEC – Matthew Gillette NYSDOH – To Be Determined	585-226-5308 To Be Determined
Environmental Director:	To Be Determined	To Be Determined
Project Manager:	To Be Determined	To Be Determined
Site Safety Supervisor:	To Be Determined	To Be Determined
Safety Director	To Be Determined	To Be Determined

# MAP AND DIRECTIONS TO THE MEDICAL FACILITY - UNITED MEMORIAL MEDICAL CENTER

**Total Est. Time:** 4 minutes **Total Est. Distance:** 1.1 miles

1:	Start out going NORTHWEST on ELLICOTT ST toward EVANS ST	285 feet
2:	Turn RIGHT onto COURT ST	364 feet
3:	Turn RIGHT onto MAIN ST	0.3 miles
4:	Turn LEFT onto SUMMIT ST	0.6 miles
5:	End at 127 North Street  Ratavia, NV 14020	



## 1.0 Introduction

The purpose of this Health and Safety Plan (HASP) is to provide guidelines for responding to potential health and safety issues that may be encountered during the Remedial Investigation (RI) at 40-52 Ellicott Street in the City of Batavia, Genesee County, New York (Site). This HASP only reflects the policies of LaBella Associates D.P.C. The requirements of this HASP are applicable to all approved LaBella personnel at the work site. This document's project specifications, and the Community Air Monitoring Plan (CAMP), are to be consulted for guidance in preventing and quickly abating any threat to human safety or the environment. The provisions of the HASP do not replace or supersede any regulatory requirements of the USEPA, NYSDEC, OSHA or other regulatory bodies.

## 2.0 Responsibilities

This HASP presents guidelines to minimize the risk of injury to project personnel, and to provide rapid response in the event of injury. The HASP is applicable only to activities of approved LaBella personnel and their authorized visitors. The Project Manager shall implement the provisions of this HASP for the duration of the project. It is the responsibility of LaBella employees to follow the requirements of this HASP, and all applicable company safety procedures.

### 3.0 Activities Covered

The activities covered under this HASP are limited to the following:

- □ Management of environmental investigation and remediation activities
- □ Environmental Monitoring
- Collection of samples
- ☐ Management of excavated soil and fill

### 4.0 Work Area Access and Site Control

The contractor(s) will have primary responsibility for work area access and site control.

## **5.0** Potential Health and Safety Hazards

This section lists some potential health and safety hazards that project personnel may encounter at the project site and some actions to be implemented by approved personnel to control and reduce the associated risk to health and safety. This is not intended to be a complete listing of any and all potential health and safety hazards. New or different hazards may be encountered as site environmental and site work conditions change. The suggested actions to be taken under this plan are not to be substituted for good judgment on the part of project personnel. At all times, the Site Safety Officer has responsibility for site safety and his instructions must be followed.

## 5.1 Hazards Due to Heavy Machinery

#### **Potential Hazard:**

Heavy machinery including trucks, drilling rigs, trailers, etc. will be in operation at the site. The presence of such equipment presents the danger of being struck or crushed. Use caution when working near heavy machinery.

#### **Protective Action:**

Make sure that operators are aware of your activities, and heed operator's instructions and warnings. Wear bright colored clothing and walk safe distances from heavy equipment. A hard hat, safety glasses and steel toe shoes are required.

### 5.2 Excavation Hazards

#### **Potential Hazard:**

Excavations and trenches can collapse, causing injury or death. Edges of excavations can be unstable and collapse. Toxic and asphyxiant gases can accumulate in confined spaces and trenches. Excavations that require working within the excavation will require air monitoring in the breathing zone (refer to Section 9.0).

Excavations left open create a fall hazard which can cause injury or death.

#### **Protective Action:**

Personnel must receive approval from the Project Manager to enter an excavation for any reason. Subsequently, approved personnel are to receive authorization for entry from the Site Safety Officer. Approved personnel are not to enter excavations over 4 feet in depth unless excavations are adequately sloped. Additional personal protective equipment may be required based on the air monitoring.

Personnel should exercise caution near all excavations at the site as it is expected that excavation sidewalls will be unstable. Do not proceed closer than 3 feet to an unsupported or non-sloped excavation side wall.

Fencing and/or barriers accompanied by "no trespassing" signs should be placed around all excavations when left open for any period of time when work is not being conducted.

## 5.3 Cuts, Punctures and Other Injuries

#### **Potential Hazard:**

In any excavation and construction work site there is the potential for the presence of sharp or jagged edges on rock, metal materials, and other sharp objects. Serious cuts and punctures can result in loss of blood and infection.

#### **Protective Action:**

The Project Manager is responsible for making First Aid supplies available at the work site to treat minor injuries. The Site Safety Officer is responsible for arranging the transportation of authorized on-site personnel to medical facilities when First Aid treatment in not sufficient. Do not move seriously injured workers. All injuries requiring treatment are to be reported to the Project Manager. Serious injuries are to be reported immediately to the Site Safety Officer

#### 5.4 Injury Due to Exposure of Chemical Hazards

#### **Potential Hazards:**

Contaminants identified in testing locations at the Site include various petroleum-related volatile organic compounds (VOCs). Volatile organic vapors, chlorinated solvents or other chemicals may be encountered during subsurface activities at the project work site. Inhalation of high concentrations of volatile organic vapors can cause headache, stupor, drowsiness, confusion and other health effects. Skin contact can cause irritation, chemical burn, or dermatitis.

#### **Protective Action:**

The presence of organic vapors may be detected by their odor and by monitoring instrumentation. Approved employees will not work in environments where hazardous concentrations of organic vapors are present. Air monitoring (refer to Section 9.0) of the work area will be performed at least every 60 minutes or more often using a Photoionization Detector (PID). Personnel are to leave the work area whenever PID measurements of ambient air exceed 25 ppm consistently for a 5 minute period. In the event that sustained total volatile organic compound (VOC) readings of 25 ppm are encountered personnel should upgrade personal protective equipment to Level C (refer to Section 8.0) and an Exclusion Zone should be established around the work area to limit and monitor access to this area (refer to Section 6.0).

5.5 Injuries due to extreme hot or cold weather conditions

### **Potential Hazards:**

Extreme hot weather conditions can cause heat exhaustion, heat stress and heat stroke or extreme cold weather conditions can cause hypothermia.

#### **Protective Action:**

Precaution measures should be taken such as dress appropriately for the weather conditions and drink plenty of fluid. If personnel should suffer from any of the above conditions, proper techniques should be taken to cool down or heat up the body and taken to the nearest hospital if needed.

## 6.0 Work Zones

In the event that conditions warrant establishing various work zones (i.e., based on hazards - Section 5.0), the following work zones should be established:

## **Exclusion Zone (EZ):**

The EZ will be established in the immediate vicinity and adjacent downwind direction of site activities that elevate breathing zone VOC concentrations to unacceptable levels based on field screening. These site activities include contaminated soil excavation and soil sampling activities. If access to the site is required to accommodate non-project related personnel then an EZ will be established by constructing a barrier around the work area (yellow caution tape and/or construction fencing). The EZ barrier shall encompass the work area and any equipment staging/soil staging areas necessary to perform the associated work. The contractor(s) will be responsible for establishing the EZ and limiting access to approved personnel. Depending on the condition for establishing the EZ, access to the EZ may require adequate PPE (e.g., Level C).

## **Contaminant Reduction Zone (CRZ):**

The CRZ will be the area where personnel entering the EZ will don proper PPE prior to entering the EZ and the area where PPE may be removed. The CRZ will also be the area where decontamination of equipment and personnel will be conducted as necessary.

## 7.0 Decontamination Procedures

Upon leaving the work area, approved personnel shall decontaminate footwear as needed. Under normal work conditions, detailed personal decontamination procedures will not be necessary. Work clothing may become contaminated in the event of an unexpected splash or spill or contact with a contaminated substance. Minor splashes on clothing and footwear can be rinsed with clean water. Heavily contaminated clothing should be removed if it cannot be rinsed with water. Personnel assigned to this project should be prepared with a change of clothing whenever on site.

Personnel will use the contractor's disposal container for disposal of PPE.

## **8.0** Personal Protective Equipment

Generally, site conditions at this work site require level of protection of Level D or modified Level D; however, air monitoring will be conducted to determine if up-grading to Level C PPE is required (refer to Section 9.0). Descriptions of the typical safety equipment associated with Level D and Level C are provided below:

#### Level D:

Hard hat, safety glasses, rubber nitrile sampling gloves, steel toe construction grade boots, etc.

#### Level C:

Level D PPE and full or ½-face respirator and tyvek suit (if necessary). [Note: Organic vapor cartridges are to be changed after each 8-hours of use or more frequently.]

## 9.0 Air Monitoring

According to 29 CFR 1910.120(h), air monitoring shall be used to identify and quantify airborne levels of hazardous substances and health hazards in order to determine the appropriate level of employee protection required for personnel working onsite. Air monitoring will consist at a minimum of the procedure listed below. Air monitoring instruments will be calibrated and maintained in accordance with the manufacturer's specifications.

The Air Monitor will utilize a photoionization detector (PID) to screen the ambient air in the work areas (drilling, excavation, soil staging, and soil grading areas) for total Volatile Organic Compounds (VOCs) and a DustTrak tm Model 8520 aerosol monitor or equivalent for measuring particulates. Work area ambient air will generally be monitored in the work area and downwind of the work area. Air monitoring of the work areas and downwind of the work areas will be performed at least every 60 minutes using a PID and the DustTrak meter.

If sustained PID readings of greater than 25 ppm are recorded in the breathing zone, either personnel are to leave the work area until satisfactory readings are obtained or approved personnel may re-enter the

work areas wearing at a minimum a ½ face respirator with organic vapor cartridges for an 8-hour duration (i.e., upgrade to Level C PPE). Organic vapor cartridges are to be changed after each 8-hour use or more frequently, if necessary. If PID readings are sustained, in the work area, at levels above 50 ppm for a 5 minute average, work will be stopped immediately until safe levels of VOCs are encountered or additional PPE will be required (i.e., Level B).

If downwind PID measurements reach or exceed 25 ppm consistently for a 5 minute period downwind of the work area, PID readings will be taken within the buildings (if occupied) on Site to ensure that the vapors are not penetrating any occupied building and effecting the personnel working within. If the PID measurements reach or exceed 25 ppm within the nearby buildings, the personnel should be evacuated via a route in which they would not encounter the work area. The building should then be ventilated until the PID measurements within the building are at or below background levels. It should be noted that the site buildings are currently vacant.

## 10.0 Emergency Action Plan

In the event of an emergency, employees are to turn off and shut down all powered equipment and leave the work areas immediately. Employees are to walk or drive out of the Site as quickly as possible, wait at the assigned 'safe area' and follow the instructions of the Site Safety Officer.

Employees are not authorized or trained to provide rescue and medical efforts. Rescue and medical efforts will be provided by local authorities.

#### 11.0 Medical Surveillance

Medical surveillance will be provided to all employees who are injured due to overexposure from an emergency incident involving hazardous substances at this site.

## 12.0 Employee Training

Personnel who are not familiar with this site plan will receive training on its entire content and organization before working at the Site.

Individuals involved with the remedial investigation must be 40-hour OSHA HAZWOPER trained with current 8-hour refresher certification.

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Table 1 **Exposure Limits and Recognition Qualities** 

Compound	PEL-TWA (ppm)(b)(d)	TLV-TWA (ppm)(c)(d)	STEL (ppm)(b)	LEL (%)(e)	UEL (%)(f)	IDLH (ppm)(g)(d)	Odor	Odor Threshold (ppm)	Ionization Potential
Acetone	750	500	NA	2.15	13.2	20,000	Sweet	4.58	9.69
Anthracene	.2	.2	NA	NA	NA	NA	Faint aromatic	NA	NA
Benzene	1	0.5	5	1.3	7.9	3000	Pleasant	8.65	9.24
Benzo (a) pyrene (coal tar pitch volatiles)	0.2	0.1	NA	NA	NA	700	NA	NA	NA
Benzo (a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo (b) Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo (g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo (k) Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	NA	NA	NA	NA	NA	NA	NA	NA	10.88
Carbon Disulfide	20	1	NA	1.3	50	500	Odorless or strong garlic type	.096	10.07
Chlorobenzene	75	10	NA	1.3	9.6	2,400	Faint almond	0.741	9.07
Chloroform	50	2	NA	NA	NA	1,000	ethereal odor	11.7	11.42
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethylene	200	200	NA	9.7	12.8	400	Acrid	NA	9.65
1,2-Dichlorobenzene	50	25	NA	2.2	9.2		Pleasant		9.07
Ethyl Alcohol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	100	100	NA	1.0	6.7	2,000	Ether	2.3	8.76
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropyl Alcohol	400	200	500	2.0	12.7	2,000	Rubbing alcohol	3	10.10
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	500	50	NA	12	23	5,000	Chloroform-like	10.2	11.35
Naphthalene	10, Skin	10	NA	0.9	5.9	250	Moth Balls	0.3	8.12
n-propylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphoric Acid	1	1	3	NA	NA	10,000	NA	NA	NA
Polychlorinated Biphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium Hydroxide	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethane	NA	NA	NA	NA	NA	NA	Sweet	NA	NA
Toluene	100	100	NA	0.9	9.5	2,000	Sweet	2.1	8.82
Trichloroethylene	100	50	NA	8	12.5	1,000	Chloroform	1.36	9.45
1,2,4-Trimethylbenzene	NA	25	NA	0.9	6.4	NA	Distinct	2.4	NA
1,3,5-Trimethylbenzene	NA	25	NA	NA	NA	NA	Distinct	2.4	NA
Vinyl Chloride	1	1	NA	NA	NA	NA	NA	NA	NA
Xylenes (o,m,p)	100	100	NA	1	7	1,000	Sweet	1.1	8.56
Metals			·			,			
Arsenic	0.01	0.2	NA	NA	NA	100, Ca	NA	NA	NA
Cadmium	0.2	0.5	NA	NA	NA	NA	NA	NA	NA
Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	1	0.5	NA	NA	NA	NA	NA NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.05	0.15	NA	NA	NA	700	NA	NA	NA
Mercury	0.05	0.05	NA	NA	NA	28	NA NA	NA	NA
Selenium	0.03	0.02	NA	NA	NA	Unknown	NA NA	NA	NA
SCICITUIII	0.2	0.02	INA	INA	11/1	Olikilowii	11/1	11/1	INA

- All values are given in parts per million (PPM) unless otherwise indicated.
   Ca = Possible Human Carcinogen, no IDLH information.

Skin = Skin Absorption
OSHA-PEL Permissible Exposure Limit (flame weighted average, 8-hour): NIOSH Guide, June 1990
ACGIH – 8 hour time weighted average from Threshold Limit Values and Biological Exposure Indices for 2003.
Metal compounds in mg/m3
Lower Exposure Limit (%)
Upper Exposure Limit (%)
Immediately Dangerous to Life or Health Level: NIOSH Guide, June 1990.

<sup>(</sup>b) (c) (d) (e) (f) (g)

## **APPENDIX 3**

**Quality Control Plan** 



## **Quality Control (QC) Program**

Location:

Ellicott Station 40-52 Ellicott Street Batavia, New York

Prepared For:

Ellicott Station, LLC c/o Batavia Development Corporation One City Centre Batavia, New York 14020

LaBella Project No. 2151319

October 2015

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### 1.0 Introduction

LaBella's Quality Control (QC) Program is an integral part of its approach to environmental investigations. By maintaining a rigorous QC program, our firm is able to provide accurate and reliable data. QC also provides safe working conditions for all on-Site workers.

The QC program contains procedures which allow for the proper collection and evaluation of data and documents that QC procedures have been followed during field investigations. The QC program presents the methodology and measurement procedures used in collecting quality field data. This methodology includes the proper use of equipment, documentation of sample collection, and sample handling procedures.

Procedures used in the firm's QC program are compatible with federal, state, and local regulations, as well as, appropriate professional and technical standards.

This QC program has been organized into the following areas:

- QC Objectives and Checks
- Field Equipment, Handling, and Calibration
- Sampling Techniques
- Sample Handling and Packaging

It should be noted that project-specific work plans (e.g., Remedial Investigation Work Plans) may have project specific details that will differ from the procedures in this QC program. In such cases, the project-specific work plan should be followed (subsequent to regulatory approval).

## 2.0 Quality Control Objectives

The United States Environmental Protection Agency (EPA) has identified five general levels of analytical data quality as being potentially applicable to site investigations conducted under CERCLA. These levels are summarized below:

- Level I Field screening. This level is characterized by the use of portable instruments, which can provide real-time data to assist in the optimization of sampling point locations and for health and safety support. Data can be generated regarding the presence or absence of certain contaminants (especially volatiles) at sampling locations.
- Level II Field analysis. This level is characterized by the use of portable analytical instruments, which can be used on site or in mobile laboratories stationed near a site (close-support labs). Depending upon the types of contaminants, sample matrix, and personnel skills, qualitative and quantitative data can be obtained.
- **Level III** Laboratory analysis using methods other than the Contract Laboratory Program (CLP) Routine Analytical Services (RAS). This level is used primarily in support of engineering studies using standard EPA-approved procedures. Some procedures may be equivalent to CLP RAS, without the CLP requirements for documentation.
- Level IV CLP Routine Analytical Services. This level is characterized by rigorous QC protocols and documentation and provides qualitative and quantitative analytical data. Some regions have obtained similar support via their own regional laboratories, university

laboratories, or other commercial laboratories.

• Level V - Non-standard methods. Analyses, which may require method modification and/or development. CLP Special Analytical Services (SAS) are considered Level V.

Unless stated otherwise, all data will be generated in accordance with Level IV. When CLP methodology is not available, federal and state approved methods will be utilized. Level III will be utilized, as necessary, for non-CLP RAS work which may include ignitability, corrosivity, reactivity, EP toxicity, and other state approved parameters for characterization. Level I will be used throughout the RI for health and safety monitoring activities.

All measurements will be made to provide that analytical results are representative of the media and conditions measured. Unless otherwise specified, all data will be calculated and reported in units consistent with other organizations reporting similar data to allow comparability of data bases among organizations. Data will be reported in micrograms per liter ( $\mu$ g/L) and milligrams (mg)/L for aqueous samples, and  $\mu$ g/ kilogram (kg) and mg/kg (dry weight) for soils, or otherwise as applicable.

The characteristics of major importance for the assessment of generated data are accuracy, precision, completeness, representativeness, and comparability. Application of these characteristics to specific projects is addressed later in this document. The characteristics are defined below.

## 2.1 Accuracy

Accuracy is the degree of agreement of a measurement or average of measurements with an accepted reference or "true" value and is a measure of bias in the system.

#### 2.2 Precision

Precision is the degree of mutual agreement among individual measurements of a given parameter.

## 2.3 Completeness

Completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount expected to be obtained under correct normal conditions.

## 2.4 Representativeness

Representativeness expresses the degree to which data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition

Careful choice and use of appropriate methods in the field will ensure that samples are representative. This is relatively easy with water or air samples since these components are homogeneously dispersed. In soil and sediment, contaminants are unlikely to be evenly distributed, and thus it is important for the sampler and analyst to exercise good judgment when removing a sample.

## 2.5 Comparability

Comparability expresses the confidence with which one data set can be compared to another. The data sets may be inter- or intra- laboratory.

## 3.0 Measurement of Data Quality

## 3.1 Accuracy

Accuracy of a particular analysis is measured by assessing its performance with "known" samples. These "knowns" take the form of EPA standard reference materials, or laboratory prepared solutions of target analytes spiked into a pure water or sample matrix. In the case of gas chromatography (GC) or GC/MS (mass spectrometry) analyses, solutions of surrogate compounds are used. These solutions can be spiked into every sample and are designed to mimic the behavior of target analytes without interfering with their determination.

In each case the recovery of the analyte is measured as a percentage, correcting for analytes known to be present in the original sample if necessary, as in the case of a matrix spike analysis. For EPA supplied known solutions, this recovery is compared to the published data that accompany the solution.

For the firm's prepared solutions, the recovery is compared to EPA-developed data or the firm's historical data as available. For surrogate compounds, recoveries are compared to EPA CLP acceptable recovery tables.

If recoveries do not meet required criteria, then the analytical data for the batch (or, in the case of surrogate compounds, for the individual sample) are considered potentially inaccurate. The analyst or his supervisor must initiate an investigation of the cause of the problem and take corrective action. This can include recalibration of the instrument, reanalysis of the QC sample, reanalysis of the samples in the batch, or flagging the data as suspect if the problems cannot be resolved. For highly contaminated samples, recovery of the matrix spike may depend on sample homogeneity. As a rule, analyses are not corrected for recovery of matrix spike or surrogate compounds.

## 3.2 Precision

Precision of a particular analysis is measured by assessing its performance with duplicate or replicate samples. Duplicate samples are pairs of samples taken in the field and transported to the laboratory as distinct samples. Their identity as duplicates is typically not known to the laboratory. For most purposes, precision is determined by the analysis of replicate pairs (i.e., two samples prepared at the laboratory from one original sample). Often in replicate analysis the sample chosen for replication does not contain target analytes so that quantitation of precision is impossible. For EPA CLP analyses, replicate pairs of spiked samples, known as matrix spike/matrix spike duplicate samples, are used for precision studies. This has the advantage that two real positive values for a target analyte can be compared.

Precision is calculated in terms of Relative Percent Difference (RPD).

- Where X<sub>1</sub> and X<sub>2</sub> represent the individual values found for the target analyte in the two replicate analyses or in the matrix spike/matrix spike duplicate analyses.
- RPDs must be compared to the method RPD for the analysis. The analyst or his supervisor
  must investigate the cause of RPDs outside stated acceptance limits. This may include a
  visual inspection of the sample for non-homogeneity, analysis of check samples, etc.
  Follow-up action may include sample reanalysis or flagging of the data as suspect if
  problems cannot be resolved.
- During the data review and validation process, field duplicate RPDs are assessed as a

measure of the total variability of both field sampling and laboratory analysis.

## 3.3 Completeness

Completeness for each parameter is calculated as follows:

• The firm's target value for completeness for all parameters is 100%. A completeness value of 95% will be considered acceptable. Incomplete results will be reported to the site managers. In planning the field sample collection, the site manager will plan to collect field duplicates from identified critical areas. This procedure should assure 100% completeness for these areas.

## 3.4 Representativeness

The characteristic of representativeness is not quantifiable. Subjective factors to be taken into account are as follows:

- The degree of homogeneity of a site;
- The degree of homogeneity of a sample taken from one point in a site; and
- The available information on which a sampling plan is based.

To maximize representativeness of results, sampling techniques and sample locations will be carefully chosen so that they provide laboratory samples representative of the site and the specific area. Within the laboratory, precautions are taken to extract from the sample bottle an aliquot representative of the whole sample. This includes premixing the sample and discarding pebbles from soil samples.

## 4.0 Quality Control Targets

Target values for detection limit, percent spike recovery and percent "true" value of known check standards, and RPD of duplicates/replicates are included in the QCP, Analytical Procedures. Note that tabulated values are not always attainable. Instances may arise where high sample concentrations, non-homogeneity of samples, or matrix interferences preclude achievement of target detection limits or other quality control criteria. In such instances, the firm will report reasons for deviations from these detection limits or noncompliance with quality control criteria.

## 5.0 Sampling Procedures

This section describes the sampling procedures to be utilized for each environmental medium that will be collected and analyzed in accordance with appropriate state and federal requirements. All procedures described are consistent with EPA sampling procedures as described in SW-846, third edition, September 1986, and subsequent updates. All samples will be delivered to the laboratory and analyzed within the holding times specified by the analytical method.

## 6.0 Soil & Groundwater Investigation

The groundwater sampling plan outlined in this subsection has been prepared in general accordance with RCRA Groundwater Monitoring Technical Enforcement Guidance Document 9950.1 (September 1986), Office of Solid Waste and Emergency Response.

Prior to drilling, all drill sites will be cleared with appropriate utility companies to avoid potential accidents relating to underground utilities.

## 6.1 Test Borings and Well Installation

## 6.1.1 Drilling Equipment

## **Direct Push Geoprobe Soil Borings:**

Soil borings and monitoring wells may be advanced with a Geoprobe direct push sampling system. The use of direct push technology allows for rapid sampling, observation, and characterization of relatively shallow overburden soils. The Geoprobe utilizes a four-foot or five-foot Macrocore sampler, with disposable polyethylene sleeves. Soil cores will be retrieved in four-foot or five-foot sections, and can be easily cut from the polyethylene sleeves for observation and sampling. The Macrocore sampler will be decontaminated between samples and borings using an alconox and water solution. Any investigative derived waste generated during the advancement of soil borings and monitoring well installations will be containerized and characterized for proper disposal.

## Hollow-Stem Auger Advanced Soil Borings:

The drilling and installation of soil borings and monitoring wells may be performed using a rotary drill rig which will have sufficient capacity to perform 4 1/2-inch inside diameter (ID) hollow-stem auger drilling in the overburden, retrieve Macrocore or split-spoon samples, and perform necessary rock coring to provide a minimum 3-inch diameter core, known in the industry as "NX." The borehole may be reamed to 5 1/2-inch diameter prior to monitoring well installation as cased hole in the bedrock, or may be left as open hole, with regulatory concurrence. Equipment sizes and diameters may vary based on project-specific criteria. Any investigative derived waste generated during the advancement of soil borings and monitoring well installations will be containerized and characterized for proper disposal.

### 6.1.2 Drilling Techniques

### Direct Push Geoprobe Advanced Borings:

Prior to initiating drilling activities, the Geoprobe, Macrocores, drive rods and/or other pertinent equipment will be steam cleaned or washed with an alconox and water solution. This cleaning procedure will also be used between each boring. Throughout and after the cleaning processes, direct contact between the equipment and the ground surface will be avoided. Plastic sheeting and/or clean support structures (e.g., pallets, sawhorses) will be used. All sampling equipment will be steam cleaned or washed with an alconox and water solution upon completion of the investigation and prior to leaving the Site.

Test borings will be advanced with 2-inch (or larger) inside diameter (ID) direct push Macrocore through overburden soils. Drilling fluids, other than water from a NYSDEC-approved source, will not be allowed without special consideration and agreement from NYSDEC. The use of lubricants is also not allowed unless approved by the NYSDEC representative.

It will be the responsibility of the consultant to arrange for the appropriate drilling equipment to be present at the Site. Standby time to arrange for additional equipment or a water supply will not be allowed unless caused by unexpected Site conditions.

During the drilling, a properly calibrated photoionization detector (PID) will be used to screen soil cores

retrieved from the Macrocores.

Direct Push Geoprobe advanced groundwater-monitoring wells typically utilize 1.25-inch threaded flush joint PVC pipe with 0.010-in. slotted screen. However, well construction will vary by project and will be specified in the project-specific work plan. PVC piping used for risers and screens will conform to the requirements of ASTM-D 1785 Schedule 40 pipe, and shall bear markings that will identify the material as that which is specified. All materials used to construct the wells will be NSF/ASTM approved. Solvent PVC glue shall not be used at any time in the construction of the wells. The bottom of the screen shall be sealed with a treated cap or plug. No lead shot or lead wool is to be employed in sealing the bottom of the well or for sealant at any point in the well. All risers and screens shall be set round, plumb, and true to line.

#### Hollow-Stem Auger Advanced Borings:

Prior to initiating drilling activities, the drill rig, augers, rods, Macrocore, split spoons and/or other pertinent equipment will be steam cleaned or washed with an alconox and water solution. This cleaning procedure will also be used between each boring. These activities will be performed in a designated onsite decontamination area. Throughout and after the cleaning processes, direct contact between the equipment and the ground surface will be avoided. Plastic sheeting and/or clean support structures (e.g., pallets, sawhorses) will be used. The drilling rig and all equipment will be steam cleaned or washed with an alconox and water solution upon completion of the investigation and prior to leaving the site.

Test borings completed with the hollow-stem auger will be advanced with 4 1/2-inch (ID) hollow stem augers through overburden, and NX-sized diamond core barrels in competent rock, driven by truck-, track-, or trailer-mounted drilling equipment. Alternative methods of drilling or equipment may be allowed or requested for project-specific criteria, but must be approved by the NYSDEC. Drilling fluids, other than water from a NYSDEC-approved source, will not be allowed without special consideration and agreement from NYSDEC. The use of lubricants is also not allowed unless approved by the NYSDEC representative.

It will be the responsibility of the consultant to arrange for the appropriate drilling equipment to be present at the site. Standby time to arrange for additional equipment or a water supply will not be allowed unless caused by unexpected site conditions.

During the drilling, a (PID) will be used to screen soils retrieved from the split spoons or Macrocores.

If bedrock wells are required, test borings shall be advanced into rock with NX (or similar) coring tools. Only water from an approved source shall be used in rock coring. The consultant shall monitor and record the petrology, core recovery, fractures, rate of advance, water levels, and water lost or produced in each test boring. The Rock Quality Determination (RQD) value shall be calculated for each 5-foot core. Each core shall be screened with a PID upon extraction to determine proper handling procedure. All core samples shall be retained and stored by the consultant in an approved wooden core box for a period of not less than one year. It should be noted that the installation of bedrock wells is not currently planned for this Site.

The method selected may be percussion or rotary drilling at the option of the subcontractor. The method and equipment selected must be capable of penetrating the bedrock at each well location to a depth required by the work plan and will be selected based on the results of the rock coring performed.

Bedrock well installation will involve construction of a rock socket in the weathered bedrock. The

socket will be drilled into the top of rock (typically 1-ft. to 5-ft. into the top of rock) at each bedrock well location to allow a permanent steel casing to be grouted securely in place prior to completion of the well. The purpose for this is to provide a seal at the overburden/bedrock interface and into the upper bedrock surface, to prevent the entrance of overburden water into the bedrock. After the grout and casing have set up for a minimum of 12 hours, the remaining bedrock can be NX (or similar) cored through the steel casing to a depth determined by the project-specific work plan.

Bedrock wells will either be open coreholes in the rock or consist of threaded, flush-joint PVC piping. Construction will vary depending on the project and as such, specific construction of the wells will be detailed in the project-specific work plan. Bedrock wells which do utilized PVC piping for risers and screens will conform to the requirements of ASTM-D 1785 Schedule 40 pipe, and shall bear markings that will identify the material as that which is specified. All materials used to construct the wells will be NSF/ASTM approved.

The well screen slot size will be selected based on the filter pack grain size and the ability to hold back 85 percent or more of the filter pack materials. Screen and riser sections shall be joined by flush-threaded coupling to form watertight unions that retain 100% of the strength of the casing. Solvent PVC glue shall not be used at any time in the construction of the wells. The bottom of the screen shall be sealed with a treated cap or plug. No lead shot or lead wool is to be employed in sealing the bottom of the well or for sealant at any point in the well. All risers and screens shall be set round, plumb, and true to line.

#### 6.1.3 Artificial Sand Pack

When utilized, granular backfill will be chemically and texturally clean, inert, siliceous, and of appropriate grain size for the screen slot size and the host environment. The sand pack will be installed using a tremie pipe, when possible (i.e., a tremie pipe may not fit into smaller, 2-in. diameter boreholes). When utilized, the well screen and casing will be installed, and the sand pack placed around the screen and casing to a depth extending 2-ft. or at least 25 percent of the screen length above the top of the screen.

An artificial sand pack will not be utilized in bedrock wells without screens (i.e., open borehole wells).

#### 6.1.4 Bentonite Seal

A minimum 2-ft. thick seal of tamped bentonite pellets will be placed directly on top of the sand pack, and care will be taken to avoid bridging. In the event that Site geology does not allow for a 2-ft. seal (e.g., only 1-ft. of space remains between the top of the sand pack and ground surface), the remaining space in the annulus will be filled with bentonite. The seal will be measured immediately after placement, without allowance for swelling.

## 6.1.5 Grout Mixture

Upon completion of the bentonite seal, the well may be grouted with a non-shrinking cement grout (e.g., Volclay) mix to be placed from the top of the bentonite seal to the ground surface. The cement grout shall consist of a mixture of Portland cement (ASTM C 150) and water, in the proportion of not more than 7 gallons of clean water per bag of cement (1 cubic foot or 94 pounds). Additionally, 3% by weight of bentonite powder shall be added, if permitted.

## 6.1.6 Surface Protection

At all times during the progress of the work, precautions shall be used to prevent tampering with or the

entrance of foreign material into the well. Upon completion of the well, a suitable lockable cap shall be installed to prevent material from entering the well. Where permanent wells are to be installed, the well riser shall be protected by a flush mounted road box set into a concrete pad. A concrete pad, sloped away from the well, shall be constructed around the flush mount road box at ground level.

Any well that is to be temporarily removed from service or left incomplete due to delay in construction shall be capped with a watertight cap and equipped with a "vandal-proof" cover, satisfying applicable NYSDEC regulations or recommendations.

#### 6.1.7 Surveying

Coordinates and elevations will be established for each monitoring well and sampling location. Elevations to the closest 0.01 foot shall be used for the survey. These elevations shall be referenced to a regional, local, or project-specific datum. USGS benchmarks will be used whenever available. The location, identification, coordinates, and elevations of the wells will be plotted on maps with a scale large enough to show their location with reference to other structures at each site.

## 6.1.8 Well Development

After completion of the well, but not sooner than 24 hours after grouting is completed, development will be accomplished using pumping, bailing, or surge blocking. No dispersing agents, acids, disinfectants, or other additives will be used during development or introduced into the well at any other time. During development, water will be removed throughout the entire water column by periodically lowering and raising the pump intake (or bailer stopping point).

Development water will be either properly contained and treated as waste until the results of chemical analysis of samples are obtained or discharged on Site as determined by the Site-specific work plans and/or consultation with the NYSDEC representatives on Site.

The development process will continue until a stabilization of pH, specific conductance, temperature, and turbidity (goal of <50 NTUs) of the discharge is achieved for three consecutive intervals following the removal of a minimum of 110% of the water lost during drilling, or three well volumes; whichever is greater. In the event that limited recharge does not allow for the recovery of all drilling water lost in the well or three (3) well volumes, the well will be allowed to stabilize to conditions deemed representative of groundwater conditions. Stabilization periods will vary by project but will be confirmed with the NYSDEC prior to sampling.

## 7.0 Geologic Logging and Sampling

At each investigative location, borings will be advanced through overburden using either a drill rig and hollow-stem auger or direct push technology. Soils will be evaluated for visual and olfactory evidence of impairment (i.e., staining, odors, and elevated PID readings) by a geologist, engineer or qualified Environmental Professional. Sampling devices will be decontaminated according to procedures outlined in the Decontamination section of this document. When utilized, split-spoon samplers will be driven into the soil using a minimum 140-pound safety hammer and allowed to free-fall 30-inches, in accordance with ASTM-D 1586-84 specifications. The number of blows required to drive the sampler each 6-inches of penetration will be recorded. When required, samples will be stored in glass jars until they are needed for testing or the project is complete.

If hard boulders or bedrock result in auger refusal, rock coring will be used to advance the hole to design

depth. If hydrogeologic conditions are favorable for well installation at a depth less than design, the well may be installed at the boring or coring termination depth. In the event that maximum design depth is reached and hydrogeologic conditions are not suitable for well installation, the maximum drilling depth may be revised. Hydrogeologic suitability for well placement will be determined by the supervising geologist, engineer or qualified Environmental Professional in consultation with NYSDEC, based on thickness and estimated hydraulic conductivity of the saturated zone encountered. If necessary, the borehole will be advanced to water or abandoned.

Boulders and bedrock encountered during well installation may be cored by standard diamond-core drilling methods using an "NX" size core barrel. All rock cores recovered will be logged by a geologist, labeled and stored in wooden core boxes. The cores will be stored by the firm until the project is completed or for at least one year. Drilling logs will be prepared by an experienced geologist or engineer, who will be present during all drilling operations. One copy of each field boring and well construction log and groundwater data, will typically be submitted as part of the investigation summary report (e.g., Remedial Investigation Report). The RQD value shall be calculated for each 5-foot section. Information provided in the logs shall include, but not be limited to, the following:

- Date, test hole identification, and project identification;
- Name of individual developing the log;
- Name of driller and assistant(s);
- Drill, make and model, auger size;
- Identification of alternative drilling methods used and justification thereof (e.g., rotary drilling with a specific bit type to remove material from within the hollow stem augers);
- Standard penetration test (ASTM D-1586) blow counts;
- Field diagram of each monitoring well installed with the depth to bottom of screen, top of screen, and pack, bentonite seal, etc.;
- Reference elevation for all depth measurements;
- Depth of each change of stratum;
- Thickness of each stratum;
- Identification of the material of which each stratum is composed, according to the USCS system or standard rock nomenclature, as appropriate;
- Depth interval from which each sample was taken:
- Depth at which hole diameters (bit sizes) change;
- Depth at which groundwater is encountered;
- Depth to static water level and changes in static water level with well depth;
- Total depth of completed well;
- Depth or location of any loss of tools or equipment;
- Location of any fractures, joints, faults, cavities, or weathered zones;
- Depth of any grouting or sealing;
- Nominal hole diameters;
- Amount of cement used for grouting or sealing;
- Depth and type of well casing;
- Description of well screen (to include depth, length, location, diameter, slot sizes, material, and manufacturer);
- Any sealing-off of water-bearing strata;
- Static water level upon completion of the well and after development;
- Drilling date or dates;
- Construction details of well; and
- An explanation of any variations from the work plan.

## 8.0 Groundwater Sampling Procedures

The groundwater in all new monitoring wells will be allowed to stabilize for at least 24-hours following development. Water levels will be measured to within 0.01 feet prior to purging and sampling. Sampling of each well will typically be accomplished in one of two ways; active or passive.

## **Active Sampling:**

Purging will be completed prior to active sampling. During purging, the following will be recorded in field books or groundwater sampling logs:

- date
- purge start time
- weather conditions
- PID reading immediately after the well cap is removed
- presence of NAPL, if any, and approximate thickness
- pH
- dissolved oxygen
- temperature
- specific conductance
- depth of well
- depth to water
- estimated water volume
- purge end time
- volume of water purged

In general, wells will be purged until the pH, conductivity, temperature, and turbidity of the water being pumped from the well have stabilized with a turbidity goal of 50 NTU. All wells will be purged of at least three well volumes or to dryness.

## Passive Sampling:

Groundwater samples will be collected via passive methods (i.e., no-purge) according to the following procedures and in the volumes specified in Table 11-1:

- Samples will be collected via passive diffusion bag (PDB) samplers. PDB samplers are made of low-density polyethylene plastic tubing (typically 4 mil), filled with laboratory grade (ASTM Type II) deionized water and sealed at both ends.
- PDB samplers will only be used to collect groundwater samples which will be analyzed for VOCs.
- PDB samplers will be deployed by hanging in the well at the middle of the well screen unless a low water table, need to deploy multiple samplers or the targeting of a specific depth interval is identified. The PDB samplers will be deployed at least 14 days prior to sampling.
- The PDB samplers will be deployed using a Teflon® coated string or synthetic rope.
- When transferring water from the PDB to sample containers, care will be taken to avoid agitating the sample, since agitation promotes the loss of volatile constituents;
- Any observable physical characteristics of the groundwater (e.g., color, sheen, odor, turbidity) at the time of sampling will be recorded; and
- Weather conditions (i.e., air temperature, sky condition, recent heavy rainfall, drought conditions) at the time of sampling will be recorded.

All groundwater samples and their accompanying QC samples will be run for volatile organic compounds (VOCs) using NYSDEC Analytical Services Protocol (ASP; revised July 2005 and subsequent amendments or revisions).

## 9.0 Management of Investigative-Derived Waste

## Purpose:

The purposes of these guidelines are to ensure the proper holding, storage, transportation, and disposal of materials that may contain hazardous wastes. Investigation-derived waste (IDW) included the following:

- Drill cuttings, discarded soil samples, drilling mud solids, and used sample containers;
- Well development and purge waters and discarded groundwater samples;
- Decontamination waters and associated solids;
- Soiled disposable personal protective equipment (PPE);
- Used disposable sampling equipment;
- Used plastic sheeting and aluminum foil;
- Other equipment or materials that either contain or have been in contact with potentially-impacted environmental media.
- Because these materials may contain regulated chemical constituents, they must be managed as a solid waste. This management may be terminated if characterization analytical results indicate the absence of these constituents.

### Procedure:

- 1. Contain all investigation-derived wastes in Department of Transportation (DOT)-approved 55-gallon drums, roll-off boxes, or other containers suitable for the wastes.
- 2. Containerize wastes from separate borings or wells in separate containers (i.e. do not combine wastes from several borings/wells in a single container, unless it is a container used specifically for transfer purposes, or unless specific permission to do so has been provided by the LaBella Project Manager. Unused samples from surface sample locations within a given area may be combined.
- 3. To the extent practicable, separate solids from drilling muds, decontamination waters, and similar liquids. Place solids within separate containers.
- 4. Transfer all waste containers to a staging area. Access to this area will be controlled. Waste containers must be transferred to the staging area as soon as practicable after the generating activity is complete.
- 5. Pending transfer, all containers will be covered and secured when not immediately attended,
- 6. Label all containers with regard to contents, origin, and date of generation. Use indelible ink for all labeling.
- 7. Collect samples for waste characterization purposes, use boring/well sample analytical data for characterization.
- 8. For wastes determined to be hazardous in character, be aware on accumulation time limitations. Coordinate the disposal of these wastes with the Owner and NYSDEC.

- 9. Dispose of investigation-derived wastes as follows;
  - Soil, water, and other environmental media for which analysis does not detect
    organic constituents, and for which inorganic constituents are at levels consistent
    with background, may be spread on-site (pending NYSDEC approval) or otherwise
    treated as a non-waste material.
  - Soils, water, and other environmental media in which organic compounds are detected or metals are present above background will be disposed as industrial waste or hazardous waste, as appropriate. Alternate disposition must be consistent with applicable State and Federal laws.
  - Personal protective equipment, disposable bailers, and similar equipment may be disposed as municipal waste, unless waste characterization results mandate disposal as industrial wastes
- 10. If waste is determined to be listed hazardous waste, it must be handled as hazardous waste as described above, unless a contained-in determination is accepted by the NYSDEC.

## 10.0 Decontamination

Sampling methods and equipment have been chosen to minimize decontamination requirements and to prevent the possibility of cross-contamination. Decontamination of equipment will be performed between discrete sampling locations. Equipment used to collect samples between composite sample locations will not require decontamination between collection of samples. All drilling equipment will be decontaminated after the completion of each drilling location. Special attention will be given to the drilling assembly and augers.

Split spoons and other non-disposable equipment will be decontaminated between each sampling event. The sampler will be cleaned prior to each use, by one of the following procedures:

- Initially cleaned of all foreign matter;
- Sanitized with a steam cleaner;

#### OR

- Initially cleaned of all foreign matter;
- Scrubbed with brushes in alconox solution;
- Rinsed; and
- Allowed to air dry.

## **11.0** Sample Containers

The containers required for sampling activities are pre-washed and ordered directly from a laboratory, which has the containers prepared in accordance with USEPA bottle washing procedures. The following tables detail sample volumes, containers, preservation and holding time for typical analytes.

Table 11-1 Water Samples

Type of Analysis	Type and Size of Container	Number of Containers and Sample Volume (per sample)	Preservation	Maximum Holding Time
VOCs	40-ml glass vial with Teflon-backed septum	Two (2); fill completely, no air space	Cool to 4° C (ice in cooler), Hydrochloric acid to pH <2	7 days
Semivolatile Organic Compounds (SVOCs)	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Pesticides	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Polychlorinated biphenyls (PCBs)	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Metals	500-ml polyethylene	One (1); fill completely	Cool to 4° C (Nitric acid to pH <2	6 months
Cyanide	500-ml polyethylene	One (1); fill completely	Cool to 4° C (Sodium hydroxide to pH >12, plus 0.6 grams ascorbic acid)	14 days

<sup>\*</sup>Holding time is based on verified time of sample collection.

Note: All sample bottles will be prepared in accordance with USEPA bottle washing procedures.

TABLE 11-2 Soil Samples

Type of Analysis	Type and Size of Container	Number of Containers and Sample Volume (per sample)	Preservation	Maximum Holding Time
VOCs, SVOCs, PCBs, and Pesticides	8-oz, glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	7 days
VOCs by USEPA Method 5035 (if specified in work plan) Closed-system Purge and Trap Method	40-ml glass vial with Teflon-backed septum	Three (3), fill with 5 grams of soil using soil syringe	Cool to 4° C (ice in cooler). Two (2) with 10 mL DI water or 5 mL sodium bisulfate, one (1) with 5 mL methanol.	14 days
RCRA/TAL Metals, and cyanide	8-oz. glass jar with Teflon-lined cap	One (1); fill completely	Cool to 4° C (ice in cooler)	Must be extracted within 10 days; analyzed with 30 days

<sup>\*</sup> Holding time is based on the times from verified time of sample collection.

Note: All sample bottles will be prepared in accordance with USEPA bottle washing procedures.

## TABLE 11-3 List of Major Instruments for Sampling and Analysis

- MSA 360 0<sub>2</sub> /Explosimeter
- Hollige Series 963 Nephlometer (turbidity meter)
- EM-31 Geomics Electromagnetic Induction Device
- pH/Temperature/Conductivity Meter Portable
- Hewlett Packard (HP) 1000 computer with RTE-6 operating system; and HP 9144 computer with RTE-4 operating system
  equipped with Aquarius software for control and data acquisition from gas chromatograph/mass spectrometer (GC/MS) systems;
  combined wiley and National Bureau of Standards (NBS) mass spectral library; and data archiving on magnetic tape
- Viriam 6000 and 37000 gas chromatrographs equipped with flame ionization, electron capture, photoionization and wall
  detectors as appropriate for various analyses,, and interfaced to Variam DS604 or D5634 data systems for processing data.
- Spectra-Physics Model SP 4100 and SP 4270 and Variam 4270 cam puting integrators
- Perkin Eimer (PE) 3000% and 3030% fully Automated Atomic Absorption Spectrophotometers (AAS) with Furnace Atomizer and background correction system
- PE Plasma II Inductively Coupled Argon Plasma (ICAP) Spectre meter with PE7500 laboratory computer
- Dionex 20001 ion chromatograph with conductivity detector for anion analysis, with integrating recorder

## 12.0 Sample Custody

This section describes standard operating procedures for sample identification and chain-of-custody to be utilized for all field activities. The purpose of these procedures is to ensure that the quality of the samples is maintained during their collection, transportation, and storage through analysis. All chain-of-custody requirements comply with standard operating procedures indicated in USEPA sample handling protocol.

Sample identification documents must be carefully prepared so that sample identification and chain-of-custody can be maintained and sample disposition controlled. Sample identification documents include:

- Field notebooks,
- Sample label,
- Custody seals, and
- Chain-of-custody records.

## 12.1 Chain-of-Custody

The primary objective of the chain-of-custody procedures is to provide an accurate written or computerized record that can be used to trace the possession and handling of a sample from collection to completion of all required analyses. A sample is in custody if it is:

- In someone's physical possession;
- In someone's view;
- Locked up; or
- Kept in a secured area that is restricted to authorized personnel.

## 12.2 Field Custody Procedures

- As few persons as possible should handle samples.
- Sample bottles will be obtained pre-cleaned from a source such as I-Chem. Coolers or boxes containing cleaned bottles should be sealed with a custody tape seal during transport to the field or while in storage prior to use.
- The sample collector is personally responsible for the care and custody of samples collected until they are transferred to another person or dispatched properly under chain-of-custody rules.
- The sample collector will record sample data in the notebook.
- The site manager will determine whether proper custody procedures were followed during the fieldwork and decide if additional samples are required.

### 12.3 Sample Tags

Sample tags attached to or affixed around the sample container must be used to properly identify all samples collected in the field. The sample tags are to be placed on the bottles so as not to obscure any QC lot numbers on the bottles; sample information must be printed in a legible manner using waterproof ink. Field identification must be sufficient to enable cross-reference with the logbook. For chain-of-custody purposes, all QC samples are subject to exactly the same custodial procedures and documentation as "real" samples.

## 12.4 Transfer of Custody and Shipment

- The coolers in which the samples are packed must be accompanied by a chain-of-custody record. When transferring samples, the individuals relinquishing and receiving them must sign, date, and note the time on the chain-of-custody record. This record documents sample custody transfer
- Shipping containers must be sealed with custody seals for shipment to the laboratory. The method of shipment, name of courier, and other pertinent information are entered in the "Remarks" section of the chain-of-custody record and traffic reports.
- All shipments must be accompanied by the chain-of-custody record identifying their contents.
   The original record accompanies the shipment. The other copies are distributed appropriately to the site manager.
- If sent by mail, the package is registered with return receipt requested. If sent by common carrier, a bill of lading is used. Freight bills, Postal Service receipts, and bill of lading are retained as part of the permanent documentation.

## 12.5 Chain-of-Custody Record

The chain-of-custody record must be fully completed in duplicate, using black carbon paper where possible, by the field technician who has been designated by the project manager as responsible for sample shipment to the appropriate laboratory for analysis. In addition, if samples are known to require rapid turnaround in the laboratory because of project time constraints or analytical concerns (e.g., extraction time or sample retention period limitations, etc.), the person completing the chain-of-custody record should note these constraints in the "Remarks" section of the record.

## 12.6 Laboratory Custody Procedures

A designated sample custodian accepts custody of the shipped samples and verifies that the sample identification number matches that on the chain-of-custody record and traffic reports, if required. Pertinent information as to shipment, pickup, and courier is entered in the "Remarks" section.

### 12.7 Custody Seals

Custody seals are preprinted adhesive-backed seals with security slots designed to break if the seals are disturbed. Sample shipping containers (coolers, cardboard boxes, etc., as appropriate) are sealed in as many places as necessary to ensure security. Seals must be signed and dated before use. On receipt at the laboratory, the custodian must check (and certify, by completing the package receipt log and LABMIS entries) that seals on boxes and bottles are intact. Strapping tape should be placed over the seals to ensure that seals are not accidentally broken during shipment.

## 13.0 Laboratory Requirements and Deliverables

This section will describe laboratory requirement and procedures to be followed for laboratory analysis. Samples collected in New York State will be analyzed by a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)-certified laboratory. When required, analyses will be conducted in accordance with the most current NYSDEC Analytical Services Protocol (ASP). For example, ASP Category B reports will be completed by the laboratory for samples representing the final delineation of the Remedial Investigation, confirmation samples, samples to determine closure of a system, and correlation samples taken using field testing technologies analyzed by an ELAP-certified laboratory to determine correlation to field results. Data Usability Summary Reports

will be completed by a third party for samples requiring ASP Category B format reports. Electronic data deliverables (EDDs) will also be generated by the laboratory in EQUIS format for samples requiring ASP Category B format reports.

#### 14.0 Documentation

## 14.1 Sample Identification

All containers of samples collected from the project will be identified using the following format on a label or tag fixed to the sample container:

#### XX-ZZ-O/D-DDMMYYYY

XX: This set of initials indicates the Site from which the sample was collected.

ZZ: These initials identify the sample location. Actual sample locations will be recorded in the task log.

O/D: An "O" designates an original sample; "D" identifies it as a duplicate.

DDMMYYYY: This set of initials indicates the date the sample was collected

Each sample will be labeled, chemically preserved (if required) and sealed immediately after collection. To minimize handling of sample containers, labels will be filled out prior to sample collection when possible. The sample label will be filled out using waterproof ink and will be firmly affixed to the sample containers. The sample label will give the following information:

- Date and time of collection
- Sample identification
- Analysis required
- Project name/number
- Preservation

## 14.2 Daily Logs

Daily logs and data forms are necessary to provide sufficient data and observations to enable participants to reconstruct events that occurred during the project and to refresh the memory of the field personnel if called upon to give testimony during legal proceedings.

The site log is the responsibility of the site manager and will include a complete summary of the day's activity at the site.

### The **Task Log** will include:

- Name of person making entry (signature).
- Names of team members on-site.
- Levels of personnel protection:
  - Level of protection originally used;
  - Changes in protection, if required; and
  - Reasons for changes.
- Documentation on samples taken, including:
  - Sampling location and depth station numbers;
  - Sampling date and time, sampling personnel;
  - Type of sample (grab, composite, etc.); and
  - Sample matrix.

- On-site measurement data.
- Field observations and remarks.
- Weather conditions, wind direction, etc.
- Unusual circumstances or difficulties.
- Initials of person recording the information.

## 15.0 Corrections to Documentation

#### 15.1 Notebook

As with any data logbooks, no pages will be removed for any reason. If corrections are necessary, these must be made by drawing a single line through the original entry (so that the original entry can still be read) and writing the corrected entry alongside. The correction must be initialed and dated. Most corrected errors will require a footnote explaining the correction.

## 15.2 Sampling Forms

As previously stated, all sample identification tags, chain-of-custody records, and other forms must be written in waterproof ink. None of these documents are to be destroyed or thrown away, even if they are illegible or contain inaccuracies that require a replacement document.

If an error is made on a document assigned to one individual, that individual may make corrections simply by crossing a line through the error and entering the corrected information. The incorrect information should not be obliterated. Any subsequent error discovered on a document should be corrected by the person who made the entry. All corrections must be initialed and dated.

### 15.3 Photographs

Photographs will be taken as directed by the site manager. Documentation of a photograph is crucial to its validity as a representation of an existing situation. The following information will be noted in the task log concerning photographs:

- Date, time, location photograph was taken;
- Photographer
- Description of photograph taken;

## 16.0 Sample Handling, Packaging, and Shipping

The transportation and handling of samples must be accomplished in a manner that not only protects the integrity of the sample, but also prevents any detrimental effects due to the possible hazardous nature of samples. Regulations for packaging, marking, labeling, and shipping hazardous materials are promulgated by the United States DOT in the Code of Federal Regulation, 49 CFR 171 through 177. All samples will be delivered to the laboratory and analyzed within the holding times specified by the analytical method for that particular analyte.

All chain-of-custody requirements must comply with standard operating procedures in the USEPA sample handling protocol.

## 16.1 Sample Packaging

Samples must be packaged carefully to avoid breakage or contamination and must be shipped to the laboratory at proper temperatures. The following sample packaging requirements will be followed:

- Sample bottle lids must never be mixed. All sample lids must stay with the original containers.
- The sample volume level can be marked by placing the top of the label at the appropriate sample height, or with a grease pencil. This procedure will help the laboratory to determine if any leakage occurred during shipment. The label should not cover any bottle preparation OC lot numbers.
- All sample bottles are placed in a plastic bag to minimize the potential for crosscontamination.
- Shipping coolers must be partially filled with packing materials and ice when required, to prevent the bottles from moving during shipment.
- The sample bottles must be placed in the cooler in such a way as to ensure that they do not touch one another. Ice will be added to the cooler to ensure that the samples reach the laboratory at temperatures no greater than 4°C.
- The environmental samples are to be placed in plastic bags. Ice is not to be used as a substitute for packing materials.
- Any remaining space in the cooler should be filled with inert packing material. Under no circumstances should material such as sawdust, sand, etc., be used.
- A duplicate custody record and traffic reports, if required must be placed in a plastic bag and taped to the bottom of the cooler lid. Custody seals are affixed to the sample cooler.

### 16.2 Shipping Containers

Shipping containers are to be custody-sealed for shipment as appropriate. The container custody seal will consist of filament tape wrapped around the package and custody seals affixed in such a way that access to the container can be gained only by cutting the filament tape and breaking a seal.

Field personnel will make arrangements for transportation of samples to the lab. The lab must be notified as early in the week as possible regarding samples intended for Saturday delivery.

## 16.3 Marking and Labeling

- Chain of custody seals shall be placed on the container, signed, and dated prior to taping the container to ensure the chain of custody seals will not be destroyed during shipment.
- If samples are designated as medium or high hazard, they must be sealed in metal paint cans, placed in the cooler with vermiculite and labeled and placarded in accordance with DOT regulations.
- In addition, the coolers must also be labeled and placarded in accordance with DOT regulations if shipping medium and high hazard samples.

## 17.0 Calibration Procedures and Frequency

All instruments and equipment used during sampling and analysis will be operated, calibrated, and maintained according to the manufacturer's guidelines and recommendations as well as criteria set forth in the applicable analytical methodology references. Operation, calibration, and maintenance will be performed by personnel properly trained in these procedures. Section 11 lists the major instruments to be used for sampling and analysis. In addition, brief descriptions of calibration procedures for major field and laboratory instruments follow.

#### 18.0 Field Instrumentation

## 18.1 Photovac/MiniRae Photoionization Detector (PID)

Standard operating procedures for the PID require that routine maintenance and calibration be performed every six months. The packages used for calibration are non-toxic analyzed gas mixtures available in pressurized containers.

## 18.2 Organic Vapor Analyzer

Organic vapor analyzers (OVAs) are calibrated and routine maintenance performed every six months when the units are not in use. Calibration is performed and the major system checks are performed prior to the instrument being released for field use.

Calibration of the OVA 128 GC must be performed by a factory-authorized service representative. The instrument is removed from its protective case and the probe is connected to the base unit. After checking for an airtight seal in the sample line (plugging the sample inlet to stop the pump), the hydrogen supply is turned on and the pressure is set to 10 psi. The electronics are turned on and the instrument is allowed to warm up for at least 5 minutes. After warm up, the instrument is zeroed on the "X10" scale using the adjust knob. The flame is then lit and a gas-tight sample bag is filled with a mixture of 100 ppm methane in air. The sample bag is then attached to the probe inlet and the internal pump is allowed to draw in as much sample as is needed. R32 on the control board is adjusted to read 100 ppm on the "X10" scale and then the hydrogen supply is shut down. The pump can now be turned off and the sample bag removed. Using the adjust knob, the meter is set to read 4 ppm on the "X1" scale. Switching back to the "X10" scale the adjust knob is again used to set the meter to 40 ppm. The scale is then set to "X100" and R33 is adjusted until the meter reads 40 ppm on the "X100" scale.

The OVA has a detection limit of 0.1 ppm in methane equivalents and a working range of 0 to 1,000 ppm. During daily field use, system checks are performed which involve calibration and maintenance of the pump systems, gases, and filters. Care is taken to check for and prevent clogging or leaks. Quad rings and the burner chamber are examined on a weekly basis. Routine biannual maintenance includes a thorough cleaning as well as a re-examination of the pump system for leaks and wear. Parts are replaced as necessary. Instrument operation is verified by calibrating and running the OVA for 4 to 6 hours. An instrument specific logbook is maintained with the OVA to document its use and maintenance.

## 18.3 Conductance, Temperature, and pH Tester

Temperature and conductance instruments are factory calibrated. Temperature accuracy can be checked against an NBS certified thermometer prior to field use if necessary. Conductance accuracy may be checked with a solution of known conductance and recalibration can be instituted, if necessary.

#### 18.4 Turbidity Meter

LaMotte 2020WE Turbidity Meter is calibrated before each use. The default units are set to NTU and the default calibration curve is formazin. A 0 NTU Standard (Code 1480) is included with the meter. To calibrate, rinse a clean tube three times with the blank. Fill the tube to the fill line with the blank. Insert the tube into the chamber, close the lid, and select "scan blank".

### 19.0 Internal Quality Control Checks

QC data are necessary to determine precision and accuracy and to demonstrate the absence of interferences and/or contamination of field equipment. Field-based QC will comprise at least 10% of each data set generated and will consist of standards, replicates, spikes, and blanks. Field duplicates and field blanks will be analyzed by the laboratory as samples and will not necessarily be identified to the laboratory as duplicates or blanks. For each matrix, field duplicates will be provided at a rate of one per 10 samples collected or one per shipment, whichever is greater. Field blanks which consist of trip, routine field, and rinsate blanks will be provided at a rate of one per 20 samples collected for each parameter group, or one per shipment, whichever is greater.

Calculations will be performed for recoveries and standard deviations along with review of retention times, response factors, chromatograms, calibration, tuning, and all other QC information generated. All QC data, including split samples, will be documented in the site logbook. QC records will be retained and results reported with sample data.

#### 19.1 Blank Samples

Blank samples are analyzed in order to assess possible contamination from the field and/or laboratory so that corrective measures may be taken, if necessary. Field samples are discussed in the following subsection:

#### 19.2 Field Blanks

Various types of blanks are used to check the cleanliness of field handling methods. The following types of blanks may be used: the trip blank, the routine field blank, and the field equipment blank. They are analyzed in the laboratory as samples, and their purpose is to assess the sampling and transport procedures as possible sources of sample contamination. Field staff may add blanks if field circumstances are such that they consider normal procedures are not sufficient to prevent or control sample contamination, or at the direction of the project manager. Rigorous documentation of all blanks in the site logbooks is mandatory.

- Routine Field Blanks or bottle blanks are blank samples prepared in the field to access ambient field conditions. They will be prepared by filling empty sample containers with deionized water and any necessary preservatives. They will be handled like a sample and shipped to the laboratory for analysis.
- **Trip Blanks** are similar to routine field blanks with the exception that they are <u>not</u> exposed to field conditions. Their analytical results give the overall level of contamination from everything except ambient field conditions. For the RI/FS, one trip blank will be collected with every batch of water samples for VOC analysis. Each trip blank will be prepared by filling a 40-ml vial with deionized water prior to the sampling trip, transported to the site, handled like a sample, and returned to the laboratory for analysis without being opened in the field.

• **Field Equipment Blanks** are blank samples (sometimes called transfer blanks or rinsate blanks) designed to demonstrate that sampling equipment has been properly prepared and cleaned before field use, and that cleaning procedures between samples are sufficient to minimize cross contamination. If a sampling team is familiar with a particular site, they may be able to predict which areas or samples are likely to have the highest concentration of contaminants. Unless other constraints apply, these samples should be taken last to avoid excessive contamination of sampling equipment.

#### 19.3 Field Duplicates

Field duplicate samples consist of a set of two samples collected independently at a sampling location during a single sampling event. In some instances the field duplicate can be a blind duplicate, i.e., indistinguishable from other analytical samples so that personnel performing the analyses are not able to determine which samples are field duplicates. Field duplicates are designed to assess the consistency of the overall sampling and analytical system.

#### 19.4 Quality Control Check Samples

Inorganic and organic control check samples are available from EPA free of charge and are used as a means of evaluating analytical techniques of the analyst. Control check samples are subjected to the entire sample procedure, including extraction, digestion, etc., as appropriate for the analytical method utilized.

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### **APPENDIX 4**

Qualifications





### **LaBella Project Personnel**

LaBella Staff Member	Title	Phone Number
Greg Senecal	Environmental Director	585-295-6243
Dennis Porter	Environmental Operations Manager	585-295-6245
Daniel Noll	Remediation Program Manager	585-295-6611
Jennifer Gillen	Project Manager	585-295-6648
Ann Aquilina	Environmental Engineer	585-295-6289
Seth Davis	Environmental Construction Specialist	585-295-6659
Steve Rife	Project Geologist	585-295-7004
Ira Poplar-Jeffers	GIS Specialist	585-295-6213



### Kyle R. Miller

Kyle is a Senior Environmental Analyst with over 17 years of experience completing Phase I and Phase II Environmental Site Assessments (ESAs) and remedial projects. He has performed, overseen, and managed numerous subsurface investigations, including the advancement of soil borings, the excavation of test pits, the installation of groundwater monitoring wells, and the completion of geophysical surveys. Kyle has also completed soil vapor intrusion studies, petroleum underground storage tank (UST) removals, and the installation and operation/maintenance of groundwater treatment systems.



#### Environmental Due Diligence and Remedial Actions | Wal-Mart Development and Expansion Sites New York State

As a subconsultant to Wal-Mart's Civil Engineering Consultant, Kyle completed Phase I ESAs, Phase II ESAs, remedial actions, and soil and groundwater management plans and specifications for numerous Wal-Mart development sites from the Hudson Valley to Western New York.

## Environmental Management of Soil, Slag, and Regulated Solid Wastes | Port of Rochester | City of Rochester Rochester, NY

Kyle developed Environmental Management Plans and associated specifications for the proper identification, handling, and disposal of soil and regulated solid wastes encountered during construction and redevelopment activities at the Port of Rochester. Kyle also provided field environmental monitoring services and assisted the contractors with the proper handling and staging of materials excavated during construction.

### **Environmental Remediation** Village of Hilton, New York.

Kyle directed and documented the excavation and disposal of petroleum-impacted soil from a former bus garage facility.

#### Subsurface Investigations and Remedial Action Plan | Corn Hill | City of Rochester Rochester, NY



#### **Senior Environmental Analyst**

 State University of New York College at Buffalo: B.S., Earth Science

#### **Certification / Registration**

 Occupational Safety and Health Administration 40-Hour Hazardous Waste Operations and Emergency Response Course

Kyle conducted a Phase II ESA and developed a subsequent remedial action plan for the installation of an oxygen injection system at an apartment and town home complex in the City of Rochester.

## Oil Spill Emergency Response and Remediation | West Henrietta Road Henrietta, NY

Kyle directed emergency response and oil recovery activities associated with a release of virgin motor oil within an auto dealership's service facility, including high-volume oil/water recovery activities, followed by the installation of an oil "skimmer" recovery system for the facility.

### Environmental Management Plan and Design of a Sub-Slab Vapor Mitigation System | DPI of Rochester, 1560 Emerson Street

#### Rochester, NY

Kyle was responsible for creation of a New York State Department of Environmental Conservation (NYSDEC) approved Environmental Management Plan (EMP) and a Monroe County Health Department (MCHD) approved Sub-Slab Vapor Mitigation System design, required for



### Kyle R. Miller

the construction of a building addition within the footprint of the City of Rochester's Former Emerson Street Landfill. These activities were performed under the City of Rochester's Brownfield Assistance Program.

### Supplemental Remedial Actions | Hoselton Chevrolet | 1301 Fairport Road

#### **Perinton, New York**

Kyle directed subcontractors to implement field activities for a Supplemental Remedial Action which included: excavation, segregation, and off-site disposal of petroleum impacted soil; confirmatory soil sampling; injection of insitu groundwater treatment materials; and the installation and sampling of groundwater monitoring wells.

### Phase II ESA | Core States Engineering | Ash Road Vestal, NY

Performed a Preliminary Phase II ESA of two adjacent parcels of land containing several areas of concern that were proposed for redevelopment as a petroleum distribution facility. Collected and submitted soil and groundwater samples from soil borings and monitoring wells installed at the site, as well as well elevation and water table elevation data, to determine groundwater flow direction. Drafted a Phase II ESA report which summarized the findings and conclusions of the investigation.

#### Phase II ESA | Alexander Realty, LLC | Former Genesee Hospital Parking Garage Rochester, New York

Performed a Phase II ESA of this former automotive facility, in order to close a historic NYSDEC Spill file. Collected and submitted soil and groundwater samples from soil borings and monitoring wells installed at the site. Drafted a Phase II ESA report which summarized the findings and conclusions of the investigation.

## Bureau of Water, Lighting, and Parking Meter Operations | City of Rochester Rochester, NY

As Senior Environmental Analyst, Kyle worked on the redevelopment of the current site for reuse as a new facility for the operations center, which included the following tasks: delineate the extent of soil and



#### Relationships. Resources. Results.

### Jennifer Gillen, MS

Jennifer is a Project Geologist responsible for the coordination and successful completion of Phase II Environmental Site Assessments (ESAs) and several Sites in the NYSDEC Brownfield/Voluntary Cleanup Programs. Jennifer has also worked on several Brownfield Opportunity Area (BOA) studies. Jennifer was previously the Phase I ESA Program Manager at LaBella and has completed hundreds of Phase I ESAs, numerous Phase II ESAs, and has experience with many Sites with chlorinated solvent impacts as well as NYSDEC Spill Sites.

#### **Project Experience**

### Canal Corridor Brownfield Opportunity Area Study | Oswego, NY

Jennifer was responsible for the compilation, analysis and dissemination of data associated with the BOA project, which spans 1,344 acres along the Oswego Canal and shore of Lake Ontario, within in the City of Oswego.

### Tonawanda Brownfield Opportunity Area Study | Tonawanda, NY

Jennifer was responsible for the compilation, mapping and analysis of data associated with this 1,000 acre BOA on the Niagara River, which included properties used for radiological waste disposal associated with the Manhattan Project.

### NYSDEC BCP Site #C828159, 690 Saint Paul Street | Rochester, NY

Jennifer assisted with the development of two Interim Remedial Measure Work Plans, the Remedial Investigation Report and Remedial Alternatives Analysis/Remedial Action Work Plan for the remediation of a NYSDEC Brownfield Cleanup Program site formerly utilized as an industrial manufacturing facility. Implemented the two Interim Remedial Measures and portions of the Remedial Investigation at the Site which included the excavation of contaminated soil and bedrock, the advancement of soil borings, and the installation and sampling of groundwater monitoring wells. Also, included in this work was the installation of bedrock monitoring wells using conventional rock coring methods and installation of infrastructure for *in situ* chemical treatment. This process involved coordination with the NYSDEC, the NYSDOH, and the City of Rochester School District.

#### Penn Yan Marine | Penn Yan, NY

Currently completing a groundwater delineation investigation and BCP application as well as a work plan for *in situ* treatment of groundwater contaminated with chlorinated volatile organic compounds. The implementation of the groundwater delineation investigation has included the installation and sampling of nineteen groundwater monitoring wells.



#### **Project Geologist**

- SUNY Albany: BS, Geological Sciences
- SUNY Albany: MS, Geological Sciences
- Certified Hazardous Waste Operations & Emergency Response (40 Hour OSHA Health and Safety Training 29)
- OSHA 8 Hour Hazardous Waste Operations and Emergency Response Course

### NYSDEC VCP Site #V00585-6, Lake Ontario Mariners Marina | Henderson Harbor, NY

Developed a Remedial Alternatives Analysis/Remedial Action Work Plan for this NYSDEC Voluntary Cleanup Site. This work included the design of a sub-slab depressurization system within a building under which a plume of petroleum-contaminated groundwater is located and the design of a pilot test for an air sparging system.

### Former Emerson Power Transmission Facility | Ithaca, NY

Jennifer assisted with a detailed review of this 100-acre site with 800,000 sq. ft. of manufacturing space. The facility was a heavy industrial facility for over 100 years and has known issues with chlorinated solvents in bedrock and with significant off-site impacts. The project included a detailed and in-depth environmental site assessment in order to document any impacts above NYSDEC criteria and thus limit liability for the purchaser.

### NYSDEC Spill Site #0906903, 185 Scio Street | Rochester, NY

Oversaw the installation of dedicated bedrock groundwater monitoring wells at the Site using conventional rock coring methods.

City of Rochester Department of Environmental Services, Division of Environmental Quality, Pump Test Report, Port of Rochester | Rochester, NY



### Jennifer Gillen, MS

which included geotechnical sampling. Implementation of the pump test included the pumping of over 650,000-gallons of water and the analysis of drawdown effects on observation wells. This process involved coordination with the New York State Department of Environmental Conservation, Monroe County Pure Waters, and the City of Rochester Division of Environmental Quality.

### NYSDEC Spill Site #0906903, 185 Scio Street | Rochester, NY

Oversaw the installation of dedicated bedrock groundwater monitoring wells at the Site using conventional rock coring methods. Completed sampling of these wells using standard low-flow methods.

## NYSDEC Spill #0911669, Phase II Environmental Site Assessment and Remediation, Wemco Corp., Saltonstall Street |

#### Canandaigua, NY

Conducted geoprobe soil boring sampling and groundwater sampling to evaluate for potential subsurface effects related to historic fuel distribution operations. Following the subsurface investigation, assisted with the implementation of remedial excavations at the Site and coordinated with the NYSDEC for the closure of the Spill.

### NYSDEC Site #C738046, Former Breneman Site | Oswego, NY

Developed Remedial Investigation Work Plan and Citizen Participation Work Plan in anticipation of the upcoming Remedial Investigation at the Site.

## Brownfield Cleanup Program Project, Greenport Crossings LLC., 181 Union Turnpike | Greenport, NY

#### Phase I Environment Site Assessments | Northeastern United States

Performed numerous Phase I ESAs and Transaction Screens on a wide variety of residential, commercial, industrial, and manufacturing facilities including gasoline stations, repair shops, apartment complexes, office buildings, and restaurants for the following groups: Financial Institutions

- · Bank of Castile
- Canandaigua National Bank

- ESL Federal Credit Union
- First Niagara Bank
- Genesee Regional Bank
- Northwest Savings Bank
- Steuben Trust Company

#### Municipal and Government Clients

- City of Rochester
- City of Oswego
- New York State Department of Transportation
- Town of Victor
- Yates County

#### **Development and Construction Companies**

- Urban Housing League of Rochester
- Edgemere Development
- Chrisanntha, Inc.
- Buckingham Properties
- Morgan Management
- Rochester Cornerstone Group



### Seth Davis, MS

Seth is an Environmental Analyst with six years of experience. His responsibilities include all aspects of site characterization for site development and Brownfield Cleanup Program projects, including Phase I and II Environmental Site Assessments and subsurface exploration and sampling programs. He has also performed numerous environmental remediation projects that include soil, groundwater and sediment mitigation activities.

Seth also has experience with project management activities, including: preparation of proposals and cost estimates, and development of work plans for investigation and remediation.

#### **Project Experience**

### Howard Wind Project | Town of Howard Howard, NY

Environmental Monitor throughout the construction of 27 wind turbines. Responsibilities included monitoring of the local roads to ensure any impacts from the construction project were mitigated, routine SWPPP inspections, and agricultural monitoring. The project included oversight to a variety of different contractors spanning a jobsite with a great geographic spread. The restoration goals on this complex project were obtained by the end of scheduled construction, one year ahead of the required restoration goal.

## Phase I & II Environmental Site Assessment | Wal-Mart #2785-01 | 360 Commerce Drive Victor, NY

Environmental Analyst for the investigation of potential sub-surface environmental issues associated with historical uses of the site as a permitted construction and demolition waste disposal facility and gravel pit. This project involved the implantation of over twenty-five test boring and six groundwater monitoring wells in areas of suspect concern identified in previous investigations.

### Development and Implementation of Proposed Waste/Fill Management Plan | Unity Health Systems

Assisted with the implementation of the W/F Management Plan including overseeing the excavation of regulated solid wasted and subsequent transportation off-site. Monitoring included defining the extent of the waste material.



#### **Environmental Analyst with Four Years of Experience**

- West Virginia University: MS, Wildlife and Fisheries Resources
- West Virginia University: BS, Wildlife and Fisheries Science
- OSHA 40-hour HAZWOPER Training
- Pennsylvania Dept. of Environmental Protection –
   Wetland Delineation Training, April 2010
- First Aid
- CPR

### Former Monoco Oil BCP | Mark IV Enterprises Pittsford, NY

Environmental Analyst for the Interim Remedial Measures implemented to satisfy the conditions of the site's Brownfield Cleanup Agreement. The project is ongoing and includes removal of all source area and grossly contaminated soil and groundwater present as a result of the site being an oil distribution facility. Following the remediation phase, the site will be redeveloped into several apartment buildings and a restaurant.

## Brownfield Cleanup Program | Former Photech Imaging | City of Rochester Rochester, NY

Conducted pre-demolition asbestos and hazardous/contaminated material surveys, sampling, and waste characterization in support of demolition bid package preparation. Assisted in bid package preparation and review of bids. Coordinated sample and relocation of ~1,200 cubic yards of soil to the Site to be used as backfill



### Seth Davis, MS

in accordance with the imported fill sampling requirements in NYSDEC DER-10. Provided oversight during the final remediation phase, which included construction management as well as environmental screening and sampling. In addition, Seth generated the final reporting as required by the NYSDEC, which included preparation of the Final Engineering Report and Site Management Plan.

#### Remedial Action Implementation | Unity Hospital Rochester, NY

Oversight of remedial action implementation for over 750 ft of drainage channel impacted with high levels of petroleum. Performed sediment sampling and characterization, and managed remedial excavation and disposal and follow-up sampling.

#### Native Soil Characterization | Unity Hospital Rochester, NY

Developed plan, implemented sampling program and prepared report for characterization of potential pesticide contamination of soil within the footprint of an excavation proposed stormwater retention pond. The site was a former agricultural and orchard area, and the excavated soil was slated for offsite usage by the Town of Greece. Contaminants of concern included pesticides, arsenic and heavy metals.

### Voluntary Cleanup Agreement Project | Ultralife Corporation

#### Newark, NY

Environmental Analyst for remedial action implementation to satisfy the conditions of the site's Voluntary Cleanup Agreement. Included excavation and disposal of impacted sediment from approximately 400 ft of drainage channels, and restoration that included backfilling, erosion and sedimentation control measures, seeding to re-establishing native vegetative species diversity, long-term monitoring, and preparation of Final Engineering Report and Site Management Plan.

### Phase II Environmental Site Assessment | City of Rochester | 51 Chili Ave.

#### Rochester, NY

Environmental Analyst for the investigation of potential

underground storage tanks. This project involved overseeing the excavation of test pits to investigate anomalies discovered during a geotechnical investigation, overseeing the decommissioning and removal of two underground storage tanks, and conducting a geoprobe and overburden groundwater sampling program to delineate impacts from the former underground storage tanks.

### Supplemental Phase II Environmental Site Assessment Wal-Mart #2107-02

Lockport, NY

Assisted with the excavation of test pits to investigate anomalies identified during a geotechnical investigation.

#### Phase II Environmental Site Assessment | 2485 Harlem Road

#### Cheektowaga, NY

Environmental Analyst for the investigation of potential contaminants related to the historical use of the site as a dry cleaner. The project involved four test borings and two groundwater monitoring wells in areas of concern as identified in a previous Phase I ESA.

### Phase II Environmental Site Assessment | Beck's Recycling

#### Shortsville, NY

Assisted with groundwater sampling and test pit excavation to investigate contamination associated with the Sites use as a scrap metal yard.

#### Pre-construction/pre-demolition Asbestos Surveys | NYSDOT

#### **Various Locations**

Assisted with asbestos surveys on bridges throughout western NY prior to scheduled construction or demolition.

#### Transformer Oil Spill Remediation | Dansville Properties Dansville, NY

Conducted soil sampling, oil sampling and waste characterization in response to a transformer oil spill. Also assisted with remedial actions to excavate impacted soil and prepared documentation to gain closure of the spill.



### Ann Aquilina, EIT

Ann is an Engineer in Training responsible for assisting with Phase II Environmental Site Assessments (ESAs) and environmental remediation projects. Project experience includes conducting Phase I ESAs, Phase II ESAs including soil and groundwater sampling and reporting, data management and analysis, and creating site maps and conceptual site models using geographic information system (GIS). Ann is 40 hour OSHA HAZWOPER certified.



#### **Project Experience**

### Former Emerson Street Landfill, City of Rochester, Rochester, New York

Developed and implemented remedial investigation work plans for a former landfill including soil and groundwater sampling, reporting, and GIS data management. Developed a Delisting Petition for a portion of the NYSDEC Listed Inactive Hazardous Waste Disposal Site.

### Phase II Environmental Site Assessment, 177 University Avenue, City of Rochester, Rochester, New York

Conducted a Phase II ESA to delineate subsurface contamination in soil and groundwater. Conducted soil boring logging, soil and groundwater sampling, reporting, and GIS data management.

### Institutional Control Program, City of Rochester Rochester, New York

Collected and developed Site Management Plans and site maps for over 175 properties in the City of Rochester with previous environmental investigations and/or remediation. Created a database for properties with environmental related institutional controls consisting of property information and Site Management Plans for use on the City of Rochester's website.

### Canandaigua Multi-Brownfield Site, Canandaigua, New York

Conducted a design phase investigation to define interim remedial measures for an approximate 15 acre site in the NYSDEC Brownfield Cleanup Program. Was responsible for soil boring logging, soil sampling, GIS data management, and developing a, interim remedial measures work plan addendum.

#### **Engineer In Training**

Stevens Institute of Technology:

 B.Eng., Environmental Engineering,
 Minors in Green Engineering and Science

 Communication

#### **Certification / Registration**

- Engineer In Training; National Council of Examiners for Engineering and Surveying
- 40-hour OSHA HAZWOPER Certified

#### **Professional Affiliations**

 American Academy of Environmental Engineers and Scientists (AAEES)

### Waste Minimization Plan, MTA New York, New York

Developed a waste minimization plan report for a large quantity generator by analyzing quantities and types of waste streams. Compared annual data from previous years and compiled tables to display data in a detailed report.

### Pump and Treat Groundwater Treatment System, City of Rochester,

#### Rochester, New York

Compiled annual reports for a groundwater treatment system in order to meet regulatory agency requirements. Compiled and interpreted over a decade worth of analytical data to create graphs and identify emission and concentration trends over time. Compiled graphs and summarized findings into detailed reports.





### Phase II Environmental Site Assessment, 131 Water Street, Penn Yan, New York

Completed a Phase II ESA at a former automobile repair shop. Ann was responsible for soil boring logging, soil and groundwater sampling, GIS data management, and reporting.

### Pre-Development Site Assessment, Kodak Park South, Rochester, New York

Conducted a pre-development site assessment for an approximate 122 acre former industrial site. Was responsible for soil and groundwater sampling and GIS data management. Organized the findings of this study and previous environmental studies conducted at the site in a detailed report.

### Phase II Environmental Site Assessment, 310 Lyell Avenue, Rochester, New York

Completed a Phase II ESA at a portion of the former Rochester Subway and Canal. Researched historic documentation in order to select soil boring and test pit locations. Conducted soil boring logging, soil and groundwater sampling, GIS data management, and reporting.



### **Greg Senecal, CHMM**

Greg is Director of Environmental Services and is a Certified Hazardous Materials Manager and is responsible for the direction of all environmental investigation related projects undertaken by the firm. He has more than 23 years experience in designing, managing, and conducting numerous site assessments, remedial projects, brownfield redevelopment projects, groundwater monitoring well installations, test pit excavations, and underground petroleum storage tank removals and spill cleanups.

Greg coordinates staffing and client relationships for many of the firm's environmental clients. This effort includes working closely with the client, and forming the best technical project teams for the diverse array of environmental consulting and engineering services offered by the firm.

#### PHASE I/II INTRO:

As Director of Environmental Services, Greg is responsible for the direction of all environmental investigation related projects undertaken by the firm. Greg has more than 24 years experience scoping, scheduling, and reviewing Phase I Environmental Site Assessments, Phase II Environmental Site Assessments, and remedial efforts undertaken by the firm.

Greg is a Certified Hazardous Materials Manager (CHMM) and has extensive experience in the field of Environmental Management relating to Phase I and Phase II Environmental Site Assessments, remediation, and environmental compliance evaluations. Greg has conducted or supervised over 3,000 Phase I Environmental Site Assessments and over 1,500 Phase II Environmental Site Assessments, as the firm has averaged performing 300-340 assessments per year.

#### **Project Experience**

### Monoco Oil Brownfield Cleanup Pittsford, NY

Greg is responsible for directing all environmental services associated with the NYSDEC Brownfield Cleanup Program for this project. This complex environmental project involves the cleanup and demolition of a 20-acre blighted vacant oil refinery. The redevelopment plan for the project includes redevelopment of an upscale waterfront apartment and town home complex along the Canal.



#### **Director, Environmental Division**

- State University of New York at Syracuse, School of Environmental Science and Forestry: BS, Environmental Science
- State University of New York at Cobleskill: AAS, Fisheries and Wildlife Technology

#### **Certification / Registration**

- Certified Hazardous Materials Manager
- Certified Hazardous Waste Operations & Emergency Response (40-Hour OSHA Health and Safety Training 29)

### 935 West Broad Street Rochester, NY

Greg is Client Manager for the Remedial Investigation, Remedial Alternatives Analysis, Site Re-use Concept Plan and a Corrective Action Plan. This project is funded under the NYSDEC 1996 Clean Water/Clean Air Bond Act. Projects tasks completed to date include: geophysical site assessment; comprehensive soil and groundwater characterization; computer model contaminant plume migration trends; GIS mapping to depict site features, analytical data, contaminant plumes; developed reuse concept site plan.

### Monroe County Environmental Testing Term Agreement Monroe County, NY

As Director of Environmental Services, Greg has been responsible for the successful completion of over 12 years of term agreements (with annual renewals) for hazardous materials inspection and abatement design with Monroe County. Assignments typically involve



### **Greg Senecal, CHMM**

asbestos and lead inspections, but have also included other Regulated Building Materials and mold. Projects have ranged in size from small utility spaces to large multi-story office/housing complexes. A recently completed project involved the inspection of 160,000 sq ft of the Public Safety Building.

### Environmental Term Agreement | City of Rochester Rochester, NY

Client Manager who directs all of the projects under the term. Projects range from Phase I Environmental Site Assessments to Site Characterizations, Remedial Cost Estimates, and Brownfield Cleanups.

### 690 St. Paul Street | NYSDEC Brownfield Cleanup Project Rochester, NY

Greg is serving as the project director for this multi-faceted Brownfield investigation and cleanup project. Greg acts as the liaison between the building owners, the former owner (Bausch & Lomb), the Building tenant (City of Rochester School District), and the numerous regulatory agencies involved in the project. This project includes a large SVI investigation, design and installation of a SVI mitigation system, monthly performance monitoring of indoor, sub slab, and exterior air, and communication of the above results to the agencies, tenants, and various stakeholder groups this project also included several IRM's for the removal of orphan tanks and petroleum impacted soils. The RI is currently focusing on the identification and delineation of suspected TCE plumes on the property and under the building structures.

#### Buffalo Avenue Industrial Corridor Brownfield Opportunity Area | Pre-Nomination Study Niagara Falls, NY

Greg served as the project director for this 1500 acre, 2500 industrial parcel Brownfield Opportunity Area Project. Greg coordinated the effort between LaBella's Planning and environmental division. He also oversaw the schedule and public outreach components of the project.

#### Vacuum Oil/South Genesee Brownfield Opportunity Area | Pre-Nomination Study Rochester, NY

Director of the Project Team for the City of to prepare a pre-nomination study for the proposed Vacuum Oil-South Genesee River Corridor Brownfield Opportunity Area.

LaBella developed mapping that allowed for the Brownfield Opportunity Area boundaries to be established in a logical manner at the 56 acre 1.2 mile long corridor along the Genesee River. LaBella conducted economic and demographic research for the project site and gathered zoning, occupancy, and environmental information for potential underutilized Brownfield properties within the BOA.

## Port of Rochester Redevelopment Project | Phase II Site Characterization

#### Rochester, NY

Project Manager for complete Phase II Site Characterization, which involved sub surface characterization of approximately 38 acres. Greg directed the environmental team who received a beneficial re-use determination to re use 80,000 cubic yards of iron foundry slag as on site fill.

### Bureau of Water, Lighting, & Parking Meter Operations Rochester, NY

Greg served as Client Manager to remediate the Water Bureau site to obtain regulatory closure or inactivation. The project scope includes the redevelopment of the current site for reuse as a new facility for the operations center.

### CSXT Train Derailment & Hazardous Materials Spill Rochester, NY

Project Manager responsible for review of all delineation reports, implementation of additional delineation studies, review of remedial work plans, and oversight of all facets of the execution of IRM as it related to achieving a cleanup that would limit long term liability for the City and allow for the planned redevelopment to occur.

### Rochester Rhinos Stadium Brownfield Redevelopment Rochester, NY

Greg served as Project Manager of the NYSDEC Voluntary Cleanup of this prominent urban redevelopment site. The voluntary clean was based around a soils management plan approach that included the re-use of approximately sixty thousand yards of low level petroleum contaminated soils as on site fill under parking lots and in landscaped berm areas of the property.



#### **Steven Rife**

Steven is a Project Geologist with LaBella's Environmental Division and is primarily involved with field operations for Phase II Environmental Site Assessments. He has more than 2 years of geology experience in related field work including shallow overburden soil sampling, bedrock mapping, basic surveying, and well logging on deep natural gas wells. When in-house, he also assists with GIS mapping, laboratory sample logistics, and report synthesis.

Steven coordinates with senior Project Managers, Engineers and Geologists to implement site-tailored remediation plans pursuant to the objectives of the client. Working closely with environmental construction personnel, he is most commonly involved with DPT soil core sampling and screening using a Geoprobe 54-LT unit and PID.

#### **Project Experience**

#### **Phase II Environmental Site Assessments**

1777 East Henrietta Road | Getinge, USA | Henrietta, NY Member of the Environmental Geology team responsible for planning and field investigation on this large industrial site with multiple REC's. Oversaw implementation of soil borings that were advanced on the interior and exterior of the facility and overburden monitoring wells installed to characterize potential impacts. Coordinated with project manager to give best data coverage representation for our client, the buyer.

### 1821 Monroe Avenue | Monroe Hollywood Collision | Brighton, NY

Worked closely with Senior Environmental Geologist on a DEC mandated bedrock interface well installation operation. On-site work consisted of: property owner coordination, drilling contractor oversight, soil contamination screening, RQD rock core determination, well installation, SWL measurement, well location surveying, and low-flow peristaltic groundwater sampling. Used ArcGIS to map previous report well locations and model groundwater flow based on SWL readings.

### 182 Avenue D | Urban League of Rochester | Rochester, NY

Advanced borings in a direct push study to characterize the extent of SVOC contamination detected in a previous LaBella Phase II. Coordinated aspects of site utility stakeout with the Monroe County Water Authority.



#### **Project Geologist, Environmental Division**

 State University of New York at Fredonia: BS. Geology

#### **Certification / Registration**

- Certified Hazardous Waste Operations & Emergency Response (40 Hour OSHA Health and Safety Training (29 CFR 1910.120)
- PEC Safe Land USA Oilfield Training
- PEC Globally Harmonized System HazCom Training
- Professional Member: GSA, AAAS

### 7185 West Main Road | Client Proposed ATM Site | LeRoy, NY

Sole project geologist tasked with a soil boring investigation designed to detect a potential groundwater VOC plume that may have resulted from an automotive facility to the south of the parcel. Handled all aspects of the project from preliminary GIS mapping, securing equipment, and proper sample collection.

#### **UST Contamination Investigations**

**120 Main Street | Historical UST Location | Geneseo, NY** Supervised a UST Geoprobe soil investigation to characterize the nature and extent of a VOC plume from a historical automobile refueling station. Predicted groundwater flow direction against adjacent structure and collected supporting quantitative evidence.





### **Steven Rife**

### Horizon Well Logging, (9 Months: 2013)

Steve worked as a Self-Supervising Logging Geologist, providing real time well-site lithologic identification, well logging, and hydrocarbon monitoring with a gas chromatograph. After four months, Steve was promoted to lead logger, and worked to train two staff members under him.

### Field Soil Sampling | Cornell University (4 Months: 2012)

Steve used a 0-30 cm basic DPT probe to sample soil cores at select commercial agricultural sites in Tompkins County as part of a USDA funded soil carbon inventory project. Steve updated the Cornell Climate Change website by interviewing faculty about their current research.



Dennis is the Environmental Operations and Phase II Environmental Site Assessment/Remediation Program Manager, and is a Certified Hazardous Materials Manager. He has managed numerous Phase I and II Environmental Site Assessments, Remedial Investigations, Feasibility Studies, industrial hygiene studies, project monitoring and asbestos sampling surveys. Dennis also has significant experience in Brownfield Redevelopment and has completed numerous Site Redevelopment Projects under the NYSDEC's Brownfield Cleanup Program.

#### **Project Experience**

### Former Photech Imaging | City of Rochester Rochester, NY

Project Manager responsible for all aspects of the project including; design phase investigations, building demolition, bid documents, contractor interviews & selection, remedial action work plans, waste profiling, contract implementation and construction management. Primary contaminants at this 12.5 acre site include asbestos, heavy metals and Semi-Volatile Organic Compounds (SVOCs) Metals contamination, primarily Silver, Cadmium and Chromium have been distributed across the site from the historical manufacturing operations.

### Penn Yan Marine | Yates County Penn Yan, NY

Project Manager working closely with Yates County and the NYSDEC to design an environmental cleanup at the site, which will be consistent with the future use of the waterfront as a mixed use marine community.

Responsibilities included conducting environmental investigations, remedial action work plans, and design documents to investigate and develop cleanup plans for a vacant and contaminated former boat manufacturing facility.

## Predevelopment Site Conditions Gap Investigation (PSCGI) | Port of Rochester Marina | City of Rochester Rochester, NY

Project Manager responsible for defining localized and sitewide environmental issues at the proposed marina site including the horizontal and vertical distribution of the slag layers or other regulated solid waste known to be present at the Site, evaluate potential issues associated with redevelopment of the subject site, and collect site-specific geotechnical data for use by the Design Team. To



### Manager of Environmental Operations with 23 Years of Experience

- SUNY Oswego: BS, Biology
- Certified Hazardous Materials Manager (CHMM)
- Certified Hazardous Waste Operations & Emergency Response (40 Hour OSHA Health and Safety Training 29)
- New York State Commercial Association of Realtors
- CHMM Local Chapter

investigate the data gaps identified in the assessment of available data, the PSCGI fieldwork included the advancement of thirty-four (34) soil borings and the installation of three, 2-inch inside diameter groundwater monitoring wells. In addition, the New York State Department of Environmental Conservation (NYSDEC) was petitioned for approval of a site-specific Beneficial Use Determination (BUD) for the reuse of the slag excavated as part of the marina construction project.

### NYSDEC Brownfield Cleanup Program Penfield, NY

Dennis served as the Remedial Program Manager for the Project. This complex project involved a detailed investigation and characterization regarding multiple source areas of chlorinated solvent contamination which included installing shallow overburden and deep overburden groundwater monitoring wells and an extensive soil boring grid. In addition, an exposure assessment for evaluating potential on-site and off-site exposures was completed. This project was further complicated by the close proximity of the Site to residential properties and a commercial Day Care Facility. The RI concluded that an Interim Remedial Measure (IRM) was warranted to immediately remove a source



area in order to minimize off-site migration and significantly reduce groundwater impacts in a cost effective and timely manner.

### NYSDEC Brownfield Cleanup Program Wolcott, NY

Dennis served as the Project Manager for all facets of environmental investigation, characterization and remediation associated with an area of mercury contamination. A Remedial Investigation (RI) was designed in accordance with the NYSDEC BCP in order to provide for the investigation and characterization of the extent of mercury contamination at the site, including the evaluation of human exposures to mercury. The selected remedial approach was to cap the area of mercury contaminated soil with asphalt. This approach allowed for the reduction in potential human exposure to the contaminated soils through direct contact, allowed the site owner to develop additional vehicle parking for the employees and eliminated the need for costly off-site landfill disposal of the mercury impacted soils.

### NYSDEC Brownfield Cleanup Program North Goodman, Rochester, NY

As Project Manager, Dennis guided the Client through the NYSDEC Brownfield Cleanup Program. The project involved the Developer acquiring the contaminated parcel from the existing owner, assuming all responsibility for cleanup and subsequently entering into the NYSDEC Brownfield Cleanup Program as a Volunteer. This complex project involved detailed investigation and characterization regarding multiple source areas, defining off-site migration pathways, installation of a sub-slab vapor mitigation system for the existing structure and completing the evaluation of bedrock groundwater.

### NYSDEC Brownfield Cleanup Program Henrietta, NY

LaBella Associates, P.C. was retained by a local manufacturing company to complete the site remediation under the NYSDEC Brownfield Cleanup Program. The project was initiated by another consultant; however, due to cost overruns and timing of the work, the Client selected LaBella to complete the project. Dennis served as the Remedial Program Manager for this Project. Timely response and client involvement was the key to bringing

the project back on track.

### NYSDEC Brownfield Cleanup Program | Former Monoco Oil Facility | Mark IV Pittsford, NY

As Project Manager, Dennis completed a Brownfield Cleanup Program (BCP) Application & Work Plan to conduct a Remedial Investigation at a former bulk petroleum facility. A soil, groundwater, and soil gas study was undertaken to develop remedial costs and assist with redeveloping the property. Subsequently, an Interim Remedial Measure was designed to remove the source area of impacts from the Site.

### **USEPA Brownfield Cleanup Grant | Seneca Nation of Indians**

#### Salamanca, NY

Dennis served as the Remedial Design Manager and assisted in authoring a United States Environmental Protection Agency (USEPA) Brownfield Cleanup Grant for the Seneca Nation. The successful grant application that was prepared sought \$200,000 for the cleanup of a vacant rail yard contaminated with diesel fuel and heavy metals. The rail yard is located in the Seneca Nation's Allegheny territory in Salamanca, New York.

## USEPA Brownfield Cleanup Grant: 935 Broad Street | City of Rochester

Rochester, NY

Dennis served as the Project Manager for the City of Rochester during the design and implementation of a comprehensive Remedial Investigation, Remedial Alternatives Analysis, Site Re-Use Concept Plan and a Corrective Action Plan for a Former Gasoline Station at 935 West Broad Street. This project was funded under the NYSDEC 1996 Clean Water/Clean Air Bond Act.

### USEPA Brownfield Cleanup Grant | Former Photech Imaging, 1000 Driving Park | City of Rochester Rochester, NY

The City of Rochester received a USEPA Remediation Grant for \$200,000 to remediate an area of hazardous and non-hazardous contamination associated with the facilities former silver wastewater recovery system. Dennis served as the Project Manager responsible for all aspects of the project including; design phase investigations, remedial design, bid documents,



contractor interviews & selection, remedial action work plans, waste profiling, contract implementation and construction management.

### NEW YORK STATE BROWNFIELD OPORTUNITY AREAS (BOAs)

## Brownfield Opportunity Area | Pre-Nomination Study | City of Rochester Rochester, NY

Dennis worked on the Project Team for the City of Rochester to prepare a pre-nomination study for the proposed Vacuum Oil-South Genesee River Corridor Brownfield Opportunity Area. LaBella developed mapping that allowed for the Brownfield Opportunity Area boundaries to be established in a logical manner at the 56 acre 1.2 mile long corridor along the Genesee River. LaBella conducted economic and demographic research for the project site and gathered zoning, occupancy, and environmental information for potential underutilized Brownfield properties within the Brownfield Opportunity Area.

#### Vacuum Oil/South Genesee Brownfield Opportunity Area | Pre-Nomination Study Rochester, NY

Dennis worked on the Project Team for the City of Rochester to prepare a pre-nomination study for the proposed Vacuum Oil-South Genesee River Corridor Brownfield Opportunity Area. LaBella developed mapping that allowed for the Brownfield Opportunity Area boundaries to be established in a logical manner at the 56 acre 1.2 mile long corridor along the Genesee River. LaBella conducted economic and demographic research for the project site and gathered zoning, occupancy, and environmental information for potential underutilized Brownfield properties within the BOA.

### Buffalo Avenue Industrial Corridor Brownfield Opportunity Area | Pre-Nomination Study Niagara Falls, NY

Dennis worked on the Project Team for the City of to prepare a pre-nomination study for this 1500 acre, 2500 industrial parcel Brownfield Opportunity Area Project. Dennis assisted in the coordination; compilation, analysis and presentation of project data; and production of a BOA program-compliant Pre-nomination Study.

#### SITE CHARACTERIZATION

### 15 Flint Street | City of Rochester Rochester, NY

As Project Manager, Dennis managed the implementation of a comprehensive Phase II Environmental Site Assessment (ESA) Subsurface Investigation at the property located at 15 Flint Street in the City of Rochester, Monroe County, New York. The Site encompasses approximately 5.23 acres and was historically operated as an oil refinery by Vacuum Oil and others from approximately 1875 to 1935. To evaluate the RECs identified in the Phase I ESA, the Phase II ESA Subsurface Investigation fieldwork included the advancement of twenty-eight soil borings, three test pits, and the installation of seventeen, 2-in. inside diameter temporary monitoring wells.

## Predevelopment Subsurface Conditions Analysis Investigation, Development Parcel 1 | Port of Rochester | City of Rochester Rochester, NY

As Project Manager, Dennis managed the implementation of a Predevelopment Subsurface Conditions Analysis Investigation (PSCAI) of a parcel of land within the Port of Rochester located at 4700 Lake Avenue within the City of Rochester, Monroe County, New York. The Site is a portion of the Port of Rochester which has been targeted for redevelopment. To evaluate the site LaBella conducted the following; electromagnetic survey using a Geonics EM61 unit, a high-sensitivity, highresolution, time domain electromagnetic (TDEM) metal detector that can detect both ferrous and nonferrous metallic objects to an approximate depth of 10 feet below ground surface (BGS); an exploratory test pit investigation including the advancement of sixteen test pits; and the implementation of eight (8) geotechnical and environmental soil borings.

### Site Characterization, 51 Chili Avenue | City of Rochester Rochester, NY

LaBella was retained by the City of Rochester to complete a comprehensive site characterization for a parcel located at 51 Chili Avenue located in the City of Rochester, Monroe County, New York. The Site was historically utilized as a gasoline filling station and automobile repair shop. As Project Manager, Dennis



managed the decommission of two (2) orphan underground storage tanks (USTs); the advancement of twenty-six (26) direct-push soil borings; five (5) truck-mounted rotary drill rig borings including the installation of one (1) overburden well and four (4) "bedrock/overburden interface" groundwater monitoring wells; and the advancement of six (6) test pits. This information supported a cost recovery action against the former responsible party.

### Site Characterization – USEPA Funded Brownfield Assistance Program | 900 Maple Street, Cylinder Services, Inc. | City of Rochester Rochester, NY

LaBella was retained by the City of Rochester (City) and Cylinder Services, Inc. under the City of Rochester's Brownfields Assistance Program (BAP) to conduct a Preliminary Geotechnical Evaluation with Environmental Confirmation Sampling of the property located at 900 Maple Street, City of Rochester, Monroe County, New York. The Site consists of two (2) contiguous parcels that total 5.44-acres zoned for commercial and warehouse storage use and is improved with one (1)  $29,520 \pm \text{square foot}$ structure that was constructed between the late 1950's and the early 1960's. Site Characterization Activities included; retaining the services of a professional plumber to "televise" available drains at the Site in order to verify connection to the sanitary or storm sewer or to determine the distance and direction from the structure that the wastewater discharge piping terminates. A total of 21 floor drains and a sump were televised to evaluate discharge locations. In addition, nine (9) test pits, nine (9) Geoprobe direct-push soil borings and twelve (12) Truck-mounted BK81 Rotary Drill Rig advanced soil borings were advanced at the Site.

### Site Characterization – USEPA Funded Brownfield Assistance Program | 110 Colfax Street, Peko Precision Products, Inc. | City of Rochester Rochester, NY

LaBella was retained by the City of Rochester (City) and Peko Precision Products, Inc. under the City of Rochester's Brownfields Assistance Program (BAP) to conduct a Phase II Environmental Site Assessment (ESA); Preliminary Site Characterization (PSC) at the property known as the City of Rochester Forestry Division and Auto Pound Auction Lot located at 110 Colfax Street in the City of Rochester, Monroe County, New York1. The 110 Colfax Street parcel is a 2.7-acre portion of the City of Rochester property addressed as 110-220 Colfax Street. This 2.7-acre portion of land is located within the Former Emerson Street Landfill (FESL) footprint. To facilitate the redevelopment of the site a source removal program including an Environmental Management Plan (EMP) was designed and implemented. In addition, to mitigate potential Human Health considerations associated with occupying the on-site structure a full building sub-slab vapor depressurization system was designed and installed.

### Predevelopment Site Conditions Gap Investigation | Port of Rochester Marina | City of Rochester Rochester, NY

As Project Manager, Dennis managed the implementation of a Predevelopment Site Conditions Gap Investigation (PSCGI) at the Port of Rochester in the City of Rochester, Monroe County, New York. The primary focus of the PSCGI was to define localized and site-wide environmental issues at the proposed marina site including the horizontal and vertical distribution of the slag layers or other regulated solid waste known to be present at the Site, evaluate potential issues associated with redevelopment of the subject site, and collect sitespecific geotechnical data for use by the Design Team. To investigate the data gaps identified in the assessment of available data, the PSCGI fieldwork included the advancement of thirty-four (34) soil borings and the installation of three, 2-inch inside diameter groundwater monitoring wells. In addition, the New York State Department of Environmental Conservation (NYSDEC) was petitioned for approval of a site-specific Beneficial Use Determination (BUD) for the reuse of the slag excavated as part of the marina construction project.

## NYSDEC Brownfield Cleanup Program | JML Optical, Portland Ave. Rochester, NY

As Project Manager, Dennis managed the implementation of a comprehensive environmental due diligence program prior to the Client divesting the realestate associated with the complex. Due diligence activities included the performance of an ASTM Phase I



Environmental Site Assessment, a Pre-Demolition Asbestos Survey, a Preliminary Phase II Environmental Site Assessment/Remedial Investigation a Remedial Alternatives Analysis Report; and Preliminary Remedial Design. This complex project is scheduled to begin remediation late in 2007.

### Remedial Investigation, Proposed Port Marina | Port of Rochester

#### Rochester, NY

Dennis served as the Project Manager for the City of Rochester regarding the design and implementation of the Remedial Investigation (RI) regarding the proposed Port Marina Project. The project approach selected consisted of a multi-step investigative process. The main focus for the RI was to evaluate the environmental implications, potential human health exposure issues and associated cost burdens associated with the potential redevelopment of the site as a marina.

### Bureau of Water, Lighting, & Parking Meter Operations Rochester, NY

Dennis served as Environmental Project Manager for the City of Rochester's new Bureau of Water, Lighting, and Parking Meter Operations complex. He managed a team of LaBella Technical Staff combined with City staff to develop and implement a cost effective site investigation, remedial action plan and successful redevelopment of the Site. This Project was the recipient of the American Public Works Association Environmental Project of the Year for New York State.

## Port of Rochester Redevelopment Project | Phase II Site Characterization Rochester, NY

Dennis served as the Technical Team Leader / Sr. Environmental Analyst for complete Phase II Site Characterization of the entire Port of Rochester. This project involved the sub surface characterization of approximately 38 acres of formerly industrial land targeted for redevelopment for the Fast Ferry Project. The site received a beneficial re-use determination to re utilize 80,000 cubic yards of iron foundry slag as on-site fill and part of the redevelopment of the Site.

### Adelphia Communications World Headquarters Coudersport, PA

Dennis served as the Field Project Manager regarding all facets of environmental investigation, characterization, and remediation associated with two former gas stations and a former agricultural distribution center that had been purchased to redevelop as a communications firm \$26 million dollar World Headquarters. Planning and management were key to the project's success. The success of the project was driven by Dennis' significant involvement with Adelphia's corporate, legal and design groups and numerous public and private organizations; from utilities and construction crews to neighborhood groups.

### Valeo North America | Facility Wide Decommissioning Rochester, NY

Dennis served as the Project Manager representing Valeo during the decommissioning of the Complex which consists of an approximately 22-acre site with 1.5 million square feet of manufacturing and warehouse space. LaBella provided Valeo with comprehensive environmental engineering design and management services associated with the phased reduction of operations at the Facility. In addition to the technical decommissioning of much of the manufacturing related infrastructure, it was paramount that LaBella design and manage each aspect to the project to minimize Valeo's long term liability associated with the Facility.

## Project Management: Remediation, Demolition, and Preliminary Site Work | Wegmans Food Markets Buffalo, NY

Dennis provided on-site Project Management for the remediation, demolition and preliminary site work in preparation for the construction of a new retail facility. The site consisted of an approximately 400,000 square foot industrial complex. This complex project involved pre-demolition remedial measures consisting of an asbestos survey, the removal of underground petroleum bulk storage tanks, above ground paint storage tanks, asbestos abatement, and the dismantlement and disposal of PCB contaminated equipment and materials.



### Foster Wheeler Plant | Site Characterization Dansville, NY

Dennis was the Remedial Investigation Manager for the due diligence investigation regarding Foster Wheeler's Dansville Facility, which was first developed for industrial purposes in the 1830's as a foundry and heavy industrial operation. The complex consisted of over 500,000 square feet of manufacturing buildings situated on an approximately 80 acre site. The facility had a long history of environmental related issues including: Consent Orders from the NYSDEC, being listed as a NYSDEC Inactive Hazardous Waste Disposal Site (IHWDS) and multiple documented chemical releases.

### Chautauqua County Jail Mayville, NY

Project Manager for environmental services in support of the construction of a 240-bed addition to this existing jail facility and renovations in the existing facility. Environmental issues included defining the nature and extent of existing contamination, completing design/bidding documents, on-site management during construction and mitigating human-health expose issues for both on-site construction workers and the future occupants of the structure.

### Rochester Economic Development | 110 Colfax St. & 690 Portland Ave.

#### Rochester, NY

Project Manager for a Remedial Investigation, Remedial Alternatives Analysis, Site Re-Use Concept Plan and a Corrective Action Plan for the former municipal landfill and manufacturing facility, respectively.

### Environmental Term Agreement | City of Rochester Rochester, NY

Project Manager on the term agreement, whose responsibilities range from Phase I Environmental Site Assessments to Site Characterizations, Remedial Cost Estimates, and Brownfield Cleanups.

### Pike Company | Spill Closure Rochester, NY

Project Manager responsible for the completion of spill closure requirements for a New York State Department of Environmental Conservation (NYSDEC) Active Spill and to delineate and remediate extensive soils impaired with gasoline.

### CSXT Train Derailment & Hazardous Materials Spill Rochester, NY

Sr. Environmental Analyst responsible for review of all delineation reports, implementation of additional delineation studies, review of remedial work plans, and oversight of all facets of the execution of IRM as it related to achieving a cleanup that would limit long term liability for the City and allow for the planned redevelopment to occur.

## North Buffalo Street over Camp Brook Creek | PENNDOT District 3-0 Elkland. PA

Sr. Environmental Analyst for the new 60 ft, single span bridge replacement.

#### Water District No. 4 Town of Kendall, NY

Sr. Environmental Analyst for four projects to install approximately 18 miles of water mains to extend the Town's distribution system.

#### **NYSDOT**

Dennis is a Phase II Environmental Site Assessment and Remediation Program Manager and Certified Hazardous Materials Manager. He will be the Senior Environmental Analyst for the Project. Dennis has completed numerous Phase I and II Environmental Site Assessments, Remedial Investigations and Design, Feasibility Studies, industrial hygiene studies, project monitoring and asbestos sampling surveys. Dennis has also completed Hazardous Waste/Contaminated Materials (HW/CM) Assessments on the following NYSDOT projects:

#### Jefferson Road, Route 252 Phases I-IV, PIN 4046.11

Sr. Environmental Analyst



### **Michael Pelychaty**

Mike is a staff environmental geologist. He has over 15 years of experience in the field of Environmental Management relating to Phase I and Phase II Environmental Site Assessments, Remedial Investigations, Brownfield Remedial Investigations and Corrective Actions.

Current work includes numerous environmental site assessments and audits in New York and Pennsylvania. The site assessments include assessment of environmental liability associated with properties such as warehouses, gas stations, auto repair facilities, manufacturing facilities, farms, commercial properties, and residential homes. While conducting these investigations, Mike has obtained a solid understanding of the many environmental issues facing property owners, municipalities, and developers.



#### **Senior Environmental Geologist**

- SUNY Fredonia: B.S., Geology
- Monroe Community College: AAS, Science

#### **Certification / Registration**

• 40-Hour OSHA HAZWOPER

#### **Project Experience**

## Brownfield Cleanup Program Application | Automotive Dealership Henrietta, NY

As Geologist, Mike completed a Brownfield Cleanup Program (BCP) Application & Work Plan to conduct a Remedial Investigation of a chlorinated solvent plume at an automotive facility. A soil, groundwater, and soil gas study was undertaken to develop remedial costs and assist with the remedial design.

### Former Photech Imaging Site | City of Rochester Rochester, NY

Mike served as Geologist overseeing the building decontamination and demolition of 15 buildings compromising 108,000 square feet of space. The site was originally developed in 1948 for manufacturing photographic film and paper. Several different companies have owned and operated the facility for photographic paper and film production through 1991. Large amounts of chemicals, wastes, and various supplies and materials were left "as-is" on-site when the facility was abandoned in 1991.

The project scope involved assessing and characterizing building materials and left over waste streams for proper disposal. As part of the project a portion of the buildings floors and walls were identified to be impacted with heavy metals that required remediation prior to demolition. Mike developed a remedial work plan to scarify building materials to allow demolition of the buildings were the impacts were identified.

Over 350 shipments of various waste streams were removed and disposed of during building decontamination and demolition activities that included hazardous waste, regulated waste, construction and demolition debris, etc. The various waste were tracked and documented for the City of Rochester to confirm proper disposal.

## Corrective Action Measures at Rotary and Mariner Sites | Broad & Plymouth, LLC Rochester, NY

Mike served as Geologist to develop a corrective action plan to obtain regulatory closure for two former gasoline stations located in a prime downtown development area. This project involved the removal and disposal of over 1,000 tons of petroleum impacted soil and the decommissioning of 6 underground tanks. Regulatory closure of the release occurred shortly after the corrective action measures were completed allowing for the property owner to redevelop the site.



### **Michael Pelychaty**

## Interim Remedial Measures and Remedial Investigation | Lake Ontario Mariners Marina | The Upstate Bank Henderson Harbor, NY

Mike served as Geologist for all facets of environmental investigation, characterization and remediation associated with an area of mercury contamination. An Interim Remedial Measure (IRM) Work Plan was designed in accordance with the NYSDEC VCP in order to provide for the removal and disposal of 500 tons of contaminated soils and 5 underground storage tanks that represented the source of contamination at the site. This approach allowed the client to perform the majority of the remedial activities required at the site at a faster rate versus waiting for government and public feedback and wait periods. Subsequent to the completion of the IRM, Mike developed a Remedial Investigation (RI) Work Plan to delineate the remaining areas of subsurface impacts that were unable to be addressed during the IRM.

## Phase II ESA | 5450 Southwestern Blvd | Wal-Mart | APD Engineering Hamburg, NY

Mike served as a Geologist overseeing the implementation of a geophysical survey, test pits, and soil borings to investigate potential for subsurface environmental issues that could affect redevelopment of the site. As part of the investigation, regulated solid waste was identified which involved the development of an environmental management plant to facilitate the handling of regulated waste during redevelopment and to comply with local regulations.

## Phase I & II ESA | 500 Ann Page Road | Wal-Mart | APD Engineering Horseheads, NY

Mike served as a Geologist for to investigate potential subsurface environmental issues associated with historical uses of the site as a manufacturing facility. This project involved the implantation of over twenty-five test boring and six groundwater monitoring wells in areas of suspect concern identified in the Phase I ESA.

### UST Removals | Industrial Park Circle | Gallina Development Corporation

#### Gates, NY

Mike oversaw the removal of six underground storage tanks in accordance with state and local regulations. This project also involved the removal of impacted soil as a result of the tank leaking. This project was accomplished during a short time period to facilitate future sale of the site.

### Former Gasoline/Service Station | BCP Site Rochester, NY

Mike is Environmental Geologist for this BCP Site, which has including conducting Remedial Investigations at two adjoining parcels, implementing Interim Remedial Measures, and developing Remedial Investigation and Interim Remedial Measure reports. This project also including implementing the necessary Citizen Participation requirements.

### Former Manufacturing Facility | BCP Site Henrietta, NY

Mike is currently serving as Environmental Geologist for this Brownfield Cleanup Program (BCP) Site. Some responsibilities included: overseeing the installation of a groundwater monitoring well network and subsequent routine sampling as part of a Monitored Natural Attenuation (MNA) program for remediation chlorinated groundwater impacts at the Site.

### 935 Broad Street | City of Rochester Rochester, NY

Mike served as Environmental Geologist for the City of Rochester during the design and implementation of a comprehensive Remedial Investigation, Remedial Alternatives Analysis, Site Re-Use Concept Plan and a Corrective Action Plan for a Former Gasoline Station at 935 West Broad Street. This project was funded under the NYSDEC 1996 Clean Water/Clean Air Bond Act. Over 1,000 tons of petroleum contaminated soil was removed as part of the project and the installation of a groundwater remediation system.

### Valeo | Facility Wide Decommissioning Rochester, NY

Mike served as Environmental Geologist representing Valeo during the decommissioning of the Complex which



### **Michael Pelychaty**

consists of an approximately 22-acre site with 1.5 million square feet of manufacturing and warehouse space. LaBella provided Valeo with comprehensive environmental engineering design and management services associated with the phased reduction of operations at the Facility. In addition to the technical decommissioning of much of the manufacturing related infrastructure, it was paramount that LaBella design and manage each aspect to the project to minimize Valeo's long term liability associated with the Facility.

### NYSDEC Brownfield Cleanup Program Wolcott, NY

Mike served as Environmental Geologist for all facets of environmental investigation, characterization and remediation associated with an area of mercury contamination. A Remedial Investigation (RI) was designed in accordance with the NYSDEC BCP in order to provide for the investigation and characterization of the extent of mercury contamination at the site including the evaluation of human exposures to mercury. The selected remedial approach will be to cap the area of mercury contaminated soil with asphalt. This approach will allow for the reduction in potential human exposure to the contaminated soils through direct contact, allow the site owner to develop additional vehicle parking for the employees and eliminate the need for costly off-site landfill disposal of the mercury impacted soils.

### Bureau of Water, Lighting, and Parking Meter Operations Rochester, NY

Mike served as Environmental Geologist to remediate the Water Bureau site to obtain regulatory closure or inactivation. This project involved the removal and disposal of over 20,000 tons of petroleum impacted soil and the installation of a groundwater treatment system. The project scope includes the redevelopment of the current site for reuse as a new facility for the operations center.

## Port of Rochester Re-Development Project | Phase II Site Characterization Rochester, NY

Environmental Geologist for the complete Phase II Site Characterization, which involved sub surface characterization of approximately 38 acres. The site

received a beneficial re-use determination to re use 80,000 cubic yards of iron foundry slag as on site fill.

### CSXT Train Derailment & Hazardous Materials Spill Rochester, NY

Environmental Geologist responsible for all delineation reports, additional delineation studies, remedial work plans, and assisted in the execution of IRM as it related to achieving a clean up that would limit long term liability for the City and allow for the planned redevelopment to occur.

### Phase I and II ESA | Village of Clyde Clyde, NY

Environmental Geologist who performed a Phase I Environmental Site Assessment (ESA) that identified several potential areas of concern at a facility that contained petroleum bulk storage, drywells, and underground hydraulic lifts. Based on the findings of the Phase I ESA, Mike oversaw the Phase II ESA that involved the advancement of test pits to investigate the identified areas of concern.

### Phase I and II ESA | Village of Newark Newark, NY

Environmental Geologist who performed oversight of the removal and the construction of approximately 5,000 cubic yards of petroleum impacted soil into a bio-cell. Projects tasks involved continuously screening the excavation with a photo-ionization detector and for olfactory observations that would identify areas of soil impairment.



### **Daniel Noll, PE**

Dan has over 15 years of experience with environmental projects at industrial/manufacturing facilities and environmental investigation projects for a variety of clients including developers, financial institutions, industrial clients, and municipalities. Dan has managed numerous Phase II Environmental Site Assessments and remediation projects such as groundwater monitoring programs, soil vapor investigations, test pit investigations, geo-probe investigations, underground storage tank removals, soil removals, bio-cell remediations, and in-situ groundwater remediation. He also has experience with the design and installation oversight of mitigation systems. In addition, Dan has assisted industrial, municipal and agricultural clients with permitting and annual reporting for State Pollution Discharge Elimination System (SPDES) permits, Part 360 Land Application permits, Composting permits, and Petroleum Bulk Storage (PBS) registrations.

#### **Project Experience**

### Carriage Cleaners BCP Site | Springs Land Company Rochester, NY

As Project Manager, Dan completed a Brownfield Cleanup Program (BCP) Application & Work Plan to conduct a Remedial Investigation at a former dry cleaning facility. A soil, groundwater, and soil gas study was undertaken to develop remedial costs and assist with redeveloping the property. Subsequently, an Interim Remedial Measure was completed to remove the source area of impacts from the Site. Dan completed a remedial alternatives analysis for selecting a treatment approach for the residual groundwater plume. Dan also attended Town Board Meetings regarding this project.

## Former Manufacturing Facility - BCP Site | Stern Family Limited Partnership Rochester, NY

Dan was the Project Engineer for this BCP Site, which underwent a Remedial Investigation, Interim Remedial Measures, and installation of a sub-slab depressurization system. Dan completed and stamped the Final Engineering Report required to obtain the Certificate of Completion for the property owner, allowing them to obtain their tax credits

### Former Bausch & Lomb Facility BCP Site | Genesee Valley Real Estate

#### Rochester, NY

Dan is Project Manager for this Brownfield site that served



#### **Brownfield Program Manager**

Clarkson University: BS, Chemical Engineering

#### **Certification / Registration**

- Professional Engineer, NY
- OSHA 40-Hour Certified Hazardous Waste Site Worker Training
- OSHA 8-Hour Certified Hazardous Waste Site Worker Refresher Training

as a manufacturing facility from the 1930s to the 1970s. The project includes a Remedial Investigation (RI) of a four-acre parcel with ten areas of concern identified based on historic information. The RI identified four areas requiring remedial actions and Interim Remedial Measures have been completed in three of the locations. The areas of remediation included petroleum impacted soil and groundwater with free floating petroleum product, and chlorinated solvent contamination including bedrock impacts at depth. A remedial alternatives analysis is being completed to determine a final remedy for the site.

### Vacuum Oil – BCP Site | One Flint Street Associates Rochester, NY

Dan was the Project Manager for this Brownfield site that is the oldest oil refinery in the United States. The current project includes developing a remedial investigation plan for two parcels that have had a history of oil refining since the 1800s. The remedial investigation was designed to fill data gaps from previous studies in order to minimize cost to the Client.



### **Daniel Noll, PE**

### Petroleum Soil Removal & Oxygen Injection System | City of Rochester

#### Rochester, NY

As Project Engineer, Dan developed a soil and groundwater study to investigate former underground storage tanks at a former gasoline/auto repair facility. A remedial alternatives analysis was conducted to evaluate several options for remediating soil and groundwater at the site including light non-aqueous phase liquid. Dan followed this project through remediation which consisted of removing about 1,500 cy of soil and designing/installing an oxygen injection system to remediate groundwater over time.

### Former Emerson Power Transmission Facility Ithaca. NY

Dan completed a detailed review of this 100-acre site with 800,000 sq. ft. of manufacturing space. The site is in the NYSDEC Inactive Hazardous Waste Disposal Site registry and was a heavy industrial facility for over 100 years. The facility closed in 2009 and Dan is the project manager for environmental due diligence activities for a potential buyer. The facility has known issues with chlorinated solvents in bedrock and with significant off-site impacts. The overall project will include a detailed and in-depth environmental site assessment with sampling for soil, bedrock, groundwater, soil gas, sediments, and surface waters in order to document any impacts above NYSDEC criteria and thus limit liability for the purchaser.

### Genesee River Dredging Project | City of Rochester Rochester, NY

Dan managed a project to permit three areas for dredging near the mouth of the Genesee River. The project included evaluating the previous dredging operations in the area, the existing sediment sampling data, sediment levels, discharge points in the area to be dredged and 3-D modeling of the sediments for accurate volume calculations. This information was summarized in a presentation to NYSDEC and the Army Corp of Engineers in order to streamline the permitting process and determine any additional requirements for obtaining a permit. Subsequent to the presentation, Dan developed the permit and submitted them to the Client for signature, and then approval by regulatory agencies.

### Port Marina | City of Rochester Rochester NY

Dan assisted with the environmental investigation of the City of Rochester Port Marina. This project included

evaluating the extent of slag fill materials that would require proper management during any redevelopment work. The extent of slag was evaluated by implementing a grid pattern of soil borings and using the resulting data to develop a 3-dimensional model of the subsurface at the Site. This model was used to generate volumes of material to be disturbed during redevelopment and estimate the cost burden of the environmental portion of the project. This project also included evaluating the magnitude and permitting of a massive dewatering program to allow the mass excavation to be completed.

## NYSDEC Legacy Site Soil Vapor Intrusion Project | City of Rochester Rochester, NY

Dan is Project Manager for this project which includes evaluating soil vapor intrusion from a former 230-acre municipal landfill with methane gas and chlorinated solvent impacts. The landfill was converted into an industrial park after closure in 1971 and is now developed with 45 separate parcels and over 2,000,000 square feet of building space. This challenging project included obtaining access from 27 different property owners and conducting site assessments at each facility and separately evaluating groundwater impacts over approximately 20-acre area. The results of this work determined the cost burden and liability of the City for addressing soil vapor intrusion. LaBella utilized all of the following mitigation approaches for minimizing this significant cost burden to the City: sealing of floors, vapor barriers, sub-slab depressurization systems and building pressurization depending on building conditions/uses.

### Fill Relocation and Sub-Slab Mitigation System | City of Rochester

#### Rochester, NY

Dan was project manager for this project which relocated approximately 3,000 cubic yards of fill material from a development site that is located on a former landfill operated by the City of Rochester. This work was conducted for the City but on private property. The fill was relocated and placed in a soil berm on City property with NYSDEC approval. In addition, Dan designed and oversaw construction of a sub-slab depressurization system for the new 8,000 square foot building.

### **APPENDIX 5**

**BCP Site Contact List** 



<u>Local (</u>	<u>Officials</u>
Jason Molino City Manager One Batavia City Centre Batavia, NY 14020	Edward Jones Chairman, City of Batavia Planning Committee One Batavia City Centre Batavia, NY 14020
Genesee County Director of Planning Attn: Felipe A. Oltramari County Building 2 3837 West Main Street Road Batavia, NY 14202	Genesee County Manager Attn: Jay Gsell County Building 2 3837 West Main Street Road Batavia, NY 14202
Genesee County Planning Board Melvin Wentland, Chairperson County Building 2 3837 West Main Street Road Batavia, New York 14020	

### **Site Owners**

Estate of Peter Della Penna 40-52 Ellicott Street, Batavia, New York 14020

### **Local Media**

The Batavian

Attn: Howard Owens 200 East Main Street Batavia, NY 14020

# Public Water Supplier City of Batavia Sewer and Water Department One Batavia City Centre Batavia, New York 14020

Nearby Schools/ Daycares							
Karen Green,	David Friedlander,						
Principal	Director						
Saint Joseph School	ARC of Orleans						
2 Summit Street	County, Rainbow						
Batavia, New York	Preschool						
14020	45 Liberty St.,						
	Batavia, NY 14020						
Sandra Griffin,	Rev. Allen Werk						
Principal	St. Paul Lutheran						
Batavia Middle	School						
School	31 Washington						
96 Ross Street	Avenue						
Batavia, New York	Batavia, New York						
14020	14020						

### **Document Repository**

Richmond Memorial Library 19 Ross Street Batavia, New York 14020

Adjacent Pro	perty Owners
City of Batavia	R and J Enterprises
One Batavia City	of Batavia, LLC
Centre	PO Box 378
Batavia, NY 14020	Batavia, NY 14024
Angotti Davaraga	Vathy A Durai IIC
Angotti Beverage	Kathy A Durei, LLC 109 S. Main St.
Corp. 56 Hartwood Dr.	
	Batavia, NY 14020
Rochester, NY 14623	
14023	
m1 0 1 A	E11: (1 TT 1 1:
The Salvation Army	Ellicott Holdings,
12 Marway Circle	LLC
Rochester, NY	3389 Dodgeson Rd.
14624	Alexander, NY
14020	14005
C 11D ( 1 1)	T G 1 G /
Gerald Potrzebowski	Irr Supply Centers
125 Hutchins St.	Inc.
Batavia, NY 14020	908 Niagara Falls
	Blvd.
	N. Tonawanda, NY
	14120

Adjacent Prope	erty Occupants
Ameriprise Financial 32 Ellicott Street Batavia, New York 14020	Empire State College 36 Ellicott Street Batavia, New York 14020
56-70 Ellicott Street Batavia, New York 14020	Mancuso Commercial Realty 34 Ellicott Street Batavia, New York 14020
WNY Urology 36 Ellicott Street #2 Batavia, New York 14020	Freed Maxick CPA 1 Evans Street Batavia, New York 14020
Lamb Family Medicine 7 Evans Street Batavia, New York 14020	

### **APPENDIX 6**

LaBella 2013 Phase II ESA Field Logs & Analytical Data Reports



	IAR		Λ	TEST	BORING LOG		ING.
LABELLA Associates, P.C.				40-52 Ellic	cott Street	SHEE JOB:	213396
300 ST	ATE STREET, ROCHE	•	, P.C.	Batavia, N	IY	CHKD	BY:
ENVIR	ONMENTAL ENGINEE	RING CONSULTAN	TS BORING LOCAT	ION:		TIME:	and to
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¥3 €	30	), t	4-71 F	Fill (Genel, brill rown Sand (	n, concrete) MF, I, M)	C	)
X 0	13	<b>Co</b>	Brun-9	grey sandy silf	(p sorin)		)
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GE	GENERAL NOTES  1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.  2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER  3) Abbreviations and = 35 to 50 % c = coarse  some = 20 to 35% m = medium BGS = Below the Ground Surface  little = 10 to 20% [ = fine NA = Not Applicable BORING: ]						

Associates, P.C.

**TEST BORING LOG** 

40-52 Ellicott Street Batavia, NY

BORING: 7 SHEET JOB: 213396 CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS** 

CONTRACTOR: Nature's Way

**BORING LOCATION:** 

GROUND SURFACE ELEVATION; START DATE: 4-23-

END DATE:

TYPE OF DRILL RIG: 684 Tobe

AUGER SIZE AND TYPE:

LABELLA REPRESENTATIVE:

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: INSIDE DIAMETER: ~1.8-Inch

OTHER:

OVERGOUSER CARS EING METHOD. SHOOT GAT							
D E P T H	SAMPLE SAMPLE NO SAMPLE AND DEPTH RECOVERY	STRATA		VISUAL CLAS	SIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	24"	CHANGE	Brun	black gravellu	fill, asphalt	2,6	
Ą	24		2-3 1		ey silt hp.ps.ml	4.7	
6	20"				ry sixt (mp.ns.n)	0.1	
8	20"		Boun	silty sond	(m,t,nd,m)	0.3	
10	20"			1.	N	1.3	
12	2011		Brun	black glove	illy sand (Mifilia)	20.3	Sight
14	24		Grey 9	yavelly sand	$(c_i n_i \ell_i l_i n)$	1.6	
45.05 <b>16.</b> 0	24		Grey ch	cipey Sandy Si	It 6p,306t,n)	0.3	
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	0.40		- eariby	vent rebusal a	21 15.20		
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	1,000		-FL				

- GENERAL NOTES

  1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
  - 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
  - 3) Abbreviations

and = 35 to 50 % some = 20 to 35% c = coarse m = medium

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

f = fine vf = very fine NA = Not Applicable

BORING:

	IAI	DE		1	TE	ST BORING LOG	BORING	3
		Ass	ociates,	P.C.	40-52 E Batavia	Ilicott Street , NY	SHEЕТ  JOВ: 21  СНКО ВУ:	3396
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				-ewi	lyment rebus	al & 14'		
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DATE	TIME	ELAPSED TIME	CASING	BORING	ENCOUNTERED			
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			little = 10 to : trace = 1 to :		f = fine vf = very fine	NA = Not Applicable	BORING	2

## Associates, P.C.

**TEST BORING LOG** 

40-52 Ellicott Street

BORING: SHEET JOB: 213396

CHKD BY:

Batavia, NY

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: Nature's Way

BORING LOCATION:

GROUND SURFACE ELEVATION: START DATE: END DATE: DATUM:

TYPE OF DRILL RIG:

AUGER SIZE AND TYPE:

LABELLA REPRESENTATIVE:

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: INSIDE DIAMETER: ~1.8-Inch OTHER:

D E P T	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
н	SAMPLE NO SAMPLE AND DEPTH RECOVERY	STRATA	VISUAL GEASSIFICATION	(111/4)	11211211110
0	18"		Grey bown gravel (c, E, 1, a, d)	0	
4	18"		Brown silt (Ip. ms, m)	0	
6	20"		Brown Sandy Silt (1p, ns, n)	0.1	
8	20"		Brown sand (m,t, md,n)	0	
10	22"		Brain gravelly sandy silt Apin	0	
12	22"		Benn Sand (n, f, nd, m)	Ó	
13	22"		Bewn sand (c,m,t,1,m)	0	
/L/	22"		Brangey sand (m, t, nd, n)	0	
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	Leivoce	BOTTOM OF	BOTTOM OF GROUNDWATER NOTES:		
DATE	TIME ELAPSED	CASING	BORING ENCOUNTERED		
GE	NERAL NOTES		-Ft -		

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
- 3) Abbreviations

and = 35 to 50 % some = 20 to 35% с = соагве m = medlum

BGS = Below the Ground Surface

little = 10 to 20% trace = 1 to 10%

f = fine vf = very fine NA = Not Applicable

BORING:

**TEST BORING LOG** 

40-52 Ellicott Street Batavia, NY

BORING: SHEET **JOB:** 213396 CHKD BY:

300 STATE STREET, ROCHESTER, NY ENVIRONMENTAL ENGINEERING CONSULTANTS

CONTRACTOR: Nature's Way

BORING LOCATION:

GROUND SURFACE ELEVATION: START DATE:

TIME: DATUM:

TYPE OF DRILL RIG:

AUGER SIZE AND TYPE:

LABELLA REPRESENTATIVE:

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: INSIDE DIAMETER: ~1.8-Inch

OTHER:

END DATE:

D E P T	SAMPLE	STRATA	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0 2	AND DEPTH RECOVERY	CHANGE	Grey (f,1,d)	6	
4	15.,		Red bransilt (mp,m)	0	
6	24"		Brown sund (film)	0	
8	24"		Braun sand (m,f,l,n)	0	
10	24"		Beam silt (mpin)	0	
12	24"		Bran grey sandy sitt (p.n)	0	
14	21"		Boun surel (f,1,m)	0	
16	24"			Ò	
18					
			-tauprent relevan Q 16'		
DATE	TIME ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF GROUNDWATER NOTES:  BORING ENCOUNTERED  -FL		

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
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- 3) Abbreviations

and = 35 to 50 % some = 20 to 35% little = 10 to 20%

trace = 1 to 10%

c = coarse

m = medlum

f = fine vf = very fine BGS = Below the Ground Surface

NA = Not Applicable

BORING:

Associates, P.C.

**TEST BORING LOG** 

40-52 Ellicott Street

Batavia, NY

BORING:/

SHEET

**JOB:** 213396 CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS** 

ORILLER:

CONTRACTOR: Nature's Way

BORING LOCATION:

GROUND SURFACE ELEVATION: START DATE: ( -23-13

DATUM:

TYPE OF DRILL RIG:

AUGER SIZE AND TYPE:

LABELLA REPRESENTATIVE:

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: INSIDE DIAMETER: ~1.8-Inch

OTHER:

END DATE:

D E P T H	SAMPLE SAMPLE NO SAMPLE AND DEPTH RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
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8	20"		Brun clayey silt (r Dark boun silt (p.		
10	18"		Brungavelly sand	(c,mf,md,n) 0	
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ATE	NATER LEVEL DATA TIME ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF GROUNDWATER NOTES: BORING ENCOUNTERED		

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
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BORING:

Associates, P.C.

**TEST BORING LOG** 

40-52 Ellicott Street Batavia, NY

BORING: SHEET JOB: 213396 CHKD BY:

300 STATE STREET, ROCHESTER, NY **ENVIRONMENTAL ENGINEERING CONSULTANTS** 

LABELLA REPRESENTATIVE:

CONTRACTOR: Nature's Way

BORING LOCATION: GROUND SURFACE ELEVATION:

START DATE:

END DATE:

DATUM:

TYPE OF DRILL RIG:

AUGER SIZE AND TYPE:

OVERBURDEN SAMPLING METHOD: Direct Push

DRIVE SAMPLER TYPE: INSIDE DIAMETER: ~1.8-Inch OTHER:

P T SAMP	LE NO SAMPLE	I STRATA	VISUAL CLASSIFICATION	FIELD SCREEN (PPM)	REMARKS	
	DEPTH RECOVER		VIOUNE OF IOUNION		( , , , , ,	
2	8 5"		5-1 Asmalt 1-2 Brun Silt (pin)		D	
4	15"		0-3 Black silt (Pim) 3-4 Raingrey Chappy silt	(nan)	0	
6	20"		Bown grey chyey sil	r (p,n)	03	
8	20"		3 lacksandy silt (pp	'w)	24	stensfeti
10	15		Brown sandy silt (1p	'_)	0	Slightod
12	5"		Boun growelly surely silt	(m,gm)	0	
14	24		boun black sand (m, f,	\ \	105	petroleur
16	241		Brun growelly sund	(n,f,l,n)	63	
18			tanipment rebusal @ 16	0		
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DATE TI	IME TIME	CASING	BORING ENCOUNTERED			
OFFICE	I NOTES		-Ft.			

- 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
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little = 10 to 20% trace = 1 to 10%

f = fine vf = very fine NA = Not Applicable

BORING:

	IAF	2F	11/	TEST BORING LOG				BORING: 1 OF		
			societes,	PC	40-52 E	Ellicott Street		<b>ЈОВ:</b> 213	396	
	ATE STREET,	ROCHESTER,	, NY		Batavia	a, NY		CHKD BY:		
	TRACTOR:	Vature's	Way	BORING LOCAT	113/			TIME: 33	an TO	
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D E		SAMPLE						PID FIELD		
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0		1811			fill (Grav	el, Ocephal	t, brick)	0		
4		1811		f	111			0		
6		15"		Gree	1 brown 5	only silt	(1P/21)	0		
8		1511		Bro	un sono	lysilt (r	man)			
10		24"		8-9	un sond Brun sandi Grey sandi	ody silt (	7.17	0		
12		24"		Grei	1		7	O		
135		A LANGE		Brown	nsittyg	sowel (c,f,1	(m)	0		
16								O		
18				Equi	prent refus	Sal 13.51				
						biogra				
DATE	TIME	DATA ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:				
				-FL					-	
GE		CATION LIN				EN SOIL TYPES, TRANSIT				
	2) WATER L 3) Abbreviation		and = 35 to 5	io %	c = coarse	NDITIONS STATED, FLUCT		INDWATER		
			some = 20 to little = 10 to 2	20%	m = medium f = fine	BGS = Below the Gro NA = Not Applicable	ound Surface	BORING:	>	
			trace = 1 to 1	10%	vf = very fine				1	

	<b>LABE</b>	LL/	PC.	40-52 Ellic		] 5	BORING: SHEET SOB: 213	3396	
	ATE STREET, ROCHESTER	, NY	- 4	Batavia, N	Y	]	CHKD BY:		
CONT	TRACTOR: Nature's ER: LLA REPRESENTATIVE:	s Way	BORING LOCAT	ACE ELEVATION:	END DATE:	י ם	OATUM:		
AUGE	OF DRILL RIG: GOO ER SIZE AND TYPE: RBURDEN SAMPLING ME	A STATE OF THE PARTY OF THE PAR	et Push		inch				
D E P T H	SAMPLE NO SAMPLE	STRATA	VISUAL CLASSIFICATION					REMARKS	
0	AND DEPTH RECOVERY	CHANGE	Asph	alt gravel (	(e,6,1,m)		0		
4	13		Bon	gsey gravelle	1sit (pin		0		
6	20"		_	n Sanly s			0.6		
8	20"		Black	14 Sanly	511+		7.3	Strong pet	edeur
10	24"		Be	in Sandy	sitt (npm		1231	strong get	when
12	24"		Brew	Cinfravelly	1 sit (1p,m		507H	sterning per	troleu
14	24"			<b>W</b>			74.3	petroleunic Sheen	)u(
5	13,,			v. v			21.2	ou show	
18									
			- Gri	ipment refusa	1651				
	VATER LEVEL DATA	BOTTOM OF	BOTTOM OF	GROUNDWATER	NOTEO.	· ·		O 11 - 1	
DATE	TIME ELAPSED	CASING	BORING -Ft	ENCOUNTERED	000	USS Sine	ely)	6-141	
GE	NERAL NOTES	F0 PF2===		TE BOUNDARY RETAIREN	OIL TYPES TO AMOUTICATE	MAY RE COAD	HAI		
				TE BOUNDARY BETWEEN S TIMES AND UNDER CONDITION					
	3) Abbreviations	and = 35 to 5 some = 20 to	50 %	c ≃ coarse m = medium	BGS = Below the Ground S				
		little = 10 to :	20%	f = fine	NA = Not Applicable		BORING:	9	

trace = 1 to 10%

vf = very fine

	IAI	2F	11/	1	Т	EST BORING LOG		ORING:	10	
			cociates,	P.C.		Ellicott Street	JC	в: 213	396	
	ATE STREET, I	ROCHESTER	, NY		Batavi	a, NY		IKD BY:		
	RACTOR:		Movi	BORING LOCAT	ION: //			ME: 930	ОТ О	
	LLA REPRES			START DATE:	124-13	END DATE:				
AUGE	OF DRILL RI R SIZE AND BURDEN SA	TYPE:	THOD: Direc	et Push		DRIVE SAMPLER TYPE: INSIDE DIAMETER: ~1.8- OTHER:	Inch			
D E P	SAMPLE NO	SAMPLE	I STRATA		VIGITAL	CLASSIFICATION	5	PID FIELD SCREEN (PPM)	REMARKS	
	AND DEPTH	RECOVERY	CHANGE		VISONE	SEAST TO A TION		(,		
2		18"		Aph	att Greybi	our grovelkit	( (d)	)		
4		1811		Boun	sandy silv	+ (LIbrick) (mp	(m,	2,0		
6		Du		Brus	gravely	sitt(hp.n)		5.1		
8		12"		Bran	gravelli	sandy sittle	p.n)	5,4		
95				Brun-	-greggrav	elly sund silt 1	when /c	88.7	odurune	de
12										
14										
16				- De marko	to the So	vent at botton with ~2' + red	of bonn	186		
18				- Samo	esult-rel	ival e	a O			
				Equip	vent refus					-
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOMOR	GROUNDWATER ENCOUNTERED	V-000 -000				
GE	NERAL NOTI	FS		-Ft						
	1) STRATIF	ICATION LIN				EEN SOIL TYPES, TRANSITIONS				
	WATER I     Abbrevlation		and = 35 to 5	50 %	c = coarse	ONDITIONS STATED, FLUCTUATION		PAINTER		
			some = 20 to		m = medium f = fine	BGS = Below the Ground S NA = Not Applicable		OBING	(6)	1
			trace = 1 to		vf = very fine		B	ORING:	U	

	IAI	DE	LL/		TES	T BORING LOG	BORING:	B
00 ST	ATE STREET,	A65	sociates, i , ny	P.C.	40-52 Ell Batavia,	icott Street NY	SHEEТ <b>J</b> OВ: 2133 СНКО ВҮ:	1 OF 396
CON'	TRACTOR: [LER:	Nature's	vvay	BORING LOCATIO	n: 1013 SE ELEVATION: 1-24-13	END DATE:	TIME: O'.O	Unto
UGI	OF DRILL RI ER SIZE AND RBURDEN SA	TYPE:	THOD: Direct	t Push		DRIVE SAMPLER TYPE: INSIDE DIAMETER: ~1.8-Inch OTHER:		
D E P T H	SAMPLE NO		STRATA CHANGE		VISUAL CLAS	SIFICATION	PID FIELD SCREEN (PPM)	REMARKS
2				-Rele	s to BHI	O		
1				-Some	s to BHI	291		
	3-7-							
0								
2								
4		U-1						
6								
8 V	VATER LEVEL	DATA	BOTTOM OF	воттомог	GROUNDWATER	NOTES:		
ATE	TIME	ELAPSED TIME	CASING	BORING -FL	ENCOUNTERED			

some = 20 to 35%

little = 10 to 20%

trace = 1 to 10%

m = medium f = fine

vf = very fine

BGS = Below the Ground Surface

BORING:

NA = Not Applicable

	LΛ	RF	11/	1	TES	ST BORING LOG		BORING:	11
300 ST.	ATE STREET,	ASE	sociates, , NY		40-52 El Batavia,	licott Street NY		SHEET JOB: 213 CHKD BY:	3396
CON'	TRACTOR: LER:	Nature's	S Way	BORING LOCAT	ACE ELEVATION:	END DATE:		TIME: [ 6	то
AUGE	OF DRILL R ER SIZE AND RBURDEN SA	TYPE:	THOD: Direc	t Push	1211)	DRIVE SAMPLER TYPE: INSIDE DIAMETER: ~1.8 OTHER:	-Inch		
D E P T H	SAMPLE NO		STRATA		VISUAL CLA	SSIFICATION		PID FIELD SCREEN (PPM)	REMARKS
0		15"		Asph	alt, gravel	(c, f, Ld)		0.1	
4		15"		Beir	gravelly 5	itelbrick)	(pm)	0	
6		22"		Brun	gravelly si	H (p.n)		1.7	
8		22"			an Sandy			147	Sheen bet
10		24"		Bru	Sandy	silt (hpir		14.2	SAA
12		241"			C (			18.1	
14		16"			\\\			76	
16									
18				(e	fusul Q	M H			
V DATE	VATER LEVEL	DATA ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING -Ft.	GROUNDWATER ENCOUNTERED	NOTES:			
		CATION LIN EVEL READ		ENT APPROXIMA BEEN MADE AT		N SOIL TYPES, TRANSITIONS  STATED, FLUCTUAT  BGS = Below the Ground	IONS OF GROU		

little = 10 to 20% trace = 1 to 10%

f = fine vf = very fine

BORING:

NA = Not Applicable

	M	3F	11/			TEST	BORING LOG		BORING:	05	
			cocietes,	P.C.			ott Street	1-11	<b>ЈОВ:</b> 213	3396	
	ATE STREET, ONMENTAL ER			5	L	Batavia, N	Υ		CHKD BY:		
CONT	TRACTOR: [ LER: ELLA REPRES	Nature's	s Way	BORING LOCAT GROUND SURF START DATE:	ACE ELEVATI	on:	END DATE:		DATUM:	San TO	
AUGE	OF DRILL R ER SIZE AND RBURDEN SA	TYPE:	THOD: Direc	t Push	211	)	DRIVE SAMPLER T INSIDE DIAMETER: OTHER:				
D E P	CAMPLEAGO	SAMPLE		PID FIELD SCREEN (PPM)	REMARKS						
H	SAMPLE NO AND DEPTH		STRATA CHANGE			VISUAL CLASS	IFICATION		(FFWI)	TCHETTI-O	
2		15"					natare		Ol		
4		15"		Ben	n ga	welly 5	silt (np	m)	0.3		
6		15°		Bru	1 gra	welly	silt (h	pim)	6.4		
8		15"				\\			0.1	Sheeh/adul	
10		20"		B	roum (	youel	ly silt	(p,n)	0.4		
12		90"		Del	ney 5	andy-	ly silt	pm	0.6	1	
14		22"		Greyo	yavelle	y Sand	y silt f	10,M)	0.8		
16		22"			<b>'</b>		,		1.7		
18				Bole	dt	016/6	no refus	El			
DATE	VATER LEVEL	DATA ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING		NDWATER UNTERED	NOTES:				
GE	NERAL NOTI	ES ICATION LIN	ES DEDDES	FNT APPROXIM	ATE BOUNDA	RY RETWEEN S	OII TYPES TRANSI	TIONS MAY RE GRA	DUAL.		
	1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL. 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER 3) Abbreviations and = 35 to 50 % o = coarse										
	o, Audievidu	vria	some = 20 to	35% 20%	m = medium f = fine		BGS = Below the Gr NA = Not Applicable		BORING:	,	
			trace = 1 to	10%	vf = very fine						

	IΛI	RF			TEST	BORING LOG		BORING:	13	
	区		يقيا سيا		40-52 Ellic	ott Street		ов: 213	3396	1
			sociates,	P.C.	Batavia, N			CHKD BY:		
ENVIRO	ONMENTAL EL	ROCHESTER NGINEERING	CONSULTANT					PILATE, MAN	<b>у</b> то	
DRILL	RACTOR: ER:	Nature's			ACE ELEVATION:			TIME:	M. IO	
LABE	LLA REPRES	SENTATIVE:		START DATE:	4-24-13	END DATE:		1,	* 2000h	
AUGE	OF DRILL R R SIZE AND RBURDEN SA	TYPE:	THOD: Direc	t Push		DRIVE SAMPLER TYPE: INSIDE DIAMETER: ~1.8- OTHER:	-Inch			
D E P		SAMPLE						PID FIELD SCREEN		
H	SAMPLE NO AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE		VISUAL CLASSI	FICATION		(PPM)	REMARKS	
2		15"		Aspha	alt Grael (	(1/n)		0		
4		K"		Brich,	Lud, gravel	(c, f, 1,n)		03		
6		20"		Bru	n gewelly, da	upy silt(ry	) (n)	0,7		
8		20"		Bern	grey son the	Isand (ent	(m, l,	1,4	Slight persion a	200
10		22"		Black	grey sandy	silt (hpir	1	270	Steny pet lockstaneer	visid
12		22"			11			26	7	predu
14		24"		Grec	y gravally s	xard (c,m,f	(3,1,	1340	slight sh Lpetroleu	
16		24"		Grey	October 5	It (hpin	1/	784		_
_18					rilled bl	6-norest	ral			
	VATER LE SE	DATA	BOTTOM OF	BOTTOMOE	GROUNDWATER	NOTES:				-
DATE	VATER LEVEL	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	ENCOUNTERED	NOTES.				
				-FI			_			
		ICATION LIN LEVEL READ		BEEN MADE AT 50 % 535% 20%	ATE BOUNDARY BETWEEN S TIMES AND UNDER CONDITIO c = coarse m = medium f = fine yf = very fine		IONS OF GROUI		13	

	ΙΛΓ	) [	11/	1		TEST	BORING LOG		BORING:	4
	LVE			1	40	-52 Ellic	ott Street		SHEET ЈОВ: 213	1 of 396
			ociates,	P.C.		atavia, N			CHKD BY:	
ENVIRO	ATE STREET, ROOMENTAL ENG	INEERING C	ONSULTANT		- 11-1				TIME:	то
DRILL	RACTOR: N	lature's	vvay	BORING LOCAT GROUND SURF	ACE ELEVATION	5		_	DATUM:	10
LABE	LLA REPRESE	NTATIVE:		START DATE:	1-24-1	)	END DATE:			
	OF DRILL RIG						DRIVE SAMPLER TYP INSIDE DIAMETER: ~			
OVEF	RBURDEN SAM	MPLING ME	THOD: Direc	t Push			OTHER:			
D E		SAMPLE							PID FIELD	
P	SAMPLE NO	SAMPLE	STRATA		VI	ISUAL CLASSII	FICATION		SCREEN (PPM)	REMARKS
H	AND DEPTH		CHANGE							
۰		13"		Ash	It Gr	10 lan	(6,1,m)	\	01	
2					10.0	100 1		)	O, I	
		13''		Bonn	y sare	V	Llin		03	
4		15		Glavelli	y sanc	MSil	4 (164		01)	
		14"		Lightly	nes	0.1	11 /h	lmn	06	
6		17		GENE	ig ca	yey-	2.11 (1)	h'1 1)	0.0	
		1111		1300	TI. Ju	(000	10.1		01	
8		14	191	Sanul	12111	(1,1)	141		0.1	
		180		0 -	Av		- 11/	. \		
10		10 mg		bon	geovell	y San	dysilt (	while!	0,1	
112		TS,		0- 4	U	10/4	sandy sit	looks	20	
M2V				וטטוע	Star	KNIG-	eli elej sit	(hill	0.0	
					7					
14										
16										
10			1 - 2	4	· ·	4		AMILOSED		
				(an)	oment	retus	al Q N	MANORAGE		
18				<u> </u>			11-	71		
							111	J		
	VATER LEVEL C	DATA ELAPSED	BOTTOM OF	BOTTOM OF	GROUND		NOTES:			
DATE	TIME	TIME	CASING	BORING -FL	ENCOUN	(IERED				
GE	NERAL NOTE	S	-					DUD 1411/D= 05 :	DUM	
	1) STRATIFIC	CATION LIN	ES REPRES INGS HAVF	ENT APPROXIM BEEN MADE AT	ATE BOUNDARY TIMES AND UNI	BETWEEN SO DER CONDITIO	DIL TYPES, TRANSITI DNS STATED, FLUCTU	UNS MAY BE GRA JATIONS OF GROU	JNDWATER	
	3) Abbrevlation	ns	and = 35 to 5	50 %	c = coarse		BGS = Below the Gro			4
			some = 20 to	20%	m = medium f = fine		NA = Not Applicable	and Ourlage	BORING:	14
			trace = 1 to 1	10%	vf = very fine					

	IAP	E	11/			EST BORING LC	)G	BORING:	15
	L/L				40-52	Ellicott Street		SHEET Јов: 213	396
200 87	ATE STREET, ROO		ociates,	MC.	Batavi	a, NY		CHKD BY:	
ENVIR	NMENTAL ENGIN	EERING C	CONSULTANT					71	(V) mm
The second	IRACTOR: Na LER:			BORING LOCAT GROUND SURF START DATE:	ACE ELEVATION:	END DATE:		DATUM:	COPP
		TATIVE:		START DATE:	ATT		D TVDC.		
AUGE	OF DRILL RIG: ER SIZE AND TY RBURDEN SAMP		THOD: Direc	t Push		DRIVE SAMPLE INSIDE DIAMET OTHER:			
D E	s	AMPLE						PID FIELD	
P T H	SAMPLE NO S		STRATA CHANGE		VISUAL	CLASSIFICATION		SCREEN (PPM)	REMARKS
H AND DEPTH RECOVERY CHANG					14.1.4				
2		0)		Asphalt, Gravel (c,f,1,d)					
						,	1		
4		0		Bour	1 gravelle	ysilt (	[p,n]	0.1	
		i.		About	NA L		State 1		
_6	6	14"		DUCK	light bar	genelly	sitt(1pin)	03	
را	h	11,		1	N. W.	1	1 11-15	33	
3,	9	9		Light	boun silt	ry day	1PStite )	JIL	
10									
-									
			)						
12									
14									
16									
18				Egu	prent refu	Isal @7	5'		
					1				
	VATER LEVEL DATE	FA	BOTTOM OF	BOTTOM OF	GROUNDWATER	NOTES:			
DATE	TIME EI	APSED TIME	CASING	BORING	ENCOUNTERED				
	NEDAL LICENS	A DOME.		-F}					
GE	NERAL NOTES 1) STRATIFICA	TION LINE	ES REPRES	ENT APPROXIM	ATE BOUNDARY BETW	EEN SOIL TYPES, TRA	NSITIONS MAY BE GRAI	DUAL.	
	2) WATER LEVI		INGS HAVE I		TIMES AND UNDER CO	ONDITIONS STATED, FL	UCTUATIONS OF GROU	INDWATER	
some = 20 to				to 35% m = medium BGS = Below the Ground Surfa					
little = 10 to 20% $f = fine$ NA = Not Applicable trace = 1 to 10% $vf = very fine$								BORING	

	<b>IABE</b>		1	TES1	BORING LOG		ORING:				
			.\	40-52 FIIi	cott Street		неет ов: 2133	OF OF			
	Ass	ociates,	P.C.	Batavia, N			HKD BY:	30			
ENVIRO	ATE STREET, ROCHESTER, DNMENTAL ENGINEERING O	CONSULTANT		16		_					
CONT	TRACTOR: Nature's	Way	BORING LOCAT				ME: 45	pare			
100 100 100	LLA REPRESENTATIVE:		START DATE:	CE ELEVATION 3	END DATE:		ATOM.	I .			
TYPE	OF DRILL RIG:										
	ER SIZE AND TYPE: RBURDEN SAMPLING MET	Inch									
OVE	T										
D E	SAMPLE						PID FIELD				
Р	SAMPLE NO SAMPLE	STRATA	-	VISUAL CLAS	SIFICATION	:	SCREEN (PPM)	REMARKS			
H	AND DEPTH RECOVERY			<i></i>							
2	(4)		Asph	calt, Grave	16,6,1,0	~	Jul				
4	(4)		Bour	black gran	ielly silt (	[p,n]	9,0				
6	29,,		Bound	Favely (1p.	n		1.4				
8	2000		Brown	n silty	day lp st	ill m	0.3				
10	24"		Bru	In Sandy	5:4 (mp.	n)	0.7				
12	24"			~(			1.4				
14	24		BR	un gsave	elly si'l+(Ir	)m)	07				
15	12		Bow	n clayey	silt ho	m	09				
_18			- eau	prent refe	501 6 5						
			V								
		DOTTO 1 05	POTTOLIGE	COOLINDWATER	NOTES:						
DATE	VATER LEVEL DATA  TIME ELAPSED	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:						
	TIME +FI.										
GE	NERAL NOTES		THE ADDDOVIM	ATE BOUNDARY BETWEEN	SOIL TYPES TRANSITIONS	MAV RE CRADI	ΙΔΙ				
	2) WATER LEVEL READ	INGS HAVE	BEEN MADE AT	TIMES AND UNDER CONDIT							
17.71		and = 35 to 5		c = coarse m = medlum	BGS = Below the Ground S	Surface		,			
		little = 10 to	20%	f = fine vf = very fine	NA = Not Applicable	F	BORING:	16			

60	Della Penna 40-52 Ellicott St, Batavia, NY	213396 Chris Kibler	4-23-13		Static Water Level:	Length of Well Screen:	Depth to Top of Pump: Tubing Type:
OR UPI WILLSOND	Project Name: P.C. Location:	Project No.: Sampled By:		ORMATION	11	C.	Baile
	KABELLA Associates, P.C.	300 State Street Rochester, New York 14614	Telephone: (585) 454-6110 Facsimile: (585) 454-3066 WELL I.D.:	WELL SAMPLING INFORMATION	Well Diameter:	Depth of Well:	Measuring Point: Pump Type:

	Соттепts							*					(6,9)
	Depth to Water (feet)												Final Static Water Level:
	Redox (mV)	+/- 10 mV											Fina
	Dissolved O <sub>2</sub> (mg/L)	+10%											2
S. Line	Turbidity (NTU)		Y W									Ý	3:40
	Conductivity (µS/cm)												Purge Time End:
	Temp °C												Pur
ENT	Hd	+/- 0.1										pas	
EASUREM	Gallons Purged											Gallons Purged	3.0
FIELD PARAMETER MEASUREMENT	Pump Rate (ml/min)										200	Total O.8	Purge Time Start:
FIELD PAI	Time											Tota	Purge

OBSERVATIONS

Notes:

OR LEVI WINE - 0.29

			Comments	· S
		DAC ST.	Depth to Water (feet)	Final Static Water Level:
Della Penna 40-52 Ellicott St, Batavia, NY	213396 Chris Kibler (1237) 65° F Sunu	Static Water Level: Length of Well Screen: Depth to Top of Pump: Tubing Type:	Turbidity Dissolved O <sub>2</sub> Redox (NTU) + 10% +/-10 mV + 10%	Fin.
Project Name: Uell Location: 40-5	.:. % %	6	Temp Conductivity Tur's (LuS/cm) (N +/- 3%	Purge Time End:
HELL Associates, P.C.	614 3110 086 TOOU =	G INFORMATION	Gallons pH Purged +/- 0.1	Gallons Purged
INBEL Associa	300 State Street Rochester, New York 14614 Telephone: (585) 454-6110 Facsimile: (585) 454-3066 WELL I.D.:	WELL SAMPLING INFORMATION Well Diameter: Depth of Well: Measuring Point: Pump Type: ELD PARAMETER MEASUREMENT	Time Pump Rate (ml/min)	Total Purge Time Start:  OBSSERVATIONS  Notes:

0.3-1 well whome

			THE REAL PROPERTY.	17.7	AC
Della Penna 40-52 Ellicott St. Batavia, NY	213396 Chris Kibler	4-24-13 Rain 520F		Static Water Level: Length of Well Screen:	Depth to Top of Pump: Tubing Type:
Project Name: Location:	Project No.:	Date:			
	<b>.</b>	PMJ3	NFORMATION	135	Bailer
INBELIA Associates PC.	300 State Street Rochester, New York 14614	Telephone: (585) 454-6110 Facsimile: (585) 454-3066 WELL LD.:	WELL SAMPLING INFORMATION	Well Diameter: Depth of Well:	Measuring Point: Pump Type:

RUL							_	_	_		_	_	_	_	_	_		
	Comments																	,2'01
	Depth to Water (feet)																	Final Static Water Level:
	Redox (mV)	+/- 10 mV																Fina
1	Turbidity Dissolved O <sub>2</sub> (NTU) (mg/L)	+ 10%																35
7	Turbidity (NTU)																	11
	ity	+/-3%																Purge Time End:
	Temp °C									9								Pu
ENT	Hď	+/- 0.1															pag	<u>\</u> C
<b>IEASUREM</b>	Gallons Purged																Gallons Purged	7.17
FIELD PARAMETER MEASUREMENT	Pump Rate (ml/min)																1.1	Purge Time Start:
FIELD PAI	Тіте																Total	Purge
		_	_	_	_	_	 _	_	_	_	_	_	_	_	_	_		

OBSERVATIONS

Notes:

0,3= 1 well whe

		Comments	rel:
	5.6. 5.6.	Depth to Water (feet)	Final Static Water Level:
avia, NY	Level: /ell Screen: p of Pump: e:	Redox (mV) +/- 10 mV	HE HE
40-52 Ellicott St, Batavia, NY 213396   Chris Kibler   インサートラ	Static Water Level: Length of Well Screen: Depth to Top of Pump: Tubing Type:	Dissolved O <sub>2</sub> (mg/L) + 10%	12:35
213396 Chris Kibler		(NTU)	
ion: 11 No.: led By:		Conductivity +/- 3%	Purge Time End:
Locati Projec Sampl Date: Weatt	2	رت د د	Pu
ATTON	Dale I	pH +/- 0.1	pas
614 5110 510 566 TPOINU		Gallons	Gallons Purged
Associates, P.C. 300 State Street Rochester, New York 14614 Telephone: (585) 454-6110 Facsimile: (585) 454-3066 WELL I.D.:	Well Diameter: Depth of Well: Measuring Point: Pump Type:	Pump Rate (ml/min)	Total Purge Time Start: OBSERVATIONS Notes:
300 St. Roches Telephin Facsim WEL	Well ] Depth Meass Pump	Time	Total Purge 7.  OBSE  Notes:



#### ANALYTICAL REPORT

Lab Number: L1307284

Client: LaBella Associates, P.C.

300 Pearl Street

Suite 252

Buffalo, NY 14202

ATTN: Dan Riker Phone: (716) 551-6281

Project Name: DELLA PENNA

Project Number: 212645 Report Date: 04/30/13

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

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



L1307284

**Project Name: DELLA PENNA** 

**Project Number:** Report Date: 04/30/13 212645

Lab Number:

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1307284-01	BH2 10-12'	40-52 ELLICOTT ST BATAVIA, NY	04/23/13 11:00
L1307284-02	BH7 6-8'	40-52 ELLICOTT ST BATAVIA, NY	04/23/13 14:45
L1307284-03	TPMW 1	40-52 ELLICOTT ST BATAVIA, NY	04/23/13 13:00
L1307284-04	TPMW 2	40-52 ELLICOTT ST BATAVIA, NY	04/23/13 15:45



Project Name:DELLA PENNALab Number:L1307284Project Number:212645Report Date:04/30/13

#### **Case Narrative**

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for 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 free of charge for 30 days from the date the project is completed. After 30 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.

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



Project Name:DELLA PENNALab Number:L1307284Project Number:212645Report Date:04/30/13

## **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

L1307284-02 and -04 have elevated detection limits due to the dilutions required by the elevated concentrations of non-target compounds in the samples.

### Metals

L1307284-03 and -04 have elevated detection limits for all analytes, except Mercury, due to the dilution required by matrix interferences encountered during analysis.

L1307284-03 and -04 have elevated detection limits due to the prep dilutiond required by the sample matrices. The WG604181-4 MS recovery, performed on L1307284-01, is below the acceptance criteria for Lead (56%). A post digestion spike was performed with an unacceptable recovery of 79%. This has been attributed to sample matrix.

The WG604181-3 Laboratory Duplicate RPD, performed on L1307284-01, is outside the acceptance criteria for Lead (99%). The elevated RPD has been attributed to the non-homogeneous nature of the sample utilized for the Laboratory Duplicate.

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:

Title: Technical Director/Representative Date: 04/30/13

Cypellia fin the Cynthia McQueen

ALPHA

# **ORGANICS**



# **VOLATILES**



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

SAMPLE RESULTS

Lab ID: L1307284-01 Date Collected: 04/23/13 11:00

Client ID: BH2 10-12' Date Received: 04/23/13
Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY
Matrix: Soil

Analytical Method: 1,8260C Analytical Date: 04/27/13 03:44

Analyst: JC Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westb	orough Lab					
Methylene chloride	ND		ug/kg	11	2.2	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.19	1
Chloroform	ND		ug/kg	1.6	0.41	1
Carbon tetrachloride	ND		ug/kg	1.1	0.23	1
1,2-Dichloropropane	ND		ug/kg	3.8	0.25	1
Dibromochloromethane	ND		ug/kg	1.1	0.34	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.33	1
Tetrachloroethene	ND		ug/kg	1.1	0.15	1
Chlorobenzene	ND		ug/kg	1.1	0.38	1
Trichlorofluoromethane	ND		ug/kg	5.5	0.13	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.16	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.12	1
Bromodichloromethane	ND		ug/kg	1.1	0.25	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.14	1
1,1-Dichloropropene	ND		ug/kg	5.5	0.50	1
Bromoform	ND		ug/kg	4.4	0.46	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.19	1
Benzene	ND		ug/kg	1.1	0.13	1
Toluene	ND		ug/kg	1.6	0.12	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	5.5	0.86	1
Bromomethane	ND		ug/kg	2.2	0.37	1
Vinyl chloride	ND		ug/kg	2.2	0.15	1
Chloroethane	ND		ug/kg	2.2	0.35	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.23	1
Trichloroethene	ND		ug/kg	1.1	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	5.5	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	5.5	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	5.5	0.26	1



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-01 Date Collected: 04/23/13 11:00

Client ID: Date Received: 04/23/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westbor						
. claime enganines by element in conservation						
Methyl tert butyl ether	ND		ug/kg	2.2	0.11	1
p/m-Xylene	ND		ug/kg	2.2	0.35	1
o-Xylene	ND		ug/kg	2.2	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1
Dibromomethane	ND		ug/kg	11	0.18	1
Styrene	ND		ug/kg	2.2	0.34	1
Dichlorodifluoromethane	ND		ug/kg	11	0.24	1
Acetone	ND		ug/kg	11	3.4	1
Carbon disulfide	ND		ug/kg	11	2.2	1
2-Butanone	ND		ug/kg	11	0.39	1
Vinyl acetate	ND		ug/kg	11	0.53	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.27	1
1,2,3-Trichloropropane	ND		ug/kg	11	0.25	1
2-Hexanone	ND		ug/kg	11	0.21	1
Bromochloromethane	ND		ug/kg	5.5	0.22	1
2,2-Dichloropropane	ND		ug/kg	5.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	4.4	0.20	1
1,3-Dichloropropane	ND		ug/kg	5.5	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.1	0.35	1
Bromobenzene	ND		ug/kg	5.5	0.23	1
n-Butylbenzene	ND		ug/kg	1.1	0.22	1
sec-Butylbenzene	ND		ug/kg	1.1	0.22	1
tert-Butylbenzene	ND		ug/kg	5.5	0.62	1
o-Chlorotoluene	ND		ug/kg	5.5	0.18	1
p-Chlorotoluene	ND		ug/kg	5.5	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.5	0.87	1
Hexachlorobutadiene	ND		ug/kg	5.5	0.46	1
Isopropylbenzene	ND		ug/kg	1.1	0.18	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.21	1
Naphthalene	ND		ug/kg	5.5	0.84	1
Acrylonitrile	ND		ug/kg	11	0.26	1
n-Propylbenzene	ND		ug/kg	1.1	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.5	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.5	0.87	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.5	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.5	0.63	1
1,4-Dioxane	ND		ug/kg	110	19.	1
1,4-Diethylbenzene	0.28	J	ug/kg	4.4	0.18	1
4-Ethyltoluene	ND		ug/kg	4.4	0.13	1



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-01 Date Collected: 04/23/13 11:00

Client ID: BH2 10-12' Date Received: 04/23/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough La	b					
1,2,4,5-Tetramethylbenzene	0.27	J	ug/kg	4.4	0.14	1
Ethyl ether	ND		ug/kg	5.5	0.29	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.5	0.49	1

			Acceptance	
Surrogate	% Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	98		70-130	
Toluene-d8	99		70-130	
4-Bromofluorobenzene	115		70-130	
Dibromofluoromethane	96		70-130	



04/23/13

Not Specified

Date Received:

Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-02 D Date Collected: 04/23/13 14:45

Client ID: BH7 6-8'

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/27/13 16:21

Analyst: JC Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westbo	orough Lab					
Methylene chloride	270	J	ug/kg	1200	240	100
1,1-Dichloroethane	ND		ug/kg	180	21.	100
Chloroform	ND		ug/kg	180	44.	100
Carbon tetrachloride	ND		ug/kg	120	25.	100
1,2-Dichloropropane	ND		ug/kg	410	27.	100
Dibromochloromethane	ND		ug/kg	120	36.	100
1,1,2-Trichloroethane	ND		ug/kg	180	36.	100
Tetrachloroethene	ND		ug/kg	120	16.	100
Chlorobenzene	ND		ug/kg	120	41.	100
Trichlorofluoromethane	ND		ug/kg	590	14.	100
1,2-Dichloroethane	ND		ug/kg	120	17.	100
1,1,1-Trichloroethane	ND		ug/kg	120	13.	100
Bromodichloromethane	ND		ug/kg	120	27.	100
trans-1,3-Dichloropropene	ND		ug/kg	120	14.	100
cis-1,3-Dichloropropene	ND		ug/kg	120	15.	100
1,1-Dichloropropene	ND		ug/kg	590	54.	100
Bromoform	ND		ug/kg	470	49.	100
1,1,2,2-Tetrachloroethane	ND		ug/kg	120	20.	100
Benzene	ND		ug/kg	120	14.	100
Toluene	ND		ug/kg	180	13.	100
Ethylbenzene	ND		ug/kg	120	17.	100
Chloromethane	ND		ug/kg	590	92.	100
Bromomethane	ND		ug/kg	240	40.	100
Vinyl chloride	ND		ug/kg	240	17.	100
Chloroethane	ND		ug/kg	240	37.	100
1,1-Dichloroethene	ND		ug/kg	120	24.	100
trans-1,2-Dichloroethene	ND		ug/kg	180	25.	100
Trichloroethene	ND		ug/kg	120	18.	100
1,2-Dichlorobenzene	ND		ug/kg	590	22.	100
1,3-Dichlorobenzene	ND		ug/kg	590	22.	100
1,4-Dichlorobenzene	ND		ug/kg	590	28.	100



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

SAMPLE RESULTS

Lab ID: L1307284-02 D Date Collected: 04/23/13 14:45

Client ID: BH7 6-8' Date Received: 04/23/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Facto
Volatile Organics by GC/MS - Westbo		<b>QUALITIES</b>	Onits	NL	HIDE	Direction 1 acto
Volatile Organies by Convident Wester	orough Lab					
Methyl tert butyl ether	ND		ug/kg	240	12.	100
p/m-Xylene	ND		ug/kg	240	38.	100
o-Xylene	ND		ug/kg	240	32.	100
cis-1,2-Dichloroethene	ND		ug/kg	120	18.	100
Dibromomethane	ND		ug/kg	1200	19.	100
Styrene	ND		ug/kg	240	36.	100
Dichlorodifluoromethane	ND		ug/kg	1200	26.	100
Acetone	ND		ug/kg	1200	360	100
Carbon disulfide	ND		ug/kg	1200	240	100
2-Butanone	ND		ug/kg	1200	42.	100
Vinyl acetate	ND		ug/kg	1200	56.	100
4-Methyl-2-pentanone	ND		ug/kg	1200	29.	100
1,2,3-Trichloropropane	ND		ug/kg	1200	26.	100
2-Hexanone	ND		ug/kg	1200	22.	100
Bromochloromethane	ND		ug/kg	590	23.	100
2,2-Dichloropropane	ND		ug/kg	590	26.	100
1,2-Dibromoethane	ND		ug/kg	470	21.	100
1,3-Dichloropropane	ND		ug/kg	590	20.	100
1,1,1,2-Tetrachloroethane	ND		ug/kg	120	37.	100
Bromobenzene	ND		ug/kg	590	24.	100
n-Butylbenzene	100	J	ug/kg	120	23.	100
sec-Butylbenzene	200		ug/kg	120	24.	100
tert-Butylbenzene	ND		ug/kg	590	66.	100
o-Chlorotoluene	ND		ug/kg	590	19.	100
p-Chlorotoluene	ND		ug/kg	590	18.	100
1,2-Dibromo-3-chloropropane	ND		ug/kg	590	93.	100
Hexachlorobutadiene	ND		ug/kg	590	50.	100
Isopropylbenzene	ND		ug/kg	120	20.	100
p-Isopropyltoluene	ND		ug/kg	120	22.	100
Naphthalene	ND		ug/kg	590	90.	100
Acrylonitrile	ND		ug/kg	1200	28.	100
n-Propylbenzene	180		ug/kg	120	15.	100
1,2,3-Trichlorobenzene	ND		ug/kg	590	20.	100
1,2,4-Trichlorobenzene	ND		ug/kg	590	93.	100
1,3,5-Trimethylbenzene	ND		ug/kg	590	17.	100
1,2,4-Trimethylbenzene	ND		ug/kg	590	67.	100
1,4-Dioxane	ND		ug/kg	12000	2000	100
1,4-Diethylbenzene	ND		ug/kg	470	19.	100
4-Ethyltoluene	ND		ug/kg	470	14.	100



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-02 D Date Collected: 04/23/13 14:45

Client ID: BH7 6-8' Date Received: 04/23/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough I	_ab					
1,2,4,5-Tetramethylbenzene	1000		ug/kg	470	15.	100
Ethyl ether	ND		ug/kg	590	31.	100
trans-1,4-Dichloro-2-butene	ND		ug/kg	590	53.	100

			Acceptance	
Surrogate	% Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	98		70-130	
Toluene-d8	108		70-130	
4-Bromofluorobenzene	113		70-130	
Dibromofluoromethane	97		70-130	



04/23/13

Date Received:

Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-03 D Date Collected: 04/23/13 13:00

Client ID: TPMW 1

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/29/13 12:40

Analyst: TR

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westb	oorough Lab					
Methylene chloride	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethane	ND		ug/l	6.2	1.8	2.5
Chloroform	ND		ug/l	6.2	1.8	2.5
Carbon tetrachloride	ND		ug/l	1.2	0.41	2.5
1,2-Dichloropropane	ND		ug/l	2.5	0.74	2.5
Dibromochloromethane	ND		ug/l	1.2	0.47	2.5
1,1,2-Trichloroethane	ND		ug/l	3.8	1.2	2.5
Tetrachloroethene	ND		ug/l	1.2	0.45	2.5
Chlorobenzene	ND		ug/l	6.2	1.8	2.5
Trichlorofluoromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dichloroethane	ND		ug/l	1.2	0.40	2.5
1,1,1-Trichloroethane	ND		ug/l	6.2	1.8	2.5
Bromodichloromethane	ND		ug/l	1.2	0.48	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	0.41	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	0.36	2.5
1,1-Dichloropropene	ND		ug/l	6.2	1.8	2.5
Bromoform	ND		ug/l	5.0	1.6	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	0.48	2.5
Benzene	0.93	J	ug/l	1.2	0.48	2.5
Toluene	ND		ug/l	6.2	1.8	2.5
Ethylbenzene	ND		ug/l	6.2	1.8	2.5
Chloromethane	ND		ug/l	6.2	1.8	2.5
Bromomethane	ND		ug/l	6.2	1.8	2.5
Vinyl chloride	ND		ug/l	2.5	0.82	2.5
Chloroethane	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethene	ND		ug/l	1.2	0.45	2.5
trans-1,2-Dichloroethene	ND		ug/l	6.2	1.8	2.5
Trichloroethene	ND		ug/l	1.2	0.44	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,3-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-03 D Date Collected: 04/23/13 13:00

Client ID: TPMW 1 Date Received: 04/23/13

Sample Location.	40 32 EEE10011 01 DA1	COTT OT BATAVIA, INT			rield riep.		Not Specified	
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Facto	
Volatile Organics by G	C/MS - Westborough Lab							
Methyl tert butyl ether		ND		ug/l	6.2	1.8	2.5	
p/m-Xylene		ND		ug/l	6.2	1.8	2.5	
o-Xylene		ND		ug/l	6.2	1.8	2.5	
cis-1,2-Dichloroethene		ND		ug/l	6.2	1.8	2.5	
Dibromomethane		ND		ug/l	12	2.5	2.5	
1,2,3-Trichloropropane		ND		ug/l	6.2	1.8	2.5	
Acrylonitrile		ND		ug/l	12	3.8	2.5	
Styrene		ND		ug/l	6.2	1.8	2.5	
Dichlorodifluoromethane		ND		ug/l	12	2.5	2.5	
Acetone		4.5	J	ug/l	12	2.5	2.5	
Carbon disulfide		ND		ug/l	12	2.5	2.5	
2-Butanone		3.5	J	ug/l	12	2.5	2.5	
Vinyl acetate		ND		ug/l	12	2.5	2.5	
4-Methyl-2-pentanone		ND		ug/l	12	2.5	2.5	
2-Hexanone		ND		ug/l	12	2.5	2.5	
Bromochloromethane		ND		ug/l	6.2	1.8	2.5	
2,2-Dichloropropane		ND		ug/l	6.2	1.8	2.5	
,2-Dibromoethane		ND		ug/l	5.0	1.6	2.5	
,3-Dichloropropane		ND		ug/l	6.2	1.8	2.5	
,1,1,2-Tetrachloroethane		ND		ug/l	6.2	1.8	2.5	
Bromobenzene		ND		ug/l	6.2	1.8	2.5	
n-Butylbenzene		ND		ug/l	6.2	1.8	2.5	
sec-Butylbenzene		1.8	J	ug/l	6.2	1.8	2.5	
ert-Butylbenzene		ND		ug/l	6.2	1.8	2.5	
o-Chlorotoluene		ND		ug/l	6.2	1.8	2.5	
o-Chlorotoluene		ND		ug/l	6.2	1.8	2.5	
,2-Dibromo-3-chloropropar	ie	ND		ug/l	6.2	1.8	2.5	
Hexachlorobutadiene		ND		ug/l	6.2	1.8	2.5	
sopropylbenzene		16		ug/l	6.2	1.8	2.5	
o-Isopropyltoluene		ND		ug/l	6.2	1.8	2.5	
Naphthalene		100		ug/l	6.2	1.8	2.5	
n-Propylbenzene		19		ug/l	6.2	1.8	2.5	
,2,3-Trichlorobenzene		ND		ug/l	6.2	1.8	2.5	
,2,4-Trichlorobenzene		ND		ug/l	6.2	1.8	2.5	
,3,5-Trimethylbenzene		ND		ug/l	6.2	1.8	2.5	
,2,4-Trimethylbenzene		ND		ug/l	6.2	1.8	2.5	
1,4-Dioxane		ND		ug/l	620	190	2.5	
,4-Diethylbenzene		4.9	J	ug/l	5.0	1.8	2.5	
4-Ethyltoluene		ND		ug/l	5.0	1.8	2.5	



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-03 D Date Collected: 04/23/13 13:00

Client ID: TPMW 1 Date Received: 04/23/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborou	ugh Lab					
1,2,4,5-Tetramethylbenzene	28		ug/l	5.0	1.6	2.5
Ethyl ether	ND		ug/l	6.2	1.8	2.5
trans-1,4-Dichloro-2-butene	ND		ug/l	6.2	1.8	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	102		70-130	
Toluene-d8	100		70-130	
4-Bromofluorobenzene	98		70-130	
Dibromofluoromethane	99		70-130	



04/23/13

**Project Name:** Lab Number: **DELLA PENNA** L1307284

**Project Number:** Report Date: 212645 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-04 D Date Collected: 04/23/13 15:45

Client ID: Date Received: TPMW 2

Field Prep: Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Not Specified

Matrix: Water Analytical Method: 1,8260C

Analytical Date: 04/29/13 13:06

Analyst: TR

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westbo	rough Lab					
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.6	10
1,2-Dichloropropane	ND		ug/l	10	3.0	10
Dibromochloromethane	ND		ug/l	5.0	1.9	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.6	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
1,1-Dichloropropene	ND		ug/l	25	7.0	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.9	10
Benzene	ND		ug/l	5.0	1.9	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	3.3	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.8	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Trichloroethene	ND		ug/l	5.0	1.7	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10
1,3-Dichlorobenzene	ND		ug/l	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-04 D Date Collected: 04/23/13 15:45

Client ID: TPMW 2 Date Received: 04/23/13

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Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-04 D Date Collected: 04/23/13 15:45

Client ID: TPMW 2 Date Received: 04/23/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lal	b					
1,2,4,5-Tetramethylbenzene	63		ug/l	20	6.5	10
Ethyl ether	ND		ug/l	25	7.0	10
trans-1,4-Dichloro-2-butene	ND		ug/l	25	7.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	100		70-130	
Toluene-d8	104		70-130	
4-Bromofluorobenzene	104		70-130	
Dibromofluoromethane	100		70-130	



Project Name:DELLA PENNALab Number:L1307284

Project Number: 212645 Report Date: 04/30/13

## Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/26/13 19:31

Analyst: JC

arameter	Result	Qualifier	Units		RL	MDL
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	01	Batch:	WG6044	77-3
Methylene chloride	ND		ug/kg		10	2.0
1,1-Dichloroethane	ND		ug/kg		1.5	0.18
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	0.31
2-Chloroethylvinyl ether	ND		ug/kg		20	0.62
1,1,2-Trichloroethane	ND		ug/kg		1.5	0.30
Tetrachloroethene	ND		ug/kg		1.0	0.14
Chlorobenzene	ND		ug/kg		1.0	0.35
Trichlorofluoromethane	ND		ug/kg		5.0	0.12
1,2-Dichloroethane	ND		ug/kg		1.0	0.15
1,1,1-Trichloroethane	ND		ug/kg		1.0	0.11
Bromodichloromethane	ND		ug/kg		1.0	0.23
trans-1,3-Dichloropropene	ND		ug/kg		1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg		1.0	0.13
1,1-Dichloropropene	ND		ug/kg		5.0	0.46
Bromoform	ND		ug/kg		4.0	0.41
1,1,2,2-Tetrachloroethane	ND		ug/kg		1.0	0.17
Benzene	ND		ug/kg		1.0	0.12
Toluene	ND		ug/kg		1.5	0.11
Ethylbenzene	ND		ug/kg		1.0	0.15
Chloromethane	ND		ug/kg		5.0	0.78
Bromomethane	ND		ug/kg		2.0	0.34
Vinyl chloride	ND		ug/kg		2.0	0.14
Chloroethane	ND		ug/kg		2.0	0.32
1,1-Dichloroethene	ND		ug/kg		1.0	0.20
trans-1,2-Dichloroethene	ND		ug/kg		1.5	0.21
Trichloroethene	ND		ug/kg		1.0	0.15
1,2-Dichlorobenzene	ND		ug/kg		5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg		5.0	0.18



Project Name:DELLA PENNALab Number:L1307284

Project Number: 212645 Report Date: 04/30/13

## Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/26/13 19:31

Analyst: JC

arameter	Result	Qualifier Un	its	RL	MDL
olatile Organics by GC/MS - V	Vestborough Lab	o for sample(s): 0	1 Batch:	WG604	1477-3
1,4-Dichlorobenzene	ND	ug	/kg	5.0	0.24
Methyl tert butyl ether	ND	ug	/kg	2.0	0.10
p/m-Xylene	ND	ug	/kg	2.0	0.32
o-Xylene	ND	ug	/kg	2.0	0.27
cis-1,2-Dichloroethene	ND	ug	/kg	1.0	0.15
Dibromomethane	ND	ug	/kg	10	0.16
Styrene	ND	ug	/kg	2.0	0.31
Dichlorodifluoromethane	ND	ug	/kg	10	0.22
Acetone	ND	ug	/kg	10	3.1
Carbon disulfide	ND	ug	/kg	10	2.0
2-Butanone	ND	ug	/kg	10	0.36
Vinyl acetate	ND	ug	/kg	10	0.48
4-Methyl-2-pentanone	ND	ug	/kg	10	0.24
1,2,3-Trichloropropane	ND	ug	/kg	10	0.22
2-Hexanone	ND	ug	/kg	10	0.19
Bromochloromethane	ND	ug	/kg	5.0	0.20
2,2-Dichloropropane	ND	ug	/kg	5.0	0.22
1,2-Dibromoethane	ND	ug	/kg	4.0	0.18
1,3-Dichloropropane	ND	ug	/kg	5.0	0.17
1,1,1,2-Tetrachloroethane	ND	ug	/kg	1.0	0.32
Bromobenzene	ND	ug	/kg	5.0	0.21
n-Butylbenzene	ND	ug	/kg	1.0	0.20
sec-Butylbenzene	ND	ug	/kg	1.0	0.20
tert-Butylbenzene	ND	ug	/kg	5.0	0.56
o-Chlorotoluene	ND	ug	/kg	5.0	0.16
p-Chlorotoluene	ND	ug	/kg	5.0	0.15
1,2-Dibromo-3-chloropropane	ND	ug	/kg	5.0	0.79
Hexachlorobutadiene	ND	ug	/kg	5.0	0.42
Isopropylbenzene	ND	ug	/kg	1.0	0.17
p-Isopropyltoluene	ND	ug	/kg	1.0	0.19
Naphthalene	ND	ug	/kg	5.0	0.77



Project Number: 212645 Report Date: 04/30/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/26/13 19:31

arameter	Result	Qualifier	Units		RL	MDL
olatile Organics by GC/MS - Wes	tborough Lab	for sample(s):	01	Batch:	WG604477	-3
Acrylonitrile	ND		ug/kg		10	0.24
Isopropyl Ether	ND		ug/kg		4.0	0.14
tert-Butyl Alcohol	ND		ug/kg		60	0.91
n-Propylbenzene	ND		ug/kg		1.0	0.12
1,2,3-Trichlorobenzene	ND		ug/kg		5.0	0.17
1,2,4-Trichlorobenzene	ND		ug/kg		5.0	0.79
1,3,5-Trimethylbenzene	ND		ug/kg		5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg		5.0	0.57
Methyl Acetate	ND		ug/kg		20	0.76
Ethyl Acetate	ND		ug/kg		20	0.82
Acrolein	ND		ug/kg		25	9.2
Cyclohexane	ND		ug/kg		20	1.1
1,4-Dioxane	ND		ug/kg		100	17.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg		20	0.27
1,4-Diethylbenzene	ND		ug/kg		4.0	0.16
4-Ethyltoluene	ND		ug/kg		4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg		4.0	0.13
Tetrahydrofuran	ND		ug/kg		20	0.38
Ethyl ether	ND		ug/kg		5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg		5.0	0.45
Methyl cyclohexane	ND		ug/kg		4.0	1.3
Ethyl-Tert-Butyl-Ether	ND		ug/kg		4.0	0.42
Tertiary-Amyl Methyl Ether	ND		ug/kg		4.0	0.58



Project Number: 212645 Report Date: 04/30/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/26/13 19:31

Analyst: JC

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG604477-3

			Acceptance	
Surrogate	%Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	98		70-130	
Toluene-d8	97		70-130	
4-Bromofluorobenzene	98		70-130	
Dibromofluoromethane	97		70-130	



Project Number: 212645 Report Date: 04/30/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/29/13 10:35

Analyst: TR

arameter	Result	Qualifier	Units	RL	MDL
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	03-04	Batch: WG	604698-3
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
2-Chloroethylvinyl ether	ND		ug/l	10	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.16
1,2-Dichloropropane	ND		ug/l	1.0	0.30
Dibromochloromethane	ND		ug/l	0.50	0.19
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.16
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19
Benzene	ND		ug/l	0.50	0.19
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.33
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.18
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.17
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70



**Project Number:** 212645 **Report Date:** 04/30/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/29/13 10:35

Analyst: TR

arameter	Result	Qualifier	Units	RL	MDL
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	03-04	Batch: WG60	)4698-3
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Isopropyl Ether	ND		ug/l	2.0	0.65
tert-Butyl Alcohol	ND		ug/l	10	0.90
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.0
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.0
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70



**Project Name: DELLA PENNA**  L1307284

Lab Number:

**Project Number:** 212645 **Report Date:** 04/30/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/29/13 10:35

Analyst: TR

arameter	Result	Qualifier	Units	RL	MDL
olatile Organics by GC/MS - Wes	tborough Lab	for sample(s):	03-04	Batch: WG60	04698-3
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.38
Ethyl Acetate	ND		ug/l	10	0.70
Cyclohexane	ND		ug/l	10	0.54
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.5	0.70
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	0.38
1,4-Dioxane	ND		ug/l	250	76.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.70
1,4-Diethylbenzene	ND		ug/l	2.0	0.70
4-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Tetrahydrofuran	ND		ug/l	5.0	1.5
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.63

Tentatively Identified Compounds

ND No Tentatively Identified Compounds ug/l



Project Number: 212645 Report Date: 04/30/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/29/13 10:35

Analyst: TR

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 03-04 Batch: WG604698-3

			Acceptance			
Surrogate	%Recovery	Qualifier	Criteria			
1,2-Dichloroethane-d4	102		70-130			
Toluene-d8	101		70-130			
4-Bromofluorobenzene	99		70-130			
Dibromofluoromethane	100		70-130			



Project Number: 212645 Report Date: 04/30/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/27/13 14:01

arameter	Result	Qualifier	Units		RL	MDL
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	02	Batch:	WG604	920-3
Methylene chloride	ND		ug/kg		10	2.0
1,1-Dichloroethane	ND		ug/kg		1.5	0.18
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	0.31
2-Chloroethylvinyl ether	ND		ug/kg		20	0.62
1,1,2-Trichloroethane	ND		ug/kg		1.5	0.30
Tetrachloroethene	ND		ug/kg		1.0	0.14
Chlorobenzene	ND		ug/kg		1.0	0.35
Trichlorofluoromethane	ND		ug/kg		5.0	0.12
1,2-Dichloroethane	ND		ug/kg		1.0	0.15
1,1,1-Trichloroethane	ND		ug/kg		1.0	0.11
Bromodichloromethane	ND		ug/kg		1.0	0.23
trans-1,3-Dichloropropene	ND		ug/kg		1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg		1.0	0.13
1,1-Dichloropropene	ND		ug/kg		5.0	0.46
Bromoform	ND		ug/kg		4.0	0.41
1,1,2,2-Tetrachloroethane	ND		ug/kg		1.0	0.17
Benzene	ND		ug/kg		1.0	0.12
Toluene	ND		ug/kg		1.5	0.11
Ethylbenzene	ND		ug/kg		1.0	0.15
Chloromethane	ND		ug/kg		5.0	0.78
Bromomethane	ND		ug/kg		2.0	0.34
Vinyl chloride	ND		ug/kg		2.0	0.14
Chloroethane	ND		ug/kg		2.0	0.32
1,1-Dichloroethene	ND		ug/kg		1.0	0.20
trans-1,2-Dichloroethene	ND		ug/kg		1.5	0.21
Trichloroethene	ND		ug/kg		1.0	0.15
1,2-Dichlorobenzene	ND		ug/kg		5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg		5.0	0.18



Project Number: 212645 Report Date: 04/30/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/27/13 14:01

arameter	Result	Qualifier	Units		RL	MDL
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	02	Batch:	WG60492	0-3
1,4-Dichlorobenzene	ND		ug/kg		5.0	0.24
Methyl tert butyl ether	ND		ug/kg		2.0	0.10
p/m-Xylene	ND		ug/kg		2.0	0.32
o-Xylene	ND		ug/kg		2.0	0.27
cis-1,2-Dichloroethene	ND		ug/kg		1.0	0.15
Dibromomethane	ND		ug/kg		10	0.16
Styrene	ND		ug/kg		2.0	0.31
Dichlorodifluoromethane	ND		ug/kg		10	0.22
Acetone	ND		ug/kg		10	3.1
Carbon disulfide	ND		ug/kg		10	2.0
2-Butanone	ND		ug/kg		10	0.36
Vinyl acetate	ND		ug/kg		10	0.48
4-Methyl-2-pentanone	ND		ug/kg		10	0.24
1,2,3-Trichloropropane	ND		ug/kg		10	0.22
2-Hexanone	ND		ug/kg		10	0.19
Bromochloromethane	ND		ug/kg		5.0	0.20
2,2-Dichloropropane	ND		ug/kg		5.0	0.22
1,2-Dibromoethane	ND		ug/kg		4.0	0.18
1,3-Dichloropropane	ND		ug/kg		5.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg		1.0	0.32
Bromobenzene	ND		ug/kg		5.0	0.21
n-Butylbenzene	ND		ug/kg		1.0	0.20
sec-Butylbenzene	ND		ug/kg		1.0	0.20
tert-Butylbenzene	ND		ug/kg		5.0	0.56
o-Chlorotoluene	ND		ug/kg		5.0	0.16
p-Chlorotoluene	ND		ug/kg		5.0	0.15
1,2-Dibromo-3-chloropropane	ND		ug/kg		5.0	0.79
Hexachlorobutadiene	ND		ug/kg		5.0	0.42
Isopropylbenzene	ND		ug/kg		1.0	0.17
p-Isopropyltoluene	ND		ug/kg		1.0	0.19
Naphthalene	ND		ug/kg		5.0	0.77



Project Number: 212645 Report Date: 04/30/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/27/13 14:01

Parameter	Result	Qualifier	Units		RL	MDL
olatile Organics by GC/MS - Wes	tborough Lab	for sample(s):	02	Batch:	WG604	920-3
Acrylonitrile	ND		ug/kg		10	0.24
Isopropyl Ether	ND		ug/kg		4.0	0.14
tert-Butyl Alcohol	ND		ug/kg		60	0.91
n-Propylbenzene	ND		ug/kg		1.0	0.12
1,2,3-Trichlorobenzene	ND		ug/kg		5.0	0.17
1,2,4-Trichlorobenzene	ND		ug/kg		5.0	0.79
1,3,5-Trimethylbenzene	ND		ug/kg		5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg		5.0	0.57
Methyl Acetate	ND		ug/kg		20	0.76
Ethyl Acetate	ND		ug/kg		20	0.82
Acrolein	ND		ug/kg		25	9.2
Cyclohexane	ND		ug/kg		20	1.1
1,4-Dioxane	ND		ug/kg		100	17.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg		20	0.27
1,4-Diethylbenzene	ND		ug/kg		4.0	0.16
4-Ethyltoluene	ND		ug/kg		4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg		4.0	0.13
Tetrahydrofuran	ND		ug/kg		20	0.38
Ethyl ether	ND		ug/kg		5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg		5.0	0.45
Methyl cyclohexane	ND		ug/kg		4.0	1.3
Ethyl-Tert-Butyl-Ether	ND		ug/kg		4.0	0.42
Tertiary-Amyl Methyl Ether	ND		ug/kg		4.0	0.58



Project Number: 212645 Report Date: 04/30/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/27/13 14:01

Analyst: JC

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG604920-3

			Acceptance	
Surrogate	%Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	99		70-130	
Toluene-d8	97		70-130	
4-Bromofluorobenzene	98		70-130	
Dibromofluoromethane	99		70-130	



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	01 Batch: V	VG604477-1	WG604477-2			
Methylene chloride	90		100		70-130	11		30
1,1-Dichloroethane	92		103		70-130	11		30
Chloroform	92		102		70-130	10		30
Carbon tetrachloride	95		105		70-130	10		30
1,2-Dichloropropane	91		104		70-130	13		30
Dibromochloromethane	87		99		70-130	13		30
2-Chloroethylvinyl ether	94		104			10		30
1,1,2-Trichloroethane	89		101		70-130	13		30
Tetrachloroethene	90		102		70-130	13		30
Chlorobenzene	87		100		70-130	14		30
Trichlorofluoromethane	101		111		70-139	9		30
1,2-Dichloroethane	93		103		70-130	10		30
1,1,1-Trichloroethane	94		104		70-130	10		30
Bromodichloromethane	91		103		70-130	12		30
trans-1,3-Dichloropropene	89		100		70-130	12		30
cis-1,3-Dichloropropene	92		102		70-130	10		30
1,1-Dichloropropene	93		106		70-130	13		30
Bromoform	84		96		70-130	13		30
1,1,2,2-Tetrachloroethane	85		97		70-130	13		30
Benzene	92		103		70-130	11		30
Toluene	87		98		70-130	12		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

arameter	LCS %Recovery	Qual	LCSD %Recovery	v Qual	%Recovery Limits	RPD	Qual	RPD Limits
/olatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	01 Batch: \	WG604477-1	WG604477-2			
Ethylbenzene	89		101		70-130	13		30
Chloromethane	91		101		52-130	10		30
Bromomethane	102		108		57-147	6		30
Vinyl chloride	90		99		67-130	10		30
Chloroethane	92		101		50-151	9		30
1,1-Dichloroethene	94		104		65-135	10		30
trans-1,2-Dichloroethene	90		103		70-130	13		30
Trichloroethene	94		105		70-130	11		30
1,2-Dichlorobenzene	85		98		70-130	14		30
1,3-Dichlorobenzene	86		100		70-130	15		30
1,4-Dichlorobenzene	85		99		70-130	15		30
Methyl tert butyl ether	90		101		66-130	12		30
p/m-Xylene	89		102		70-130	14		30
o-Xylene	89		102		70-130	14		30
cis-1,2-Dichloroethene	92		103		70-130	11		30
Dibromomethane	93		104		70-130	11		30
Styrene	89		102		70-130	14		30
Dichlorodifluoromethane	100		110		30-146	10		30
Acetone	142	Q	149	Q	54-140	5		30
Carbon disulfide	90		102		59-130	13		30
2-Butanone	143	Q	139	Q	70-130	3		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by GC/MS - Westborough L	_ab Associated	sample(s):	01 Batch: We	G604477-1	WG604477-2			
Vinyl acetate	94		105		70-130	11		30
4-Methyl-2-pentanone	96		105		70-130	9		30
1,2,3-Trichloropropane	85		97		68-130	13		30
2-Hexanone	111		111		70-130	0		30
Bromochloromethane	95		106		70-130	11		30
2,2-Dichloropropane	95		104		70-130	9		30
1,2-Dibromoethane	86		98		70-130	13		30
1,3-Dichloropropane	88		98		69-130	11		30
1,1,1,2-Tetrachloroethane	88		99		70-130	12		30
Bromobenzene	85		98		70-130	14		30
n-Butylbenzene	88		102		70-130	15		30
sec-Butylbenzene	87		100		70-130	14		30
tert-Butylbenzene	87		100		70-130	14		30
o-Chlorotoluene	83		96		70-130	15		30
p-Chlorotoluene	85		98		70-130	14		30
1,2-Dibromo-3-chloropropane	89		103		68-130	15		30
Hexachlorobutadiene	88		98		67-130	11		30
Isopropylbenzene	89		100		70-130	12		30
p-Isopropyltoluene	88		101		70-130	14		30
Naphthalene	86		95		70-130	10		30
Acrylonitrile	96		111		70-130	14		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

ırameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
platile Organics by GC/MS - Westborough	Lab Associated	sample(s):	01 Batch: \	NG604477-1	WG604477-2			
Isopropyl Ether	91		104		66-130	13		30
tert-Butyl Alcohol	90		99		70-130	10		30
n-Propylbenzene	86		100		70-130	15		30
1,2,3-Trichlorobenzene	86		98		70-130	13		30
1,2,4-Trichlorobenzene	87		98		70-130	12		30
1,3,5-Trimethylbenzene	87		100		70-130	14		30
1,2,4-Trimethylbenzene	86		99		70-130	14		30
Methyl Acetate	92		103		51-146	11		30
Ethyl Acetate	95		100		70-130	5		30
Acrolein	27	Q	39	Q	70-130	36	Q	30
Cyclohexane	101		114		59-142	12		30
1,4-Dioxane	91		101		65-136	10		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	102		114		50-139	11		30
1,4-Diethylbenzene	94		105		70-130	11		30
4-Ethyltoluene	94		105		70-130	11		30
1,2,4,5-Tetramethylbenzene	94		105		70-130	11		30
Tetrahydrofuran	92		91		66-130	1		30
Ethyl ether	88		100		67-130	13		30
trans-1,4-Dichloro-2-butene	90		100		70-130	11		30
Methyl cyclohexane	101		113		70-130	11		30
Ethyl-Tert-Butyl-Ether	92		103		70-130	11		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

Parameter	LCS %Recovery	Qual	LCSD %Recove	ry Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westboroug	h Lab Associated	sample(s):	01 Batch:	WG604477-1	WG604477-2			
Tertiary-Amyl Methyl Ether	91		102		70-130	11		30

	LCS		LCSD		Acceptance	
Surrogate	%Recovery	Qual	%Recovery	Qual	Criteria	
1,2-Dichloroethane-d4	101		99		70-130	
Toluene-d8	97		98		70-130	
4-Bromofluorobenzene	98		99		70-130	
Dibromofluoromethane	100		99		70-130	

olatile Organics by GC/MS - Westborough La	ab Associated sample(s)	: 03-04 Batch:	WG604698-1 WG604698-2	2	
Methylene chloride	85	86	70-130	1	20
1,1-Dichloroethane	90	92	70-130	2	20
Chloroform	94	95	70-130	1	20
2-Chloroethylvinyl ether	77	76	70-130	1	20
Carbon tetrachloride	97	100	63-132	3	20
1,2-Dichloropropane	88	90	70-130	2	20
Dibromochloromethane	104	106	63-130	2	20
1,1,2-Trichloroethane	101	102	70-130	1	20
Tetrachloroethene	104	106	70-130	2	20



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

arameter	LCS %Recovery	Qual	LCSD %Recove		%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	03-04 Ba	ch: WG604698	3-1 WG604698-2			
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	96		99		62-150	3		20
1,2-Dichloroethane	95		95		70-130	0		20
1,1,1-Trichloroethane	95		98		67-130	3		20
Bromodichloromethane	94		95		67-130	1		20
trans-1,3-Dichloropropene	99		98		70-130	1		20
cis-1,3-Dichloropropene	93		93		70-130	0		20
1,1-Dichloropropene	93		94		70-130	1		20
Bromoform	101		102		54-136	1		20
1,1,2,2-Tetrachloroethane	102		101		67-130	1		20
Benzene	89		92		70-130	3		20
Toluene	98		100		70-130	2		20
Ethylbenzene	100		101		70-130	1		20
Chloromethane	86		82		64-130	5		20
Bromomethane	74		75		39-139	1		20
Vinyl chloride	87		88		55-140	1		20
Chloroethane	104		103		55-138	1		20
1,1-Dichloroethene	95		97		61-145	2		20
trans-1,2-Dichloroethene	92		95		70-130	3		20
Trichloroethene	89		93		70-130	4		20
1,2-Dichlorobenzene	100		102		70-130	2		20



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

Parameter	LCS %Recovery	Qual	LCSD %Recove		%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	03-04 Ba	ch: WG604698	3-1 WG604698-2			
1,3-Dichlorobenzene	102		102		70-130	0		20
1,4-Dichlorobenzene	100		102		70-130	2		20
Methyl tert butyl ether	89		89		63-130	0		20
p/m-Xylene	102		101		70-130	1		20
o-Xylene	101		103		70-130	2		20
cis-1,2-Dichloroethene	92		94		70-130	2		20
Dibromomethane	98		100		70-130	2		20
1,2,3-Trichloropropane	104		104		64-130	0		20
Acrylonitrile	88		87		70-130	1		20
Isopropyl Ether	84		85		70-130	1		20
tert-Butyl Alcohol	84		87		70-130	4		20
Styrene	102		103		70-130	1		20
Dichlorodifluoromethane	83		86		36-147	4		20
Acetone	81		83		58-148	2		20
Carbon disulfide	86		88		51-130	2		20
2-Butanone	76		76		63-138	0		20
Vinyl acetate	86		83		70-130	4		20
4-Methyl-2-pentanone	88		91		59-130	3		20
2-Hexanone	88		87		57-130	1		20
Bromochloromethane	97		101		70-130	4		20
2,2-Dichloropropane	96		96		63-133	0		20



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

Parameter	LCS %Recovery	Qual		CSD covery	% Qual	Recovery Limits	RPD	Qual	RPD Limits
/olatile Organics by GC/MS - Westborough	Lab Associated	sample(s):	03-04	Batch:	WG604698-1	WG604698-2			
1,2-Dibromoethane	103			102		70-130	1		20
1,3-Dichloropropane	100			100		70-130	0		20
1,1,1,2-Tetrachloroethane	100			100		64-130	0		20
Bromobenzene	102			104		70-130	2		20
n-Butylbenzene	98			102		53-136	4		20
sec-Butylbenzene	101			103		70-130	2		20
tert-Butylbenzene	101			102		70-130	1		20
o-Chlorotoluene	100			103		70-130	3		20
p-Chlorotoluene	99			99		70-130	0		20
1,2-Dibromo-3-chloropropane	95			98		41-144	3		20
Hexachlorobutadiene	100			100		63-130	0		20
Isopropylbenzene	102			104		70-130	2		20
p-Isopropyltoluene	100			102		70-130	2		20
Naphthalene	91			93		70-130	2		20
n-Propylbenzene	100			102		69-130	2		20
1,2,3-Trichlorobenzene	96			97		70-130	1		20
1,2,4-Trichlorobenzene	97			99		70-130	2		20
1,3,5-Trimethylbenzene	100			103		64-130	3		20
1,2,4-Trimethylbenzene	100			103		70-130	3		20
Methyl Acetate	89			88		70-130	1		20
Ethyl Acetate	82			80		70-130	2		20



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

ırameter	LCS %Recovery	Qual		CSD covery	% Qual	%Recovery Limits	RPD	Qual	RPD Limits
platile Organics by GC/MS - Westborough L	ab Associated	sample(s):	03-04	Batch:	WG604698-1	I WG604698-2			
Cyclohexane	88			90		70-130	2		20
Ethyl-Tert-Butyl-Ether	88			88		70-130	0		20
Tertiary-Amyl Methyl Ether	90			91		66-130	1		20
1,4-Dioxane	92			100		56-162	8		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	95			97		70-130	2		20
1,4-Diethylbenzene	97			99		70-130	2		20
4-Ethyltoluene	99			101		70-130	2		20
1,2,4,5-Tetramethylbenzene	95			98		70-130	3		20
Ethyl ether	89			90		59-134	1		20
trans-1,4-Dichloro-2-butene	92			89		70-130	3		20
Methyl cyclohexane	92			94		70-130	2		20

	LCS		LCSD		Acceptance	
Surrogate	%Recovery	Qual	%Recovery	Qual	Criteria	
1,2-Dichloroethane-d4	103		104		70-130	
Toluene-d8	104		104		70-130	
4-Bromofluorobenzene	97		98		70-130	
Dibromofluoromethane	101		102		70-130	



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	02 Batch: V	VG604920-1	WG604920-2			
Methylene chloride	97		90		70-130	7		30
1,1-Dichloroethane	97		89		70-130	9		30
Chloroform	100		92		70-130	8		30
Carbon tetrachloride	102		92		70-130	10		30
1,2-Dichloropropane	96		89		70-130	8		30
Dibromochloromethane	97		88		70-130	10		30
2-Chloroethylvinyl ether	99		90			10		30
1,1,2-Trichloroethane	96		89		70-130	8		30
Tetrachloroethene	96		86		70-130	11		30
Chlorobenzene	94		86		70-130	9		30
Trichlorofluoromethane	106		94		70-139	12		30
1,2-Dichloroethane	100		92		70-130	8		30
1,1,1-Trichloroethane	101		91		70-130	10		30
Bromodichloromethane	102		92		70-130	10		30
trans-1,3-Dichloropropene	98		89		70-130	10		30
cis-1,3-Dichloropropene	100		92		70-130	8		30
1,1-Dichloropropene	100		89		70-130	12		30
Bromoform	94		88		70-130	7		30
1,1,2,2-Tetrachloroethane	92		85		70-130	8		30
Benzene	97		90		70-130	7		30
Toluene	93		85		70-130	9		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	02 Batch: V	VG604920-1	WG604920-2			
Ethylbenzene	96		86		70-130	11		30
Chloromethane	87		79		52-130	10		30
Bromomethane	107		94		57-147	13		30
Vinyl chloride	92		84		67-130	9		30
Chloroethane	99		89		50-151	11		30
1,1-Dichloroethene	98		90		65-135	9		30
trans-1,2-Dichloroethene	97		87		70-130	11		30
Trichloroethene	100		91		70-130	9		30
1,2-Dichlorobenzene	92		85		70-130	8		30
1,3-Dichlorobenzene	94		87		70-130	8		30
1,4-Dichlorobenzene	92		85		70-130	8		30
Methyl tert butyl ether	101		91		66-130	10		30
p/m-Xylene	96		87		70-130	10		30
o-Xylene	96		87		70-130	10		30
cis-1,2-Dichloroethene	99		91		70-130	8		30
Dibromomethane	102		94		70-130	8		30
Styrene	98		88		70-130	11		30
Dichlorodifluoromethane	102		91		30-146	11		30
Acetone	136		134		54-140	1		30
Carbon disulfide	95		85		59-130	11		30
2-Butanone	114		107		70-130	6		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
/olatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	02 Batch: V	/G604920-1	WG604920-2			
Vinyl acetate	98		88		70-130	11		30
4-Methyl-2-pentanone	99		90		70-130	10		30
1,2,3-Trichloropropane	95		86		68-130	10		30
2-Hexanone	95		88		70-130	8		30
Bromochloromethane	104		95		70-130	9		30
2,2-Dichloropropane	100		90		70-130	11		30
1,2-Dibromoethane	97		88		70-130	10		30
1,3-Dichloropropane	95		86		69-130	10		30
1,1,1,2-Tetrachloroethane	97		88		70-130	10		30
Bromobenzene	93		86		70-130	8		30
n-Butylbenzene	93		85		70-130	9		30
sec-Butylbenzene	94		86		70-130	9		30
tert-Butylbenzene	94		86		70-130	9		30
o-Chlorotoluene	91		84		70-130	8		30
p-Chlorotoluene	93		85		70-130	9		30
1,2-Dibromo-3-chloropropane	96		91		68-130	5		30
Hexachlorobutadiene	93		85		67-130	9		30
Isopropylbenzene	96		87		70-130	10		30
p-Isopropyltoluene	95		86		70-130	10		30
Naphthalene	92		84		70-130	9		30
Acrylonitrile	99		93		70-130	6		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

Sopropy  Ether	arameter	LCS %Recovery	Qual	LCSD %Recovery	v Qual	%Recovery Limits	RPD	Qual	RPD Limits
tent-Butyl Alcohol         99         86         70-130         14         30           n-Propylbenzene         93         86         70-130         8         30           1,2,3-Trichlorobenzene         93         85         70-130         9         30           1,2,4-Trichlorobenzene         92         84         70-130         9         30           1,3,5-Trimethylbenzene         94         86         70-130         9         30           1,2,4-Trimethylbenzene         94         87         70-130         8         30           Methyl Acetate         91         86         51-146         6         30           Ethyl Acetate         91         86         51-146         6         30           Ethyl Acetate         93         83         70-130         11         30           Acrolein         80         68         Q         70-130         16         30           Cyclohexane         101         91         59-142         10         30           1,4-Dioxane         98         90         65-136         9         30           1,2-Trichloro-1,2,2-Trifluoroethane         106         94         50-139         12	olatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	02 Batch:	WG604920-1	WG604920-2			
n-Propylbenzene 93 86 70-130 8 30  1,2,3-Trichlorobenzene 92 84 70-130 9 30  1,3,5-Trimethylbenzene 94 86 70-130 9 30  1,3,5-Trimethylbenzene 94 86 70-130 9 30  1,2,4-Trinethylbenzene 94 87 70-130 8 30  Methyl Acetate 91 86 51-146 6 30  Ethyl Acetate 93 83 70-130 11 30  Acrolein 80 68 Q 70-130 16 30  Cyclohexane 101 91 59-142 10 30  1,4-Dioxane 98 90 65-136 9 30  1,1,2-Trichloro-1,2,2-Trifluoroethane 106 94 50-139 12 30  1,4-Diethylbenzene 101 91 70-130 10 30  4-Ethyltoluene 102 92 70-130 10 30  4-Ethyltoluene 102 92 70-130 10 30  Tetrahydrofuran 95 85 66-130 11 30  Ethyl ether 104 93 67-130 11 30  Ethyl ether 104 93 67-130 11 30  Methyl cyclohexane 105 95 70-130 9 30  Methyl cyclohexane 106 88 70-130 9 30	Isopropyl Ether	93		87		66-130	7		30
1,2,3-Trichlorobenzene       93       85       70-130       9       30         1,2,4-Trichlorobenzene       92       84       70-130       9       30         1,3,5-Trimethylbenzene       94       86       70-130       9       30         1,2,4-Trimethylbenzene       94       87       70-130       8       30         Methyl Acetate       91       86       51-146       6       30         Ethyl Acetate       93       83       70-130       11       30         Acrolein       80       68       Q       70-130       16       30         Cyclohexane       101       91       59-142       10       30         1,4-Dioxane       98       90       65-136       9       30         1,1,2-Trichloro-1,2,2-Trifluoroethane       106       94       50-139       12       30         1,4-Diethylbenzene       101       91       70-130       10       30         4-Ethyltoluene       102       92       70-130       10       30         4-Ethyltoluene       102       92       70-130       8       30         Tetrahydrofuran       95       85       66-130       11 <td>tert-Butyl Alcohol</td> <td>99</td> <td></td> <td>86</td> <td></td> <td>70-130</td> <td>14</td> <td></td> <td>30</td>	tert-Butyl Alcohol	99		86		70-130	14		30
1,2,4-Trichlorobenzene       92       84       70-130       9       30         1,3,5-Trimethylbenzene       94       86       70-130       8       30         Methyl Acetate       91       86       51-146       6       30         Ethyl Acetate       93       83       70-130       11       30         Acrolein       80       68       Q       70-130       16       30         Cyclohexane       101       91       59-142       10       30         1,4-Dioxane       98       90       65-136       9       30         1,1,2-Trichloro-1,2,2-Trifluoroethane       106       94       50-139       12       30         1,4-Diethylbenzene       101       91       70-130       10       30         4-Ethyltoluene       102       92       70-130       10       30         4-Ethyltoluene       100       92       70-130       8       30         Tetrahydrofuran       95       85       66-130       11       30         Ethyl ether       104       93       67-130       11       30         trans-1,4-Dichloro-2-butene       96       88       70-130       9	n-Propylbenzene	93		86		70-130	8		30
1,3,5-Trimethylbenzene       94       86       70-130       9       30         1,2,4-Trimethylbenzene       94       87       70-130       8       30         Methyl Acetate       91       86       51-146       6       30         Ethyl Acetate       93       83       70-130       11       30         Acrolein       80       68       Q       70-130       16       30         Cyclohexane       101       91       59-142       10       30         1,4-Dioxane       98       90       65-136       9       30         1,1,2-Trichloro-1,2,2-Trifluoroethane       106       94       50-139       12       30         1,4-Diethylbenzene       101       91       70-130       10       30         4-Ethyltoluene       102       92       70-130       10       30         1-2,4,5-Tetramethylbenzene       100       92       70-130       8       30         Tetrahydrofuran       95       85       66-130       11       30         Ethyl ether       104       93       67-130       11       30         trans-1,4-Dichloro-2-butene       96       88       70-130       <	1,2,3-Trichlorobenzene	93		85		70-130	9		30
1,2,4-Trimethylbenzene       94       87       70-130       8       30         Methyl Acetate       91       86       51-146       6       30         Ethyl Acetate       93       83       70-130       11       30         Acrolein       80       68       Q       70-130       16       30         Cyclohexane       101       91       59-142       10       30         1,4-Dioxane       98       90       65-136       9       30         1,1,2-Trichloro-1,2,2-Trifluoroethane       106       94       50-139       12       30         1,4-Diethylbenzene       101       91       70-130       10       30         4-Ethyltoluene       102       92       70-130       10       30         1,2,4,5-Tetramethylbenzene       100       92       70-130       8       30         Tetrahydrofuran       95       85       66-130       11       30         Ethyl ether       104       93       67-130       11       30         trans-1,4-Dichloro-2-butene       96       88       70-130       9       30         Methyl cyclohexane       105       95       70-130	1,2,4-Trichlorobenzene	92		84		70-130	9		30
Methyl Acetate         91         86         51-146         6         30           Ethyl Acetate         93         83         70-130         11         30           Acrolein         80         68         Q         70-130         16         30           Cyclohexane         101         91         59-142         10         30           1,4-Dioxane         98         90         65-136         9         30           1,1,2-Trichloro-1,2,2-Trifluoroethane         106         94         50-139         12         30           1,4-Diethylbenzene         101         91         70-130         10         30           4-Ethyltoluene         102         92         70-130         10         30           1,2,4,5-Tetramethylbenzene         100         92         70-130         8         30           Tetrahydrofuran         95         85         66-130         11         30           Ethyl ether         104         93         67-130         11         30           Ethyl ether         104         93         67-130         11         30           Methyl cyclohexane         105         95         70-130         10 <t< td=""><td>1,3,5-Trimethylbenzene</td><td>94</td><td></td><td>86</td><td></td><td>70-130</td><td>9</td><td></td><td>30</td></t<>	1,3,5-Trimethylbenzene	94		86		70-130	9		30
Ethyl Acetate       93       83       70-130       11       30         Acrolein       80       68       Q       70-130       16       30         Cyclohexane       101       91       59-142       10       30         1,4-Dioxane       98       90       65-136       9       30         1,1,2-Trichloro-1,2,2-Trifluoroethane       106       94       50-139       12       30         1,4-Diethylbenzene       101       91       70-130       10       30         4-Ethyltoluene       102       92       70-130       10       30         1,2,4,5-Tetramethylbenzene       100       92       70-130       8       30         Tetrahydrofuran       95       85       66-130       11       30         Ethyl ether       104       93       67-130       11       30         trans-1,4-Dichloro-2-butene       96       88       70-130       9       30         Methyl cyclohexane       105       95       70-130       10       30	1,2,4-Trimethylbenzene	94		87		70-130	8		30
Acrolein       80       68       Q       70-130       16       30         Cyclohexane       101       91       59-142       10       30         1,4-Dioxane       98       90       65-136       9       30         1,1,2-Trichloro-1,2,2-Trifluoroethane       106       94       50-139       12       30         1,4-Diethylbenzene       101       91       70-130       10       30         4-Ethyltoluene       102       92       70-130       10       30         1,2,4,5-Tetramethylbenzene       100       92       70-130       8       30         Tetrahydrofuran       95       85       66-130       11       30         Ethyl ether       104       93       67-130       11       30         trans-1,4-Dichloro-2-butene       96       88       70-130       9       30         Methyl cyclohexane       105       95       70-130       10       30	Methyl Acetate	91		86		51-146	6		30
Cyclohexane         101         91         59-142         10         30           1,4-Dioxane         98         90         65-136         9         30           1,1,2-Trichloro-1,2,2-Trifluoroethane         106         94         50-139         12         30           1,4-Diethylbenzene         101         91         70-130         10         30           4-Ethyltoluene         102         92         70-130         10         30           1,2,4,5-Tetramethylbenzene         100         92         70-130         8         30           Tetrahydrofuran         95         85         66-130         11         30           Ethyl ether         104         93         67-130         11         30           trans-1,4-Dichloro-2-butene         96         88         70-130         9         30           Methyl cyclohexane         105         95         70-130         10         30	Ethyl Acetate	93		83		70-130	11		30
1,4-Dioxane       98       90       65-136       9       30         1,1,2-Trichloro-1,2,2-Trifluoroethane       106       94       50-139       12       30         1,4-Diethylbenzene       101       91       70-130       10       30         4-Ethyltoluene       102       92       70-130       10       30         1,2,4,5-Tetramethylbenzene       100       92       70-130       8       30         Tetrahydrofuran       95       85       66-130       11       30         Ethyl ether       104       93       67-130       11       30         trans-1,4-Dichloro-2-butene       96       88       70-130       9       30         Methyl cyclohexane       105       95       70-130       10       30	Acrolein	80		68	Q	70-130	16		30
1,1,2-Trichloro-1,2,2-Trifluoroethane       106       94       50-139       12       30         1,4-Diethylbenzene       101       91       70-130       10       30         4-Ethyltoluene       102       92       70-130       10       30         1,2,4,5-Tetramethylbenzene       100       92       70-130       8       30         Tetrahydrofuran       95       85       66-130       11       30         Ethyl ether       104       93       67-130       11       30         trans-1,4-Dichloro-2-butene       96       88       70-130       9       30         Methyl cyclohexane       105       95       70-130       10       30	Cyclohexane	101		91		59-142	10		30
1,4-Diethylbenzene       101       91       70-130       10       30         4-Ethyltoluene       102       92       70-130       10       30         1,2,4,5-Tetramethylbenzene       100       92       70-130       8       30         Tetrahydrofuran       95       85       66-130       11       30         Ethyl ether       104       93       67-130       11       30         trans-1,4-Dichloro-2-butene       96       88       70-130       9       30         Methyl cyclohexane       105       95       70-130       10       30	1,4-Dioxane	98		90		65-136	9		30
4-Ethyltoluene       102       92       70-130       10       30         1,2,4,5-Tetramethylbenzene       100       92       70-130       8       30         Tetrahydrofuran       95       85       66-130       11       30         Ethyl ether       104       93       67-130       11       30         trans-1,4-Dichloro-2-butene       96       88       70-130       9       30         Methyl cyclohexane       105       95       70-130       10       30	1,1,2-Trichloro-1,2,2-Trifluoroethane	106		94		50-139	12		30
1,2,4,5-Tetramethylbenzene       100       92       70-130       8       30         Tetrahydrofuran       95       85       66-130       11       30         Ethyl ether       104       93       67-130       11       30         trans-1,4-Dichloro-2-butene       96       88       70-130       9       30         Methyl cyclohexane       105       95       70-130       10       30	1,4-Diethylbenzene	101		91		70-130	10		30
Tetrahydrofuran         95         85         66-130         11         30           Ethyl ether         104         93         67-130         11         30           trans-1,4-Dichloro-2-butene         96         88         70-130         9         30           Methyl cyclohexane         105         95         70-130         10         30	4-Ethyltoluene	102		92		70-130	10		30
Ethyl ether     104     93     67-130     11     30       trans-1,4-Dichloro-2-butene     96     88     70-130     9     30       Methyl cyclohexane     105     95     70-130     10     30	1,2,4,5-Tetramethylbenzene	100		92		70-130	8		30
trans-1,4-Dichloro-2-butene     96     88     70-130     9     30       Methyl cyclohexane     105     95     70-130     10     30	Tetrahydrofuran	95		85		66-130	11		30
Methyl cyclohexane         105         95         70-130         10         30	Ethyl ether	104		93		67-130	11		30
	trans-1,4-Dichloro-2-butene	96		88		70-130	9		30
Ethyl-Tert-Butyl-Ether         100         90         70-130         11         30	Methyl cyclohexane	105		95		70-130	10		30
	Ethyl-Tert-Butyl-Ether	100		90		70-130	11		30



**Project Name: DELLA PENNA** 

**Project Number:** 212645

Lab Number:

L1307284

Report Date:

04/30/13

Parameter	LCS %Recovery	Qual	LCSD %Recove	ry Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough I	_ab Associated	sample(s):	02 Batch:	WG604920-1	WG604920-2			
Tertiary-Amyl Methyl Ether	101		92		70-130	9		30

	LCS		LCSD		Acceptance	
Surrogate	%Recovery	Qual	%Recovery	Qual	Criteria	
1,2-Dichloroethane-d4	102		100		70-130	
Toluene-d8	98		97		70-130	
4-Bromofluorobenzene	99		99		70-130	
Dibromofluoromethane	102		100		70-130	



#### **SEMIVOLATILES**



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: 04/23/13 11:00

Client ID: BH2 10-12' Date Received: 04/23/13

Sample Location:40-52 ELLICOTT ST BATAVIA, NYField Prep:Not SpecifiedMatrix:SoilExtraction Method:EPA 3546Analytical Method:1,8270DExtraction Date:04/25/13 18:14

Analytical Date: 04/29/13 14:08

Analyst: JB Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
Acenaphthene	ND		ug/kg	140	37.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	60.	1
Hexachlorobenzene	ND		ug/kg	110	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	51.	1
2-Chloronaphthalene	ND		ug/kg	180	59.	1
1,2-Dichlorobenzene	ND		ug/kg	180	60.	1
1,3-Dichlorobenzene	ND		ug/kg	180	57.	1
1,4-Dichlorobenzene	ND		ug/kg	180	55.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	39.	1
2,6-Dinitrotoluene	ND		ug/kg	180	46.	1
Fluoranthene	320		ug/kg	110	33.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	55.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	64.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	55.	1
Hexachlorobutadiene	ND		ug/kg	180	51.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	120	1
Hexachloroethane	ND		ug/kg	140	33.	1
Isophorone	ND		ug/kg	160	48.	1
Naphthalene	ND		ug/kg	180	60.	1
Nitrobenzene	ND		ug/kg	160	43.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	38.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	54.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	48.	1
Butyl benzyl phthalate	ND		ug/kg	180	35.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	45.	1
Diethyl phthalate	ND		ug/kg	180	38.	1
Dimethyl phthalate	ND		ug/kg	180	46.	1
Benzo(a)anthracene	150		ug/kg	110	36.	1



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: 04/23/13 11:00

Client ID: BH2 10-12' Date Received: 04/23/13

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Parameter  Somirelatile Organise by CC/MS Wa		Qualifier	Units	KL	IVIDL	Dilution Factor
Semivolatile Organics by GC/MS - We	Sworough Lab					
Benzo(a)pyrene	180		ug/kg	140	44.	1
Benzo(b)fluoranthene	130		ug/kg	110	37.	1
Benzo(k)fluoranthene	120		ug/kg	110	35.	1
Chrysene	130		ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	140	34.	1
Anthracene	70	J	ug/kg	110	30.	1
Benzo(ghi)perylene	140		ug/kg	140	38.	1
Fluorene	ND		ug/kg	180	52.	1
Phenanthrene	210		ug/kg	110	36.	1
Dibenzo(a,h)anthracene	53	J	ug/kg	110	35.	1
Indeno(1,2,3-cd)Pyrene	180		ug/kg	140	40.	1
Pyrene	250		ug/kg	110	35.	1
Biphenyl	ND		ug/kg	410	60.	1
4-Chloroaniline	ND		ug/kg	180	48.	1
2-Nitroaniline	ND		ug/kg	180	51.	1
3-Nitroaniline	ND		ug/kg	180	50.	1
4-Nitroaniline	ND		ug/kg	180	49.	1
Dibenzofuran	ND		ug/kg	180	61.	1
2-Methylnaphthalene	ND		ug/kg	220	58.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	56.	1
Acetophenone	ND		ug/kg	180	56.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
P-Chloro-M-Cresol	ND		ug/kg	180	53.	1
2-Chlorophenol	ND		ug/kg	180	55.	1
2,4-Dichlorophenol	ND		ug/kg	160	59.	1
2,4-Dimethylphenol	ND		ug/kg	180	54.	1
2-Nitrophenol	ND		ug/kg	390	57.	1
4-Nitrophenol	ND		ug/kg	250	59.	1
2,4-Dinitrophenol	ND		ug/kg	870	250	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	66.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	54.	1
2-Methylphenol	ND		ug/kg	180	58.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	60.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	59.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	39.	1



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

SAMPLE RESULTS

Lab ID: L1307284-01 Date Collected: 04/23/13 11:00

Client ID: BH2 10-12' Date Received: 04/23/13
Sample Location: 40-52 ELLICOTT ST BATAVIA, 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	56		25-120	
Phenol-d6	57		10-120	
Nitrobenzene-d5	48		23-120	
2-Fluorobiphenyl	51		30-120	
2,4,6-Tribromophenol	60		0-136	
4-Terphenyl-d14	61		18-120	



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: 04/23/13 14:45

Client ID: BH7 6-8' Date Received: 04/23/13
Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Spec

Sample Location:40-52 ELLICOTT ST BATAVIA, NYField Prep:Not SpecifiedMatrix:SoilExtraction Method:EPA 3546Analytical Method:1,8270DExtraction Date:04/25/13 18:14

Analytical Netriod. 1,6270D Extraction Date: 04/25/13 16.1 Analytical Date: 04/29/13 14:34

Analyst: JB Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
Acenaphthene	ND		ug/kg	150	40.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	63.	1
Hexachlorobenzene	ND		ug/kg	120	36.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	54.	1
2-Chloronaphthalene	ND		ug/kg	190	63.	1
1,2-Dichlorobenzene	ND		ug/kg	190	63.	1
1,3-Dichlorobenzene	ND		ug/kg	190	61.	1
1,4-Dichlorobenzene	ND		ug/kg	190	59.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	42.	1
2,6-Dinitrotoluene	ND		ug/kg	190	49.	1
Fluoranthene	ND		ug/kg	120	35.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	59.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	44.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	68.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	58.	1
Hexachlorobutadiene	ND		ug/kg	190	54.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	120	1
Hexachloroethane	ND		ug/kg	150	35.	1
Isophorone	ND		ug/kg	170	51.	1
Naphthalene	ND		ug/kg	190	64.	1
Nitrobenzene	ND		ug/kg	170	46.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	40.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	58.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	190	50.	1
Butyl benzyl phthalate	ND		ug/kg	190	38.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	74	J	ug/kg	190	48.	1
Diethyl phthalate	ND		ug/kg	190	41.	1
Dimethyl phthalate	ND		ug/kg	190	49.	1
Benzo(a)anthracene	ND		ug/kg	120	38.	1



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-02 Date Collected: 04/23/13 14:45

Client ID: Date Received: 04/23/13

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

	• • . =		ор .	riot opcomod		
Parameter	Result Quali	fier Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - We	estborough Lab					
Benzo(a)pyrene	ND	ug/kg	150	47.	1	
Benzo(b)fluoranthene	ND	ug/kg	120	39.	1	
Benzo(k)fluoranthene	ND	ug/kg	120	37.	1	
Chrysene	ND	ug/kg	120	38.	1	
Acenaphthylene	ND	ug/kg	150	36.	1	
Anthracene	ND	ug/kg	120	32.	1	
Benzo(ghi)perylene	ND	ug/kg	150	40.	1	
Fluorene	ND	ug/kg	190	55.	1	
Phenanthrene	ND	ug/kg	120	38.	1	
Dibenzo(a,h)anthracene	ND	ug/kg	120	37.	1	
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	150	43.	1	
Pyrene	ND	ug/kg	120	38.	1	
Biphenyl	ND	ug/kg	440	64.	1	
4-Chloroaniline	ND	ug/kg	190	51.	1	
2-Nitroaniline	ND	ug/kg	190	54.	1	
3-Nitroaniline	ND	ug/kg	190	53.	1	
4-Nitroaniline	ND	ug/kg	190	52.	1	
Dibenzofuran	ND	ug/kg	190	64.	1	
2-Methylnaphthalene	ND	ug/kg	230	62.	1	
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	190	60.	1	
Acetophenone	ND	ug/kg	190	60.	1	
2,4,6-Trichlorophenol	ND	ug/kg	120	36.	1	
P-Chloro-M-Cresol	ND	ug/kg	190	56.	1	
2-Chlorophenol	ND	ug/kg	190	58.	1	
2,4-Dichlorophenol	ND	ug/kg	170	62.	1	
2,4-Dimethylphenol	ND	ug/kg	190	58.	1	
2-Nitrophenol	ND	ug/kg	420	60.	1	
4-Nitrophenol	ND	ug/kg	270	62.	1	
2,4-Dinitrophenol	ND	ug/kg	930	260	1	
4,6-Dinitro-o-cresol	ND	ug/kg	500	71.	1	
Pentachlorophenol	ND	ug/kg	150	41.	1	
Phenol	ND	ug/kg	190	57.	1	
2-Methylphenol	ND	ug/kg	190	62.	1	
3-Methylphenol/4-Methylphenol	ND	ug/kg	280	63.	1	
2,4,5-Trichlorophenol	ND	ug/kg	190	62.	1	
Benzoic Acid	ND	ug/kg	620	200	1	
Benzyl Alcohol	ND	ug/kg	190	59.	1	
Carbazole	ND	ug/kg	190	42.	1	



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

SAMPLE RESULTS

Lab ID: Date Collected: 04/23/13 14:45

Client ID: BH7 6-8' Date Received: 04/23/13
Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	77		25-120	
Phenol-d6	77		10-120	
Nitrobenzene-d5	72		23-120	
2-Fluorobiphenyl	73		30-120	
2,4,6-Tribromophenol	91		0-136	
4-Terphenyl-d14	91		18-120	



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-03 Date Collected: 04/23/13 13:00

Client ID: TPMW 1 Date Received: 04/23/13

Sample Location:40-52 ELLICOTT ST BATAVIA, NYField Prep:Not SpecifiedMatrix:WaterExtraction Method:EPA 3510CAnalytical Method:1,8270DExtraction Date:04/27/13 03:41

Analytical Netriod. 1,6270D Extraction Date: 04/27/13 03.4 Analytical Date: 04/29/13 01:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	ND		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	2.4		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-03 Date Collected: 04/23/13 13:00

Client ID: TPMW 1 Date Received: 04/23/13

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>
Semivolatile Organics by GC/MS - W	estborough Lab					
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.34	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.43	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.2	1
2-Nitrophenol	ND		ug/l	10	0.48	1
4-Nitrophenol	ND		ug/l	10	1.2	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59	1
Phenol	ND		ug/l	5.0	0.26	1
2-Methylphenol	ND		ug/l	5.0	0.53	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.47	1
Carbazole	3.9		ug/l	2.0	0.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	46		21-120	
Phenol-d6	33		10-120	
Nitrobenzene-d5	69		23-120	
2-Fluorobiphenyl	82		15-120	
2,4,6-Tribromophenol	108		10-120	
4-Terphenyl-d14	101		41-149	

04/23/13

Date Received:

0.80

ug/l

0.07

**Project Name: DELLA PENNA** Lab Number: L1307284

**Project Number: Report Date:** 212645 04/30/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: L1307284-03 04/23/13 13:00

Client ID: TPMW 1

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified Matrix: Water

**Extraction Method: EPA 3510C** Analytical Method: 1,8270D-SIM **Extraction Date:** 04/27/13 03:35

Analytical Date: 04/30/13 04:08 Analyst: AS

**Parameter** Result Qualifier Units RL MDL **Dilution Factor** Semivolatile Organics by GC/MS-SIM - Westborough Lab Acenaphthene 2.5 ug/l 0.20 0.06 1 ND ug/l 0.20 0.07 1 2-Chloronaphthalene 0.72 0.20 0.04 1 Fluoranthene ug/l Hexachlorobutadiene ND ug/l 0.50 0.07 1 1 Naphthalene 13 ug/l 0.20 0.06 0.12 J 0.20 1 Benzo(a)anthracene ug/l 0.06 Benzo(a)pyrene 0.07 J ug/l 0.20 0.07 1 Benzo(b)fluoranthene 0.10 J 0.20 0.07 1 ug/l Benzo(k)fluoranthene ND ug/l 0.20 0.07 1 Chrysene 0.11 J ug/l 0.20 0.05 1 Acenaphthylene ND ug/l 0.20 0.05 1 Anthracene 0.99 ug/l 0.20 0.06 1 Benzo(ghi)perylene ND ug/l 0.20 0.07 1 Fluorene 2.7 ug/l 0.20 0.06 1 Phenanthrene 3.0 ug/l 0.20 0.06 1 1 Dibenzo(a,h)anthracene ND ug/l 0.20 0.07 Indeno(1,2,3-cd)Pyrene ND 0.20 0.08 1 ug/l Pyrene 0.45 ug/l 0.20 0.06 1 0.20 2-Methylnaphthalene 2.2 ug/l 0.06 1 Pentachlorophenol ND ug/l 0.80 0.19 1 Hexachlorobenzene ND ug/l 0.80 0.01 1 ND 1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	41		21-120	
Phenol-d6	30		10-120	
Nitrobenzene-d5	71		23-120	
2-Fluorobiphenyl	66		15-120	
2,4,6-Tribromophenol	69		10-120	
4-Terphenyl-d14	78		41-149	



Hexachloroethane

Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-04 Date Collected: 04/23/13 15:45

Client ID: TPMW 2 Date Received: 04/23/13

Sample Location:40-52 ELLICOTT ST BATAVIA, NYField Prep:Not SpecifiedMatrix:WaterExtraction Method:EPA 3510CAnalytical Method:1,8270DExtraction Date:04/27/13 03:41

Analytical Method: 1,8270D Extraction Date: 04/27/13 03:4
Analytical Date: 04/29/13 02:00

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>
Semivolatile Organics by GC/MS - Wes	tborough Lab					
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	ND		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	ND		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-04 Date Collected: 04/23/13 15:45

Client ID: TPMW 2 Date Received: 04/23/13

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

MDL	Dilution Factor
0.45	1
0.50	1
0.34	1
0.43	1
1.2	1
0.48	1
1.2	1
1.4	1
0.59	1
0.26	1
0.53	1
0.47	1
0.45	1
1.0	1
0.47	1
0.53	1
	1.2 1.4 0.59 0.26 0.53 0.47 0.45 1.0

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	18	Q	21-120	
Phenol-d6	11		10-120	
Nitrobenzene-d5	29		23-120	
2-Fluorobiphenyl	36		15-120	
2,4,6-Tribromophenol	46		10-120	
4-Terphenyl-d14	47		41-149	



04/23/13

04/27/13 03:35

Date Received:

**Project Name:** Lab Number: **DELLA PENNA** L1307284

**Project Number:** Report Date: 212645 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-04 Date Collected: 04/23/13 15:45

Client ID: TPMW 2

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified Extraction Method: **EPA 3510C** 

Matrix: Water

Analytical Method: 1,8270D-SIM **Extraction Date:** Analytical Date: 04/30/13 04:40

Analyst: AS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM	1 - Westborough Lab					
Acenaphthene	0.13	J	ug/l	0.20	0.06	1
2-Chloronaphthalene	0.59		ug/l	0.20	0.07	1
Fluoranthene	0.32		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	1.2		ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	0.13	J	ug/l	0.20	0.05	1
Anthracene	0.14	J	ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	0.51		ug/l	0.20	0.06	1
Phenanthrene	0.95		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	0.20		ug/l	0.20	0.06	1
2-Methylnaphthalene	0.23		ug/l	0.20	0.06	1
Pentachlorophenol	0.53	J	ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	19	Q	21-120	
Phenol-d6	14		10-120	
Nitrobenzene-d5	38		23-120	
2-Fluorobiphenyl	34		15-120	
2,4,6-Tribromophenol	45		10-120	
4-Terphenyl-d14	42		41-149	



**Project Number:** 212645

Lab Number: L1307284

**Report Date:** 04/30/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 04/30/13 11:34

Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 04/25/13 18:14

arameter	Result	Qualifier Units	RL	MDL
emivolatile Organics by GC/MS	- Westborough	Lab for sample(s):	01-02 Batch:	WG604102-1
Acenaphthene	ND	ug/kg	130	34.
Benzidine	ND	ug/kg	540	130
n-Nitrosodimethylamine	ND	ug/kg	330	54.
1,2,4-Trichlorobenzene	ND	ug/kg	160	54.
Hexachlorobenzene	ND	ug/kg	99	31.
Bis(2-chloroethyl)ether	ND	ug/kg	150	46.
2-Chloronaphthalene	ND	ug/kg	160	54.
1,2-Dichlorobenzene	ND	ug/kg	160	54.
1,3-Dichlorobenzene	ND	ug/kg	160	52.
1,4-Dichlorobenzene	ND	ug/kg	160	50.
3,3'-Dichlorobenzidine	ND	ug/kg	160	44.
2,4-Dinitrotoluene	ND	ug/kg	160	36.
2,6-Dinitrotoluene	ND	ug/kg	160	42.
Fluoranthene	ND	ug/kg	99	30.
4-Chlorophenyl phenyl ether	ND	ug/kg	160	50.
4-Bromophenyl phenyl ether	ND	ug/kg	160	38.
Azobenzene	ND	ug/kg	160	44.
Bis(2-chloroisopropyl)ether	ND	ug/kg	200	58.
Bis(2-chloroethoxy)methane	ND	ug/kg	180	50.
Hexachlorobutadiene	ND	ug/kg	160	47.
Hexachlorocyclopentadiene	ND	ug/kg	470	110
Hexachloroethane	ND	ug/kg	130	30.
Isophorone	ND	ug/kg	150	44.
Naphthalene	ND	ug/kg	160	55.
Nitrobenzene	ND	ug/kg	150	39.
NitrosoDiPhenylAmine(NDPA)/DPA	ND	ug/kg	130	35.
n-Nitrosodi-n-propylamine	ND	ug/kg	160	49.
Bis(2-Ethylhexyl)phthalate	ND	ug/kg	160	43.
Butyl benzyl phthalate	ND	ug/kg	160	32.
Di-n-butylphthalate	ND	ug/kg	160	32.
Di-n-octylphthalate	ND	ug/kg	160	41.



**Project Number:** 212645

Lab Number: L1307284

**Report Date:** 04/30/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 04/30/13 11:34

Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 04/25/13 18:14

Parameter	Result	Qualifier Units	RL	MDL
Semivolatile Organics by GC/M	IS - Westborough	Lab for sample(s):	01-02 Batch:	WG604102-1
Diethyl phthalate	ND	ug/kg	160	35.
Dimethyl phthalate	ND	ug/kg	160	42.
Benzo(a)anthracene	ND	ug/kg	99	32.
Benzo(a)pyrene	ND	ug/kg	130	40.
Benzo(b)fluoranthene	ND	ug/kg	99	33.
Benzo(k)fluoranthene	ND	ug/kg	99	32.
Chrysene	ND	ug/kg	99	32.
Acenaphthylene	ND	ug/kg	130	31.
Anthracene	ND	ug/kg	99	28.
Benzo(ghi)perylene	ND	ug/kg	130	34.
Fluorene	ND	ug/kg	160	47.
Phenanthrene	ND	ug/kg	99	32.
Dibenzo(a,h)anthracene	ND	ug/kg	99	32.
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	130	37.
Pyrene	ND	ug/kg	99	32.
Biphenyl	ND	ug/kg	380	54.
Aniline	ND	ug/kg	200	34.
4-Chloroaniline	ND	ug/kg	160	44.
2-Nitroaniline	ND	ug/kg	160	47.
3-Nitroaniline	ND	ug/kg	160	46.
4-Nitroaniline	ND	ug/kg	160	45.
Dibenzofuran	ND	ug/kg	160	55.
2-Methylnaphthalene	ND	ug/kg	200	53.
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	160	51.
Acetophenone	ND	ug/kg	160	51.
2,4,6-Trichlorophenol	ND	ug/kg	99	31.
P-Chloro-M-Cresol	ND	ug/kg	160	48.
2-Chlorophenol	ND	ug/kg	160	50.
2,4-Dichlorophenol	ND	ug/kg	150	54.
2,4-Dimethylphenol	ND	ug/kg	160	49.
2-Nitrophenol	ND	ug/kg	360	52.



Project Number: 212645

Lab Number: L1307284

**Report Date:** 04/30/13

Method Blank Analysis Batch Quality Control

Analytical Method: Analytical Date: 1,8270D 04/30/13 11:34

Analyst:

JB

Extraction Method: EPA 3546
Extraction Date: 04/25/13 18:14

arameter	Result	Qualifier Units	RL	MDL
emivolatile Organics by GC/M	S - Westborough	Lab for sample(s):	01-02 Batch:	WG604102-1
4-Nitrophenol	ND	ug/kg	230	54.
2,4-Dinitrophenol	ND	ug/kg	790	230
4,6-Dinitro-o-cresol	ND	ug/kg	430	60.
Pentachlorophenol	ND	ug/kg	130	35.
Phenol	ND	ug/kg	160	49.
2-Methylphenol	ND	ug/kg	160	53.
3-Methylphenol/4-Methylphenol	ND	ug/kg	240	54.
2,4,5-Trichlorophenol	ND	ug/kg	160	54.
Benzoic Acid	ND	ug/kg	540	170
Benzyl Alcohol	ND	ug/kg	160	51.
Carbazole	ND	ug/kg	160	36.
Benzaldehyde	ND	ug/kg	220	67.
Caprolactam	ND	ug/kg	160	46.
Atrazine	ND	ug/kg	130	37.
Pyridine	ND	ug/kg	660	59.
Parathion, ethyl	ND	ug/kg	160	65.

Surrogate	%Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	55	25-120
Phenol-d6	55	10-120
Nitrobenzene-d5	50	23-120
2-Fluorobiphenyl	51	30-120
2,4,6-Tribromophenol	47	0-136
4-Terphenyl-d14	65	18-120



**Project Number:** 212645 Lab Number: L1307284

Report Date: 04/30/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM Analytical Date: 04/30/13 02:32

Analyst:

AS

Extraction Method: EPA 3510C

04/27/13 03:35 Extraction Date:

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS-SIN	Л - Westbor	ough Lab for	sample(s):	03-04	Batch:	WG604438-1
Acenaphthene	ND		ug/l	0.20	)	0.06
2-Chloronaphthalene	ND		ug/l	0.20	)	0.07
Fluoranthene	ND		ug/l	0.20	)	0.04
Hexachlorobutadiene	ND		ug/l	0.50	)	0.07
Naphthalene	ND		ug/l	0.20	)	0.06
Benzo(a)anthracene	ND		ug/l	0.20	)	0.06
Benzo(a)pyrene	ND		ug/l	0.20	)	0.07
Benzo(b)fluoranthene	ND		ug/l	0.20	)	0.07
Benzo(k)fluoranthene	ND		ug/l	0.20	)	0.07
Chrysene	ND		ug/l	0.20	)	0.05
Acenaphthylene	ND		ug/l	0.20	)	0.05
Anthracene	ND		ug/l	0.20	)	0.06
Benzo(ghi)perylene	ND		ug/l	0.20	)	0.07
Fluorene	ND		ug/l	0.20	)	0.06
Phenanthrene	ND		ug/l	0.20	)	0.06
Dibenzo(a,h)anthracene	ND		ug/l	0.20	)	0.07
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	)	0.08
Pyrene	ND		ug/l	0.20	)	0.06
2-Methylnaphthalene	ND		ug/l	0.20	)	0.06
Pentachlorophenol	ND		ug/l	0.80	)	0.19
Hexachlorobenzene	ND		ug/l	0.80	)	0.01
Hexachloroethane	0.14	J	ug/l	0.80	)	0.07



**Project Number:** 212645

Lab Number:

L1307284

**Report Date:** 04/30/13

Method Blank Analysis
Batch Quality Control

Analytical Method: Analytical Date: 1,8270D-SIM 04/30/13 02:32

Analyst: AS

Extraction Method: EPA 3510C

Extraction Date: 04

04/27/13 03:35

Devementer	Result	Qualifier	Units	RL	MDL
Parameter	Resuit	Qualifier	Units	RL .	MDL

Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03-04 Batch: WG604438-1

		Acceptance
Surrogate	%Recovery	Qualifier Criteria
2-Fluorophenol	41	21-120
Phenol-d6	29	10-120
Nitrobenzene-d5	68	23-120
2-Fluorobiphenyl	65	15-120
2,4,6-Tribromophenol	77	10-120
4-Terphenyl-d14	83	41-149



**Project Number:** 212645

Lab Number: L1307284

**Report Date:** 04/30/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 04/28/13 19:39

Analyst: JB

Extraction Method: EPA 3510C Extraction Date: 04/27/13 03:41

arameter	Result	Qualifier Units	RL	MDL
emivolatile Organics by GC/MS -	- Westborough	Lab for sample(s):	03-04 Batch:	WG604440-1
1,2,4-Trichlorobenzene	ND	ug/l	5.0	0.67
Bis(2-chloroethyl)ether	ND	ug/l	2.0	0.39
1,2-Dichlorobenzene	ND	ug/l	2.0	0.55
1,3-Dichlorobenzene	ND	ug/l	2.0	0.55
1,4-Dichlorobenzene	ND	ug/l	2.0	0.55
3,3'-Dichlorobenzidine	ND	ug/l	5.0	0.85
2,4-Dinitrotoluene	ND	ug/l	5.0	0.45
2,6-Dinitrotoluene	ND	ug/l	5.0	0.46
4-Chlorophenyl phenyl ether	ND	ug/l	2.0	0.61
4-Bromophenyl phenyl ether	ND	ug/l	2.0	0.67
Bis(2-chloroisopropyl)ether	ND	ug/l	2.0	0.50
Bis(2-chloroethoxy)methane	ND	ug/l	5.0	0.40
Hexachlorocyclopentadiene	ND	ug/l	20	2.1
Isophorone	ND	ug/l	5.0	0.35
Nitrobenzene	ND	ug/l	2.0	0.50
NitrosoDiPhenylAmine(NDPA)/DPA	ND	ug/l	2.0	0.70
n-Nitrosodi-n-propylamine	ND	ug/l	5.0	0.39
Bis(2-Ethylhexyl)phthalate	ND	ug/l	3.0	1.4
Butyl benzyl phthalate	ND	ug/l	5.0	0.46
Di-n-butylphthalate	ND	ug/l	5.0	0.54
Di-n-octylphthalate	ND	ug/l	5.0	0.53
Diethyl phthalate	ND	ug/l	5.0	0.45
Dimethyl phthalate	ND	ug/l	5.0	0.45
Biphenyl	ND	ug/l	2.0	0.50
4-Chloroaniline	ND	ug/l	5.0	0.83
2-Nitroaniline	ND	ug/l	5.0	0.40
3-Nitroaniline	ND	ug/l	5.0	0.59
4-Nitroaniline	ND	ug/l	5.0	0.55
Dibenzofuran	ND	ug/l	2.0	0.47
1,2,4,5-Tetrachlorobenzene	ND	ug/l	10	0.65
Acetophenone	ND	ug/l	5.0	0.55



**Project Number:** 212645 Lab Number:

L1307284

Report Date: 04/30/13

**Method Blank Analysis Batch Quality Control** 

Analytical Method: Analytical Date:

1,8270D

04/28/13 19:39

Analyst: JB Extraction Method: EPA 3510C 04/27/13 03:41 **Extraction Date:** 

arameter	Result	Qualifier Units	RL	MDL
emivolatile Organics by GC/MS	6 - Westborough	Lab for sample(s):	03-04 Batch:	WG604440-1
2,4,6-Trichlorophenol	ND	ug/l	5.0	0.45
P-Chloro-M-Cresol	ND	ug/l	2.0	0.50
2-Chlorophenol	ND	ug/l	2.0	0.34
2,4-Dichlorophenol	ND	ug/l	5.0	0.43
2,4-Dimethylphenol	ND	ug/l	5.0	1.2
2-Nitrophenol	ND	ug/l	10	0.48
4-Nitrophenol	ND	ug/l	10	1.2
2,4-Dinitrophenol	ND	ug/l	20	1.4
4,6-Dinitro-o-cresol	ND	ug/l	10	0.59
Phenol	ND	ug/l	5.0	0.26
2-Methylphenol	ND	ug/l	5.0	0.53
3-Methylphenol/4-Methylphenol	ND	ug/l	5.0	0.47
2,4,5-Trichlorophenol	ND	ug/l	5.0	0.45
Benzoic Acid	ND	ug/l	50	1.0
Benzyl Alcohol	ND	ug/l	2.0	0.47
Carbazole	ND	ug/l	2.0	0.53

Tentatively Identified Compounds

No Tentatively Identified Compounds

ND

ug/l



Lab Number:

L1307284

**Project Number:** 

212645

Report Date:

04/30/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: Analytical Date:

1,8270D

JB

04/28/13 19:39

Analyst:

Extraction Method: EPA 3510C

Extraction Date:

04/27/13 03:41

Parameter	Result	Qualifier	Units		RL	MDL	
Semivolatile Organics by GC/MS - V	Nesthorough	n I ah for sam	nle(s)·	03-04	Batch:	WG604440-1	

		Acceptance	
Surrogate	%Recovery	Qualifier Criteria	
0.51	40	04.400	
2-Fluorophenol	40	21-120	
Phenol-d6	27	10-120	
Nitrobenzene-d5	59	23-120	
2-Fluorobiphenyl	70	15-120	
2,4,6-Tribromophenol	79	10-120	
4-Terphenyl-d14	90	41-149	



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborou	ıgh Lab Associ	ated sample(	s): 01-02 Bat	ch: WG604	102-2 WG6041	02-3		
Acenaphthene	71		78		31-137	9		50
Benzidine	14		15			7		50
n-Nitrosodimethylamine	60		66			10		50
1,2,4-Trichlorobenzene	65		69		38-107	6		50
Hexachlorobenzene	70		80		40-140	13		50
Bis(2-chloroethyl)ether	58		61		40-140	5		50
2-Chloronaphthalene	68		72		40-140	6		50
1,2-Dichlorobenzene	60		64		40-140	6		50
1,3-Dichlorobenzene	59		64		40-140	8		50
1,4-Dichlorobenzene	60		65		28-104	8		50
3,3'-Dichlorobenzidine	56		62		40-140	10		50
2,4-Dinitrotoluene	81		93	Q	28-89	14		50
2,6-Dinitrotoluene	82		90		40-140	9		50
Fluoranthene	84		96		40-140	13		50
4-Chlorophenyl phenyl ether	73		80		40-140	9		50
4-Bromophenyl phenyl ether	76		85		40-140	11		50
Azobenzene	76		84		40-140	10		50
Bis(2-chloroisopropyl)ether	59		62		40-140	5		50
Bis(2-chloroethoxy)methane	58		62		40-117	7		50
Hexachlorobutadiene	64		67		40-140	5		50
Hexachlorocyclopentadiene	31	Q	35	Q	40-140	12		50



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

arameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Wes	tborough Lab Associ	ated sample(s	): 01-02 Bat	ch: WG604102-2 WG604	1102-3		
Hexachloroethane	57		60	40-140	5		50
Isophorone	62		66	40-140	6		50
Naphthalene	65		69	40-140	6		50
Nitrobenzene	68		72	40-140	6		50
NitrosoDiPhenylAmine(NDPA)/DPA	77		89		14		50
n-Nitrosodi-n-propylamine	63		66	32-121	5		50
Bis(2-Ethylhexyl)phthalate	84		92	40-140	9		50
Butyl benzyl phthalate	82		94	40-140	14		50
Di-n-butylphthalate	85		95	40-140	11		50
Di-n-octylphthalate	84		93	40-140	10		50
Diethyl phthalate	78		88	40-140	12		50
Dimethyl phthalate	77		87	40-140	12		50
Benzo(a)anthracene	86		96	40-140	11		50
Benzo(a)pyrene	78		87	40-140	11		50
Benzo(b)fluoranthene	84		93	40-140	10		50
Benzo(k)fluoranthene	84		94	40-140	11		50
Chrysene	77		87	40-140	12		50
Acenaphthylene	76		80	40-140	5		50
Anthracene	80		87	40-140	8		50
Benzo(ghi)perylene	84		96	40-140	13		50
Fluorene	75		84	40-140	11		50



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborou	ugh Lab Assoc	iated sample(	s): 01-02 Ba	tch: WG6	04102-2 WG6041	102-3		
Phenanthrene	76		86		40-140	12		50
Dibenzo(a,h)anthracene	86		94		40-140	9		50
Indeno(1,2,3-cd)Pyrene	84		97		40-140	14		50
Pyrene	81		93		35-142	14		50
Biphenyl	72		78			8		50
Aniline	37	Q	38	Q	40-140	3		50
4-Chloroaniline	46		48		40-140	4		50
2-Nitroaniline	76		84		47-134	10		50
3-Nitroaniline	63		72		26-129	13		50
4-Nitroaniline	74		86		41-125	15		50
Dibenzofuran	73		81		40-140	10		50
2-Methylnaphthalene	67		71		40-140	6		50
1,2,4,5-Tetrachlorobenzene	68		74		40-117	8		50
Acetophenone	60		64		14-144	6		50
2,4,6-Trichlorophenol	80		86		30-130	7		50
P-Chloro-M-Cresol	84		89		26-103	6		50
2-Chlorophenol	63		67		25-102	6		50
2,4-Dichlorophenol	78		82		30-130	5		50
2,4-Dimethylphenol	64		66		30-130	3		50
2-Nitrophenol	60		63		30-130	5		50
4-Nitrophenol	86		99		11-114	14		50



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

arameter	LCS %Recovery	LCSD Qual %Recove	,	RPD	Qual RPD Limits
emivolatile Organics by GC/MS - We	estborough Lab Associa	ted sample(s): 01-02	Batch: WG604102-2 WG60	)4102-3	
2,4-Dinitrophenol	85	98	4-130	14	50
4,6-Dinitro-o-cresol	78	92	10-130	16	50
Pentachlorophenol	77	84	17-109	9	50
Phenol	62	67	26-90	8	50
2-Methylphenol	66	70	30-130.	6	50
3-Methylphenol/4-Methylphenol	68	72	30-130	6	50
2,4,5-Trichlorophenol	82	89	30-130	8	50
Benzoic Acid	34	38		11	50
Benzyl Alcohol	63	67	40-140	6	50
Carbazole	82	92	54-128	11	50
Benzaldehyde	51	58		13	50
Caprolactam	81	95		16	50
Atrazine	87	99		13	50
Pyridine	47	57	10-93	19	50
Parathion, ethyl	94	105	40-140	11	50



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

**Report Date:** 04/30/13

	LCS		LCSD		%Recovery			
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG604102-2 WG604102-3

LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
66	71	25-120
66	71	10-120
61	64	23-120
69	74	30-120
72	81	0-136
77	90	18-120
	%Recovery Qual  66 66 61 69 72	%Recovery         Qual         %Recovery         Qual           66         71         66         71           61         64         69         74           72         81         81

emivolatile Organics by GC/MS-SIM - Westb	orough Lab A	ssociated sam	ple(s): 03-04	Batch: WG604438-2 WG	6604438-3	
Acenaphthene	70		76	37-111	8	40
2-Chloronaphthalene	60		69	40-140	14	40
Fluoranthene	72		80	40-140	11	40
Hexachlorobutadiene	60		67	40-140	11	40
Naphthalene	60		67	40-140	11	40
Benzo(a)anthracene	78		88	40-140	12	40
Benzo(a)pyrene	79		87	40-140	10	40
Benzo(b)fluoranthene	79		88	40-140	11	40
Benzo(k)fluoranthene	84		96	40-140	13	40



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - W	Vestborough Lab	Associated s	ample(s): 03-04	Batch:	WG604438-2 V	VG604438-3		
Chrysene	76		85		40-140	11		40
Acenaphthylene	64		74		40-140	14		40
Anthracene	76		85		40-140	11		40
Benzo(ghi)perylene	76		80		40-140	5		40
Fluorene	78		90		40-140	14		40
Phenanthrene	64		65		40-140	2		40
Dibenzo(a,h)anthracene	80		86		40-140	7		40
Indeno(1,2,3-cd)Pyrene	80		85		40-140	6		40
Pyrene	69		76		26-127	10		40
2-Methylnaphthalene	61		67		40-140	9		40
Pentachlorophenol	66		73		9-103	10		40
Hexachlorobenzene	60		65		40-140	8		40
Hexachloroethane	60		68		40-140	13		40

LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	
44		50		21-120	
34		37		10-120	
72		82		23-120	
72		80		15-120	
86		92		10-120	
77		86		41-149	
	%Recovery  44 34 72 72 86	%Recovery Qual  44  34  72  72  86	%Recovery         Qual         %Recovery           44         50           34         37           72         82           72         80           86         92	%Recovery         Qual         %Recovery         Qual           44         50         37         72         82         72         80         86         92         92         92         80         92         80         86         92         80         86         92         80         86         86         92         80         86         80 <td>%Recovery         Qual         %Recovery         Qual         Criteria           44         50         21-120           34         37         10-120           72         82         23-120           72         80         15-120           86         92         10-120</td>	%Recovery         Qual         %Recovery         Qual         Criteria           44         50         21-120           34         37         10-120           72         82         23-120           72         80         15-120           86         92         10-120



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

arameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westboro	ugh Lab Assoc	iated sample(	s): 03-04 Ba	ntch: WG604440-2 WG604	4440-3		
1,2,4-Trichlorobenzene	71		67	39-98	6		30
Bis(2-chloroethyl)ether	74		69	40-140	7		30
1,2-Dichlorobenzene	66		63	40-140	5		30
1,3-Dichlorobenzene	64		60	40-140	6		30
1,4-Dichlorobenzene	65		62	36-97	5		30
3,3'-Dichlorobenzidine	72		68	40-140	6		30
2,4-Dinitrotoluene	100	Q	97	Q 24-96	3		30
2,6-Dinitrotoluene	103		99	40-140	4		30
4-Chlorophenyl phenyl ether	93		91	40-140	2		30
4-Bromophenyl phenyl ether	98		98	40-140	0		30
Bis(2-chloroisopropyl)ether	77		70	40-140	10		30
Bis(2-chloroethoxy)methane	85		78	40-140	9		30
Hexachlorocyclopentadiene	46		42	40-140	9		30
Isophorone	84		78	40-140	7		30
Nitrobenzene	76		70	40-140	8		30
NitrosoDiPhenylAmine(NDPA)/DPA	95		92	40-140	3		30
n-Nitrosodi-n-propylamine	83		76	29-132	9		30
Bis(2-Ethylhexyl)phthalate	119		96	40-140	21		30
Butyl benzyl phthalate	100		95	40-140	5		30
Di-n-butylphthalate	102		98	40-140	4		30
Di-n-octylphthalate	108		103	40-140	5		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborou	gh Lab Assoc	iated sample(	s): 03-04 Ba	tch: WG604440-2 WG6044	40-3		
Diethyl phthalate	94		93	40-140	1		30
Dimethyl phthalate	94		93	40-140	1		30
Biphenyl	83		80		4		30
4-Chloroaniline	71		67	40-140	6		30
2-Nitroaniline	101		99	52-143	2		30
3-Nitroaniline	76		73	25-145	4		30
4-Nitroaniline	95		95	51-143	0		30
Dibenzofuran	90		88	40-140	2		30
1,2,4,5-Tetrachlorobenzene	77		75	2-134	3		30
Acetophenone	85		77	39-129	10		30
2,4,6-Trichlorophenol	99		94	30-130	5		30
P-Chloro-M-Cresol	98	Q	92	23-97	6		30
2-Chlorophenol	78		71	27-123	9		30
2,4-Dichlorophenol	92		84	30-130	9		30
2,4-Dimethylphenol	90		80	30-130	12		30
2-Nitrophenol	84		77	30-130	9		30
4-Nitrophenol	61		53	10-80	14		30
2,4-Dinitrophenol	98		92	20-130	6		30
4,6-Dinitro-o-cresol	103		98	20-164	5		30
Phenol	42		37	12-110	13		30
2-Methylphenol	78		70	30-130	11		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborou	igh Lab Associ	ated sample(s	s): 03-04 Bat	ch: WG6	04440-2 WG6044	40-3		
3-Methylphenol/4-Methylphenol	74		66		30-130	11		30
2,4,5-Trichlorophenol	106		99		30-130	7		30
Benzoic Acid	42		37			13		30
Benzyl Alcohol	72		66			9		30
Carbazole	99		94		55-144	5		30

LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
56	50	21-120
43	38	10-120
84	75	23-120
98	90	15-120
111	106	10-120
108	103	41-149
	%Recovery Qua 56 43 84 98 111	%Recovery         Qual         %Recovery         Qual           56         50           43         38           84         75           98         90           111         106



#### **PCBS**



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: 04/23/13 11:00

Client ID: BH2 10-12' Date Received: 04/23/13

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 04/25/13 20:04

Analytical Date: 04/26/13 11:22 Cleanup Method1: EPA 3665A
Analyst: KB Cleanup Date1: 04/26/13
Percent Solids: 91% Cleanup Method2: EPA 3660B
Cleanup Date2: 04/26/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by G	C - Westborough Lab					
Aroclor 1016	ND		ug/kg	35.8	7.07	1
Aroclor 1221	ND		ug/kg	35.8	10.8	1
Aroclor 1232	ND		ug/kg	35.8	7.60	1
Aroclor 1242	ND		ug/kg	35.8	6.79	1
Aroclor 1248	ND		ug/kg	35.8	4.33	1
Aroclor 1254	ND		ug/kg	35.8	5.64	1
Aroclor 1260	ND		ug/kg	35.8	6.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2,4,5,6-Tetrachloro-m-xylene	73		30-150	
Decachlorobiphenyl	64		30-150	
2,4,5,6-Tetrachloro-m-xylene	84		30-150	
Decachlorobiphenyl	95		30-150	



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: 04/23/13 14:45

Client ID: BH7 6-8' Date Received: 04/23/13

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified Matrix: Soil Extraction Method: EPA 3546

Analytical Method: 1,8082A Extraction Date: 04/25/13 20:04
Analytical Date: 04/30/13 11:12 Cleanup Method1: EPA 3665A
Analyst: KB Cleanup Date1: 04/26/13

Percent Solids: 85% Cleanup Method2: EPA 3660B Cleanup Date2: 04/26/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - W	estborough Lab					
Aroclor 1016	ND		ug/kg	38.9	7.69	1
Aroclor 1221	ND		ug/kg	38.9	11.7	1
Aroclor 1232	ND		ug/kg	38.9	8.27	1
Aroclor 1242	ND		ug/kg	38.9	7.39	1
Aroclor 1248	ND		ug/kg	38.9	4.71	1
Aroclor 1254	ND		ug/kg	38.9	6.14	1
Aroclor 1260	ND		ug/kg	38.9	6.76	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2,4,5,6-Tetrachloro-m-xylene	105		30-150	
Decachlorobiphenyl	103		30-150	
2,4,5,6-Tetrachloro-m-xylene	100		30-150	
Decachlorobiphenyl	114		30-150	



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: 04/23/13 13:00

Client ID: TPMW 1 Date Received: 04/23/13

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified Matrix: Water Extraction Method: EPA 3510C

Analytical Method: 1,8082A Extraction Date: 04/26/13 19:19
Analytical Date: 04/28/13 23:46 Cleanup Method1: EPA 3665A
Analyst: KB Cleanup Date1: 04/27/13

Cleanup Method2: EPA 3660B Cleanup Date2: 04/27/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westbe	orough Lab					
Aroclor 1016	ND		ug/l	0.083	0.055	1
Aroclor 1221	ND		ug/l	0.083	0.053	1
Aroclor 1232	ND		ug/l	0.083	0.031	1
Aroclor 1242	ND		ug/l	0.083	0.060	1
Aroclor 1248	ND		ug/l	0.083	0.051	1
Aroclor 1254	ND		ug/l	0.083	0.034	1
Aroclor 1260	ND		ug/l	0.083	0.032	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2,4,5,6-Tetrachloro-m-xylene	46		30-150	
Decachlorobiphenyl	36		30-150	
2,4,5,6-Tetrachloro-m-xylene	41		30-150	
Decachlorobiphenyl	38		30-150	



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-04 Date Collected: 04/23/13 15:45

Client ID: TPMW 2 Date Received: 04/23/13

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified Matrix: Extraction Method: EPA 3510C

Analytical Method: 1,8082A Extraction Date: 04/26/13 19:19
Analytical Date: 04/28/13 23:59 Cleanup Method1: EPA 3665A

Analyst: KB Cleanup Date1: 04/27/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 04/27/13

Qualifier **Parameter** Result Units RLMDL **Dilution Factor** Polychlorinated Biphenyls by GC - Westborough Lab Aroclor 1016 ND ug/l 0.083 0.055 1 ND Aroclor 1221 ug/l 0.083 0.053 1 Aroclor 1232 ND 0.083 0.031 1 ug/l Aroclor 1242 ND ug/l 0.083 0.060 1 ND 1 Aroclor 1248 ug/l 0.083 0.051 Aroclor 1254 ND ug/l 0.083 0.034 1 Aroclor 1260 ND ug/l 0.083 0.032 1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2,4,5,6-Tetrachloro-m-xylene	53		30-150	
Decachlorobiphenyl	37		30-150	
2,4,5,6-Tetrachloro-m-xylene	52		30-150	
Decachlorobiphenyl	39		30-150	



**Project Number:** 212645 Lab Number:

L1307284

Report Date: 04/30/13

**Method Blank Analysis Batch Quality Control** 

Analytical Method: Analytical Date:

1,8082A 04/26/13 14:26

Analyst:

KΒ

Extraction Method: EPA 3546 Extraction Date:

04/25/13 20:04

Cleanup Method1: EPA 3665A

Cleanup Date1: Cleanup Method2: EPA 3660B

04/26/13

Cleanup Date2:

04/26/13

Parameter	Result	Qualifier Units	RL	MDL
Polychlorinated Biphenyls by GC	- Westborough	Lab for sample(s):	01-02 Batch:	WG604116-1
Aroclor 1016	ND	ug/kg	33.3	6.57
Aroclor 1221	ND	ug/kg	33.3	10.0
Aroclor 1232	ND	ug/kg	33.3	7.07
Aroclor 1242	ND	ug/kg	33.3	6.31
Aroclor 1248	ND	ug/kg	33.3	4.02
Aroclor 1254	ND	ug/kg	33.3	5.24
Aroclor 1260	ND	ug/kg	33.3	5.77

	Acceptance					
Surrogate	%Recovery	Qualifier	lifier Criteria			
0.450.7	0.5		00.450			
2,4,5,6-Tetrachloro-m-xylene	95		30-150			
Decachlorobiphenyl	83		30-150			
2,4,5,6-Tetrachloro-m-xylene	98		30-150			
Decachlorobiphenyl	114		30-150			



**Project Number:** 212645 Lab Number:

L1307284

Report Date:

04/30/13

**Method Blank Analysis Batch Quality Control** 

Analytical Method: Analytical Date:

1,8082A 04/29/13 00:51

Analyst:

KΒ

Extraction Method: EPA 3510C Extraction Date:

04/26/13 19:19

Cleanup Method1: EPA 3665A

Cleanup Date1: Cleanup Method2: EPA 3660B

04/27/13

Cleanup Date2:

04/27/13

Parameter	Result	Qualifier Units	RL	MDL
Polychlorinated Biphenyls by GC - \	Vestborough	Lab for sample(s):	03-04 Batch:	WG604382-1
Aroclor 1016	ND	ug/l	0.083	0.055
Aroclor 1221	ND	ug/l	0.083	0.053
Aroclor 1232	ND	ug/l	0.083	0.031
Aroclor 1242	ND	ug/l	0.083	0.060
Aroclor 1248	ND	ug/l	0.083	0.051
Aroclor 1254	ND	ug/l	0.083	0.034
Aroclor 1260	ND	ug/l	0.083	0.032

	1	Acceptance	
%Recovery	Qualifier	Criteria	
57		30-150	
54		30-150	
57		30-150	
55		30-150	
	57 54 57	%Recovery Qualifier  57 54 57	57 30-150 54 30-150 57 30-150



Project Name: DELLA PENNA

Project Number: 212645

Lab Number: L1307284

Parameter	LCS %Recovery	Qual	LCSD %Recovery		ecovery _imits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westbord	ough Lab Associ	ated sample(	s): 01-02 Bat	ch: WG604116	6-2 WG60411	6-3		
Aroclor 1016	78		88	2	40-140	12		50
Aroclor 1260	62		67	4	40-140	8		50

	LCS		LCSD		Acceptance	
Surrogate	%Recovery	Qual	%Recovery	Qual	Criteria	
2,4,5,6-Tetrachloro-m-xylene	82		92		30-150	
Decachlorobiphenyl	65		70		30-150	
2,4,5,6-Tetrachloro-m-xylene	78		94		30-150	
Decachlorobiphenyl	85		86		30-150	

Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 03-04 Batch: WG604382-2 WG604382-3									
Aroclor 1016	63	68	40-140	7	50				
Aroclor 1260	60	64	40-140	6	50				

	LCS		LCSD		Acceptance	
Surrogate	%Recovery Qual		%Recovery	Qual	Criteria	
2,4,5,6-Tetrachloro-m-xylene	54		61		30-150	
Decachlorobiphenyl	56		65		30-150	
2,4,5,6-Tetrachloro-m-xylene	52		59		30-150	
Decachlorobiphenyl	56		64		30-150	



#### **METALS**



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-01 Date Collected: 04/23/13 11:00

Client ID: BH2 10-12' Date Received: 04/23/13
Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 91%

**Dilution** Date Date Prep **Analytical** Method Method Factor **Prepared Analyzed** Result Qualifier Units RL MDL **Parameter Analyst** Total Metals - Westborough Lab Arsenic, Total 2.9 mg/kg 0.42 0.12 1 04/26/13 08:06 04/26/13 20:41 EPA 3050B 1,6010C MG Barium, Total 22 0.12 1 04/26/13 08:06 04/26/13 20:41 EPA 3050B 1,6010C MG mg/kg 0.42 J 0.03 1 1,6010C Cadmium, Total 0.15 0.42 04/26/13 08:06 04/26/13 20:41 EPA 3050B MG mg/kg 1,6010C Chromium, Total 7.0 mg/kg 0.42 0.08 1 04/26/13 08:06 04/26/13 20:41 EPA 3050B MG 26 0.12 1 04/26/13 08:06 04/26/13 20:41 EPA 3050B 1,6010C MG Lead, Total mg/kg 2.1 Mercury, Total 0.02 J 0.07 0.02 1 04/29/13 08:48 04/29/13 11:26 EPA 7471B 1,7471B MC mg/kg J 1,6010C Selenium, Total 0.50 mg/kg 0.84 0.12 1 04/26/13 08:06 04/26/13 20:41 EPA 3050B MG 0.42 Silver, Total ND mg/kg 0.08 1 04/26/13 08:06 04/26/13 20:41 EPA 3050B 1,6010C MG



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-02 Date Collected: 04/23/13 14:45

Client ID: BH7 6-8' Date Received: 04/23/13
Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 85%

**Dilution** Date Date Prep **Analytical** Method Factor **Prepared** Method **Analyzed** Result Qualifier Units RL MDL **Parameter Analyst** Total Metals - Westborough Lab Arsenic, Total 6.2 mg/kg 0.46 0.14 1 04/26/13 08:06 04/26/13 20:53 EPA 3050B 1,6010C MG Barium, Total 16 0.46 0.14 1 04/26/13 08:06 04/26/13 20:53 EPA 3050B 1,6010C MG mg/kg J 1 1,6010C Cadmium, Total 0.10 0.46 0.03 04/26/13 08:06 04/26/13 20:53 EPA 3050B MG mg/kg 1,6010C Chromium, Total 8.8 mg/kg 0.46 0.09 1 04/26/13 08:06 04/26/13 20:53 EPA 3050B MG 8.0 2.3 0.14 1 04/26/13 08:06 04/26/13 20:53 EPA 3050B 1,6010C MG Lead, Total mg/kg Mercury, Total ND 0.08 0.02 1 04/29/13 08:48 04/29/13 11:33 EPA 7471B 1,7471B MC mg/kg J 1,6010C Selenium, Total 0.32 mg/kg 0.91 0.14 1 04/26/13 08:06 04/26/13 20:53 EPA 3050B MG 0.46 Silver, Total ND mg/kg 0.09 1 04/26/13 08:06 04/26/13 20:53 EPA 3050B 1,6010C MG



Project Name:DELLA PENNALab Number:L1307284Project Number:212645Report Date:04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-03 Date Collected: 04/23/13 13:00

Client ID: TPMW 1 Date Received: 04/23/13
Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

Matrix: Water

Analytical Method Dilution Date Date Prep **Factor** Prepared **Analyzed** Method **Parameter** Result Qualifier Units RL MDL Analyst Total Metals - Westborough Lab Mercury, Total 0.00259 0.00100 0.00033 1 1,7470A mg/l 04/27/13 09:17 04/29/13 10:37 EPA 7470A JΗ



Project Name:DELLA PENNALab Number:L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-03 D Date Collected: 04/23/13 13:00

Client ID: TPMW 1 Date Received: 04/23/13
Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	tborough L	.ab									
Arsenic, Total	0.1158		mg/l	0.00500	0.00200	10	04/26/13 07:58	3 04/27/13 16:59	EPA 3005A	1,6020A	AK
Barium, Total	1.065		mg/l	0.00500	0.00100	10	04/26/13 07:58	3 04/27/13 16:59	EPA 3005A	1,6020A	AK
Cadmium, Total	0.00181	J	mg/l	0.00500	0.00050	10	04/26/13 07:58	3 04/27/13 16:59	EPA 3005A	1,6020A	AK
Chromium, Total	0.1866		mg/l	0.01000	0.00200	10	04/26/13 07:58	3 04/27/13 16:59	EPA 3005A	1,6020A	AK
Lead, Total	0.2954		mg/l	0.01000	0.00200	10	04/26/13 07:58	3 04/27/13 16:59	EPA 3005A	1,6020A	AK
Selenium, Total	0.0105	J	mg/l	0.0500	0.00300	10	04/26/13 07:58	3 04/27/13 16:59	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.00400	0.00100	10	04/26/13 07:58	3 04/29/13 21:01	EPA 3005A	1,6020A	ВМ



Project Name:DELLA PENNALab Number:L1307284Project Number:212645Report Date:04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-04 Date Collected: 04/23/13 15:45

Client ID: TPMW 2 Date Received: 04/23/13
Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

Matrix: Water

Analytical Method Dilution Date Date Prep **Factor** Prepared Analyzed Method **Parameter** Result Qualifier Units RL MDL Analyst Total Metals - Westborough Lab Mercury, Total 0.00855 0.00100 0.00033 1 1,7470A mg/l 04/27/13 09:17 04/29/13 10:39 EPA 7470A JΗ



Project Name:DELLA PENNALab Number:L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-04 D Date Collected: 04/23/13 15:45

Client ID: TPMW 2 Date Received: 04/23/13
Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - West	borough L	.ab									
	J										
Arsenic, Total	0.08168		mg/l	0.00500	0.00200	10	04/26/13 07:58	3 04/27/13 17:02	EPA 3005A	1,6020A	AK
Barium, Total	1.748		mg/l	0.00500	0.00100	10	04/26/13 07:58	3 04/27/13 17:02	EPA 3005A	1,6020A	AK
Cadmium, Total	0.02108		mg/l	0.00500	0.00050	10	04/26/13 07:58	3 04/27/13 17:02	EPA 3005A	1,6020A	AK
Chromium, Total	0.3687		mg/l	0.01000	0.00200	10	04/26/13 07:58	3 04/27/13 17:02	EPA 3005A	1,6020A	AK
Lead, Total	0.7898		mg/l	0.01000	0.00200	10	04/26/13 07:58	3 04/27/13 17:02	EPA 3005A	1,6020A	AK
Selenium, Total	0.0281	J	mg/l	0.0500	0.00300	10	04/26/13 07:58	3 04/27/13 17:02	EPA 3005A	1,6020A	AK
Silver, Total	0.00212	J	mg/l	0.00400	0.00100	10	04/26/13 07:58	3 04/29/13 21:08	EPA 3005A	1,6020A	ВМ



Project Number: 212645

Lab Number:

L1307284

**Report Date:** 04/30/13

# Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough	h Lab for	sample(s):	03-04	Batch:	WG604	4175-1				
Arsenic, Total	0.00033	J	mg/l	0.00050	0.00020	) 1	04/26/13 07:58	04/27/13 16:22	2 1,6020A	AK
Barium, Total	ND		mg/l	0.00050	0.00010	) 1	04/26/13 07:58	04/27/13 16:22	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00050	0.00005	5 1	04/26/13 07:58	04/27/13 16:22	2 1,6020A	AK
Chromium, Total	ND		mg/l	0.00100	0.00020	) 1	04/26/13 07:58	04/27/13 16:22	2 1,6020A	AK
Lead, Total	ND		mg/l	0.00100	0.00020	) 1	04/26/13 07:58	04/27/13 16:22	2 1,6020A	AK
Selenium, Total	ND		mg/l	0.00500	0.00030	) 1	04/26/13 07:58	04/27/13 16:22	2 1,6020A	AK
Silver, Total	ND		mg/l	0.00040	0.00010	) 1	04/26/13 07:58	04/29/13 20:05	5 1,6020A	ВМ

**Prep Information** 

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westboroug	h Lab for sample(s)	: 01-02	Batch:	WG60	4181-1				
Arsenic, Total	ND	mg/kg	0.40	0.12	1	04/26/13 08:06	04/26/13 20:35	1,6010C	MG
Barium, Total	ND	mg/kg	0.40	0.12	1	04/26/13 08:06	04/26/13 20:35	1,6010C	MG
Cadmium, Total	ND	mg/kg	0.40	0.02	1	04/26/13 08:06	04/26/13 20:35	1,6010C	MG
Chromium, Total	ND	mg/kg	0.40	0.08	1	04/26/13 08:06	04/26/13 20:35	1,6010C	MG
Lead, Total	ND	mg/kg	2.0	0.12	1	04/26/13 08:06	04/26/13 20:35	1,6010C	MG
Selenium, Total	ND	mg/kg	0.80	0.12	1	04/26/13 08:06	04/26/13 20:35	1,6010C	MG
Silver, Total	ND	mg/kg	0.40	0.08	1	04/26/13 08:06	04/26/13 20:35	1,6010C	MG

**Prep Information** 

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborou	igh Lab for sample(s)	: 03-04	Batch: WG60	04284-1				
Mercury, Total	ND	mg/l	0.00020 0.0000	06 1	04/27/13 09:17	04/29/13 09:58	3 1,7470A	JH



Project Name: DELLA PENNA

Project Number: 212645

Lab Number:

L1307284

**Report Date:** 04/30/13

Method Blank Analysis Batch Quality Control

**Prep Information** 

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Westborough	Lab fo	or sample(s):	01-02	Batch:	WG604	4550-1				
Mercury, Total	ND		mg/kg	0.08	0.02	1	04/29/13 08:48	04/29/13 11:23	3 1,7471B	MC

**Prep Information** 

Digestion Method: EPA 7471B



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307284

<u>Parameter</u>	LCS %Recovery	LCSI Qual %Recov		%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sar	mple(s): 03-04	Batch: WG604175-2					
Arsenic, Total	108	-		80-120	-		
Barium, Total	96	-		80-120	-		
Cadmium, Total	108	-		80-120	-		
Chromium, Total	99	-		80-120	-		
Lead, Total	102	-		80-120	-		
Selenium, Total	108	-		80-120	-		
Silver, Total	104	-		80-120	-		
Total Metals - Westborough Lab Associated sar	mple(s): 01-02	Batch: WG604181-2	SRM Lot Numb	er: 0518-10-02			
Arsenic, Total	104	-		81-119	-		
Barium, Total	104	-		83-118	-		
Cadmium, Total	94	-		82-117	-		
Chromium, Total	101	-		80-119	-		
Lead, Total	99	-		80-120	-		
Selenium, Total	109	-		80-120	-		
Silver, Total	108	-		66-134	-		
Total Metals - Westborough Lab Associated sar	mple(s): 03-04	Batch: WG604284-2					
Mercury, Total	93	-		80-120	-		



## Lab Control Sample Analysis Batch Quality Control

Project Name: DELLA PENNA

Lab Number:

L1307284

**Project Number:** 212645

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**Report Date:** 04/30/13

Parameter	LCS eter %Recover		%Recovery ery Limits	RPD	RPD Limits
Total Metals - Westborough Lab A	associated sample(s): 01-02	Batch: WG604550-2	SRM Lot Number: 0518-10-02		
Mercury, Total	98		67-133	-	



## Matrix Spike Analysis Batch Quality Control

Project Name: DELLA PENNA

Project Number: 212645

Lab Number: L1307284

**Report Date:** 04/30/13

arameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery Qual	Recovery Limits	RPD Qual	RPD Limits
Total Metals - Westborou	igh Lab Associated	sample(s):	03-04 QC	Batch ID: WG	604175-4	QC S	Sample: L1307405-01	Client ID:	MS Sample	
Arsenic, Total	0.00101	0.12	0.1302	108		-	-	80-120	-	20
Barium, Total	1.714	2	3.627	96		-	-	80-120	-	20
Cadmium, Total	ND	0.51	0.5359	105		-	-	80-120	-	20
Chromium, Total	0.00083J	0.2	0.1988	99		-	-	80-120	-	20
Lead, Total	0.00613	0.51	0.5281	102		-	-	80-120	-	20
Selenium, Total	ND	0.12	0.130	108		-	-	80-120	-	20
Silver, Total	ND	0.05	0.05101	102		-	-	80-120	-	20
otal Metals - Westborou	ugh Lab Associated	sample(s):	01-02 QC	Batch ID: WG	604181-4	QC S	Sample: L1307284-01	Client ID:	BH2 10-12'	
Arsenic, Total	2.9	10	13	101		-	-	75-125	-	35
Barium, Total	22.	167	190	101		-	-	75-125	-	35
Cadmium, Total	0.15J	42.5	32	75		-	-	75-125	-	35
Chromium, Total	7.0	16.7	23	96		-	-	75-125	-	35
Lead, Total	26.	42.5	50	56	Q	-	-	75-125	-	35
Selenium, Total	0.50J	10	9.7	97		-	-	75-125	-	35
Silver, Total	ND	25	28	112		-	-	75-125	-	35
otal Metals - Westborou	ugh Lab Associated	sample(s):	03-04 QC	Batch ID: WG	604284-4	QC S	Sample: L1307162-01	Client ID:	MS Sample	
Mercury, Total	ND	0.001	0.00129	129		-	-	70-130	-	20
otal Metals - Westborou	ugh Lab Associated	sample(s):	01-02 QC	Batch ID: WG	604550-4	QC S	Sample: L1307284-01	Client ID:	BH2 10-12'	
Mercury, Total	0.02J	0.172	0.17	99		-	-	70-130	-	35



## Lab Duplicate Analysis Batch Quality Control

Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number:

L1307284 04/30/13

Report Date:

**Native Sample Duplicate Sample RPD Limits RPD** Qual **Parameter** Units Total Metals - Westborough Lab Associated sample(s): 03-04 QC Batch ID: WG604175-3 QC Sample: L1307405-01 Client ID: DUP Sample Arsenic, Total 0.00101 0.00091 mg/l 11 20 Cadmium, Total ND ND mg/l NC 20 Chromium, Total 0.00083J 0.00076J mg/l NC 20 Lead, Total 0.00613 0.00611 mg/l 0 20 Selenium, Total ND ND mg/l NC 20 Total Metals - Westborough Lab Associated sample(s): 03-04 QC Batch ID: WG604175-3 QC Sample: L1307405-01 Client ID: DUP Sample Barium, Total 1.714 1.735 mg/l 20 Total Metals - Westborough Lab Associated sample(s): 03-04 QC Batch ID: WG604175-3 QC Sample: L1307405-01 Client ID: DUP Sample Silver, Total ND ND NC 20 mg/l Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG604181-3 QC Sample: L1307284-01 Client ID: BH2 10-12' 35 Arsenic, Total 2.9 2.7 mg/kg 7 35 Barium, Total 22. 16 mg/kg 32 NC 35 Cadmium, Total 0.15J 0.06J mg/kg 35 Chromium, Total 7.0 6.6 mg/kg 6 Q Lead, Total 26. 8.8 mg/kg 99 35 Selenium, Total 0.50J 0.45J mg/kg NC 35 Silver, Total ND NC 35 ND mg/kg



# Lab Duplicate Analysis Batch Quality Control

**Project Name:** DELLA PENNA

Project Number: 212645

Lab Number:

L1307284

Report Date:

04/30/13

arameter		Native Sample		Duplica	ate :	Sample	Units	RPD	RPD	Limits
Total Metals - Westborough Lab	Associated sample(s): 0	3-04	QC Batch ID:	WG604284	-3	QC Sample:	L1307162-01	Client ID:	DUP Sample	
Mercury, Total			ND		ND		mg/l	NC		20
Total Metals - Westborough Lab	Associated sample(s): 0	)1-02	QC Batch ID:	WG604550	-3	QC Sample:	L1307284-01	Client ID:	BH2 10-12'	
Mercury, Total			0.02J		ND		mg/kg	NC		35

# INORGANICS & MISCELLANEOUS



Project Name: DELLA PENNA Lab

Lab Number:

L1307284

Project Number: 212645

Report Date:

04/30/13

## **SAMPLE RESULTS**

Lab ID: L1307284-01

Client ID: BH2 10-12'

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY

Matrix: Soil

Date Collected:

04/23/13 11:00

Date Received:

04/23/13

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab									
Solids, Total	91.1		%	0.100	NA	1	-	04/25/13 01:11	30,2540G	RD
Cyanide, Total	ND		mg/kg	1.1	0.25	1	04/26/13 12:00	04/29/13 12:55	30,4500CN-CE	JO



Project Name: DELLA PENNA

Lab Number:

L1307284

Project Number: 212645

Report Date:

04/30/13

## **SAMPLE RESULTS**

Lab ID: L1307284-02

Client ID: BH7 6-8'

Sample Location: 40-52 ELLICOTT ST BATAVIA, NY

Matrix: Soil

Date Collected: 04/23/13 14:45

Date Received: 04/23/13

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab									
Solids, Total	85.0		%	0.100	NA	1	-	04/25/13 01:11	30,2540G	RD
Cyanide, Total	ND		mg/kg	1.2	0.27	1	04/26/13 12:00	04/29/13 12:56	30,4500CN-CE	JO



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-03 Date Collected: 04/23/13 13:00

Client ID: TPMW 1 Date Received: 04/23/13 Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab									
Cyanide, Total	ND		mg/l	0.005	0.001	1	04/25/13 20:45	04/29/13 14:20	1,9010C/9012A	JO



Project Name: DELLA PENNA Lab Number: L1307284

Project Number: 212645 Report Date: 04/30/13

**SAMPLE RESULTS** 

Lab ID: L1307284-04 Date Collected: 04/23/13 15:45

Client ID: TPMW 2 Date Received: 04/23/13 Sample Location: 40-52 ELLICOTT ST BATAVIA, NY Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab	)								
Cyanide, Total	0.004	J	mg/l	0.005	0.001	1	04/25/13 20:45	04/29/13 14:20	1,9010C/9012A	JO



**Project Name: DELLA PENNA** 

L1307284 Project Number: 212645 **Report Date:** 04/30/13

Lab Number:

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab for sam	ple(s): 03	-04 Bat	tch: W0	3604106-1				
Cyanide, Total	ND	mg/l	0.005	0.001	1	04/25/13 20:45	04/29/13 14:07	1,9010C/9012	A JO
General Chemistry -	Westborough Lab for sam	ple(s): 01	-02 Bat	tch: W0	G604307-1				
Cyanide, Total	ND	mg/kg	0.93	0.22	1	04/26/13 12:00	04/29/13 12:38	30,4500CN-CE	∃ JO



## Lab Control Sample Analysis Batch Quality Control

**Project Name: DELLA PENNA** 

Lab Number:

L1307284

**Project Number:** 212645

Report Date: 04/30/13

Parameter	LCS %Recovery Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Asso	ociated sample(s): 03-04	Batch: WG6041	06-2 WG6	04106-3			
Cyanide, Total	107	103		80-120	4		20
General Chemistry - Westborough Lab Asso	ociated sample(s): 01-02	2 Batch: WG6043	07-2				
Cyanide, Total	106	-			-		



## Matrix Spike Analysis Batch Quality Control

Project Name: DELLA PENNA

Lab Number:

L1307284

04/30/13

Project Number: 212645

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westbor Sample	rough Lab Asso	ciated samp	ole(s): 03-04	QC Batch II	D: WG60	)4106-4	WG604106-5	QC Sar	nple: L1307	250-06	Client	ID: MS
Cyanide, Total	ND	0.2	0.211	106		0.209	104		80-120	1		20
General Chemistry - Westbor	rough Lab Asso	ciated samp	ole(s): 01-02	QC Batch II	D: WG60	04307-4	QC Sample: I	_130728	34-02 Clie	nt ID: E	H7 6-8	
Cyanide, Total	ND	11	11	98		-	-			-		



# Lab Duplicate Analysis Batch Quality Control

**Project Name:** DELLA PENNA

Project Number: 212645

Lab Number:

L1307284 04/30/13

Report Date:

Parameter	Native Sam	ple D	ouplicate Sampl	e Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01-02	QC Batch ID:	WG603854-1	QC Sample:	L1306808-02	Client ID:	DUP Sample
Solids, Total	83.2		79.8	%	4		20
General Chemistry - Westborough Lab	Associated sample(s): 01-02	QC Batch ID:	WG604307-3	QC Sample:	L1307284-02	Client ID:	BH7 6-8'
Cyanide, Total	ND		ND	mg/kg	NC		



Project Name: **DELLA PENNA** 

Lab Number: L1307284 **Report Date:** 04/30/13 Project Number: 212645

## **Sample Receipt and Container Information**

YES Were project specific reporting limits specified?

Reagent H2O Preserved Vials Frozen on: NA

## **Cooler Information Custody Seal**

Cooler

Absent Α В Absent

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1307284-01A	Vial Large unpreserved	В	N/A	4.4	Υ	Absent	NYTCL-8260(14)
L1307284-01B	Amber 250ml unpreserved	В	N/A	4.4	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)
L1307284-01C	Amber 250ml unpreserved	В	N/A	4.4	Y	Absent	TCN-4500(14),TS(7),NYTCL- 8082(14)
L1307284-02A	Vial Large unpreserved	В	N/A	4.4	Υ	Absent	NYTCL-8260(14)
L1307284-02B	Amber 250ml unpreserved	В	N/A	4.4	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)
L1307284-02C	Amber 250ml unpreserved	В	N/A	4.4	Υ	Absent	TCN-4500(14),TS(7),NYTCL- 8082(14)
L1307284-03A	Vial HCI preserved	Α	N/A	5.0	Υ	Absent	NYTCL-8260(14)
L1307284-03B	Vial HCI preserved	Α	N/A	5.0	Υ	Absent	NYTCL-8260(14)
L1307284-03C	Vial HCI preserved	Α	N/A	5.0	Υ	Absent	NYTCL-8260(14)
L1307284-03D	Amber 1000ml unpreserved	Α	7	5.0	Υ	Absent	NYTCL-8270(7),NYTCL-8270- SIM(7)
L1307284-03E	Amber 1000ml unpreserved	Α	7	5.0	Υ	Absent	NYTCL-8270(7),NYTCL-8270- SIM(7)
L1307284-03F	Plastic 500ml HNO3 preserved	A	<2	5.0	Y	Absent	BA-6020T(180),SE- 6020T(180),CR-6020T(180),PB- 6020T(180),AS-6020T(180),AG- 6020T(180),CD-6020T(180),HG- T(28)
L1307284-03G	Amber 1000ml unpreserved	Α	7	5.0	Υ	Absent	NYTCL-8082-1200ML(7)
L1307284-03H	Amber 1000ml unpreserved	Α	7	5.0	Υ	Absent	NYTCL-8082-1200ML(7)
L1307284-03I	Plastic 250ml NaOH preserved	Α	>12	5.0	Υ	Absent	TCN-9010(14)
L1307284-04A	Vial HCl preserved	Α	N/A	5.0	Υ	Absent	NYTCL-8260(14)
L1307284-04B	Vial HCI preserved	Α	N/A	5.0	Υ	Absent	NYTCL-8260(14)



Project Name: DELLA PENNA

Project Number: 212645

**Lab Number:** L1307284 **Report Date:** 04/30/13

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1307284-04C	Vial HCl preserved	Α	N/A	5.0	Υ	Absent	NYTCL-8260(14)
L1307284-04D	Amber 1000ml unpreserved	Α	7	5.0	Υ	Absent	NYTCL-8270(7),NYTCL-8270- SIM(7)
L1307284-04E	Amber 1000ml unpreserved	Α	7	5.0	Υ	Absent	NYTCL-8270(7),NYTCL-8270- SIM(7)
L1307284-04F	Plastic 500ml HNO3 preserved	Α	<2	5.0	Y	Absent	BA-6020T(180),SE- 6020T(180),CR-6020T(180),PB- 6020T(180),AS-6020T(180),AG- 6020T(180),CD-6020T(180),HG- T(28)
L1307284-04G	Amber 1000ml unpreserved	Α	7	5.0	Υ	Absent	NYTCL-8082-1200ML(7)
L1307284-04H	Amber 1000ml unpreserved	Α	7	5.0	Υ	Absent	NYTCL-8082-1200ML(7)
L1307284-04I	Plastic 250ml NaOH preserved	Α	>12	5.0	Υ	Absent	TCN-9010(14)

## **Container Comments**

L1307284-02C



L1307284

Project Name: DELLA PENNA Lab Number:

Project Number: 212645 Report Date: 04/30/13

#### **GLOSSARY**

#### Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes
or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

#### Footnotes

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

#### Terms

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".
- 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 five times (5x) 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.
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- 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 RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: DU Report with "J" Qualifiers



Project Name:DELLA PENNALab Number:L1307284Project Number:212645Report Date:04/30/13

#### **Data Qualifiers**

due to obvious interference.

- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- 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:DELLA PENNALab Number:L1307284Project Number:212645Report Date:04/30/13

#### REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

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 it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

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



## **Certificate/Approval Program Summary**

Last revised December 19, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

### Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate, Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform - Colilert (SM9223, Enumeration and P/A), E. Coli. - Colilert (SM9223, Enumeration and P/A), HPC - Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform - MF m-FC (SM9222D), Fecal Coliform - A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity, Organic Parameters; PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

## Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 6010C, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8330, 8151A, 8260B, 8260C, 8270C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014, 9030B, 9040B, 9045C, 6010B, 6010C, 6020, 6020A, 7471A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8270D, 8330, 8151A, 8081A, 8081B, 8082, 8082A, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

### Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1.2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; Page ColilertQT\_SM9223B; MF-SM9222D.)

Non-Potable Water (Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services <u>Certificate/Lab ID</u>: 200307. *NELAP Accredited. Drinking Water* (<u>Inorganic Parameters</u>: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. <u>Organic Parameters</u>: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited. Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, NJ EPH.)

#### New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

*Drinking Water* (<u>Inorganic Parameters</u>: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. <u>Organic Parameters</u>: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010C, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012B, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 18270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C,

3546, 3580A, 5030B, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID: 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

*Drinking Water Program* Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID: 68-03671. *NELAP Accredited.*Drinking Water (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. *NELAP Accredited via NJ-DEP*. Refer to MA-DEP Certificate for Potable and Non-Potable Water. Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

**Texas Commisson on Environmental Quality** <u>Certificate/Lab ID</u>: T104704476. **NELAP Accredited.** *Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2<sup>-</sup> D, 510C, 5210B, 5220D, 5310C, 5540C. <u>Organic Parameters</u>: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. NELAP Accredited. Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, )

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 355B0, 3580A, 3630C, 6020A, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

**Department of Defense, L-A-B** Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Page \$71jd & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C,

8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

**EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

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#### ANALYTICAL REPORT

Lab Number: L1307330

Client: LaBella Associates, P.C.

300 Pearl Street

Suite 252

Buffalo, NY 14202

ATTN: Dan Riker Phone: (716) 551-6281

Project Name: DELLA PENNA

Project Number: 212645 Report Date: 05/01/13

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



L1307330

Lab Number:

4052 ELLICOT ST., BATAVIA, NY 04/24/13 12:50

Project Name: DELLA PENNA

BH13 9-11'

L1307330-05

**Project Number:** 212645 **Report Date:** 05/01/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1307330-01	BH12 6-8'	4052 ELLICOT ST., BATAVIA, NY	04/24/13 11:05
L1307330-02	TPMW3	4052 ELLICOT ST., BATAVIA, NY	04/24/13 11:50
L1307330-03	BH9 8-10'	4052 ELLICOT ST., BATAVIA, NY	04/24/13 09:15
L1307330-04	TPMW4	4052 ELLICOT ST., BATAVIA, NY	04/24/13 13:00



Project Name:DELLA PENNALab Number:L1307330Project Number:212645Report Date:05/01/13

#### **Case Narrative**

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for 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 free of charge for 30 days from the date the project is completed. After 30 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.

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



Project Name:DELLA PENNALab Number:L1307330Project Number:212645Report Date:05/01/13

## **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.

L1307330-04 and -05 have elevated detection limits due to the dilutions required by the elevated concentrations of non-target compounds in the samples.

#### Semivolatile Organics

L1307330-01 and -04 have elevated detection limits due to the dilutions required by the sample matrices. The WG604184-2/-3 LCS/LCSD recoveries, associated with L1307330-01, -03, and -05, are below the acceptance criteria for Benzoic acid (0%/0%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

### Semivolatile Organics by SIM

The surrogate recoveries for L1307330-04 are below the acceptance criteria for 2-Fluorophenol, Phenol-d6, Nitrobenzene-d5, 2-Fluorobiphenyl, 2,4,6-Tribromophenol, and 4-Terphenyl-d14 (all 0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

#### **PCBs**

L1307330-02 has elevated detection limits due to limited sample volume available for analysis. L1307330-05 has elevated detection limits due to the dilution required by the sample matrix.



Project Name:DELLA PENNALab Number:L1307330Project Number:212645Report Date:05/01/13

## **Case Narrative (continued)**

Metals

L1307330-02 and -04 have elevated detection limits for all elements, except Mercury, due to the dilutions required by matrix interferences encountered during analysis.

L1307330-02, -04 have elevated detection limits for Mercury due to the prep dilutions required by the sample matrices.

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:

Title: Technical Director/Representative Date: 05/01/13

Cypelling M. Chen Cynthia McQueen

ALPHA

## **ORGANICS**



## **VOLATILES**



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-01 Date Collected: 04/24/13 11:05

Client ID: BH12 6-8' Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 04/29/13 19:44

Analyst: BN Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westb	orough Lab					
Methylene chloride	ND		ug/kg	11	2.2	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.19	1
Chloroform	ND		ug/kg	1.6	0.40	1
Carbon tetrachloride	ND		ug/kg	1.1	0.23	1
1,2-Dichloropropane	ND		ug/kg	3.8	0.25	1
Dibromochloromethane	ND		ug/kg	1.1	0.33	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.33	1
Tetrachloroethene	ND		ug/kg	1.1	0.15	1
Chlorobenzene	ND		ug/kg	1.1	0.38	1
Trichlorofluoromethane	ND		ug/kg	5.4	0.13	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.16	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.12	1
Bromodichloromethane	ND		ug/kg	1.1	0.25	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.14	1
1,1-Dichloropropene	ND		ug/kg	5.4	0.50	1
Bromoform	ND		ug/kg	4.4	0.45	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.18	1
Benzene	ND		ug/kg	1.1	0.13	1
Toluene	ND		ug/kg	1.6	0.12	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	5.4	0.85	1
Bromomethane	ND		ug/kg	2.2	0.37	1
Vinyl chloride	ND		ug/kg	2.2	0.15	1
Chloroethane	ND		ug/kg	2.2	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.23	1
Trichloroethene	ND		ug/kg	1.1	0.16	1
1,2-Dichlorobenzene	1.0	J	ug/kg	5.4	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	5.4	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	5.4	0.26	1



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

## **SAMPLE RESULTS**

Lab ID: Date Collected: 04/24/13 11:05

Client ID: BH12 6-8' Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Sample Location. 4032 ELL	JOOT ST., BATAVIA, INT		r leid r rep.		NOU	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Wes	stborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.2	0.11	1	
p/m-Xylene	ND		ug/kg	2.2	0.35	1	
o-Xylene	ND		ug/kg	2.2	0.29	1	
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1	
Dibromomethane	ND		ug/kg	11	0.18	1	
Styrene	ND		ug/kg	2.2	0.34	1	
Dichlorodifluoromethane	ND		ug/kg	11	0.24	1	
Acetone	12		ug/kg	11	3.4	1	
Carbon disulfide	5.8	J	ug/kg	11	2.2	1	
2-Butanone	ND		ug/kg	11	0.39	1	
Vinyl acetate	ND		ug/kg	11	0.52	1	
I-Methyl-2-pentanone	ND		ug/kg	11	0.26	1	
1,2,3-Trichloropropane	ND		ug/kg	11	0.24	1	
2-Hexanone	ND		ug/kg	11	0.20	1	
Bromochloromethane	ND		ug/kg	5.4	0.21	1	
2,2-Dichloropropane	ND		ug/kg	5.4	0.24	1	
,2-Dibromoethane	ND		ug/kg	4.4	0.19	1	
,3-Dichloropropane	ND		ug/kg	5.4	0.19	1	
I,1,1,2-Tetrachloroethane	ND		ug/kg	1.1	0.35	1	
Bromobenzene	ND		ug/kg	5.4	0.23	1	
n-Butylbenzene	ND		ug/kg	1.1	0.22	1	
sec-Butylbenzene	ND		ug/kg	1.1	0.22	1	
ert-Butylbenzene	ND		ug/kg	5.4	0.61	1	
o-Chlorotoluene	ND		ug/kg	5.4	0.17	1	
o-Chlorotoluene	ND		ug/kg	5.4	0.17	1	
I,2-Dibromo-3-chloropropane	ND		ug/kg	5.4	0.86	1	
Hexachlorobutadiene	ND		ug/kg	5.4	0.46	1	
sopropylbenzene	ND		ug/kg	1.1	0.18	1	
o-Isopropyltoluene	ND		ug/kg	1.1	0.21	1	
Naphthalene	4.1	J	ug/kg	5.4	0.84	1	
Acrylonitrile	ND		ug/kg	11	0.26	1	
n-Propylbenzene	ND		ug/kg	1.1	0.14	1	
,2,3-Trichlorobenzene	ND		ug/kg	5.4	0.18	1	
,2,4-Trichlorobenzene	ND		ug/kg	5.4	0.86	1	
,3,5-Trimethylbenzene	ND		ug/kg	5.4	0.16	1	
I,2,4-Trimethylbenzene	ND		ug/kg	5.4	0.62	1	
,4-Dioxane	ND		ug/kg	110	19.	1	
1,4-Diethylbenzene	ND		ug/kg	4.4	0.17	1	
4-Ethyltoluene	ND		ug/kg	4.4	0.13	1	
-							



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: 04/24/13 11:05

Client ID: Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough La	ab					
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.4	0.14	1
Ethyl ether	ND		ug/kg	5.4	0.29	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	111		70-130	
Toluene-d8	98		70-130	
4-Bromofluorobenzene	101		70-130	
Dibromofluoromethane	104		70-130	



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-02 Date Collected: 04/24/13 11:50

Client ID: TPMW3 Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified Matrix: Water

Analytical Method: 1,8260C

Analytical Date: 04/29/13 13:31

Analyst: TR

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westbo	rough Lab					
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	0.54		ug/l	0.50	0.19	1
Toluene	0.76	J	ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: 04/24/13 11:50

Client ID: TPMW3 Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Facto
Volatile Organics by GC/MS - Westbo	orough Lab					
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	3.4	J	ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	0.70	J	ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	76.	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-02 Date Collected: 04/24/13 11:50

Client ID: TPMW3 Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westborough Lab							
1,2,4,5-Tetramethylbenzene	0.65	J	ug/l	2.0	0.65	1	
Ethyl ether	ND		ug/l	2.5	0.70	1	
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	99		70-130	
Toluene-d8	100		70-130	
4-Bromofluorobenzene	100		70-130	
Dibromofluoromethane	100		70-130	



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-03 D Date Collected: 04/24/13 09:15

Client ID: Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/30/13 10:13

Analyst: BN Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westb	orough Lab					
Methylene chloride	ND		ug/kg	590	120	50
1,1-Dichloroethane	ND		ug/kg	88	10.	50
Chloroform	ND		ug/kg	88	22.	50
Carbon tetrachloride	ND		ug/kg	59	12.	50
1,2-Dichloropropane	ND		ug/kg	200	13.	50
Dibromochloromethane	ND		ug/kg	59	18.	50
1,1,2-Trichloroethane	ND		ug/kg	88	18.	50
Tetrachloroethene	ND		ug/kg	59	8.2	50
Chlorobenzene	ND		ug/kg	59	20.	50
Trichlorofluoromethane	ND		ug/kg	290	7.1	50
1,2-Dichloroethane	ND		ug/kg	59	8.6	50
1,1,1-Trichloroethane	ND		ug/kg	59	6.5	50
Bromodichloromethane	ND		ug/kg	59	13.	50
trans-1,3-Dichloropropene	ND		ug/kg	59	7.1	50
cis-1,3-Dichloropropene	ND		ug/kg	59	7.5	50
1,1-Dichloropropene	ND		ug/kg	290	27.	50
Bromoform	ND		ug/kg	240	24.	50
1,1,2,2-Tetrachloroethane	ND		ug/kg	59	10.	50
Benzene	ND		ug/kg	59	6.9	50
Toluene	ND		ug/kg	88	6.6	50
Ethylbenzene	ND		ug/kg	59	8.7	50
Chloromethane	ND		ug/kg	290	46.	50
Bromomethane	ND		ug/kg	120	20.	50
Vinyl chloride	ND		ug/kg	120	8.3	50
Chloroethane	ND		ug/kg	120	18.	50
1,1-Dichloroethene	ND		ug/kg	59	12.	50
trans-1,2-Dichloroethene	ND		ug/kg	88	12.	50
Trichloroethene	ND		ug/kg	59	9.0	50
1,2-Dichlorobenzene	ND		ug/kg	290	11.	50
1,3-Dichlorobenzene	ND		ug/kg	290	11.	50
1,4-Dichlorobenzene	ND		ug/kg	290	14.	50



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

SAMPLE RESULTS

Lab ID: L1307330-03 D Date Collected: 04/24/13 09:15

Client ID: Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

		<u> </u>				<b>-</b>
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westbo	orough Lab					
Methyl tert butyl ether	ND		ug/kg	120	6.1	50
p/m-Xylene	36	J	ug/kg	120	19.	50
o-Xylene	ND		ug/kg	120	16.	50
cis-1,2-Dichloroethene	ND		ug/kg	59	8.8	50
Dibromomethane	ND		ug/kg	590	9.6	50
Styrene	ND		ug/kg	120	18.	50
Dichlorodifluoromethane	ND		ug/kg	590	13.	50
Acetone	ND		ug/kg	590	180	50
Carbon disulfide	ND		ug/kg	590	120	50
2-Butanone	ND		ug/kg	590	21.	50
Vinyl acetate	ND		ug/kg	590	28.	50
4-Methyl-2-pentanone	ND		ug/kg	590	14.	50
1,2,3-Trichloropropane	ND		ug/kg	590	13.	50
2-Hexanone	ND		ug/kg	590	11.	50
Bromochloromethane	ND		ug/kg	290	12.	50
2,2-Dichloropropane	ND		ug/kg	290	13.	50
1,2-Dibromoethane	ND		ug/kg	240	10.	50
1,3-Dichloropropane	ND		ug/kg	290	10.	50
1,1,1,2-Tetrachloroethane	ND		ug/kg	59	19.	50
Bromobenzene	ND		ug/kg	290	12.	50
n-Butylbenzene	78		ug/kg	59	12.	50
sec-Butylbenzene	160		ug/kg	59	12.	50
tert-Butylbenzene	ND		ug/kg	290	33.	50
o-Chlorotoluene	ND		ug/kg	290	9.4	50
p-Chlorotoluene	ND		ug/kg	290	9.0	50
1,2-Dibromo-3-chloropropane	ND		ug/kg	290	46.	50
Hexachlorobutadiene	ND		ug/kg	290	25.	50
Isopropylbenzene	200		ug/kg	59	9.8	50
p-Isopropyltoluene	160		ug/kg	59	11.	50
Naphthalene	1200		ug/kg	290	45.	50
Acrylonitrile	ND		ug/kg	590	14.	50
n-Propylbenzene	380		ug/kg	59	7.4	50
1,2,3-Trichlorobenzene	ND		ug/kg	290	9.9	50
1,2,4-Trichlorobenzene	ND		ug/kg	290	46.	50
1,3,5-Trimethylbenzene	1400		ug/kg	290	8.4	50
1,2,4-Trimethylbenzene	3400		ug/kg	290	34.	50
1,4-Dioxane	ND		ug/kg	5900	1000	50
1,4-Diethylbenzene	1700		ug/kg	240	9.4	50
4-Ethyltoluene	57	J	ug/kg	240	6.9	50



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-03 D Date Collected: 04/24/13 09:15

Client ID: Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab	)					
1,2,4,5-Tetramethylbenzene	780		ug/kg	240	7.6	50
Ethyl ether	ND		ug/kg	290	16.	50
trans-1,4-Dichloro-2-butene	ND		ug/kg	290	26.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	91		70-130	
Toluene-d8	108		70-130	
4-Bromofluorobenzene	115		70-130	
Dibromofluoromethane	96		70-130	



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-04 D Date Collected: 04/24/13 13:00

Client ID: TPMW4 Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Water Analytical Method: 1,8260C

Analytical Date: 04/29/13 13:56

Analyst: TR

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westb	orough Lab					
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.6	10
1,2-Dichloropropane	ND		ug/l	10	3.0	10
Dibromochloromethane	ND		ug/l	5.0	1.9	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.6	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
1,1-Dichloropropene	ND		ug/l	25	7.0	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.9	10
Benzene	5.5		ug/l	5.0	1.9	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	3.3	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.8	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Trichloroethene	ND		ug/l	5.0	1.7	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10
1,3-Dichlorobenzene	ND		ug/l	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10



**Project Name:** Lab Number: DELLA PENNA L1307330

**Project Number:** Report Date: 212645 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-04 D

Date Collected: 04/24/13 13:00 Client ID: TPMW4 Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Sample Location. 4002	LLLICOT ST., DATAVIA, INT		1 101	eld i lep.		ot Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS -	Westborough Lab						
Methyl tert butyl ether	ND		ug/l	25	7.0	10	
p/m-Xylene	ND		ug/l	25	7.0	10	
o-Xylene	ND		ug/l	25	7.0	10	
cis-1,2-Dichloroethene	ND		ug/l	25	7.0	10	
Dibromomethane	ND		ug/l	50	10.	10	
1,2,3-Trichloropropane	ND		ug/l	25	7.0	10	
Acrylonitrile	ND		ug/l	50	15.	10	
Styrene	ND		ug/l	25	7.0	10	
Dichlorodifluoromethane	ND		ug/l	50	10.	10	
Acetone	ND		ug/l	50	10.	10	
Carbon disulfide	ND		ug/l	50	10.	10	
2-Butanone	ND		ug/l	50	10.	10	
Vinyl acetate	ND		ug/l	50	10.	10	
4-Methyl-2-pentanone	ND		ug/l	50	10.	10	
2-Hexanone	ND		ug/l	50	10.	10	
Bromochloromethane	ND		ug/l	25	7.0	10	
2,2-Dichloropropane	ND		ug/l	25	7.0	10	
1,2-Dibromoethane	ND		ug/l	20	6.5	10	
1,3-Dichloropropane	ND		ug/l	25	7.0	10	
1,1,1,2-Tetrachloroethane	ND		ug/l	25	7.0	10	
Bromobenzene	ND		ug/l	25	7.0	10	
n-Butylbenzene	ND		ug/l	25	7.0	10	
sec-Butylbenzene	ND		ug/l	25	7.0	10	
tert-Butylbenzene	ND		ug/l	25	7.0	10	
o-Chlorotoluene	ND		ug/l	25	7.0	10	
p-Chlorotoluene	ND		ug/l	25	7.0	10	
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10	
Hexachlorobutadiene	ND		ug/l	25	7.0	10	
Isopropylbenzene	8.2	J	ug/l	25	7.0	10	
p-Isopropyltoluene	ND		ug/l	25	7.0	10	
Naphthalene	78		ug/l	25	7.0	10	
n-Propylbenzene	9.9	J	ug/l	25	7.0	10	
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10	
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10	
1,3,5-Trimethylbenzene	40		ug/l	25	7.0	10	
1,2,4-Trimethylbenzene	100		ug/l	25	7.0	10	
1,4-Dioxane	ND		ug/l	2500	760	10	
1,4-Diethylbenzene	24		ug/l	20	7.0	10	
4-Ethyltoluene	ND		ug/l	20	7.0	10	
			<del>-</del>				



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-04 D Date Collected: 04/24/13 13:00

Client ID: TPMW4 Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lal	0					
1,2,4,5-Tetramethylbenzene	14	J	ug/l	20	6.5	10
Ethyl ether	ND		ug/l	25	7.0	10
trans-1,4-Dichloro-2-butene	ND		ug/l	25	7.0	10

			Acceptance	
Surrogate	% Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	101		70-130	
Toluene-d8	102		70-130	
4-Bromofluorobenzene	103		70-130	
Dibromofluoromethane	97		70-130	



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-05 D Date Collected: 04/24/13 12:50

Client ID: Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/30/13 10:41

Analyst: BN Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westbo	rough Lab					
Methylene chloride	ND		ug/kg	550	110	50
1,1-Dichloroethane	ND		ug/kg	83	9.8	50
Chloroform	ND		ug/kg	83	20.	50
Carbon tetrachloride	ND		ug/kg	55	12.	50
1,2-Dichloropropane	ND		ug/kg	190	13.	50
Dibromochloromethane	ND		ug/kg	55	17.	50
1,1,2-Trichloroethane	ND		ug/kg	83	17.	50
Tetrachloroethene	ND		ug/kg	55	7.7	50
Chlorobenzene	400		ug/kg	55	19.	50
Trichlorofluoromethane	ND		ug/kg	280	6.7	50
1,2-Dichloroethane	ND		ug/kg	55	8.1	50
1,1,1-Trichloroethane	ND		ug/kg	55	6.1	50
Bromodichloromethane	ND		ug/kg	55	13.	50
trans-1,3-Dichloropropene	ND		ug/kg	55	6.7	50
cis-1,3-Dichloropropene	ND		ug/kg	55	7.0	50
1,1-Dichloropropene	ND		ug/kg	280	25.	50
Bromoform	ND		ug/kg	220	23.	50
1,1,2,2-Tetrachloroethane	ND		ug/kg	55	9.4	50
Benzene	ND		ug/kg	55	6.5	50
Toluene	ND		ug/kg	83	6.2	50
Ethylbenzene	ND		ug/kg	55	8.1	50
Chloromethane	ND		ug/kg	280	43.	50
Bromomethane	ND		ug/kg	110	19.	50
Vinyl chloride	ND		ug/kg	110	7.8	50
Chloroethane	ND		ug/kg	110	17.	50
1,1-Dichloroethene	ND		ug/kg	55	11.	50
trans-1,2-Dichloroethene	ND		ug/kg	83	12.	50
Trichloroethene	ND		ug/kg	55	8.4	50
1,2-Dichlorobenzene	ND		ug/kg	280	10.	50
1,3-Dichlorobenzene	ND		ug/kg	280	10.	50
1,4-Dichlorobenzene	ND		ug/kg	280	13.	50



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-05 D Date Collected: 04/24/13 12:50

Client ID: Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Sample Location. 4002	ation. 4002 ELLICOT ST., DATAVIA, IVI		Specified			
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS -	Westborough Lab					
Methyl tert butyl ether	ND		ug/kg	110	5.8	50
o/m-Xylene	ND		ug/kg	110	18.	50
o-Xylene	ND		ug/kg	110	15.	50
cis-1,2-Dichloroethene	ND		ug/kg	55	8.2	50
Dibromomethane	ND		ug/kg	550	9.0	50
Styrene	ND		ug/kg	110	17.	50
Dichlorodifluoromethane	ND		ug/kg	550	12.	50
Acetone	ND		ug/kg	550	170	50
Carbon disulfide	ND		ug/kg	550	110	50
2-Butanone	ND		ug/kg	550	20.	50
/inyl acetate	ND		ug/kg	550	26.	50
1-Methyl-2-pentanone	ND		ug/kg	550	13.	50
,2,3-Trichloropropane	ND		ug/kg	550	12.	50
?-Hexanone	ND		ug/kg	550	10.	50
Bromochloromethane	ND		ug/kg	280	11.	50
2,2-Dichloropropane	ND		ug/kg	280	12.	50
,2-Dibromoethane	ND		ug/kg	220	9.8	50
,3-Dichloropropane	ND		ug/kg	280	9.5	50
,1,1,2-Tetrachloroethane	ND		ug/kg	55	18.	50
Bromobenzene	ND		ug/kg	280	12.	50
-Butylbenzene	240		ug/kg	55	11.	50
ec-Butylbenzene	260		ug/kg	55	11.	50
ert-Butylbenzene	ND		ug/kg	280	31.	50
-Chlorotoluene	ND		ug/kg	280	8.8	50
o-Chlorotoluene	ND		ug/kg	280	8.5	50
,2-Dibromo-3-chloropropane	ND		ug/kg	280	44.	50
Hexachlorobutadiene	ND		ug/kg	280	23.	50
sopropylbenzene	140		ug/kg	55	9.2	50
-Isopropyltoluene	ND		ug/kg	55	10.	50
Naphthalene	920		ug/kg	280	42.	50
Acrylonitrile	ND		ug/kg	550	13.	50
-Propylbenzene	190		ug/kg	55	6.9	50
,2,3-Trichlorobenzene	ND		ug/kg	280	9.3	50
,2,4-Trichlorobenzene	ND		ug/kg	280	44.	50
,3,5-Trimethylbenzene	ND		ug/kg	280	7.9	50
,2,4-Trimethylbenzene	ND		ug/kg	280	32.	50
,4-Dioxane	ND		ug/kg	5500	960	50
,4-Diethylbenzene	280		ug/kg	220	8.8	50
-Ethyltoluene	ND		ug/kg	220	6.4	50



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-05 D Date Collected: 04/24/13 12:50

Client ID: Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough	Lab					
1,2,4,5-Tetramethylbenzene	1000		ug/kg	220	7.2	50
Ethyl ether	ND		ug/kg	280	15.	50
trans-1,4-Dichloro-2-butene	ND		ug/kg	280	25.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	93		70-130	
Toluene-d8	112		70-130	
4-Bromofluorobenzene	112		70-130	
Dibromofluoromethane	97		70-130	



L1307330

Lab Number:

Project Name: DELLA PENNA

Project Number: 212645 Report Date: 05/01/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/29/13 10:35

Analyst: TR

arameter	Result	Qualifier	Units	RL	MDL
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	02,04	Batch: WG60	)4698-3
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
2-Chloroethylvinyl ether	ND		ug/l	10	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.16
1,2-Dichloropropane	ND		ug/l	1.0	0.30
Dibromochloromethane	ND		ug/l	0.50	0.19
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.16
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19
Benzene	ND		ug/l	0.50	0.19
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.33
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.18
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.17
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70



L1307330

Lab Number:

Project Name: DELLA PENNA

Project Number: 212645 Report Date: 05/01/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/29/13 10:35

Analyst: TR

Parameter	Result	Qualifier	Units	RL	MDL
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	02,04	Batch: WG60	)4698-3
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Isopropyl Ether	ND		ug/l	2.0	0.65
tert-Butyl Alcohol	ND		ug/l	10	0.90
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.0
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.0
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70



Project Name: DELLA PENNA

Project Number: 212645

Lab Number: L1307330

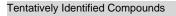
**Report Date:** 05/01/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/29/13 10:35

Analyst: TR

arameter	Result	Qualifier	Units	RL	MDL
olatile Organics by GC/MS - We	estborough Lab	for sample(s):	02,04	Batch: WG6	04698-3
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.38
Ethyl Acetate	ND		ug/l	10	0.70
Cyclohexane	ND		ug/l	10	0.54
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.5	0.70
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	0.38
1,4-Dioxane	ND		ug/l	250	76.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	0.70
1,4-Diethylbenzene	ND		ug/l	2.0	0.70
4-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Tetrahydrofuran	ND		ug/l	5.0	1.5
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.63



No Tentatively Identified Compounds ND

ug/l



Project Number: 212645 Report Date: 05/01/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/29/13 10:35

Analyst: TR

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,04 Batch: WG604698-3

	Acceptance						
Surrogate	%Recovery	%Recovery Qualifier					
1,2-Dichloroethane-d4	102		70-130				
Toluene-d8	101		70-130				
4-Bromofluorobenzene	99		70-130				
Dibromofluoromethane	100		70-130				



Project Number: 212645 Report Date: 05/01/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/29/13 11:05

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS - We	estborough Lab	for sample(s): 01	Batch: WG60	4720-3
Methylene chloride	ND	ug/kg	10	2.0
1,1-Dichloroethane	ND	ug/kg	1.5	0.18
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	0.31
2-Chloroethylvinyl ether	ND	ug/kg	20	0.62
1,1,2-Trichloroethane	ND	ug/kg	1.5	0.30
Tetrachloroethene	ND	ug/kg	1.0	0.14
Chlorobenzene	ND	ug/kg	1.0	0.35
Trichlorofluoromethane	ND	ug/kg	5.0	0.12
1,2-Dichloroethane	ND	ug/kg	1.0	0.15
1,1,1-Trichloroethane	ND	ug/kg	1.0	0.11
Bromodichloromethane	ND	ug/kg	1.0	0.23
trans-1,3-Dichloropropene	ND	ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND	ug/kg	1.0	0.13
1,1-Dichloropropene	ND	ug/kg	5.0	0.46
Bromoform	ND	ug/kg	4.0	0.41
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.0	0.17
Benzene	ND	ug/kg	1.0	0.12
Toluene	ND	ug/kg	1.5	0.11
Ethylbenzene	ND	ug/kg	1.0	0.15
Chloromethane	ND	ug/kg	5.0	0.78
Bromomethane	ND	ug/kg	2.0	0.34
Vinyl chloride	ND	ug/kg	2.0	0.14
Chloroethane	ND	ug/kg	2.0	0.32
1,1-Dichloroethene	ND	ug/kg	1.0	0.20
trans-1,2-Dichloroethene	ND	ug/kg	1.5	0.21
Trichloroethene	ND	ug/kg	1.0	0.15
1,2-Dichlorobenzene	ND	ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND	ug/kg	5.0	0.18



Project Number: 212645 Report Date: 05/01/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/29/13 11:05

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS - W	estborough Lab	o for sample(s): 01	Batch: WG60	04720-3
1,4-Dichlorobenzene	ND	ug/kg	5.0	0.24
Methyl tert butyl ether	ND	ug/kg	2.0	0.10
p/m-Xylene	ND	ug/kg	2.0	0.32
o-Xylene	ND	ug/kg	2.0	0.27
cis-1,2-Dichloroethene	ND	ug/kg	1.0	0.15
Dibromomethane	ND	ug/kg	10	0.16
Styrene	ND	ug/kg	2.0	0.31
Dichlorodifluoromethane	ND	ug/ko	10	0.22
Acetone	ND	ug/ko	10	3.1
Carbon disulfide	ND	ug/ko	10	2.0
2-Butanone	ND	ug/ko	10	0.36
Vinyl acetate	ND	ug/ko	10	0.48
4-Methyl-2-pentanone	ND	ug/kg	10	0.24
1,2,3-Trichloropropane	ND	ug/kg	10	0.22
2-Hexanone	ND	ug/ko	10	0.19
Bromochloromethane	ND	ug/ko	5.0	0.20
2,2-Dichloropropane	ND	ug/ko	5.0	0.22
1,2-Dibromoethane	ND	ug/ko	4.0	0.18
1,3-Dichloropropane	ND	ug/ko	5.0	0.17
1,1,1,2-Tetrachloroethane	ND	ug/ko	1.0	0.32
Bromobenzene	ND	ug/ko	5.0	0.21
n-Butylbenzene	ND	ug/kg	1.0	0.20
sec-Butylbenzene	ND	ug/kg	1.0	0.20
tert-Butylbenzene	ND	ug/kg	5.0	0.56
o-Chlorotoluene	ND	ug/kg	5.0	0.16
p-Chlorotoluene	ND	ug/kg	5.0	0.15
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0	0.79
Hexachlorobutadiene	ND	ug/kg	5.0	0.42
Isopropylbenzene	ND	ug/kg	1.0	0.17
p-Isopropyltoluene	ND	ug/kg	1.0	0.19
Naphthalene	ND	ug/kg	5.0	0.77



L1307330

Project Name: DELLA PENNA Lab Number:

Project Number: 212645 Report Date: 05/01/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/29/13 11:05

Parameter	Result	Qualifier	Units		RL	MDL
Volatile Organics by GC/MS - Wes	stborough Lab	for sample(s):	01	Batch:	WG60472	20-3
Acrylonitrile	ND		ug/kg		10	0.24
Isopropyl Ether	ND		ug/kg		4.0	0.14
tert-Butyl Alcohol	ND		ug/kg		60	0.91
n-Propylbenzene	ND		ug/kg		1.0	0.12
1,2,3-Trichlorobenzene	ND		ug/kg		5.0	0.17
1,2,4-Trichlorobenzene	ND		ug/kg		5.0	0.79
1,3,5-Trimethylbenzene	ND		ug/kg		5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg		5.0	0.57
Methyl Acetate	ND		ug/kg		20	0.76
Ethyl Acetate	ND		ug/kg		20	0.82
Acrolein	ND		ug/kg		25	9.2
Cyclohexane	ND		ug/kg		20	1.1
1,4-Dioxane	ND		ug/kg		100	17.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg		20	0.27
1,4-Diethylbenzene	ND		ug/kg		4.0	0.16
4-Ethyltoluene	ND		ug/kg		4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg		4.0	0.13
Tetrahydrofuran	ND		ug/kg		20	0.38
Ethyl ether	ND		ug/kg		5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg		5.0	0.45
Methyl cyclohexane	ND		ug/kg		4.0	1.3
Ethyl-Tert-Butyl-Ether	ND		ug/kg		4.0	0.42
Tertiary-Amyl Methyl Ether	ND		ug/kg		4.0	0.58



Project Number: 212645 Report Date: 05/01/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/29/13 11:05

Analyst: BN

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG604720-3

		Accep						
Surrogate	%Recovery	Qualifier	Criteria					
1,2-Dichloroethane-d4	105		70-130					
Toluene-d8	103		70-130					
4-Bromofluorobenzene	106		70-130					
Dibromofluoromethane	104		70-130					



Project Number: 212645 Report Date: 05/01/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/30/13 08:49

arameter	Result	Qualifier	Units	RL	MDL
olatile Organics by GC/MS -	Westborough Lab	for sample(s):	03,05	Batch: WG6	605018-3
Methylene chloride	ND		ug/kg	10	2.0
1,1-Dichloroethane	ND		ug/kg	1.5	0.18
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	0.31
2-Chloroethylvinyl ether	ND		ug/kg	20	0.62
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.12
1,2-Dichloroethane	ND		ug/kg	1.0	0.15
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.23
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13
1,1-Dichloropropene	ND		ug/kg	5.0	0.46
Bromoform	ND		ug/kg	4.0	0.41
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.17
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.11
Ethylbenzene	ND		ug/kg	1.0	0.15
Chloromethane	ND		ug/kg	5.0	0.78
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.14
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.20
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.15
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.18



L1307330

Lab Number:

Project Name: DELLA PENNA

Project Number: 212645 Report Date: 05/01/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/30/13 08:49

Parameter	Result	Qualifier	Units	RL	MDL
olatile Organics by GC/MS -	Westborough Lab	for sample(s):	03,05	Batch: WG60	5018-3
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.24
Methyl tert butyl ether	ND		ug/kg	2.0	0.10
p/m-Xylene	ND		ug/kg	2.0	0.32
o-Xylene	ND		ug/kg	2.0	0.27
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15
Dibromomethane	ND		ug/kg	10	0.16
Styrene	ND		ug/kg	2.0	0.31
Dichlorodifluoromethane	ND		ug/kg	10	0.22
Acetone	ND		ug/kg	10	3.1
Carbon disulfide	ND		ug/kg	10	2.0
2-Butanone	ND		ug/kg	10	0.36
Vinyl acetate	ND		ug/kg	10	0.48
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.22
2-Hexanone	ND		ug/kg	10	0.19
Bromochloromethane	ND		ug/kg	5.0	0.20
2,2-Dichloropropane	ND		ug/kg	5.0	0.22
1,2-Dibromoethane	ND		ug/kg	4.0	0.18
1,3-Dichloropropane	ND		ug/kg	5.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.21
n-Butylbenzene	ND		ug/kg	1.0	0.20
sec-Butylbenzene	ND		ug/kg	1.0	0.20
tert-Butylbenzene	ND		ug/kg	5.0	0.56
o-Chlorotoluene	ND		ug/kg	5.0	0.16
p-Chlorotoluene	ND		ug/kg	5.0	0.15
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.79
Hexachlorobutadiene	ND		ug/kg	5.0	0.42
Isopropylbenzene	ND		ug/kg	1.0	0.17
p-Isopropyltoluene	ND		ug/kg	1.0	0.19
Naphthalene	ND		ug/kg	5.0	0.77



L1307330

Project Name: DELLA PENNA Lab Number:

Project Number: 212645 Report Date: 05/01/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/30/13 08:49

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - V	Vestborough Lab	for sample(s):	03,05	Batch: WG60	5018-3
Acrylonitrile	ND		ug/kg	10	0.24
Isopropyl Ether	ND		ug/kg	4.0	0.14
tert-Butyl Alcohol	ND		ug/kg	60	0.91
n-Propylbenzene	ND		ug/kg	1.0	0.12
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.17
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.79
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.57
Methyl Acetate	ND		ug/kg	20	0.76
Ethyl Acetate	ND		ug/kg	20	0.82
Acrolein	ND		ug/kg	25	9.2
Cyclohexane	ND		ug/kg	20	1.1
1,4-Dioxane	ND		ug/kg	100	17.
1,1,2-Trichloro-1,2,2-Trifluoroethane	e ND		ug/kg	20	0.27
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16
4-Ethyltoluene	ND		ug/kg	4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13
Tetrahydrofuran	ND		ug/kg	20	0.38
Ethyl ether	ND		ug/kg	5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.45
Methyl cyclohexane	ND		ug/kg	4.0	1.3
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	0.42
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	0.58



Project Number: 212645 Report Date: 05/01/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 04/30/13 08:49

Analyst: BN

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 03,05 Batch: WG605018-3

	Acceptance					
Surrogate	%Recovery	Recovery Qualifier				
1,2-Dichloroethane-d4	90		70-130			
Toluene-d8	104		70-130			
4-Bromofluorobenzene	103		70-130			
Dibromofluoromethane	100		70-130			



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

Parameter	LCS %Recovery	Qual		CSD covery	% Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	02,04	Batch:	WG604698-1	WG604698-2			
Methylene chloride	85			86		70-130	1		20
1,1-Dichloroethane	90			92		70-130	2		20
Chloroform	94			95		70-130	1		20
2-Chloroethylvinyl ether	77			76		70-130	1		20
Carbon tetrachloride	97			100		63-132	3		20
1,2-Dichloropropane	88			90		70-130	2		20
Dibromochloromethane	104			106		63-130	2		20
1,1,2-Trichloroethane	101			102		70-130	1		20
Tetrachloroethene	104			106		70-130	2		20
Chlorobenzene	100			100		75-130	0		20
Trichlorofluoromethane	96			99		62-150	3		20
1,2-Dichloroethane	95			95		70-130	0		20
1,1,1-Trichloroethane	95			98		67-130	3		20
Bromodichloromethane	94			95		67-130	1		20
trans-1,3-Dichloropropene	99			98		70-130	1		20
cis-1,3-Dichloropropene	93			93		70-130	0		20
1,1-Dichloropropene	93			94		70-130	1		20
Bromoform	101			102		54-136	1		20
1,1,2,2-Tetrachloroethane	102			101		67-130	1		20
Benzene	89			92		70-130	3		20
Toluene	98			100		70-130	2		20



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

arameter	LCS %Recovery	Qual	LCSD %Recove		%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by GC/MS - Westborough	Lab Associated	sample(s):	02,04 Bate	ch: WG604698-	1 WG604698-2			
Ethylbenzene	100		101		70-130	1		20
Chloromethane	86		82		64-130	5		20
Bromomethane	74		75		39-139	1		20
Vinyl chloride	87		88		55-140	1		20
Chloroethane	104		103		55-138	1		20
1,1-Dichloroethene	95		97		61-145	2		20
trans-1,2-Dichloroethene	92		95		70-130	3		20
Trichloroethene	89		93		70-130	4		20
1,2-Dichlorobenzene	100		102		70-130	2		20
1,3-Dichlorobenzene	102		102		70-130	0		20
1,4-Dichlorobenzene	100		102		70-130	2		20
Methyl tert butyl ether	89		89		63-130	0		20
p/m-Xylene	102		101		70-130	1		20
o-Xylene	101		103		70-130	2		20
cis-1,2-Dichloroethene	92		94		70-130	2		20
Dibromomethane	98		100		70-130	2		20
1,2,3-Trichloropropane	104		104		64-130	0		20
Acrylonitrile	88		87		70-130	1		20
Isopropyl Ether	84		85		70-130	1		20
tert-Butyl Alcohol	84		87		70-130	4		20
Styrene	102		103		70-130	1		20



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

Parameter	LCS %Recovery	Qual		CSD covery	% Qual	Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	02,04	Batch:	WG604698-1	WG604698-2			
Dichlorodifluoromethane	83			86		36-147	4		20
Acetone	81			83		58-148	2		20
Carbon disulfide	86			88		51-130	2		20
2-Butanone	76			76		63-138	0		20
Vinyl acetate	86			83		70-130	4		20
4-Methyl-2-pentanone	88			91		59-130	3		20
2-Hexanone	88			87		57-130	1		20
Bromochloromethane	97			101		70-130	4		20
2,2-Dichloropropane	96			96		63-133	0		20
1,2-Dibromoethane	103			102		70-130	1		20
1,3-Dichloropropane	100			100		70-130	0		20
1,1,1,2-Tetrachloroethane	100			100		64-130	0		20
Bromobenzene	102			104		70-130	2		20
n-Butylbenzene	98			102		53-136	4		20
sec-Butylbenzene	101			103		70-130	2		20
tert-Butylbenzene	101			102		70-130	1		20
o-Chlorotoluene	100			103		70-130	3		20
p-Chlorotoluene	99			99		70-130	0		20
1,2-Dibromo-3-chloropropane	95			98		41-144	3		20
Hexachlorobutadiene	100			100		63-130	0		20
Isopropylbenzene	102			104		70-130	2		20



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

Parameter	LCS %Recovery	Qual		CSD covery	% Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough La	ab Associated	sample(s):	02,04	Batch:	WG604698-1	WG604698-2			
p-Isopropyltoluene	100			102		70-130	2		20
Naphthalene	91			93		70-130	2		20
n-Propylbenzene	100			102		69-130	2		20
1,2,3-Trichlorobenzene	96			97		70-130	1		20
1,2,4-Trichlorobenzene	97			99		70-130	2		20
1,3,5-Trimethylbenzene	100			103		64-130	3		20
1,2,4-Trimethylbenzene	100			103		70-130	3		20
Methyl Acetate	89			88		70-130	1		20
Ethyl Acetate	82			80		70-130	2		20
Cyclohexane	88			90		70-130	2		20
Ethyl-Tert-Butyl-Ether	88			88		70-130	0		20
Tertiary-Amyl Methyl Ether	90			91		66-130	1		20
1,4-Dioxane	92			100		56-162	8		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	95			97		70-130	2		20
1,4-Diethylbenzene	97			99		70-130	2		20
4-Ethyltoluene	99			101		70-130	2		20
1,2,4,5-Tetramethylbenzene	95			98		70-130	3		20
Ethyl ether	89			90		59-134	1		20
trans-1,4-Dichloro-2-butene	92			89		70-130	3		20
Methyl cyclohexane	92			94		70-130	2		20



**RPD Limits** 

#### Lab Control Sample Analysis Batch Quality Control

Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

**Report Date:** 05/01/13

LCS LCSD %Recovery
Parameter %Recovery Qual %Recovery Qual Limits RPD Qual

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04 Batch: WG604698-1 WG604698-2

	LCS		LCSD		Acceptance	
Surrogate	%Recovery	Qual	%Recovery	Qual	Criteria	
1,2-Dichloroethane-d4	103		104		70-130	
Toluene-d8	104		104		70-130	
4-Bromofluorobenzene	97		98		70-130	
Dibromofluoromethane	101		102		70-130	

Volatile Organics by GC/MS - Westborough La	b Associated	sample(s): 01	I Batch: V	VG604720-1 WG604720-2		
Methylene chloride	103		104	70-130	1	30
1,1-Dichloroethane	105		105	70-130	0	30
Chloroform	103		103	70-130	0	30
Carbon tetrachloride	106		103	70-130	3	30
1,2-Dichloropropane	104		106	70-130	2	30
Dibromochloromethane	101		103	70-130	2	30
2-Chloroethylvinyl ether	95		97		2	30
1,1,2-Trichloroethane	102		104	70-130	2	30
Tetrachloroethene	103		100	70-130	3	30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

ırameter	LCS %Recovery	Qual	LCSD %Recovery	' Qual	%Recovery Limits	RPD	Qual	RPD Limits
platile Organics by GC/MS - Westborough I	_ab Associated	sample(s):	01 Batch: \	WG604720-1	WG604720-2			
Chlorobenzene	104		104		70-130	0		30
Trichlorofluoromethane	108		103		70-139	5		30
1,2-Dichloroethane	102		103		70-130	1		30
1,1,1-Trichloroethane	106		103		70-130	3		30
Bromodichloromethane	102		104		70-130	2		30
trans-1,3-Dichloropropene	91		93		70-130	2		30
cis-1,3-Dichloropropene	105		107		70-130	2		30
1,1-Dichloropropene	108		105		70-130	3		30
Bromoform	100		100		70-130	0		30
1,1,2,2-Tetrachloroethane	102		104		70-130	2		30
Benzene	106		105		70-130	1		30
Toluene	105		104		70-130	1		30
Ethylbenzene	107		106		70-130	1		30
Chloromethane	103		102		52-130	1		30
Bromomethane	110		112		57-147	2		30
Vinyl chloride	113		110		67-130	3		30
Chloroethane	108		106		50-151	2		30
1,1-Dichloroethene	107		104		65-135	3		30
trans-1,2-Dichloroethene	105		104		70-130	1		30
Trichloroethene	104		103		70-130	1		30
1,2-Dichlorobenzene	104		104		70-130	0		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	01 Batch: W	/G604720-1	WG604720-2			
1,3-Dichlorobenzene	104		104		70-130	0		30
1,4-Dichlorobenzene	103		103		70-130	0		30
Methyl tert butyl ether	104		107		66-130	3		30
p/m-Xylene	107		106		70-130	1		30
o-Xylene	109		109		70-130	0		30
cis-1,2-Dichloroethene	103		106		70-130	3		30
Dibromomethane	101		104		70-130	3		30
Styrene	108		109		70-130	1		30
Dichlorodifluoromethane	108		102		30-146	6		30
Acetone	127		103		54-140	21		30
Carbon disulfide	105		102		59-130	3		30
2-Butanone	110		101		70-130	9		30
Vinyl acetate	95		96		70-130	1		30
4-Methyl-2-pentanone	98		99		70-130	1		30
1,2,3-Trichloropropane	101		100		68-130	1		30
2-Hexanone	106		102		70-130	4		30
Bromochloromethane	101		103		70-130	2		30
2,2-Dichloropropane	98		97		70-130	1		30
1,2-Dibromoethane	100		100		70-130	0		30
1,3-Dichloropropane	103		105		69-130	2		30
1,1,1,2-Tetrachloroethane	102		103		70-130	1		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

arameter	LCS %Recovery Q	LCSD Rual %Recovery	%Recovery Qual Limits	RPD	Qual RPD L	<u>imits</u>
olatile Organics by GC/MS - Westb	orough Lab Associated sam	nple(s): 01 Batch: W	G604720-1 WG604720-2			
Bromobenzene	104	104	70-130	0	30	)
n-Butylbenzene	110	106	70-130	4	30	)
sec-Butylbenzene	110	106	70-130	4	30	)
tert-Butylbenzene	108	106	70-130	2	30	)
o-Chlorotoluene	106	104	70-130	2	30	)
p-Chlorotoluene	105	105	70-130	0	30	)
1,2-Dibromo-3-chloropropane	98	97	68-130	1	30	)
Hexachlorobutadiene	104	101	67-130	3	30	)
Isopropylbenzene	108	106	70-130	2	30	)
p-Isopropyltoluene	109	105	70-130	4	30	)
Naphthalene	100	101	70-130	1	30	)
Acrylonitrile	104	103	70-130	1	30	)
Isopropyl Ether	108	110	66-130	2	30	)
tert-Butyl Alcohol	103	106	70-130	3	30	)
n-Propylbenzene	106	104	70-130	2	30	)
1,2,3-Trichlorobenzene	106	108	70-130	2	30	)
1,2,4-Trichlorobenzene	107	107	70-130	0	30	)
1,3,5-Trimethylbenzene	107	105	70-130	2	30	)
1,2,4-Trimethylbenzene	108	106	70-130	2	30	)
Methyl Acetate	99	98	51-146	1	30	)
Ethyl Acetate	104	106	70-130	2	30	)



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

arameter	LCS %Recovery	Qual	LCSD %Recover	y Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by GC/MS - Westborough La	ab Associated	sample(s):	01 Batch:	WG604720-1	WG604720-2			
Acrolein	107		108		70-130	1		30
Cyclohexane	113		108		59-142	5		30
1,4-Dioxane	107		103		65-136	4		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	109		104		50-139	5		30
1,4-Diethylbenzene	107		105		70-130	2		30
4-Ethyltoluene	109		107		70-130	2		30
1,2,4,5-Tetramethylbenzene	111		111		70-130	0		30
Tetrahydrofuran	99		102		66-130	3		30
Ethyl ether	103		107		67-130	4		30
trans-1,4-Dichloro-2-butene	97		100		70-130	3		30
Methyl cyclohexane	113		108		70-130	5		30
Ethyl-Tert-Butyl-Ether	106		108		70-130	2		30
Tertiary-Amyl Methyl Ether	103		107		70-130	4		30

	LCS		LCSD		Acceptance	
Surrogate	%Recovery	Qual	%Recovery	Qual	Criteria	
1.2-Dichloroethane-d4	115		108		70-130	
Toluene-d8	105		104		70-130	
4-Bromofluorobenzene	105		103		70-130	
Dibromofluoromethane	111		108		70-130	



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

Parameter	LCS %Recovery	Qual		CSD covery	% Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	03,05	Batch:	WG605018-1	WG605018-2			
Methylene chloride	95			90		70-130	5		30
1,1-Dichloroethane	104			97		70-130	7		30
Chloroform	100			95		70-130	5		30
Carbon tetrachloride	109			96		70-130	13		30
1,2-Dichloropropane	101			95		70-130	6		30
Dibromochloromethane	96			92		70-130	4		30
2-Chloroethylvinyl ether	101			95			6		30
1,1,2-Trichloroethane	91			89		70-130	2		30
Tetrachloroethene	111			101		70-130	9		30
Chlorobenzene	105			100		70-130	5		30
Trichlorofluoromethane	102			90		70-139	13		30
1,2-Dichloroethane	93			89		70-130	4		30
1,1,1-Trichloroethane	105			94		70-130	11		30
Bromodichloromethane	97			93		70-130	4		30
trans-1,3-Dichloropropene	98			94		70-130	4		30
cis-1,3-Dichloropropene	97			92		70-130	5		30
1,1-Dichloropropene	108			96		70-130	12		30
Bromoform	85			82		70-130	4		30
1,1,2,2-Tetrachloroethane	85			82		70-130	4		30
Benzene	102			95		70-130	7		30
Toluene	102			95		70-130	7		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

rameter	LCS %Recovery	Qual		CSD covery	% Qual	Recovery Limits	RPD	Qual	RPD Limits
platile Organics by GC/MS - Westborough	Lab Associated	sample(s):	03,05	Batch:	WG605018-1	WG605018-2			
Ethylbenzene	107			99		70-130	8		30
Chloromethane	115			106		52-130	8		30
Bromomethane	90			81		57-147	11		30
Vinyl chloride	107			95		67-130	12		30
Chloroethane	92			85		50-151	8		30
1,1-Dichloroethene	110			100		65-135	10		30
trans-1,2-Dichloroethene	109			98		70-130	11		30
Trichloroethene	101			92		70-130	9		30
1,2-Dichlorobenzene	104			102		70-130	2		30
1,3-Dichlorobenzene	108			104		70-130	4		30
1,4-Dichlorobenzene	106			101		70-130	5		30
Methyl tert butyl ether	88			86		66-130	2		30
p/m-Xylene	109			102		70-130	7		30
o-Xylene	106			99		70-130	7		30
cis-1,2-Dichloroethene	102			96		70-130	6		30
Dibromomethane	94			89		70-130	5		30
Styrene	103			97		70-130	6		30
Dichlorodifluoromethane	115			99		30-146	15		30
Acetone	119			83		54-140	36	Q	30
Carbon disulfide	100			89		59-130	12		30
2-Butanone	101			77		70-130	27		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

arameter	LCS %Recovery	Qual	LC: %Rec		9 Qual	%Recovery Limits	RPD	Qual	RPD Limits
platile Organics by GC/MS - Westbord	ough Lab Associated	sample(s):	03,05	Batch:	WG605018-1	WG605018-2			
Vinyl acetate	82		3	30		70-130	2		30
4-Methyl-2-pentanone	70		6	66	Q	70-130	6		30
1,2,3-Trichloropropane	80		3	32		68-130	2		30
2-Hexanone	87		6	69	Q	70-130	23		30
Bromochloromethane	100		9	96		70-130	4		30
2,2-Dichloropropane	104		9	94		70-130	10		30
1,2-Dibromoethane	94		9	91		70-130	3		30
1,3-Dichloropropane	94		9	92		69-130	2		30
1,1,1,2-Tetrachloroethane	101		9	97		70-130	4		30
Bromobenzene	103		1	00		70-130	3		30
n-Butylbenzene	116		1	06		70-130	9		30
sec-Butylbenzene	115		1	04		70-130	10		30
tert-Butylbenzene	116		1	08		70-130	7		30
o-Chlorotoluene	114		1	08		70-130	5		30
p-Chlorotoluene	109		1	03		70-130	6		30
1,2-Dibromo-3-chloropropane	84		8	32		68-130	2		30
Hexachlorobutadiene	124		1	13		67-130	9		30
Isopropylbenzene	111		1	03		70-130	7		30
p-Isopropyltoluene	117		1	07		70-130	9		30
Naphthalene	91		8	39		70-130	2		30
Acrylonitrile	79		7	76		70-130	4		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

arameter	LCS %Recovery	Qual		CSD covery	% Qual	Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	03,05	Batch:	WG605018-1	WG605018-2			
Isopropyl Ether	100			97		66-130	3		30
tert-Butyl Alcohol	66	Q		65	Q	70-130	2		30
n-Propylbenzene	111			102		70-130	8		30
1,2,3-Trichlorobenzene	104			103		70-130	1		30
1,2,4-Trichlorobenzene	112			108		70-130	4		30
1,3,5-Trimethylbenzene	113			105		70-130	7		30
1,2,4-Trimethylbenzene	113			107		70-130	5		30
Methyl Acetate	75			74		51-146	1		30
Ethyl Acetate	69	Q		68	Q	70-130	1		30
Acrolein	78			75		70-130	4		30
Cyclohexane	110			97		59-142	13		30
1,4-Dioxane	86			82		65-136	5		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	110			96		50-139	14		30
1,4-Diethylbenzene	116			107		70-130	8		30
4-Ethyltoluene	112			104		70-130	7		30
1,2,4,5-Tetramethylbenzene	116			111		70-130	4		30
Tetrahydrofuran	76			74		66-130	3		30
Ethyl ether	86			84		67-130	2		30
trans-1,4-Dichloro-2-butene	78			77		70-130	1		30
Methyl cyclohexane	111			96		70-130	14		30
Ethyl-Tert-Butyl-Ether	95			92		70-130	3		30



L1307330

## Lab Control Sample Analysis Batch Quality Control

Project Name: DELLA PENNA

Project Number: 212645

Lab Number:

Parameter	LCS %Recovery	Qual		CSD covery	9/ Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough	Lab Associated	sample(s):	03,05	Batch:	WG605018-1	WG605018-2			
Tertiary-Amyl Methyl Ether	92			89		70-130	3		30

	LCS		LCSD		Acceptance	
Surrogate	rrogate %Recovery		%Recovery	Qual	Criteria	
1,2-Dichloroethane-d4	91		90		70-130	
Toluene-d8	104		105		70-130	
4-Bromofluorobenzene	100		101		70-130	
Dibromofluoromethane	99		100		70-130	



#### **SEMIVOLATILES**



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-01 D Date Collected: 04/24/13 11:05

Client ID: BH12 6-8' Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Soil Extraction Method: EPA 3546

Matrix:SoilExtraction Method:EPA 3546Analytical Method:1,8270DExtraction Date:04/26/13 10:27

Analyst: RC
Percent Solids: 92%

04/30/13 21:26

Analytical Date:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
Acenaphthene	ND		ug/kg	710	180	5
1,2,4-Trichlorobenzene	ND		ug/kg	890	290	5
Hexachlorobenzene	ND		ug/kg	530	160	5
Bis(2-chloroethyl)ether	ND		ug/kg	800	250	5
2-Chloronaphthalene	ND		ug/kg	890	290	5
1,2-Dichlorobenzene	ND		ug/kg	890	290	5
1,3-Dichlorobenzene	ND		ug/kg	890	280	5
1,4-Dichlorobenzene	ND		ug/kg	890	270	5
3,3'-Dichlorobenzidine	ND		ug/kg	890	240	5
2,4-Dinitrotoluene	ND		ug/kg	890	190	5
2,6-Dinitrotoluene	ND		ug/kg	890	230	5
Fluoranthene	580		ug/kg	530	160	5
4-Chlorophenyl phenyl ether	ND		ug/kg	890	270	5
4-Bromophenyl phenyl ether	ND		ug/kg	890	200	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1100	310	5
Bis(2-chloroethoxy)methane	ND		ug/kg	960	270	5
Hexachlorobutadiene	ND		ug/kg	890	250	5
Hexachlorocyclopentadiene	ND		ug/kg	2500	570	5
Hexachloroethane	ND		ug/kg	710	160	5
Isophorone	ND		ug/kg	800	240	5
Naphthalene	ND		ug/kg	890	300	5
Nitrobenzene	ND		ug/kg	800	210	5
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	710	190	5
n-Nitrosodi-n-propylamine	ND		ug/kg	890	260	5
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	890	230	5
Butyl benzyl phthalate	ND		ug/kg	890	170	5
Di-n-butylphthalate	ND		ug/kg	890	170	5
Di-n-octylphthalate	ND		ug/kg	890	220	5
Diethyl phthalate	ND		ug/kg	890	190	5
Dimethyl phthalate	ND		ug/kg	890	220	5
Benzo(a)anthracene	230	J	ug/kg	530	170	5



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-01 D Date Collected: 04/24/13 11:05

Client ID: Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

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Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westbord	ough Lab					
Benzo(a)pyrene	ND		ug/kg	710	220	5
Benzo(b)fluoranthene	190	J	ug/kg	530	180	5
Benzo(k)fluoranthene	ND		ug/kg	530	170	5
Chrysene	200	J	ug/kg	530	170	5
Acenaphthylene	ND		ug/kg	710	170	5
Anthracene	170	J	ug/kg	530	150	5
Benzo(ghi)perylene	ND		ug/kg	710	180	5
Fluorene	ND		ug/kg	890	250	5
Phenanthrene	680		ug/kg	530	170	5
Dibenzo(a,h)anthracene	ND		ug/kg	530	170	5
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	710	200	5
Pyrene	450	J	ug/kg	530	170	5
Biphenyl	ND		ug/kg	2000	290	5
4-Chloroaniline	ND		ug/kg	890	230	5
2-Nitroaniline	ND		ug/kg	890	250	5
3-Nitroaniline	ND		ug/kg	890	240	5
4-Nitroaniline	ND		ug/kg	890	240	5
Dibenzofuran	ND		ug/kg	890	300	5
2-Methylnaphthalene	ND		ug/kg	1100	280	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	890	280	5
Acetophenone	ND		ug/kg	890	280	5
2,4,6-Trichlorophenol	ND		ug/kg	530	170	5
P-Chloro-M-Cresol	ND		ug/kg	890	260	5
2-Chlorophenol	ND		ug/kg	890	270	5
2,4-Dichlorophenol	ND		ug/kg	800	290	5
2,4-Dimethylphenol	ND		ug/kg	890	260	5
2-Nitrophenol	ND		ug/kg	1900	280	5
4-Nitrophenol	ND		ug/kg	1200	290	5
2,4-Dinitrophenol	ND		ug/kg	4300	1200	5
4,6-Dinitro-o-cresol	ND		ug/kg	2300	320	5
Pentachlorophenol	ND		ug/kg	710	190	5
Phenol	ND		ug/kg	890	260	5
2-Methylphenol	ND		ug/kg	890	290	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1300	290	5
2,4,5-Trichlorophenol			ug/kg	890	290	5
	ND		~g,g			
Benzoic Acid	ND ND		ug/kg	2900	900	5
Benzoic Acid Benzyl Alcohol						5 5



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

SAMPLE RESULTS

Lab ID: L1307330-01 D Date Collected: 04/24/13 11:05

Client ID: BH12 6-8' Date Received: 04/24/13
Sample Location: 4052 ELLICOT ST., BATAVIA, 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	83		10-120	
Nitrobenzene-d5	80		23-120	
2-Fluorobiphenyl	86		30-120	
2,4,6-Tribromophenol	82		0-136	
4-Terphenyl-d14	94		18-120	



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: 04/24/13 11:50

Client ID: TPMW3 Date Received: 04/24/13

Sample Location:4052 ELLICOT ST., BATAVIA, NYField Prep:Not SpecifiedMatrix:WaterExtraction Method:EPA 3510CAnalytical Method:1,8270DExtraction Date:04/27/13 03:41

Analytical Nethod. 1,6270D Extraction Date: 04/27/13 03.2 Analytical Date: 04/30/13 12:21

Analyst: JB

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>
Semivolatile Organics by GC/MS - Wes	tborough Lab					
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	ND		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	ND		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1



Not Specified

1

1

1

Field Prep:

ug/l

ug/l

ug/l

50

2.0

2.0

1.0

0.47

0.53

Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-02 Date Collected: 04/24/13 11:50

Client ID: TPMW3 Date Received: 04/24/13

4052 ELLICOT ST., BATAVIA, NY

**Parameter** Qualifier Units RLMDL **Dilution Factor** Semivolatile Organics by GC/MS - Westborough Lab 2,4,6-Trichlorophenol ND 5.0 0.45 1 ug/l P-Chloro-M-Cresol ND ug/l 2.0 0.50 1 ND ug/l 2.0 0.34 1 2-Chlorophenol 2,4-Dichlorophenol ND ug/l 5.0 0.43 1 2,4-Dimethylphenol ND ug/l 5.0 1.2 1 ND 2-Nitrophenol ug/l 10 0.48 1 4-Nitrophenol ND 1 ug/l 10 1.2 ND 1 2,4-Dinitrophenol ug/l 20 1.4 1 4,6-Dinitro-o-cresol ND ug/l 10 0.59 ND 1 Phenol ug/l 5.0 0.26 2-Methylphenol ND 5.0 0.53 ug/l 1 3-Methylphenol/4-Methylphenol ND 5.0 0.47 1 ug/l ND 1 2,4,5-Trichlorophenol ug/l 5.0 0.45

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	25		21-120
Phenol-d6	19		10-120
Nitrobenzene-d5	29		23-120
2-Fluorobiphenyl	34		15-120
2,4,6-Tribromophenol	36		10-120
4-Terphenyl-d14	43		41-149

ND

ND

ND

Sample Location:

Benzoic Acid

Carbazole

Benzyl Alcohol

04/24/13

Date Received:

Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: 04/24/13 11:50

Client ID: TPMW3

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Water Extraction Method: EPA 3510C
Analytical Method: 1,8270D-SIM Extraction Date: 04/27/13 03:35

Analytical Date: 04/30/13 12:54

Analyst: AS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-S	IM - Westborough Lab					
Acenaphthene	0.13	J	ug/l	0.20	0.06	1
2-Chloronaphthalene	ND	<u> </u>	ug/l	0.20	0.07	<u>'</u> 1
Fluoranthene	0.22			0.20	0.07	1
			ug/l			
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	0.08	J	ug/l	0.20	0.06	1
Benzo(a)anthracene	0.12	J	ug/l	0.20	0.06	1
Benzo(a)pyrene	0.08	J	ug/l	0.20	0.07	1
Benzo(b)fluoranthene	0.12	J	ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	0.11	J	ug/l	0.20	0.05	1
Acenaphthylene	0.11	J	ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	0.14	J	ug/l	0.20	0.06	1
Phenanthrene	0.21		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	0.21		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	24		21-120	
Phenol-d6	19		10-120	
Nitrobenzene-d5	35		23-120	
2-Fluorobiphenyl	36		15-120	
2,4,6-Tribromophenol	36		10-120	
4-Terphenyl-d14	40	Q	41-149	



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-03 Date Collected: 04/24/13 09:15

Client ID: BH9 8-10' Date Received: 04/24/13

Sample Location:4052 ELLICOT ST., BATAVIA, NYField Prep:Not SpecifiedMatrix:SoilExtraction Method:EPA 3546Analytical Method:1,8270DExtraction Date:04/26/13 10:27

Analytical Date: 04/30/13 00:02

Analyst: RC Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
Acenaphthene	850		ug/kg	150	40.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	63.	1
Hexachlorobenzene	ND		ug/kg	120	36.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	54.	1
2-Chloronaphthalene	ND		ug/kg	190	63.	1
1,2-Dichlorobenzene	ND		ug/kg	190	63.	1
1,3-Dichlorobenzene	ND		ug/kg	190	61.	1
1,4-Dichlorobenzene	ND		ug/kg	190	59.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	42.	1
2,6-Dinitrotoluene	ND		ug/kg	190	49.	1
Fluoranthene	1500		ug/kg	120	35.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	59.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	44.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	68.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	58.	1
Hexachlorobutadiene	ND		ug/kg	190	54.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	120	1
Hexachloroethane	ND		ug/kg	150	35.	1
Isophorone	ND		ug/kg	170	51.	1
Naphthalene	480		ug/kg	190	64.	1
Nitrobenzene	ND		ug/kg	170	46.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	40.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	57.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	190	50.	1
Butyl benzyl phthalate	ND		ug/kg	190	38.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	47.	1
Diethyl phthalate	ND		ug/kg	190	41.	1
Dimethyl phthalate	ND		ug/kg	190	49.	1
Benzo(a)anthracene	520		ug/kg	120	38.	1



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-03 Date Collected: 04/24/13 09:15

Client ID: Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

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Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westbord	ough Lab					
Benzo(a)pyrene	520		ug/kg	150	47.	1
Benzo(b)fluoranthene	410		ug/kg	120	39.	1
Benzo(k)fluoranthene	150		ug/kg	120	37.	1
Chrysene	480		ug/kg	120	38.	1
Acenaphthylene	140	J	ug/kg	150	36.	1
Anthracene	750		ug/kg	120	32.	1
Benzo(ghi)perylene	320		ug/kg	150	40.	1
Fluorene	340		ug/kg	190	55.	1
Phenanthrene	2300		ug/kg	120	38.	1
Dibenzo(a,h)anthracene	38	J	ug/kg	120	37.	1
Indeno(1,2,3-cd)Pyrene	250		ug/kg	150	43.	1
Pyrene	2200		ug/kg	120	38.	1
Biphenyl	ND		ug/kg	440	64.	1
4-Chloroaniline	ND		ug/kg	190	51.	1
2-Nitroaniline	ND		ug/kg	190	54.	1
3-Nitroaniline	ND		ug/kg	190	53.	1
4-Nitroaniline	ND		ug/kg	190	52.	1
Dibenzofuran	ND		ug/kg	190	64.	1
2-Methylnaphthalene	480		ug/kg	230	62.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	60.	1
Acetophenone	ND		ug/kg	190	60.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
P-Chloro-M-Cresol	ND		ug/kg	190	56.	1
2-Chlorophenol	ND		ug/kg	190	58.	1
2,4-Dichlorophenol	ND		ug/kg	170	62.	1
2,4-Dimethylphenol	ND		ug/kg	190	57.	1
2-Nitrophenol	ND		ug/kg	420	60.	1
4-Nitrophenol	ND		ug/kg	270	62.	1
2,4-Dinitrophenol	ND		ug/kg	930	260	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	71.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	57.	1
2-Methylphenol	ND		ug/kg	190	62.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	63.	1
	ND		0 0			
2,4,5-Trichlorophenol	ND ND		ug/kg	190	62.	1
•				190 620	62. 200	1
2,4,5-Trichlorophenol  Benzoic Acid  Benzyl Alcohol	ND		ug/kg			



Not Specified

**Project Name:** Lab Number: **DELLA PENNA** L1307330

Report Date: **Project Number:** 212645 05/01/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: L1307330-03 04/24/13 09:15

Client ID: BH9 8-10' Date Received: 04/24/13 Field Prep: Sample Location: 4052 ELLICOT ST., BATAVIA, NY

Parameter Result Qualifier Units RL MDL **Dilution Factor** 

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	61		25-120	
Phenol-d6	62		10-120	
Nitrobenzene-d5	68		23-120	
2-Fluorobiphenyl	75		30-120	
2,4,6-Tribromophenol	79		0-136	
4-Terphenyl-d14	72		18-120	



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

SAMPLE RESULTS

Lab ID: L1307330-04 D2 Client ID: TPMW4

Sample Location: 4052 ELLICOT ST., BATAVIA, NY

Matrix: Water

Analytical Method: 1,8270D-SIM Analytical Date: 04/30/13 19:35

Analyst: AS

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Date Collected: 04/24/13 13:00 Date Received: 04/24/13

Field Prep: Not Specified Extraction Method: EPA 3510C

Extraction Date: 04/27/13 03:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborn	ough Lab					
Phenanthrene	490		ug/l	5.6	1.8	40
Pyrene	450		ug/l	5.6	1.6	40

**Project Name:** Lab Number: **DELLA PENNA** L1307330

**Project Number:** Report Date: 212645 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-04 D Date Collected: 04/24/13 13:00

Client ID: TPMW4 Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

**Extraction Method: EPA 3510C** Matrix: Water Analytical Method: 1,8270D **Extraction Date:** 04/27/13 03:41

Analytical Date: 04/30/13 22:24

Analyst: JB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
1,2,4-Trichlorobenzene	ND		ug/l	25	3.3	5
Bis(2-chloroethyl)ether	ND		ug/l	10	1.9	5
1,2-Dichlorobenzene	ND		ug/l	10	2.7	5
1,3-Dichlorobenzene	ND		ug/l	10	2.7	5
1,4-Dichlorobenzene	ND		ug/l	10	2.8	5
3,3'-Dichlorobenzidine	ND		ug/l	25	4.3	5
2,4-Dinitrotoluene	ND		ug/l	25	2.2	5
2,6-Dinitrotoluene	ND		ug/l	25	2.3	5
4-Chlorophenyl phenyl ether	ND		ug/l	10	3.0	5
4-Bromophenyl phenyl ether	ND		ug/l	10	3.4	5
Bis(2-chloroisopropyl)ether	ND		ug/l	10	2.5	5
Bis(2-chloroethoxy)methane	ND		ug/l	25	2.0	5
Hexachlorocyclopentadiene	ND		ug/l	100	10.	5
Isophorone	ND		ug/l	25	1.7	5
Nitrobenzene	ND		ug/l	10	2.5	5
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	10	3.5	5
n-Nitrosodi-n-propylamine	ND		ug/l	25	2.0	5
Bis(2-Ethylhexyl)phthalate	ND		ug/l	15	7.0	5
Butyl benzyl phthalate	ND		ug/l	25	2.3	5
Di-n-butylphthalate	ND		ug/l	25	2.7	5
Di-n-octylphthalate	ND		ug/l	25	2.7	5
Diethyl phthalate	ND		ug/l	25	2.2	5
Dimethyl phthalate	ND		ug/l	25	2.2	5
Biphenyl	17		ug/l	10	2.5	5
4-Chloroaniline	ND		ug/l	25	4.1	5
2-Nitroaniline	ND		ug/l	25	2.0	5
3-Nitroaniline	ND		ug/l	25	3.0	5
4-Nitroaniline	ND		ug/l	25	2.8	5
Dibenzofuran	ND		ug/l	10	2.4	5
1,2,4,5-Tetrachlorobenzene	ND		ug/l	50	3.3	5
Acetophenone	ND		ug/l	25	2.8	5



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-04 D Date Collected: 04/24/13 13:00

Client ID: TPMW4 Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>
Semivolatile Organics by GC/MS - W	estborough Lab					
2,4,6-Trichlorophenol	ND		ug/l	25	2.2	5
P-Chloro-M-Cresol	ND		ug/l	10	2.5	5
2-Chlorophenol	ND		ug/l	10	1.7	5
2,4-Dichlorophenol	ND		ug/l	25	2.1	5
2,4-Dimethylphenol	ND		ug/l	25	6.2	5
2-Nitrophenol	ND		ug/l	50	2.4	5
4-Nitrophenol	ND		ug/l	50	6.1	5
2,4-Dinitrophenol	ND		ug/l	100	7.0	5
4,6-Dinitro-o-cresol	ND		ug/l	50	2.9	5
Phenol	ND		ug/l	25	1.3	5
2-Methylphenol	ND		ug/l	25	2.6	5
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.4	5
2,4,5-Trichlorophenol	ND		ug/l	25	2.2	5
Benzoic Acid	ND		ug/l	250	5.0	5
Benzyl Alcohol	ND		ug/l	10	2.4	5
Carbazole	ND		ug/l	10	2.6	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	18	Q	21-120
Phenol-d6	17		10-120
litrobenzene-d5	32		23-120
-Fluorobiphenyl	36		15-120
2,4,6-Tribromophenol	33		10-120
I-Terphenyl-d14	33	Q	41-149

Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-04 D Date Collected: 04/24/13 13:00

Client ID: TPMW4

Sample Location: 4052 ELLICOT ST., BATAVIA, NY

Matrix: Water

Analytical Method: 1,8270D-SIM Analytical Date: 04/30/13 13:26

Analyst: AS

Date Received: 04/24/13
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 04/27/13 03:35

**Parameter** Qualifier Units RLMDL **Dilution Factor** Semivolatile Organics by GC/MS-SIM - Westborough Lab Acenaphthene 180 ug/l 2.8 0.90 20 ND 2-Chloronaphthalene ug/l 2.8 0.92 20 280 0.60 20 Fluoranthene ug/l 2.8 Hexachlorobutadiene ND ug/l 7.0 0.99 20 Naphthalene 92 ug/l 2.8 0.90 20 98 2.8 20 Benzo(a)anthracene ug/l 0.80 Benzo(a)pyrene 92 ug/l 2.8 0.97 20 Benzo(b)fluoranthene 74 2.8 0.99 20 ug/l Benzo(k)fluoranthene 29 ug/l 2.8 0.95 20 Chrysene 87 ug/l 2.8 0.69 20 Acenaphthylene 26 2.8 0.70 20 ug/l Anthracene 140 ug/l 2.8 0.88 20 Benzo(ghi)perylene 61 ug/l 2.8 0.98 20 Fluorene 91 ug/l 2.8 0.80 20 Е Phenanthrene 350 ug/l 2.8 0.90 20 7.4 Dibenzo(a,h)anthracene ug/l 2.8 1.0 20 Indeno(1,2,3-cd)Pyrene 49 2.8 20 ug/l 1.1 Pyrene 370 Е ug/l 2.8 0.80 20 2-Methylnaphthalene 18 ug/l 2.8 0.84 20 Pentachlorophenol ND ug/l 11 2.6 20 Hexachlorobenzene ND ug/l 11 0.20 20 ND Hexachloroethane 11 0.91 20 ug/l

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	0	Q	21-120	
Phenol-d6	0	Q	10-120	
Nitrobenzene-d5	0	Q	23-120	
2-Fluorobiphenyl	0	Q	15-120	
2,4,6-Tribromophenol	0	Q	10-120	
4-Terphenyl-d14	0	Q	41-149	



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: 04/24/13 12:50

Client ID: BH13 9-11' Date Received: 04/24/13

Sample Location:4052 ELLICOT ST., BATAVIA, NYField Prep:Not SpecifiedMatrix:SoilExtraction Method:EPA 3546Analytical Method:1,8270DExtraction Date:04/26/13 10:27

Analytical Date: 04/30/13 00:29

Analyst: RC Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
Acenaphthene	920		ug/kg	150	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	60.	1
Hexachlorobenzene	ND		ug/kg	110	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	51.	1
2-Chloronaphthalene	ND		ug/kg	180	60.	1
1,2-Dichlorobenzene	ND		ug/kg	180	60.	1
1,3-Dichlorobenzene	ND		ug/kg	180	58.	1
1,4-Dichlorobenzene	ND		ug/kg	180	56.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	40.	1
2,6-Dinitrotoluene	ND		ug/kg	180	47.	1
Fluoranthene	2500		ug/kg	110	34.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	56.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	64.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	55.	1
Hexachlorobutadiene	ND		ug/kg	180	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	120	1
Hexachloroethane	ND		ug/kg	150	33.	1
Isophorone	ND		ug/kg	160	49.	1
Naphthalene	300		ug/kg	180	61.	1
Nitrobenzene	ND		ug/kg	160	44.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	38.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	55.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	48.	1
Butyl benzyl phthalate	ND		ug/kg	180	36.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	45.	1
Diethyl phthalate	ND		ug/kg	180	39.	1
Dimethyl phthalate	ND		ug/kg	180	46.	1
Benzo(a)anthracene	1000		ug/kg	110	36.	1



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

SAMPLE RESULTS

Lab ID: L1307330-05 Date Collected: 04/24/13 12:50

Client ID: Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Campic Location.	332 LLLIOOT OT., DATAVIA, INT			иттор.		Specified
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by 0	GC/MS - Westborough Lab					
Benzo(a)pyrene	1000		ug/kg	150	45.	1
Benzo(b)fluoranthene	820		ug/kg	110	37.	1
Benzo(k)fluoranthene	320		ug/kg	110	35.	1
Chrysene	920		ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	150	34.	1
Anthracene	610		ug/kg	110	30.	1
Benzo(ghi)perylene	620		ug/kg	150	38.	1
Fluorene	440		ug/kg	180	52.	1
Phenanthrene	1400		ug/kg	110	36.	1
Dibenzo(a,h)anthracene	81	J	ug/kg	110	35.	1
Indeno(1,2,3-cd)Pyrene	540		ug/kg	150	41.	1
Pyrene	4000		ug/kg	110	36.	1
Biphenyl	ND		ug/kg	420	60.	1
4-Chloroaniline	ND		ug/kg	180	48.	1
2-Nitroaniline	ND		ug/kg	180	52.	1
3-Nitroaniline	ND		ug/kg	180	50.	1
4-Nitroaniline	ND		ug/kg	180	49.	1
Dibenzofuran	ND		ug/kg	180	61.	1
2-Methylnaphthalene	64	J	ug/kg	220	58.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	57.	1
Acetophenone	ND		ug/kg	180	57.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
P-Chloro-M-Cresol	ND		ug/kg	180	53.	1
2-Chlorophenol	ND		ug/kg	180	55.	1
2,4-Dichlorophenol	ND		ug/kg	160	59.	1
2,4-Dimethylphenol	ND		ug/kg	180	55.	1
2-Nitrophenol	ND		ug/kg	400	57.	1
4-Nitrophenol	ND		ug/kg	260	59.	1
2,4-Dinitrophenol	ND		ug/kg	880	250	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	67.	1
Pentachlorophenol	ND		ug/kg	150	39.	1
Phenol	ND		ug/kg	180	54.	1
2-Methylphenol	ND		ug/kg	180	59.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	60.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	59.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	39.	1



**Project Name:** Lab Number: **DELLA PENNA** L1307330

Report Date: **Project Number:** 212645 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-05 Date Collected: 04/24/13 12:50

Client ID: BH13 9-11' Date Received: 04/24/13 Field Prep: Sample Location: 4052 ELLICOT ST., BATAVIA, NY Not Specified

Result Qualifier Units RL MDL

Parameter **Dilution Factor** 

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	79		25-120	
Phenol-d6	83		10-120	
Nitrobenzene-d5	116		23-120	
2-Fluorobiphenyl	92		30-120	
2,4,6-Tribromophenol	97		0-136	
4-Terphenyl-d14	88		18-120	



**Project Number:** 212645

Lab Number: L1307330

**Report Date:** 05/01/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 04/29/13 19:05

Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 04/26/13 10:27

Acenaphthene	Parameter	Result	Qualifier Units	RL	MDL
1,2,4-Trichlorobenzene         ND         ug/kg         160         54.           Hexachlorobenzene         ND         ug/kg         99         31.           Bis(2-chloroethyl)ether         ND         ug/kg         150         46.           2-Chloropalpthalene         ND         ug/kg         160         54.           1,2-Dichlorobenzene         ND         ug/kg         160         54.           1,2-Dichlorobenzene         ND         ug/kg         160         52.           1,4-Dichlorobenzene         ND         ug/kg         160         52.           1,4-Dichlorobenzene         ND         ug/kg         160         50.           3,3-Dichlorobenzidine         ND         ug/kg         160         50.           3,3-Dichlorobenzidine         ND         ug/kg         160         36.           2,4-Dinitrotoluene         ND         ug/kg         160         36.           2,6-Dinitrotoluene         ND         ug/kg         160         42.           Fluoranthene         ND         ug/kg         160         42.           Fluoranthene         ND         ug/kg         160         50.           4-Chlorophenyl phenyl ether         ND	Semivolatile Organics by GC/MS	- Westborough	Lab for sample(s):	01,03,05 Batch:	WG604184-1
Hexachlorobenzene   ND	Acenaphthene	ND	ug/kg	130	34.
Bis(2-chloroethyl)ether         ND         ug/kg         150         46.           2-Chloronaphthalene         ND         ug/kg         160         54.           1,2-Dichlorobenzene         ND         ug/kg         160         54.           1,3-Dichlorobenzene         ND         ug/kg         160         52.           1,4-Dichlorobenzene         ND         ug/kg         160         50.           3,3-Dichlorobenzeidine         ND         ug/kg         160         44.           2,4-Dinitrotoluene         ND         ug/kg         160         36.           2,6-Dinitrotoluene         ND         ug/kg         160         36.           2,6-Dinitrotoluene         ND         ug/kg         99         30.           4-Chlorophenyl phenyl ether         ND         ug/kg         99         30.           4-Chlorophenyl phenyl ether         ND         ug/kg         160         38.           Bis(2-chloroethory)methane         ND         ug/kg         200         58.           Bis(2-chloroethoxy)methane         ND         ug/kg         180         50.           Hexachlorobutadiene         ND         ug/kg         180         50.           Hexachlorobutadie	1,2,4-Trichlorobenzene	ND	ug/kg	160	54.
2-Chloronaphthalene         ND         ug/kg         160         54.           1,2-Dichlorobenzene         ND         ug/kg         160         54.           1,3-Dichlorobenzene         ND         ug/kg         160         52.           1,4-Dichlorobenzene         ND         ug/kg         160         50.           3,3-Dichlorobenzidine         ND         ug/kg         160         44.           2,4-Dinitrotoluene         ND         ug/kg         160         36.           2,6-Dinitrotoluene         ND         ug/kg         160         36.           2,6-Dinitrotoluene         ND         ug/kg         160         42.           Fluoranthene         ND         ug/kg         99         30.           4-Chlorophenyl phenyl ether         ND         ug/kg         160         50.           4-Bromophenyl phenyl ether         ND         ug/kg         160         38.           Bis(2-chloroisopropyl)ether         ND         ug/kg         200         58.           Bis(2-chloroethoxy)methane         ND         ug/kg         180         50.           Hexachlorobutadiene         ND         ug/kg         180         47.           Hexachlorocyclopentadiene <td>Hexachlorobenzene</td> <td>ND</td> <td>ug/kg</td> <td>99</td> <td>31.</td>	Hexachlorobenzene	ND	ug/kg	99	31.
1,2-Dichlorobenzene         ND         ug/kg         160         54.           1,3-Dichlorobenzene         ND         ug/kg         160         52.           1,4-Dichlorobenzene         ND         ug/kg         160         50.           3,3'-Dichlorobenzidine         ND         ug/kg         160         44.           2,4-Dinitrotoluene         ND         ug/kg         160         36.           2,6-Dinitrotoluene         ND         ug/kg         160         42.           Fluoranthene         ND         ug/kg         99         30.           4-Chlorophenyl phenyl ether         ND         ug/kg         160         50.           4-Bromophenyl phenyl ether         ND         ug/kg         160         38.           Bis(2-chloroisopropyl)ether         ND         ug/kg         200         58.           Bis(2-chlorosethoxy)methane         ND         ug/kg         180         50.           Hexachloroethoxy)methane         ND         ug/kg         180         50.           Hexachloroethoxy)methane         ND         ug/kg         160         47.           Hexachloroethane         ND         ug/kg         160         47.           Hexachloroethane </td <td>Bis(2-chloroethyl)ether</td> <td>ND</td> <td>ug/kg</td> <td>150</td> <td>46.</td>	Bis(2-chloroethyl)ether	ND	ug/kg	150	46.
1,3-Dichlorobenzene         ND         ug/kg         160         52.           1,4-Dichlorobenzene         ND         ug/kg         160         50.           3,3'-Dichlorobenzidine         ND         ug/kg         160         44.           2,4-Dinitrotoluene         ND         ug/kg         160         36.           2,6-Dinitrotoluene         ND         ug/kg         160         42.           Fluoranthene         ND         ug/kg         99         30.           4-Chlorophenyl phenyl ether         ND         ug/kg         160         50.           4-Bromophenyl phenyl ether         ND         ug/kg         160         38.           Bis(2-chloroisopropyl)ether         ND         ug/kg         160         38.           Bis(2-chloroethoxy)methane         ND         ug/kg         180         50.           Hexachlorobutadiene         ND         ug/kg         180         50.           Hexachlorocyclopentadiene         ND         ug/kg         160         47.           Hexachlorocyclopentadiene         ND         ug/kg         130         30.           Isophorone         ND         ug/kg         150         44.           Naphthalene	2-Chloronaphthalene	ND	ug/kg	160	54.
1,4-Dichlorobenzene         ND         ug/kg         160         50.           3,3'-Dichlorobenzidine         ND         ug/kg         160         44.           2,4-Dinitrotoluene         ND         ug/kg         160         36.           2,6-Dinitrotoluene         ND         ug/kg         160         42.           Fluoranthene         ND         ug/kg         99         30.           4-Chlorophenyl phenyl ether         ND         ug/kg         160         50.           4-Bromophenyl phenyl ether         ND         ug/kg         160         38.           Bis(2-chloroisopropyl)ether         ND         ug/kg         200         58.           Bis(2-chloroethoxy)methane         ND         ug/kg         180         50.           Hexachlorobutadiene         ND         ug/kg         180         50.           Hexachlorocyclopentadiene         ND         ug/kg         160         47.           Hexachlorocyclopentadiene         ND         ug/kg         130         30.           Isophorone         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         160         55.           Nitrobenzene         N	1,2-Dichlorobenzene	ND	ug/kg	160	54.
3,3'-Dichlorobenzidine         ND         ug/kg         160         44.           2,4-Dinitrotoluene         ND         ug/kg         160         36.           2,6-Dinitrotoluene         ND         ug/kg         160         42.           Fluoranthene         ND         ug/kg         99         30.           4-Chlorophenyl phenyl ether         ND         ug/kg         160         50.           4-Bromophenyl phenyl ether         ND         ug/kg         160         38.           Bis(2-chlorosopropyl)ether         ND         ug/kg         200         58.           Bis(2-chlorosopropyl)ether         ND         ug/kg         180         50.           Hexachlorobutadiene         ND         ug/kg         160         47.           Hexachlorocyclopentadiene         ND         ug/kg         470         110           Hexachlorocyclopentadiene         ND         ug/kg         130         30.           Isophorone         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         160         55.           Nitrobenzene         ND         ug/kg         150         39.           Nitrosodi-n-propylamine <t< td=""><td>1,3-Dichlorobenzene</td><td>ND</td><td>ug/kg</td><td>160</td><td>52.</td></t<>	1,3-Dichlorobenzene	ND	ug/kg	160	52.
2,4-Dinitrotoluene         ND         ug/kg         160         36.           2,6-Dinitrotoluene         ND         ug/kg         160         42.           Fluoranthene         ND         ug/kg         99         30.           4-Chlorophenyl phenyl ether         ND         ug/kg         160         50.           4-Bromophenyl phenyl ether         ND         ug/kg         160         38.           Bis(2-chlorostopropyl)ether         ND         ug/kg         200         58.           Bis(2-chlorosthoxy)methane         ND         ug/kg         180         50.           Hexachlorobutadiene         ND         ug/kg         160         47.           Hexachlorocyclopentadiene         ND         ug/kg         470         110           Hexachlorocyclopentadiene         ND         ug/kg         130         30.           Isophorone         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         150         39.           NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate	1,4-Dichlorobenzene	ND	ug/kg	160	50.
2,6-Dinitrotoluene         ND         ug/kg         160         42.           Fluoranthene         ND         ug/kg         99         30.           4-Chlorophenyl phenyl ether         ND         ug/kg         160         50.           4-Bromophenyl phenyl ether         ND         ug/kg         160         38.           Bis(2-chlorostopropyl)ether         ND         ug/kg         200         58.           Bis(2-chlorosthoxy)methane         ND         ug/kg         180         50.           Hexachlorosthoxy)methane         ND         ug/kg         160         47.           Hexachlorobutadiene         ND         ug/kg         130         30.           Hexachlorobutadiene         ND         ug/kg         150         47.           Hexachlorobutadiene         ND         ug/kg         150         44.           Hexachlorobutadiene <td>3,3'-Dichlorobenzidine</td> <td>ND</td> <td>ug/kg</td> <td>160</td> <td>44.</td>	3,3'-Dichlorobenzidine	ND	ug/kg	160	44.
Fluoranthene         ND         ug/kg         99         30.           4-Chlorophenyl phenyl ether         ND         ug/kg         160         50.           4-Bromophenyl phenyl ether         ND         ug/kg         160         38.           Bis(2-chlorospoyr)lether         ND         ug/kg         200         58.           Bis(2-chloroethoxy)methane         ND         ug/kg         180         50.           Hexachlorobutadiene         ND         ug/kg         160         47.           Hexachlorocyclopentadiene         ND         ug/kg         470         110           Hexachlorocyclopentadiene         ND         ug/kg         130         30.           Isophorone         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         150         39.           NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         150         39.           NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl p	2,4-Dinitrotoluene	ND	ug/kg	160	36.
4-Chlorophenyl phenyl ether         ND         ug/kg         160         50.           4-Bromophenyl phenyl ether         ND         ug/kg         160         38.           Bis(2-chloroisopropyl)ether         ND         ug/kg         200         58.           Bis(2-chloroethoxy)methane         ND         ug/kg         180         50.           Hexachlorobutadiene         ND         ug/kg         160         47.           Hexachlorocyclopentadiene         ND         ug/kg         470         110           Hexachlorocythane         ND         ug/kg         130         30.           Isophorone         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         160         55.           Nitrobenzene         ND         ug/kg         150         39.           NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         130         35.           n-Nitrosodi-n-propylamine         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylph	2,6-Dinitrotoluene	ND	ug/kg	160	42.
4-Bromophenyl phenyl ether         ND         ug/kg         160         38.           Bis(2-chloroisopropyl)ether         ND         ug/kg         200         58.           Bis(2-chloroethoxy)methane         ND         ug/kg         180         50.           Hexachlorobutadiene         ND         ug/kg         160         47.           Hexachlorocyclopentadiene         ND         ug/kg         470         110           Hexachloroethane         ND         ug/kg         130         30.           Isophorone         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         160         55.           Nitrobenzene         ND         ug/kg         150         39.           NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         130         35.           n-Nitrosodi-n-propylamine         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylphthalate         ND         ug/kg         160         41.           Diethyl phthalate <td>Fluoranthene</td> <td>ND</td> <td>ug/kg</td> <td>99</td> <td>30.</td>	Fluoranthene	ND	ug/kg	99	30.
Bis(2-chloroisopropyl)ether         ND         ug/kg         200         58.           Bis(2-chloroethoxy)methane         ND         ug/kg         180         50.           Hexachlorobutadiene         ND         ug/kg         160         47.           Hexachlorocyclopentadiene         ND         ug/kg         470         110           Hexachloroethane         ND         ug/kg         130         30.           Isophorone         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         160         55.           Nitrobenzene         ND         ug/kg         150         39.           NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         130         35.           n-Nitrosodi-n-propylamine         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylphthalate         ND         ug/kg         160         32.           Di-n-octylphthalate         ND         ug/kg         160         35.           Diethyl phthalate	4-Chlorophenyl phenyl ether	ND	ug/kg	160	50.
Bis(2-chloroethoxy)methane         ND         ug/kg         180         50.           Hexachlorobutadiene         ND         ug/kg         160         47.           Hexachlorocyclopentadiene         ND         ug/kg         470         110           Hexachloroethane         ND         ug/kg         130         30.           Isophorone         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         160         55.           Nitrobenzene         ND         ug/kg         150         39.           NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         130         35.           n-Nitrosodi-n-propylamine         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylphthalate         ND         ug/kg         160         32.           Di-n-octylphthalate         ND         ug/kg         160         41.           Diethyl phthalate         ND         ug/kg         160         35.           Dimethyl phthalate         ND	4-Bromophenyl phenyl ether	ND	ug/kg	160	38.
Hexachlorobutadiene         ND         ug/kg         160         47.           Hexachlorocyclopentadiene         ND         ug/kg         470         110           Hexachloroethane         ND         ug/kg         130         30.           Isophorone         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         160         55.           Nitrobenzene         ND         ug/kg         150         39.           NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         130         35.           n-Nitrosodi-n-propylamine         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylphthalate         ND         ug/kg         160         32.           Di-n-octylphthalate         ND         ug/kg         160         41.           Diethyl phthalate         ND         ug/kg         160         35.           Dimethyl phthalate         ND         ug/kg         160         42.	Bis(2-chloroisopropyl)ether	ND	ug/kg	200	58.
Hexachlorocyclopentadiene         ND         ug/kg         470         110           Hexachloroethane         ND         ug/kg         130         30.           Isophorone         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         160         55.           Nitrobenzene         ND         ug/kg         150         39.           NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         130         35.           n-Nitrosodi-n-propylamine         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylphthalate         ND         ug/kg         160         32.           Di-n-octylphthalate         ND         ug/kg         160         41.           Diethyl phthalate         ND         ug/kg         160         35.           Dimethyl phthalate         ND         ug/kg         160         42.	Bis(2-chloroethoxy)methane	ND	ug/kg	180	50.
Hexachloroethane         ND         ug/kg         130         30.           Isophorone         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         160         55.           Nitrobenzene         ND         ug/kg         150         39.           NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         130         35.           n-Nitrosodi-n-propylamine         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylphthalate         ND         ug/kg         160         32.           Di-n-octylphthalate         ND         ug/kg         160         41.           Diethyl phthalate         ND         ug/kg         160         35.           Dimethyl phthalate         ND         ug/kg         160         35.	Hexachlorobutadiene	ND	ug/kg	160	47.
Isophorone         ND         ug/kg         150         44.           Naphthalene         ND         ug/kg         160         55.           Nitrobenzene         ND         ug/kg         150         39.           NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         130         35.           n-Nitrosodi-n-propylamine         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylphthalate         ND         ug/kg         160         32.           Di-n-octylphthalate         ND         ug/kg         160         41.           Diethyl phthalate         ND         ug/kg         160         35.           Dimethyl phthalate         ND         ug/kg         160         35.	Hexachlorocyclopentadiene	ND	ug/kg	470	110
Naphthalene         ND         ug/kg         160         55.           Nitrobenzene         ND         ug/kg         150         39.           NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         130         35.           n-Nitrosodi-n-propylamine         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylphthalate         ND         ug/kg         160         32.           Di-n-octylphthalate         ND         ug/kg         160         41.           Diethyl phthalate         ND         ug/kg         160         35.           Dimethyl phthalate         ND         ug/kg         160         42.	Hexachloroethane	ND	ug/kg	130	30.
Nitrobenzene         ND         ug/kg         150         39.           NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         130         35.           n-Nitrosodi-n-propylamine         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylphthalate         ND         ug/kg         160         32.           Di-n-octylphthalate         ND         ug/kg         160         41.           Diethyl phthalate         ND         ug/kg         160         35.           Dimethyl phthalate         ND         ug/kg         160         42.	Isophorone	ND	ug/kg	150	44.
NitrosoDiPhenylAmine(NDPA)/DPA         ND         ug/kg         130         35.           n-Nitrosodi-n-propylamine         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylphthalate         ND         ug/kg         160         32.           Di-n-octylphthalate         ND         ug/kg         160         41.           Diethyl phthalate         ND         ug/kg         160         35.           Dimethyl phthalate         ND         ug/kg         160         42.	Naphthalene	ND	ug/kg	160	55.
n-Nitrosodi-n-propylamine         ND         ug/kg         160         49.           Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylphthalate         ND         ug/kg         160         32.           Di-n-octylphthalate         ND         ug/kg         160         41.           Diethyl phthalate         ND         ug/kg         160         35.           Dimethyl phthalate         ND         ug/kg         160         42.	Nitrobenzene	ND	ug/kg	150	39.
Bis(2-Ethylhexyl)phthalate         ND         ug/kg         160         43.           Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylphthalate         ND         ug/kg         160         32.           Di-n-octylphthalate         ND         ug/kg         160         41.           Diethyl phthalate         ND         ug/kg         160         35.           Dimethyl phthalate         ND         ug/kg         160         42.	NitrosoDiPhenylAmine(NDPA)/DPA	ND	ug/kg	130	35.
Butyl benzyl phthalate         ND         ug/kg         160         32.           Di-n-butylphthalate         ND         ug/kg         160         32.           Di-n-octylphthalate         ND         ug/kg         160         41.           Diethyl phthalate         ND         ug/kg         160         35.           Dimethyl phthalate         ND         ug/kg         160         42.	n-Nitrosodi-n-propylamine	ND	ug/kg	160	49.
Di-n-butylphthalate         ND         ug/kg         160         32.           Di-n-octylphthalate         ND         ug/kg         160         41.           Diethyl phthalate         ND         ug/kg         160         35.           Dimethyl phthalate         ND         ug/kg         160         42.	Bis(2-Ethylhexyl)phthalate	ND	ug/kg	160	43.
Di-n-octylphthalateNDug/kg16041.Diethyl phthalateNDug/kg16035.Dimethyl phthalateNDug/kg16042.	Butyl benzyl phthalate	ND	ug/kg	160	32.
Diethyl phthalateNDug/kg16035.Dimethyl phthalateNDug/kg16042.	Di-n-butylphthalate	ND	ug/kg	160	32.
Dimethyl phthalate ND ug/kg 160 42.	Di-n-octylphthalate	ND	ug/kg	160	41.
	Diethyl phthalate	ND	ug/kg	160	35.
Benzo(a)anthracene ND ug/kg 99 32	Dimethyl phthalate	ND	ug/kg	160	42.
	Benzo(a)anthracene	ND	ug/kg	99	32.



**Project Number:** 212645

Lab Number: L1307330

**Report Date:** 05/01/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 04/29/13 19:05

Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 04/26/13 10:27

Parameter	Result	Qualifier Units	RL	MDL
Semivolatile Organics by GC/N	MS - Westborough	Lab for sample(s):	01,03,05 Batch:	WG604184-1
Benzo(a)pyrene	ND	ug/kg	130	40.
Benzo(b)fluoranthene	ND	ug/kg	99	33.
Benzo(k)fluoranthene	ND	ug/kg	99	32.
Chrysene	ND	ug/kg	99	32.
Acenaphthylene	ND	ug/kg	130	31.
Anthracene	ND	ug/kg	99	28.
Benzo(ghi)perylene	ND	ug/kg	130	34.
Fluorene	ND	ug/kg	160	47.
Phenanthrene	ND	ug/kg	99	32.
Dibenzo(a,h)anthracene	ND	ug/kg	99	32.
Indeno(1,2,3-cd)Pyrene	ND	ug/kg	130	37.
Pyrene	ND	ug/kg	99	32.
Biphenyl	ND	ug/kg	380	54.
4-Chloroaniline	ND	ug/kg	160	44.
2-Nitroaniline	ND	ug/kg	160	47.
3-Nitroaniline	ND	ug/kg	160	46.
4-Nitroaniline	ND	ug/kg	160	45.
Dibenzofuran	ND	ug/kg	160	55.
2-Methylnaphthalene	ND	ug/kg	200	53.
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	160	51.
Acetophenone	ND	ug/kg	160	51.
2,4,6-Trichlorophenol	ND	ug/kg	99	31.
P-Chloro-M-Cresol	ND	ug/kg	160	48.
2-Chlorophenol	ND	ug/kg	160	50.
2,4-Dichlorophenol	ND	ug/kg	150	54.
2,4-Dimethylphenol	ND	ug/kg	160	49.
2-Nitrophenol	ND	ug/kg	360	52.
4-Nitrophenol	ND	ug/kg	230	54.
2,4-Dinitrophenol	ND	ug/kg	790	230
4,6-Dinitro-o-cresol	ND	ug/kg	430	60.
Pentachlorophenol	ND	ug/kg	130	35.



**Project Number:** 212645 Lab Number:

L1307330

**Report Date:** 05/01/13

#### **Method Blank Analysis Batch Quality Control**

Analytical Method: Analytical Date:

1,8270D

04/29/13 19:05

Analyst: RC Extraction Method: EPA 3546 04/26/13 10:27 **Extraction Date:** 

Parameter	Result	Qualifier Units	RL	MDL
Semivolatile Organics by GC/MS	S - Westborough	Lab for sample(s):	01,03,05 Batch:	WG604184-1
Phenol	ND	ug/kg	160	49.
2-Methylphenol	ND	ug/kg	160	53.
3-Methylphenol/4-Methylphenol	ND	ug/kg	240	54.
2,4,5-Trichlorophenol	ND	ug/kg	160	54.
Benzoic Acid	ND	ug/kg	540	170
Benzyl Alcohol	ND	ug/kg	160	51.
Carbazole	ND	ug/kg	160	36.

Tentatively Identified Compounds

No Tentatively Identified Compounds

ND

ug/kg

		Acceptance	
Surrogate	%Recovery	Qualifier Criteria	
2-Fluorophenol	73	25-120	
Phenol-d6	72	10-120	
Nitrobenzene-d5	70	23-120	
2-Fluorobiphenyl	77	30-120	
2,4,6-Tribromophenol	81	0-136	
4-Terphenyl-d14	90	18-120	



**Project Number:** 212645

Lab Number: L1307330

**Report Date:** 05/01/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM Analytical Date: 04/30/13 02:32

Analyst: AS

Extraction Method: EPA 3510C Extraction Date: 04/27/13 03:35

Remivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s):         02,04         Batch:         WG604438-1           Acenaphthene         ND         ug/l         0.20         0.06           2-Chloronaphthalene         ND         ug/l         0.20         0.07           Fluoranthene         ND         ug/l         0.20         0.04           Hexachlorobutadiene         ND         ug/l         0.50         0.07           Naphthalene         ND         ug/l         0.20         0.06           Benzo(a)anthracene         ND         ug/l         0.20         0.06           Benzo(b)fluoranthene         ND         ug/l         0.20         0.07           Benzo(k)fluoranthene         ND         ug/l         0.20         0.07           Chrysene         ND         ug/l         0.20         0.05           Acenaphthylene         ND         ug/l         0.20         0.05           Anthracene         ND         ug/l         0.20         0.06           Benzo(ghi)perylene         ND         ug/l         0.20         0.07           Fluorene         ND         ug/l         0.20         0.06           Dibenzo(a,h)anthracene         ND	Parameter	Result	Qualifier	Units	RL		MDL
2-Chloronaphthalene         ND         ug/l         0.20         0.07           Fluoranthene         ND         ug/l         0.20         0.04           Hexachlorobutadiene         ND         ug/l         0.50         0.07           Naphthalene         ND         ug/l         0.20         0.06           Benzo(a)anthracene         ND         ug/l         0.20         0.06           Benzo(a)pyrene         ND         ug/l         0.20         0.07           Benzo(b)fluoranthene         ND         ug/l         0.20         0.07           Benzo(k)fluoranthene         ND         ug/l         0.20         0.07           Chrysene         ND         ug/l         0.20         0.05           Acenaphthylene         ND         ug/l         0.20         0.05           Anthracene         ND         ug/l         0.20         0.06           Benzo(ghi)perylene         ND         ug/l         0.20         0.06           Phenanthrene         ND         ug/l         0.20         0.06           Phenanthrene         ND         ug/l         0.20         0.06           Dibenzo(a,h)anthracene         ND         ug/l         0.20	Semivolatile Organics by GC/MS	S-SIM - Westbor	rough Lab fo	r sample(s):	02,04	Batch:	WG604438-1
Fluoranthene   ND	Acenaphthene	ND		ug/l	0.20	)	0.06
ND	2-Chloronaphthalene	ND		ug/l	0.20	)	0.07
Naphthalene         ND         ug/l         0.20         0.06           Benzo(a)anthracene         ND         ug/l         0.20         0.06           Benzo(a)pyrene         ND         ug/l         0.20         0.07           Benzo(b)fluoranthene         ND         ug/l         0.20         0.07           Benzo(k)fluoranthene         ND         ug/l         0.20         0.07           Chrysene         ND         ug/l         0.20         0.05           Acenaphthylene         ND         ug/l         0.20         0.05           Anthracene         ND         ug/l         0.20         0.06           Benzo(ghi)perylene         ND         ug/l         0.20         0.07           Fluorene         ND         ug/l         0.20         0.06           Phenanthrene         ND         ug/l         0.20         0.06           Dibenzo(a,h)anthracene         ND         ug/l         0.20         0.07           Indeno(1,2,3-cd)Pyrene         ND         ug/l         0.20         0.08           Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.80         <	Fluoranthene	ND		ug/l	0.20	)	0.04
Benzo(a)anthracene         ND         ug/l         0.20         0.06           Benzo(a)pyrene         ND         ug/l         0.20         0.07           Benzo(b)fluoranthene         ND         ug/l         0.20         0.07           Benzo(k)fluoranthene         ND         ug/l         0.20         0.07           Chrysene         ND         ug/l         0.20         0.05           Acenaphthylene         ND         ug/l         0.20         0.05           Anthracene         ND         ug/l         0.20         0.06           Benzo(ghi)perylene         ND         ug/l         0.20         0.07           Fluorene         ND         ug/l         0.20         0.06           Phenanthrene         ND         ug/l         0.20         0.06           Dibenzo(a,h)anthracene         ND         ug/l         0.20         0.07           Indeno(1,2,3-cd)Pyrene         ND         ug/l         0.20         0.08           Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorobenzene         ND         ug/l         0.80	Hexachlorobutadiene	ND		ug/l	0.50	)	0.07
Benzo(a)pyrene         ND         ug/l         0.20         0.07           Benzo(b)fluoranthene         ND         ug/l         0.20         0.07           Benzo(k)fluoranthene         ND         ug/l         0.20         0.07           Chrysene         ND         ug/l         0.20         0.05           Acenaphthylene         ND         ug/l         0.20         0.05           Anthracene         ND         ug/l         0.20         0.06           Benzo(ghi)perylene         ND         ug/l         0.20         0.07           Fluorene         ND         ug/l         0.20         0.06           Phenanthrene         ND         ug/l         0.20         0.06           Dibenzo(a,h)anthracene         ND         ug/l         0.20         0.07           Indeno(1,2,3-cd)Pyrene         ND         ug/l         0.20         0.08           Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80	Naphthalene	ND		ug/l	0.20	)	0.06
Benzo(b)fluoranthene         ND         ug/l         0.20         0.07           Benzo(k)fluoranthene         ND         ug/l         0.20         0.07           Chrysene         ND         ug/l         0.20         0.05           Acenaphthylene         ND         ug/l         0.20         0.05           Anthracene         ND         ug/l         0.20         0.06           Benzo(ghi)perylene         ND         ug/l         0.20         0.07           Fluorene         ND         ug/l         0.20         0.06           Phenanthrene         ND         ug/l         0.20         0.06           Dibenzo(a,h)anthracene         ND         ug/l         0.20         0.07           Indeno(1,2,3-cd)Pyrene         ND         ug/l         0.20         0.08           Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80         0.01	Benzo(a)anthracene	ND		ug/l	0.20	)	0.06
Benzo(k)fluoranthene         ND         ug/l         0.20         0.07           Chrysene         ND         ug/l         0.20         0.05           Acenaphthylene         ND         ug/l         0.20         0.05           Anthracene         ND         ug/l         0.20         0.06           Benzo(ghi)perylene         ND         ug/l         0.20         0.07           Fluorene         ND         ug/l         0.20         0.06           Phenanthrene         ND         ug/l         0.20         0.06           Dibenzo(a,h)anthracene         ND         ug/l         0.20         0.07           Indeno(1,2,3-cd)Pyrene         ND         ug/l         0.20         0.08           Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80         0.01	Benzo(a)pyrene	ND		ug/l	0.20	)	0.07
Chrysene         ND         ug/l         0.20         0.05           Acenaphthylene         ND         ug/l         0.20         0.05           Anthracene         ND         ug/l         0.20         0.06           Benzo(ghi)perylene         ND         ug/l         0.20         0.07           Fluorene         ND         ug/l         0.20         0.06           Phenanthrene         ND         ug/l         0.20         0.06           Dibenzo(a,h)anthracene         ND         ug/l         0.20         0.07           Indeno(1,2,3-cd)Pyrene         ND         ug/l         0.20         0.08           Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80         0.01	Benzo(b)fluoranthene	ND		ug/l	0.20	)	0.07
Acenaphthylene         ND         ug/l         0.20         0.05           Anthracene         ND         ug/l         0.20         0.06           Benzo(ghi)perylene         ND         ug/l         0.20         0.07           Fluorene         ND         ug/l         0.20         0.06           Phenanthrene         ND         ug/l         0.20         0.06           Dibenzo(a,h)anthracene         ND         ug/l         0.20         0.07           Indeno(1,2,3-cd)Pyrene         ND         ug/l         0.20         0.08           Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80         0.01	Benzo(k)fluoranthene	ND		ug/l	0.20	)	0.07
Anthracene         ND         ug/l         0.20         0.06           Benzo(ghi)perylene         ND         ug/l         0.20         0.07           Fluorene         ND         ug/l         0.20         0.06           Phenanthrene         ND         ug/l         0.20         0.06           Dibenzo(a,h)anthracene         ND         ug/l         0.20         0.07           Indeno(1,2,3-cd)Pyrene         ND         ug/l         0.20         0.08           Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80         0.01	Chrysene	ND		ug/l	0.20	)	0.05
Benzo(ghi)perylene         ND         ug/l         0.20         0.07           Fluorene         ND         ug/l         0.20         0.06           Phenanthrene         ND         ug/l         0.20         0.06           Dibenzo(a,h)anthracene         ND         ug/l         0.20         0.07           Indeno(1,2,3-cd)Pyrene         ND         ug/l         0.20         0.08           Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80         0.01	Acenaphthylene	ND		ug/l	0.20	)	0.05
Fluorene         ND         ug/l         0.20         0.06           Phenanthrene         ND         ug/l         0.20         0.06           Dibenzo(a,h)anthracene         ND         ug/l         0.20         0.07           Indeno(1,2,3-cd)Pyrene         ND         ug/l         0.20         0.08           Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80         0.01	Anthracene	ND		ug/l	0.20	)	0.06
Phenanthrene         ND         ug/l         0.20         0.06           Dibenzo(a,h)anthracene         ND         ug/l         0.20         0.07           Indeno(1,2,3-cd)Pyrene         ND         ug/l         0.20         0.08           Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80         0.01	Benzo(ghi)perylene	ND		ug/l	0.20	)	0.07
Dibenzo(a,h)anthracene         ND         ug/l         0.20         0.07           Indeno(1,2,3-cd)Pyrene         ND         ug/l         0.20         0.08           Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80         0.01	Fluorene	ND		ug/l	0.20	)	0.06
Indeno(1,2,3-cd)Pyrene         ND         ug/l         0.20         0.08           Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80         0.01	Phenanthrene	ND		ug/l	0.20	)	0.06
Pyrene         ND         ug/l         0.20         0.06           2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80         0.01	Dibenzo(a,h)anthracene	ND		ug/l	0.20	)	0.07
2-Methylnaphthalene         ND         ug/l         0.20         0.06           Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80         0.01	Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	)	0.08
Pentachlorophenol         ND         ug/l         0.80         0.19           Hexachlorobenzene         ND         ug/l         0.80         0.01	Pyrene	ND		ug/l	0.20	)	0.06
Hexachlorobenzene ND ug/l 0.80 0.01	2-Methylnaphthalene	ND		ug/l	0.20	)	0.06
	Pentachlorophenol	ND		ug/l	0.80	)	0.19
Hexachloroethane 0.14 J ug/l 0.80 0.07	Hexachlorobenzene	ND		ug/l	0.80	)	0.01
	Hexachloroethane	0.14	J	ug/l	0.80	)	0.07



L1307330

Lab Number:

Project Name: DELLA PENNA

Project Number: 212645 Report Date: 05/01/13

Method Blank Analysis
Batch Quality Control

Analytical Method: Analytical Date: 1,8270D-SIM 04/30/13 02:32

Analyst: AS

Extraction Method: EPA 3510C Extraction Date: 04/27/13 03:35

Parameter Result Qualifier Units RL MDL

Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02,04 Batch: WG604438-1

		Acceptance
Surrogate	%Recovery	Qualifier Criteria
2-Fluorophenol	41	21-120
Phenol-d6	29	10-120
Nitrobenzene-d5	68	23-120
2-Fluorobiphenyl	65	15-120
2,4,6-Tribromophenol	77	10-120
4-Terphenyl-d14	83	41-149



**Project Number:** 212645

Lab Number: L1307330

**Report Date:** 05/01/13

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 04/28/13 19:39

Analyst: JB

Extraction Method: EPA 3510C Extraction Date: 04/27/13 03:41

Parameter	Result	Qualifier Units	RL	MDL
Semivolatile Organics by GC/MS	- Westborough	Lab for sample(s):	02,04 Batch:	WG604440-1
1,2,4-Trichlorobenzene	ND	ug/l	5.0	0.67
Bis(2-chloroethyl)ether	ND	ug/l	2.0	0.39
1,2-Dichlorobenzene	ND	ug/l	2.0	0.55
1,3-Dichlorobenzene	ND	ug/l	2.0	0.55
1,4-Dichlorobenzene	ND	ug/l	2.0	0.55
3,3'-Dichlorobenzidine	ND	ug/l	5.0	0.85
2,4-Dinitrotoluene	ND	ug/l	5.0	0.45
2,6-Dinitrotoluene	ND	ug/l	5.0	0.46
4-Chlorophenyl phenyl ether	ND	ug/l	2.0	0.61
4-Bromophenyl phenyl ether	ND	ug/l	2.0	0.67
Bis(2-chloroisopropyl)ether	ND	ug/l	2.0	0.50
Bis(2-chloroethoxy)methane	ND	ug/l	5.0	0.40
Hexachlorocyclopentadiene	ND	ug/l	20	2.1
Isophorone	ND	ug/l	5.0	0.35
Nitrobenzene	ND	ug/l	2.0	0.50
NitrosoDiPhenylAmine(NDPA)/DPA	ND	ug/l	2.0	0.70
n-Nitrosodi-n-propylamine	ND	ug/l	5.0	0.39
Bis(2-Ethylhexyl)phthalate	ND	ug/l	3.0	1.4
Butyl benzyl phthalate	ND	ug/l	5.0	0.46
Di-n-butylphthalate	ND	ug/l	5.0	0.54
Di-n-octylphthalate	ND	ug/l	5.0	0.53
Diethyl phthalate	ND	ug/l	5.0	0.45
Dimethyl phthalate	ND	ug/l	5.0	0.45
Biphenyl	ND	ug/l	2.0	0.50
4-Chloroaniline	ND	ug/l	5.0	0.83
2-Nitroaniline	ND	ug/l	5.0	0.40
3-Nitroaniline	ND	ug/l	5.0	0.59
4-Nitroaniline	ND	ug/l	5.0	0.55
Dibenzofuran	ND	ug/l	2.0	0.47
1,2,4,5-Tetrachlorobenzene	ND	ug/l	10	0.65
Acetophenone	ND	ug/l	5.0	0.55



**Project Number:** 212645

Lab Number:

L1307330

**Report Date:** 05/01/13

Method Blank Analysis
Batch Quality Control

Analytical Method: Analytical Date:

1,8270D

Analyst:

04/28/13 19:39

JB

Extraction Method: EPA 3510C Extraction Date: 04/27/13 03:41

Result Qualifier Units RL MDL **Parameter** Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04 Batch: WG604440-1 ND 2,4,6-Trichlorophenol 5.0 0.45 ug/l ND 2.0 0.50 P-Chloro-M-Cresol ug/l 2-Chlorophenol ND ug/l 2.0 0.34 2,4-Dichlorophenol ND ug/l 5.0 0.43 2,4-Dimethylphenol ND 5.0 1.2 ug/l ND 2-Nitrophenol 10 0.48 ug/l ND 4-Nitrophenol ug/l 10 1.2 ND 2,4-Dinitrophenol ug/l 20 1.4 4,6-Dinitro-o-cresol ND 10 0.59 ug/l Phenol ND 5.0 ug/l 0.26 ND 2-Methylphenol 5.0 ug/l 0.53 3-Methylphenol/4-Methylphenol ND ug/l 5.0 0.47 2,4,5-Trichlorophenol ND 5.0 0.45 ug/l Benzoic Acid ND ug/l 50 1.0 Benzyl Alcohol ND 0.47 ug/l 2.0 ND 2.0 0.53 Carbazole ug/l

Tentatively Identified Compounds

No Tentatively Identified Compounds

ND

ug/l



**Project Number:** 212645

Lab Number:

L1307330

Report Date: 0

05/01/13

Method Blank Analysis
Batch Quality Control

Analytical Method: Analytical Date: 1,8270D

04/28/13 19:39

Analyst: JB

Extraction Method: EPA 3510C

Extraction Date: (

04/27/13 03:41

ParameterResultQualifierUnitsRLMDLSemivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04Batch: WG604440-1

		Acceptance
Surrogate	%Recovery	Qualifier Criteria
2-Fluorophenol	40	21-120
Phenol-d6	27	10-120
Nitrobenzene-d5	59	23-120
2-Fluorobiphenyl	70	15-120
2,4,6-Tribromophenol	79	10-120
4-Terphenyl-d14	90	41-149



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

arameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	Qual	RPD Limits
emivolatile Organics by GC/MS - Westboro	ugh Lab Associ	ated sample(s	s): 01,03,05	Batch: WG604184-2 WG60	04184-3		
Acenaphthene	75		68	31-137	10		50
1,2,4-Trichlorobenzene	74		68	38-107	8		50
Hexachlorobenzene	82		82	40-140	0		50
Bis(2-chloroethyl)ether	72		62	40-140	15		50
2-Chloronaphthalene	85		73	40-140	15		50
1,2-Dichlorobenzene	73		64	40-140	13		50
1,3-Dichlorobenzene	71		63	40-140	12		50
1,4-Dichlorobenzene	72		65	28-104	10		50
3,3'-Dichlorobenzidine	51		51	40-140	0		50
2,4-Dinitrotoluene	85		84	28-89	1		50
2,6-Dinitrotoluene	97		88	40-140	10		50
Fluoranthene	81		81	40-140	0		50
4-Chlorophenyl phenyl ether	78		73	40-140	7		50
4-Bromophenyl phenyl ether	85		80	40-140	6		50
Bis(2-chloroisopropyl)ether	67		58	40-140	14		50
Bis(2-chloroethoxy)methane	80		64	40-117	22		50
Hexachlorobutadiene	73		70	40-140	4		50
Hexachlorocyclopentadiene	63		55	40-140	14		50
Hexachloroethane	71		64	40-140	10		50
Isophorone	81		65	40-140	22		50
Naphthalene	74		66	40-140	11		50



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westbord	ugh Lab Assoc	iated sample(s	s): 01,03,05	Batch: WG604184-2 WG60	04184-3		
Nitrobenzene	72		67	40-140	7		50
NitrosoDiPhenylAmine(NDPA)/DPA	84		79		6		50
n-Nitrosodi-n-propylamine	81		66	32-121	20		50
Bis(2-Ethylhexyl)phthalate	78		81	40-140	4		50
Butyl benzyl phthalate	82		80	40-140	2		50
Di-n-butylphthalate	79		77	40-140	3		50
Di-n-octylphthalate	84		84	40-140	0		50
Diethyl phthalate	78		77	40-140	1		50
Dimethyl phthalate	79		78	40-140	1		50
Benzo(a)anthracene	77		77	40-140	0		50
Benzo(a)pyrene	76		80	40-140	5		50
Benzo(b)fluoranthene	77		76	40-140	1		50
Benzo(k)fluoranthene	79		80	40-140	1		50
Chrysene	77		80	40-140	4		50
Acenaphthylene	84		77	40-140	9		50
Anthracene	77		76	40-140	1		50
Benzo(ghi)perylene	75		76	40-140	1		50
Fluorene	80		76	40-140	5		50
Phenanthrene	75		76	40-140	1		50
Dibenzo(a,h)anthracene	78		77	40-140	1		50
Indeno(1,2,3-cd)Pyrene	77		76	40-140	1		50



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
emivolatile Organics by GC/MS - Westborou	ıgh Lab Associ	ated sample(s	3): 01,03,05	Batch: V	VG604184-2 WG60	04184-3		
Pyrene	81		80		35-142	1		50
Biphenyl	74		68			8		50
4-Chloroaniline	43		38	Q	40-140	12		50
2-Nitroaniline	97		85		47-134	13		50
3-Nitroaniline	57		54		26-129	5		50
4-Nitroaniline	84		81		41-125	4		50
Dibenzofuran	76		72		40-140	5		50
2-Methylnaphthalene	78		70		40-140	11		50
1,2,4,5-Tetrachlorobenzene	71		67		40-117	6		50
Acetophenone	83		69		14-144	18		50
2,4,6-Trichlorophenol	98		85		30-130	14		50
P-Chloro-M-Cresol	92		86		26-103	7		50
2-Chlorophenol	82		70		25-102	16		50
2,4-Dichlorophenol	92		79		30-130	15		50
2,4-Dimethylphenol	91		71		30-130	25		50
2-Nitrophenol	87		72		30-130	19		50
4-Nitrophenol	91		89		11-114	2		50
2,4-Dinitrophenol	64		63		4-130	2		50
4,6-Dinitro-o-cresol	87		83		10-130	5		50
Pentachlorophenol	80		79		17-109	1		50
Phenol	82		68		26-90	19		50



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborou	gh Lab Assoc	iated sample(s	3): 01,03,05	Batch: V	VG604184-2 WG6	604184-3		
2-Methylphenol	87		71		30-130.	20		50
3-Methylphenol/4-Methylphenol	87		70		30-130	22		50
2,4,5-Trichlorophenol	95		89		30-130	7		50
Benzoic Acid	0		0			NC		50
Benzyl Alcohol	82		64		40-140	25		50
Carbazole	78		79		54-128	1		50

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qu	al %Recovery Qual	Criteria
2-Fluorophenol	84	76	25-120
Phenol-d6	90	75	10-120
Nitrobenzene-d5	83	68	23-120
2-Fluorobiphenyl	87	77	30-120
2,4,6-Tribromophenol	95	92	0-136
4-Terphenyl-d14	88	84	18-120



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westl	oorough Lab A	ssociated sam	nple(s): 02,04	Batch:	WG604438-2 WG	604438-3		
Acenaphthene	70		76		37-111	8		40
2-Chloronaphthalene	60		69		40-140	14		40
Fluoranthene	72		80		40-140	11		40
Hexachlorobutadiene	60		67		40-140	11		40
Naphthalene	60		67		40-140	11		40
Benzo(a)anthracene	78		88		40-140	12		40
Benzo(a)pyrene	79		87		40-140	10		40
Benzo(b)fluoranthene	79		88		40-140	11		40
Benzo(k)fluoranthene	84		96		40-140	13		40
Chrysene	76		85		40-140	11		40
Acenaphthylene	64		74		40-140	14		40
Anthracene	76		85		40-140	11		40
Benzo(ghi)perylene	76		80		40-140	5		40
Fluorene	78		90		40-140	14		40
Phenanthrene	64		65		40-140	2		40
Dibenzo(a,h)anthracene	80		86		40-140	7		40
Indeno(1,2,3-cd)Pyrene	80		85		40-140	6		40
Pyrene	69		76		26-127	10		40
2-Methylnaphthalene	61		67		40-140	9		40
Pentachlorophenol	66		73		9-103	10		40
Hexachlorobenzene	60		65		40-140	8		40



Project Name: DELLA PENNA

**Project Number:** 212645

\_A PENNA

Lab Number: L1307330

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - V	Vestborough Lab As	sociated	sample(s): 02,04	Batch:	WG604438-2	WG604438-3		
Hexachloroethane	60		68		40-140	13		40

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qu	al %Recovery Qual	Criteria
2-Fluorophenol	44	50	21-120
Phenol-d6	34	37	10-120
Nitrobenzene-d5	72	82	23-120
2-Fluorobiphenyl	72	80	15-120
2,4,6-Tribromophenol	86	92	10-120
4-Terphenyl-d14	77	86	41-149



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

arameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westboro	ugh Lab Assoc	iated sample(	s): 02,04 Ba	tch: WG604440-2 WG604	1440-3		
1,2,4-Trichlorobenzene	71		67	39-98	6		30
Bis(2-chloroethyl)ether	74		69	40-140	7		30
1,2-Dichlorobenzene	66		63	40-140	5		30
1,3-Dichlorobenzene	64		60	40-140	6		30
1,4-Dichlorobenzene	65		62	36-97	5		30
3,3'-Dichlorobenzidine	72		68	40-140	6		30
2,4-Dinitrotoluene	100	Q	97	Q 24-96	3		30
2,6-Dinitrotoluene	103		99	40-140	4		30
4-Chlorophenyl phenyl ether	93		91	40-140	2		30
4-Bromophenyl phenyl ether	98		98	40-140	0		30
Bis(2-chloroisopropyl)ether	77		70	40-140	10		30
Bis(2-chloroethoxy)methane	85		78	40-140	9		30
Hexachlorocyclopentadiene	46		42	40-140	9		30
Isophorone	84		78	40-140	7		30
Nitrobenzene	76		70	40-140	8		30
NitrosoDiPhenylAmine(NDPA)/DPA	95		92	40-140	3		30
n-Nitrosodi-n-propylamine	83		76	29-132	9		30
Bis(2-Ethylhexyl)phthalate	119		96	40-140	21		30
Butyl benzyl phthalate	100		95	40-140	5		30
Di-n-butylphthalate	102		98	40-140	4		30
Di-n-octylphthalate	108		103	40-140	5		30



Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westboro	ugh Lab Associ	ated sample(	s): 02,04 Bat	tch: WG604440-2 WG6044	40-3		
Diethyl phthalate	94		93	40-140	1		30
Dimethyl phthalate	94		93	40-140	1		30
Biphenyl	83		80		4		30
4-Chloroaniline	71		67	40-140	6		30
2-Nitroaniline	101		99	52-143	2		30
3-Nitroaniline	76		73	25-145	4		30
4-Nitroaniline	95		95	51-143	0		30
Dibenzofuran	90		88	40-140	2		30
1,2,4,5-Tetrachlorobenzene	77		75	2-134	3		30
Acetophenone	85		77	39-129	10		30
2,4,6-Trichlorophenol	99		94	30-130	5		30
P-Chloro-M-Cresol	98	Q	92	23-97	6		30
2-Chlorophenol	78		71	27-123	9		30
2,4-Dichlorophenol	92		84	30-130	9		30
2,4-Dimethylphenol	90		80	30-130	12		30
2-Nitrophenol	84		77	30-130	9		30
4-Nitrophenol	61		53	10-80	14		30
2,4-Dinitrophenol	98		92	20-130	6		30
4,6-Dinitro-o-cresol	103		98	20-164	5		30
Phenol	42		37	12-110	13		30
2-Methylphenol	78		70	30-130	11		30



Project Name: DELLA PENNA

Project Number: 212645

Lab Number: L1307330

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborou	ıgh Lab Associ	ated sample(s	s): 02,04 Ba	ch: WG6	04440-2 WG6044	140-3		
3-Methylphenol/4-Methylphenol	74		66		30-130	11		30
2,4,5-Trichlorophenol	106		99		30-130	7		30
Benzoic Acid	42		37			13		30
Benzyl Alcohol	72		66			9		30
Carbazole	99		94		55-144	5		30

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
2-Fluorophenol	56	50	21-120
Phenol-d6	43	38	10-120
Nitrobenzene-d5	84	75	23-120
2-Fluorobiphenyl	98	90	15-120
2,4,6-Tribromophenol	111	106	10-120
4-Terphenyl-d14	108	103	41-149



#### **PCBS**



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-01 D Date Collected: 04/24/13

Client ID: BH12 6-8'

Sample Location: 4052 ELLICOT ST., BATAVIA, NY

Matrix: Soil
Analytical Method: 1,8082A

Analytical Date: 05/01/13 09:53

Analyst: KB Percent Solids: 92% Date Collected: 04/24/13 11:05 Date Received: 04/24/13 Field Prep: Not Specified **Extraction Method:** EPA 3546 04/25/13 20:04 **Extraction Date:** Cleanup Method1: EPA 3665A Cleanup Date1: 04/26/13 Cleanup Method2: EPA 3660B Cleanup Date2: 04/26/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Polychlorinated Biphenyls by GC - Westborough Lab								
						_		
Aroclor 1016	ND		ug/kg	181	35.7	5		
Aroclor 1221	ND		ug/kg	181	54.5	5		
Aroclor 1232	ND		ug/kg	181	38.4	5		
Aroclor 1242	ND		ug/kg	181	34.3	5		
Aroclor 1248	ND		ug/kg	181	21.9	5		
Aroclor 1254	ND		ug/kg	181	28.5	5		
Aroclor 1262	ND		ug/kg	181	13.4	5		
Aroclor 1268	ND		ug/kg	181	26.2	5		

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2,4,5,6-Tetrachloro-m-xylene	116		30-150	
Decachlorobiphenyl	100		30-150	
2,4,5,6-Tetrachloro-m-xylene	112		30-150	
Decachlorobiphenyl	125		30-150	
Decachioropiphenyi	125		30-130	



04/24/13

Date Received:

**Project Name:** Lab Number: **DELLA PENNA** L1307330

**Project Number:** 212645 **Report Date:** 05/01/13

**SAMPLE RESULTS** 

Lab ID: D Date Collected: L1307330-01 04/24/13 11:05

Client ID: BH12 6-8'

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep:

Not Specified **Extraction Method:** EPA 3546 Matrix: Soil 04/25/13 20:04 Analytical Method: 1,8082A **Extraction Date:** Analytical Date: 05/01/13 09:53 Cleanup Method1: EPA 3665A Analyst: KΒ Cleanup Date1: 04/26/13

92% Percent Solids: Cleanup Method2: EPA 3660B

Cleanup Date2: 04/26/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1260	80.6	J	ug/kg	181	31.4	5	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2,4,5,6-Tetrachloro-m-xylene	116		30-150	
Decachlorobiphenyl	100		30-150	
2,4,5,6-Tetrachloro-m-xylene	112		30-150	
Decachlorobiphenyl	125		30-150	



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: Date Collected: 04/24/13 11:50

Client ID: TPMW3 Date Received: 04/24/13 Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Spec

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified Matrix: EPA 3510C

Analytical Method: 1,8082A Extraction Date: 04/30/13 11:26

Analytical Date: 04/30/13 20:46 Cleanup Method1: EPA 3665A Analyst: KB Cleanup Date1: 04/30/13

Cleanup Method2: EPA 3660B Cleanup Date2: 04/30/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by Go	C - Westborough Lab					
Aroclor 1016	ND		ug/l	0.167	0.110	1
Aroclor 1221	ND		ug/l	0.167	0.107	1
Aroclor 1232	ND		ug/l	0.167	0.062	1
Aroclor 1242	ND		ug/l	0.167	0.120	1
Aroclor 1248	ND		ug/l	0.167	0.102	1
Aroclor 1254	ND		ug/l	0.167	0.068	1
Aroclor 1260	ND		ug/l	0.167	0.063	1
Aroclor 1262	ND		ug/l	0.167	0.058	1
Aroclor 1268	ND		ug/l	0.167	0.075	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
	<u> </u>	444		
2,4,5,6-Tetrachloro-m-xylene	88		30-150	
Decachlorobiphenyl	60		30-150	
2,4,5,6-Tetrachloro-m-xylene	88		30-150	
Decachlorobiphenyl	71		30-150	



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

SAMPLE RESULTS

Lab ID: Date Collected: 04/24/13 09:15

Client ID: BH9 8-10' Date Received: 04/24/13

Sample Location:4052 ELLICOT ST., BATAVIA, NYField Prep:Not SpecifiedMatrix:SoilExtraction Method:EPA 3546Analytical Method:1,8082AExtraction Date:04/25/13 20:04

Analytical Date: 04/26/13 14:02 Cleanup Method1: EPA 3665A
Analyst: KB Cleanup Date1: 04/26/13
Percent Solids: 85% Cleanup Method2: EPA 3660B

Cleanup Date2: 04/26/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by G	C - Westborough Lab					
Aroclor 1016	ND		ug/kg	37.1	7.32	1
Aroclor 1221	ND		ug/kg	37.1	11.2	1
Aroclor 1232	ND		ug/kg	37.1	7.87	1
Aroclor 1242	ND		ug/kg	37.1	7.03	1
Aroclor 1248	ND		ug/kg	37.1	4.48	1
Aroclor 1254	ND		ug/kg	37.1	5.84	1
Aroclor 1260	ND		ug/kg	37.1	6.43	1
Aroclor 1262	ND		ug/kg	37.1	2.74	1
Aroclor 1268	ND		ug/kg	37.1	5.38	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2,4,5,6-Tetrachloro-m-xylene	75		30-150	
Decachlorobiphenyl	70		30-150	
2,4,5,6-Tetrachloro-m-xylene	92		30-150	
Decachlorobiphenyl	101		30-150	



04/27/13

Cleanup Date2:

0.083

0.038

1

ug/l

Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-04 Date Collected: 04/24/13 13:00

Client ID: TPMW4 Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified Matrix: Water **Extraction Method: EPA 3510C** Analytical Method: 1,8082A **Extraction Date:** 04/26/13 19:19 Analytical Date: 04/29/13 00:25 Cleanup Method1: **EPA 3665A** 

Analyst: KB Cleanup Date1: 04/27/13 Cleanup Method2: EPA 3660B

**Parameter** Result Qualifier Units RLMDL **Dilution Factor** Polychlorinated Biphenyls by GC - Westborough Lab Aroclor 1016 ND ug/l 0.083 0.055 1 Aroclor 1221 ND ug/l 0.083 0.053 1 Aroclor 1232 ND 0.083 1 ug/l 0.031 Aroclor 1242 ND ug/l 0.083 0.060 1 ND 1 Aroclor 1248 ug/l 0.083 0.051 ND 1 Aroclor 1254 ug/l 0.083 0.034 Aroclor 1260 ND ug/l 0.083 0.032 1 Aroclor 1262 ND 0.083 0.029 1 ug/l

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2,4,5,6-Tetrachloro-m-xylene	67		30-150	
Decachlorobiphenyl	34		30-150	
2,4,5,6-Tetrachloro-m-xylene	65		30-150	
Decachlorobiphenyl	42		30-150	

ND



Aroclor 1268

Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-05 D Date Collected: 04/24/

Client ID: BH13 9-11'

Sample Location: 4052 ELLICOT ST., BATAVIA, NY

Matrix: Soil Analytical Method: 1,8082A

Analytical Date: 05/01/13 10:05

Analyst: KB Percent Solids: 91% Date Collected: 04/24/13 12:50 Date Received: 04/24/13 Field Prep: Not Specified **Extraction Method:** EPA 3546 04/25/13 20:04 **Extraction Date:** Cleanup Method1: EPA 3665A Cleanup Date1: 04/26/13 Cleanup Method2: EPA 3660B Cleanup Date2: 04/26/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Wes	stborough Lab					
Aroclor 1016	ND		ug/kg	176	34.7	5
Aroclor 1221	ND		ug/kg	176	53.0	5
Aroclor 1232	ND		ug/kg	176	37.4	5
Aroclor 1242	ND		ug/kg	176	33.4	5
Aroclor 1248	ND		ug/kg	176	21.3	5
Aroclor 1254	ND		ug/kg	176	27.7	5
Aroclor 1260	ND		ug/kg	176	30.5	5
Aroclor 1262	ND		ug/kg	176	13.0	5
Aroclor 1268	ND		ug/kg	176	25.5	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2,4,5,6-Tetrachloro-m-xylene	121		30-150	
Decachlorobiphenyl	121		30-150	
2,4,5,6-Tetrachloro-m-xylene	123		30-150	
Decachlorobiphenyl	145		30-150	



**Project Name: DELLA PENNA** 

**Project Number:** 212645 Lab Number: L1307330

Report Date: 05/01/13

**Method Blank Analysis Batch Quality Control** 

Analytical Method: Analytical Date:

1,8082A 04/26/13 14:26

Analyst:

KΒ

Extraction Method: EPA 3546 Extraction Date:

04/25/13 20:04

Cleanup Method1: EPA 3665A

Cleanup Date1: Cleanup Method2: EPA 3660B

04/26/13

Cleanup Date2: 04/26/13

Parameter	Result	Qualifier Units	RL	MDL
Polychlorinated Biphenyls by G0	C - Westborough L	_ab for sample(s):	01,03,05 Batch:	WG604116-1
Aroclor 1016	ND	ug/kg	33.3	6.57
Aroclor 1221	ND	ug/kg	33.3	10.0
Aroclor 1232	ND	ug/kg	33.3	7.07
Aroclor 1242	ND	ug/kg	33.3	6.31
Aroclor 1248	ND	ug/kg	33.3	4.02
Aroclor 1254	ND	ug/kg	33.3	5.24
Aroclor 1260	ND	ug/kg	33.3	5.77
Aroclor 1262	ND	ug/kg	33.3	2.46
Aroclor 1268	ND	ug/kg	33.3	4.82

Acceptance				
%Recovery	Qualifier	Criteria		
95		30-150		
83		30-150		
98		30-150		
114		30-150		
	95 83 98	%Recovery Qualifier  95 83 98		



**Project Name: DELLA PENNA** 

**Project Number:** 212645 Lab Number: L1307330

Report Date: 05/01/13

**Method Blank Analysis Batch Quality Control** 

Analytical Method: Analytical Date:

1,8082A 04/29/13 00:51

Analyst: KΒ Extraction Method: EPA 3510C 04/26/13 19:19 Extraction Date: Cleanup Method1: EPA 3665A Cleanup Date1: 04/27/13 Cleanup Method2: EPA 3660B

Cleanup Date2: 04/27/13

Parameter	Result	Qualifier Units	RL	MDL
Polychlorinated Biphenyls by GC	- Westborough	Lab for sample(s):	04 Batch:	WG604382-1
Aroclor 1016	ND	ug/l	0.083	3 0.055
Aroclor 1221	ND	ug/l	0.083	3 0.053
Aroclor 1232	ND	ug/l	0.083	3 0.031
Aroclor 1242	ND	ug/l	0.083	0.060
Aroclor 1248	ND	ug/l	0.083	3 0.051
Aroclor 1254	ND	ug/l	0.083	0.034
Aroclor 1260	ND	ug/l	0.083	3 0.032
Aroclor 1262	ND	ug/l	0.083	3 0.029
Aroclor 1268	ND	ug/l	0.083	3 0.038

	Acceptance					
Surrogate	%Recovery	Qualifier	Criteria			
2,4,5,6-Tetrachloro-m-xylene	57		30-150			
Decachlorobiphenyl	54		30-150			
2,4,5,6-Tetrachloro-m-xylene	57		30-150			
Decachlorobiphenyl	55		30-150			



**Project Name: DELLA PENNA** 

**Project Number:** 212645 Lab Number: L1307330

**Report Date:** 05/01/13

**Method Blank Analysis Batch Quality Control** 

Analytical Method: Analytical Date:

1,8082A

Analyst:

04/30/13 20:09

KΒ

Extraction Method: EPA 3510C Extraction Date: 04/30/13 11:26 Cleanup Method1: EPA 3665A Cleanup Date1: 04/30/13 Cleanup Method2: EPA 3660B

Cleanup Date2: 04/30/13

Parameter	Result	Qualifier Units	RL	MDL
Polychlorinated Biphenyls by GC -	Westborough	Lab for sample(s):	02 Batch:	WG604908-1
Aroclor 1016	ND	ug/l	0.083	3 0.055
Aroclor 1221	ND	ug/l	0.083	3 0.053
Aroclor 1232	ND	ug/l	0.083	3 0.031
Aroclor 1242	ND	ug/l	0.083	3 0.060
Aroclor 1248	ND	ug/l	0.083	3 0.051
Aroclor 1254	ND	ug/l	0.083	3 0.034
Aroclor 1260	ND	ug/l	0.083	3 0.032
Aroclor 1262	ND	ug/l	0.083	0.029
Aroclor 1268	ND	ug/l	0.083	0.038

		Acceptance	
%Recovery	Qualifier	Criteria	
85		30-150	
89		30-150	
85		30-150	
110		30-150	
	85 89 85	%Recovery Qualifier  85 89 85	85 30-150 89 30-150 85 30-150



## Lab Control Sample Analysis Batch Quality Control

Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

**Report Date:** 05/01/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recover Limits	y RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - We	estborough Lab Associa	ated sample	e(s): 01,03,05	Batch:	WG604116-2	WG604116-3		
Aroclor 1016	78		88		40-140	12		50
Aroclor 1260	62		67		40-140	8		50

	LCS		LCSD		Acceptance	
Surrogate	%Recovery	Qual	%Recovery	Qual	Criteria	
2,4,5,6-Tetrachloro-m-xylene	82		92		30-150	
Decachlorobiphenyl	65		70		30-150	
2,4,5,6-Tetrachloro-m-xylene	78		94		30-150	
Decachlorobiphenyl	85		86		30-150	

Polychlorinated Biphenyls by GC - Westborou	gh Lab Associated	sample(s): 04 Batch: WG	604382-2 WG604382-3	}	
Aroclor 1016	63	68	40-140	7	50
Aroclor 1260	60	64	40-140	6	50

	LCS		LCSD		Acceptance	
Surrogate	%Recovery	%Recovery Qual		Qual	Criteria	
2,4,5,6-Tetrachloro-m-xylene	54		61		30-150	
Decachlorobiphenyl	56		65		30-150	
2,4,5,6-Tetrachloro-m-xylene	52		59		30-150	
Decachlorobiphenyl	56		64		30-150	



## Lab Control Sample Analysis Batch Quality Control

Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

**Report Date:** 05/01/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westboro	ugh Lab Associa	ated sample(	s): 02 Batch:	WG6049	008-2 WG604908-3	3		
Aroclor 1016	87		89		40-140	3		50
Aroclor 1260	72		75		40-140	4		50

	LCS		LCSD		Acceptance	
Surrogate	%Recovery	Qual	%Recovery	Qual	Criteria	
2,4,5,6-Tetrachloro-m-xylene	86		82		30-150	
Decachlorobiphenyl	86		86		30-150	
2,4,5,6-Tetrachloro-m-xylene	86		83		30-150	
Decachlorobiphenyl	104		102		30-150	



## **METALS**



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

 Lab ID:
 L1307330-01
 Date Collected:
 04/24/13 11:05

 Client ID:
 BH12 6-8'
 Date Received:
 04/24/13

Client ID: BH12 6-8' Date Received: 04/24/13
Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 92%

Dilution Date Date Prep **Analytical** Method Factor Prepared Method **Analyzed** Result Qualifier Units RL MDL **Parameter Analyst** Total Metals - Westborough Lab Arsenic, Total 3.6 mg/kg 0.42 0.13 1 04/26/13 11:52 04/29/13 21:15 EPA 3050B 1,6010C MG Barium, Total 9.5 0.13 1 04/26/13 11:52 04/29/13 21:15 EPA 3050B 1,6010C MG mg/kg 0.42 J 1 1,6010C Cadmium, Total 0.12 0.42 0.03 04/26/13 11:52 04/29/13 21:15 EPA 3050B MG mg/kg 1,6010C Chromium, Total 4.2 mg/kg 0.42 0.08 1 04/26/13 11:52 04/29/13 21:15 EPA 3050B MG 04/26/13 11:52 04/29/13 21:15 EPA 3050B 4.7 2.1 0.13 1 1,6010C MG Lead, Total mg/kg Mercury, Total ND 0.09 0.02 1 04/30/13 14:45 05/01/13 09:31 EPA 7471B 1,7471B MC mg/kg 1,6010C Selenium, Total 0.93 mg/kg 0.84 0.13 1 04/26/13 11:52 04/29/13 21:15 EPA 3050B MG Silver, Total ND mg/kg 0.42 0.08 1 04/26/13 11:52 04/29/13 21:15 EPA 3050B 1,6010C MG



Project Name:DELLA PENNALab Number:L1307330Project Number:212645Report Date:05/01/13

SAMPLE RESULTS

 Lab ID:
 L1307330-02
 Date Collected:
 04/24/13 11:50

 Client ID:
 TPMW3
 Date Received:
 04/24/13

Client ID: TPMW3 Date Received: 04/24/13
Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Water

Analytical Method Dilution Date Date Prep **Factor Prepared Analyzed** Method **Parameter** Result Qualifier Units RL MDL Analyst Total Metals - Westborough Lab Mercury, Total 0.00779 0.00100 0.00033 1 1,7470A mg/l 04/29/13 15:34 04/30/13 18:45 EPA 7470A JΗ



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-02 D Date Collected: 04/24/13 11:50

Client ID: TPMW3 Date Received: 04/24/13
Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - West	tborough L	.ab									
Arsenic, Total	0.02890		mg/l	0.00250	0.00100	5	04/26/13 07:58	3 04/27/13 17:05	EPA 3005A	1,6020A	AK
Barium, Total	0.5975		mg/l	0.00250	0.00050	5	04/26/13 07:58	3 04/27/13 17:05	EPA 3005A	1,6020A	AK
Cadmium, Total	0.00300		mg/l	0.00250	0.00025	5	04/26/13 07:58	3 04/27/13 17:05	EPA 3005A	1,6020A	AK
Chromium, Total	0.03474		mg/l	0.00500	0.00100	5	04/26/13 07:58	3 04/27/13 17:05	EPA 3005A	1,6020A	AK
Lead, Total	0.1729		mg/l	0.00500	0.00100	5	04/26/13 07:58	3 04/27/13 17:05	EPA 3005A	1,6020A	AK
Selenium, Total	0.00163	J	mg/l	0.0250	0.00150	5	04/26/13 07:58	3 04/27/13 17:05	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.00200	0.00050	5	04/26/13 07:58	3 04/29/13 21:14	EPA 3005A	1,6020A	ВМ



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-03 Date Collected: 04/24/13 09:15

Client ID: BH9 8-10' Date Received: 04/24/13
Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 85%

Dilution Date Date Prep **Analytical** Method Factor Prepared Method **Analyzed Parameter** Result Qualifier Units RL MDL **Analyst** Total Metals - Westborough Lab Arsenic, Total 2.7 mg/kg 0.46 0.14 1 04/26/13 11:52 04/29/13 21:18 EPA 3050B 1,6010C MG Barium, Total 20 0.46 0.14 1 04/26/13 11:52 04/29/13 21:18 EPA 3050B 1,6010C MG mg/kg J 1 1,6010C Cadmium, Total 0.21 mg/kg 0.46 0.03 04/26/13 11:52 04/29/13 21:18 EPA 3050B MG 1,6010C Chromium, Total 9.9 mg/kg 0.46 0.09 1 04/26/13 11:52 04/29/13 21:18 EPA 3050B MG 7.7 2.3 0.14 1 04/26/13 11:52 04/29/13 21:18 EPA 3050B 1,6010C MG Lead, Total mg/kg Mercury, Total ND 0.08 0.02 1 04/30/13 14:45 05/01/13 09:33 EPA 7471B 1,7471B MC mg/kg J 1,6010C Selenium, Total 0.49 mg/kg 0.91 0.14 1 04/26/13 11:52 04/29/13 21:18 EPA 3050B MG 0.46 Silver, Total ND mg/kg 0.09 1 04/26/13 11:52 04/29/13 21:18 EPA 3050B 1,6010C MG



Project Name:DELLA PENNALab Number:L1307330Project Number:212645Report Date:05/01/13

SAMPLE RESULTS

Lab ID: L1307330-04 Date Collected: 04/24/13 13:00

Client ID: TPMW4 Date Received: 04/24/13
Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Water

Dilution Date Date Prep **Analytical** Method **Factor Prepared Analyzed** Method Parameter Result Qualifier Units RL MDL Analyst Total Metals - Westborough Lab Mercury, Total 0.00065 0.00100 0.00033 1 1,7470A mg/l 04/29/13 15:34 04/30/13 18:47 EPA 7470A JΗ



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-04 D Date Collected: 04/24/13 13:00

Client ID: TPMW4 Date Received: 04/24/13
Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Wes	sthorough L	ah									
Total Metals Wes	siborougir L	-ub									
Arsenic, Total	0.01405		mg/l	0.00250	0.00100	5	04/26/13 07:5	8 04/27/13 17:08	EPA 3005A	1,6020A	AK
Barium, Total	0.4290		mg/l	0.00250	0.00050	5	04/26/13 07:58	8 04/27/13 17:08	EPA 3005A	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00250	0.00025	5	04/26/13 07:5	8 04/27/13 17:08	EPA 3005A	1,6020A	AK
Chromium, Total	0.00960		mg/l	0.00500	0.00100	5	04/26/13 07:58	8 04/27/13 17:08	EPA 3005A	1,6020A	AK
Lead, Total	0.01084		mg/l	0.00500	0.00100	5	04/26/13 07:58	8 04/27/13 17:08	EPA 3005A	1,6020A	AK
Selenium, Total	ND		mg/l	0.0250	0.00150	5	04/26/13 07:58	8 04/27/13 17:08	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.00200	0.00050	5	04/26/13 07:5	8 04/29/13 21:20	EPA 3005A	1,6020A	ВМ



**Project Name: DELLA PENNA** Lab Number: L1307330

**Project Number:** 212645 **Report Date:** 05/01/13

**SAMPLE RESULTS** 

Date Collected: Lab ID: L1307330-05 04/24/13 12:50 Client ID: BH13 9-11' Date Received: 04/24/13

4052 ELLICOT ST., BATAVIA, NY Field Prep: Sample Location: Not Specified

Matrix: Soil Percent Solids: 91%

reiteili Solius.	91/0					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
T											
Total Metals - West	borougn i	_ab									
Arsenic, Total	5.5		mg/kg	0.44	0.13	1	04/26/13 11:52	2 04/29/13 21:21	EPA 3050B	1,6010C	MG
Barium, Total	10		mg/kg	0.44	0.13	1	04/26/13 11:52	2 04/29/13 21:21	EPA 3050B	1,6010C	MG
Cadmium, Total	0.15	J	mg/kg	0.44	0.03	1	04/26/13 11:52	2 04/29/13 21:21	EPA 3050B	1,6010C	MG
Chromium, Total	4.8		mg/kg	0.44	0.09	1	04/26/13 11:52	2 04/29/13 21:21	EPA 3050B	1,6010C	MG
Lead, Total	3.7		mg/kg	2.2	0.13	1	04/26/13 11:52	2 04/29/13 21:21	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.09	0.02	1	04/30/13 14:45	5 05/01/13 09:35	EPA 7471B	1,7471B	MC
Selenium, Total	0.25	J	mg/kg	0.87	0.13	1	04/26/13 11:52	2 04/29/13 21:21	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.44	0.09	1	04/26/13 11:52	2 04/29/13 21:21	EPA 3050B	1,6010C	MG



Project Name: DELLA PENNA

Project Number: 212645

Lab Number:

L1307330

Report Date:

05/01/13

# 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 fo	or sample(s):	02,04	Batch:	WG604	175-1				
Arsenic, Total	0.00033	3 J	mg/l	0.00050	0.00020	1	04/26/13 07:58	04/27/13 16:22	1,6020A	AK
Barium, Total	ND		mg/l	0.00050	0.00010	1	04/26/13 07:58	04/27/13 16:22	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00050	0.00005	1	04/26/13 07:58	04/27/13 16:22	1,6020A	AK
Chromium, Total	ND		mg/l	0.00100	0.00020	1	04/26/13 07:58	04/27/13 16:22	1,6020A	AK
Lead, Total	ND		mg/l	0.00100	0.00020	1	04/26/13 07:58	04/27/13 16:22	1,6020A	AK
Selenium, Total	ND		mg/l	0.00500	0.00030	1	04/26/13 07:58	04/27/13 16:22	1,6020A	AK
Silver, Total	ND		mg/l	0.00040	0.00010	1	04/26/13 07:58	04/29/13 20:05	1,6020A	ВМ

### **Prep Information**

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough	h Lab for sample(s):	01,03,05	Bato	ch: WG	6604277-1				
Arsenic, Total	ND	mg/kg	0.40	0.12	1	04/26/13 11:52	04/29/13 12:11	1,6010C	MG
Barium, Total	ND	mg/kg	0.40	0.12	1	04/26/13 11:52	04/29/13 12:11	1,6010C	MG
Cadmium, Total	ND	mg/kg	0.40	0.02	1	04/26/13 11:52	04/29/13 12:11	1,6010C	MG
Chromium, Total	ND	mg/kg	0.40	0.08	1	04/26/13 11:52	04/29/13 12:11	1,6010C	MG
Lead, Total	ND	mg/kg	2.0	0.12	1	04/26/13 11:52	04/29/13 12:11	1,6010C	MG
Selenium, Total	ND	mg/kg	0.80	0.12	1	04/26/13 11:52	04/29/13 12:11	1,6010C	MG
Silver, Total	ND	mg/kg	0.40	0.08	1	04/26/13 11:52	04/29/13 12:11	1,6010C	MG

### **Prep Information**

Digestion Method: EPA 3050B

Parameter	Result Qualifie	r Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	l Analyst
Total Metals - Westborou	gh Lab for sample(	(s): 02,04	Batch:	WG604	4625-1				
Mercury, Total	ND	mg/l	0.0002	0.00006	3 1	04/29/13 15:34	04/30/13 18:18	1,7470A	JH



Project Name: DELLA PENNA

Project Number: 212645

Lab Number:

L1307330

**Report Date:** 05/01/13

Method Blank Analysis Batch Quality Control

**Prep Information** 

Digestion Method: EPA 7470A

Parameter	Result Qual	ifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westboroug	h Lab for sam	ple(s): 01,03,05	5 Batc	h: WG	604884-1				
Mercury, Total	ND	mg/kg	0.08	0.02	1	04/30/13 14:45	05/01/13 09:09	1,7471B	MC

**Prep Information** 

Digestion Method: EPA 7471B



## Lab Control Sample Analysis Batch Quality Control

Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number: L1307330

**Report Date:** 05/01/13

arameter	LCS %Recovery	LCSD Qual %Recovery	%Recovery / Qual Limits	RPD	Qual	RPD Limits
otal Metals - Westborough Lab Associated sa	mple(s): 02,04	Batch: WG604175-2				
Arsenic, Total	108	-	80-120	-		
Barium, Total	96	-	80-120	-		
Cadmium, Total	108	-	80-120	-		
Chromium, Total	99	-	80-120	-		
Lead, Total	102	-	80-120	-		
Selenium, Total	108	-	80-120	-		
Silver, Total	104	-	80-120	-		
otal Metals - Westborough Lab Associated sa Arsenic, Total	mple(s): 01,03,05	5 Batch: WG604277-2	SRM Lot Number: 0518-10-02 81-119	_		
Barium, Total	100	-	83-118	-		
Cadmium, Total	94	-	82-117	-		
Chromium, Total	97	-	80-119	-		
Lead, Total	94	-	80-120	-		
Selenium, Total	98	-	80-120	-		
Silver, Total	102	-	66-134	-		
otal Metals - Westborough Lab Associated sa	mple(s): 02,04	Batch: WG604625-2				
Mercury, Total	102	-	80-120	-		



## Lab Control Sample Analysis Batch Quality Control

**Project Name: DELLA PENNA** 

Lab Number: L1307330

**Project Number:** 212645 Report Date: 05/01/13

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab	Associated sample(s): 01,03,05	Batch: WG604884-2	SRM Lot Number: 0518-10-02		
Mercury, Total	114	-	67-133	-	



### Matrix Spike Analysis Batch Quality Control

Project Name: DELLA PENNA

Project Number: 212645

Lab Number:

L1307330

Report Date:

arameter	Native Sample	MS Added	MS Found %	MS %Recovery		MSD ound	MSD %Recovery Qua	Recovery I Limits	RPD Qual	RPD Limits
Γotal Metals - Westborough L	_ab Associated	sample(s):	02,04 QC B	atch ID: WG	604175-4	QC S	ample: L1307405-01	Client ID:	MS Sample	
Arsenic, Total	0.00101	0.12	0.1302	108		-	-	80-120	-	20
Barium, Total	1.714	2	3.627	96		-	-	80-120	-	20
Cadmium, Total	ND	0.51	0.5359	105		-	-	80-120	-	20
Chromium, Total	0.00083J	0.2	0.1988	99		-	-	80-120	-	20
Lead, Total	0.00613	0.51	0.5281	102		-	-	80-120	-	20
Selenium, Total	ND	0.12	0.130	108		-	-	80-120	-	20
Silver, Total	ND	0.05	0.05101	102		-	-	80-120	-	20
Total Metals - Westborough L	_ab Associated :	sample(s):	01,03,05 Q0	C Batch ID: V	VG604277	-4 Q0	C Sample: L1307068	-02 Client II	D: MS Sample	)
Arsenic, Total	3.4	10.3	13	93		-	-	75-125	-	35
Barium, Total	73.	172	250	103		-	-	75-125	-	35
Cadmium, Total	0.61	44	35	78		-	-	75-125	-	35
Chromium, Total	18.	17.2	33	87		-	-	75-125	-	35
Lead, Total	68.	44	91	52	Q	-	-	75-125	-	35
Selenium, Total	0.27J	10.3	10	97		-	-	75-125	-	35
Silver, Total	0.09J	25.9	28	108		-	-	75-125	-	35
Fotal Metals - Westborough L	_ab Associated :	sample(s):	02,04 QC B	atch ID: WG	604625-4	QC S	ample: L1307682-01	Client ID:	MS Sample	
Mercury, Total	ND	0.001	0.00146	146	Q	-	-	70-130	-	20
Total Metals - Westborough L	_ab Associated	sample(s):	01,03,05 Q	C Batch ID: V	VG604884	-4 Q0	C Sample: L1306710	-02 Client II	D: MS Sample	)
Mercury, Total	ND	0.158	0.17	108		-	-	70-130	-	35



## Lab Duplicate Analysis Batch Quality Control

Project Name: DELLA PENNA

Project Number: 212645

Lab Number:

L1307330

Report Date:

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual RPD	Limits
otal Metals - Westborough Lab Associated sample(s	s): 02,04 QC Batch ID:	WG604175-3 QC Sample:	L1307405-01	Client ID	: DUP Sample	
Arsenic, Total	0.00101	0.00091	mg/l	11		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.00083J	0.00076J	mg/l	NC		20
Lead, Total	0.00613	0.00611	mg/l	0		20
Selenium, Total	ND	ND	mg/l	NC		20
otal Metals - Westborough Lab Associated sample(s	s): 02,04 QC Batch ID:	WG604175-3 QC Sample:	L1307405-01	Client ID	: DUP Sample	
Barium, Total	1.714	1.735	mg/l	1		20
otal Metals - Westborough Lab Associated sample(s	s): 02,04 QC Batch ID:	WG604175-3 QC Sample:	L1307405-01	Client ID:	: DUP Sample	
Silver, Total	ND	ND	mg/l	NC		20
otal Metals - Westborough Lab Associated sample(s	s): 01,03,05 QC Batch	ID: WG604277-3 QC Samp	ole: L1307068	-02 Client	ID: DUP Samp	ole
Arsenic, Total	3.4	6.4	mg/kg	61	Q	35
Barium, Total	73.	86	mg/kg	16		35
Cadmium, Total	0.61	1.2	mg/kg	65	Q	35
Chromium, Total	18.	23	mg/kg	24		35
Lead, Total	68.	130	mg/kg	63	Q	35
Selenium, Total	0.27J	0.86J	mg/kg	NC		35
Silver, Total	0.09J	0.18J	mg/kg	NC		35



## Lab Duplicate Analysis Batch Quality Control

Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number:

L1307330

Report Date:

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s)	: 02,04 QC Batch ID:	WG604625-3 QC Sample:	L1307682-01	Client ID:	DUP Sample
Mercury, Total	ND	ND	mg/l	NC	20
Total Metals - Westborough Lab Associated sample(s)	: 01,03,05 QC Batch	ID: WG604884-3 QC Sam	ole: L1306710	-02 Client	ID: DUP Sample
Mercury, Total	ND	ND	mg/kg	NC	35



## INORGANICS & MISCELLANEOUS



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-01 Date Collected: 04/24/13 11:05

Client ID: BH12 6-8' Date Received: 04/24/13

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified Matrix: Soil

Analytical Method **Dilution** Date Date Factor Prepared Qualifier Units RL MDL **Analyzed Parameter** Result **Analyst** General Chemistry - Westborough Lab Solids, Total 91.9 % 0.100 NA 1 04/25/13 22:29 30,2540G RD 0.24 Cyanide, Total ND mg/kg 1.0 1 04/26/13 12:00 04/29/13 12:58 30,4500CN-CE JO



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-02 Date Collected: 04/24/13 11:50

Client ID: TPMW3 Date Received: 04/24/13 Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab									
Cyanide, Total	0.006		mg/l	0.005	0.001	1	04/26/13 12:00	04/29/13 12:49	1,9010C/9012A	JO



04/26/13 12:00 04/29/13 12:59 30,4500CN-CE

04/24/13 09:15

JO

Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-03 Date Collected:

mg/kg

Client ID: BH9 8-10' Date Received: 04/24/13
Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Spec

1.1

Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified Matrix: Soil

Analytical Method **Dilution** Date Date Factor Prepared Qualifier Units RL MDL **Analyzed Parameter** Result **Analyst** General Chemistry - Westborough Lab Solids, Total 85.0 % 0.100 NA 1 04/25/13 22:29 30,2540G RD

0.25

1



Cyanide, Total

ND

Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-04 Date Collected: 04/24/13 13:00

Client ID: TPMW4 Date Received: 04/24/13 Sample Location: 4052 ELLICOT ST., BATAVIA, NY Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab									
Cyanide, Total	ND		mg/l	0.005	0.001	1	04/26/13 12:00	04/29/13 12:50	1,9010C/9012A	JO



Project Name: DELLA PENNA Lab Number: L1307330

Project Number: 212645 Report Date: 05/01/13

**SAMPLE RESULTS** 

Lab ID: L1307330-05 Date Collected: 04/24/13 12:50

Client ID: BH13 9-11' Date Received: 04/24/13
Sample Location: 4052 ELLICOT ST., BATAVIA, 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	90.6		%	0.100	NA	1	-	04/25/13 22:29	30,2540G	RD
Cyanide, Total	ND		mg/kg	1.1	0.25	1	04/26/13 12:00	04/29/13 13:14	30,4500CN-CE	JO



Project Name: DELLA PENNA

Project Number: 212645

Lab Number: L1307330

**Report Date:** 05/01/13

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifie	er Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry	- Westborough Lab for sa	ample(s): 02	2,04 Ba	tch: W	G604305-1				
Cyanide, Total	ND	mg/l	0.005	0.001	1	04/26/13 12:00	04/29/13 12:36	1,9010C/9012	A JO
General Chemistry	- Westborough Lab for sa	ample(s): 0	1,03,05	Batch:	WG604307	<b>'-1</b>			
Cvanide, Total	ND	ma/ka	0.93	0.22	1	04/26/13 12:00	04/29/13 12:38	30.4500CN-CE	E JO



## Lab Control Sample Analysis Batch Quality Control

**Project Name: DELLA PENNA** 

Lab Number:

L1307330

**Project Number:** 212645

Report Date: 05/01/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
General Chemistry - Westborough Lab A	ssociated sample(s)	: 02,04	Batch: WG6043	05-4 WG6	604305-5				
Cyanide, Total	109		108		80-120	1		20	
General Chemistry - Westborough Lab A	ssociated sample(s)	: 01,03,0	05 Batch: WG60	)4307-2					
Cyanide, Total	106		-			-			



## Matrix Spike Analysis Batch Quality Control

Project Name: DELLA PENNA

Lab Number:

L1307330

Project Number: 212645

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborou Sample	gh Lab Asso	ciated samp	le(s): 02,04	QC Batch ID	): WG60	04305-3	WG604305-2	QC Sar	nple: L1307	'336-05	Clien	t ID: MS
Cyanide, Total	ND	0.2	0.211	106		0.214	107		80-120	1		20
General Chemistry - Westborou	gh Lab Asso	ciated samp	le(s): 01,03	,05 QC Batcl	h ID: W	G604307	-4 QC Sampl	e: L130	7284-02	Client ID	: MS S	Sample
Cyanide, Total	ND	11	11	98		-	-			-		

## Lab Duplicate Analysis Batch Quality Control

Project Name: DELLA PENNA

**Project Number:** 212645

Lab Number:

L1307330

Report Date:

Parameter	Native Sam	ole Duplicate Samp	ole Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01,03,0	QC Batch ID: WG604143	3-1 QC Sample:	L1307331-01	Client ID:	DUP Sample
Solids, Total	98.0	97.3	%	1		20
General Chemistry - Westborough Lab	Associated sample(s): 01,03,0	5 QC Batch ID: WG604307	7-3 QC Sample:	L1307284-02	Client ID:	DUP Sample
Cyanide, Total	ND	ND	mg/kg	NC		



Project Name: **DELLA PENNA** 

Lab Number: L1307330 **Report Date:** 05/01/13 Project Number: 212645

### **Sample Receipt and Container Information**

YES Were project specific reporting limits specified?

Reagent H2O Preserved Vials Frozen on: NA

### **Cooler Information Custody Seal**

Cooler

Absent Α В Absent

Container Information Temp								
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)	
L1307330-01A	Vial Large unpreserved	В	N/A	2.4	Υ	Absent	NYTCL-8260(14)	
L1307330-01B	Amber 250ml unpreserved	В	N/A	2.4	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)	
L1307330-01C	Amber 250ml unpreserved	В	N/A	2.4	Υ	Absent	TCN-4500(14),TS(7),NYTCL-8082(14)	
L1307330-02A	Vial HCI preserved	В	N/A	2.4	Υ	Absent	NYTCL-8260(14)	
L1307330-02B	Vial HCI preserved	В	N/A	2.4	Υ	Absent	NYTCL-8260(14)	
L1307330-02C	Vial HCI preserved	В	N/A	2.4	Υ	Absent	NYTCL-8260(14)	
L1307330-02D	Amber 1000ml unpreserved	Α	7	3.8	Υ	Absent	NYTCL-8270(7),NYTCL-8270- SIM(7)	
L1307330-02E	Amber 1000ml unpreserved	Α	7	3.8	Υ	Absent	NYTCL-8270(7),NYTCL-8270- SIM(7)	
L1307330-02F	Plastic 500ml HNO3 preserved	Α	<2	3.8	Y	Absent	BA-6020T(180),SE- 6020T(180),CR-6020T(180),PB- 6020T(180),AS-6020T(180),AG- 6020T(180),CD-6020T(180),HG- T(28)	
L1307330-02G	Amber 1000ml unpreserved	Α	7	3.8	Υ	Absent	NYTCL-8082-1200ML(7)	
L1307330-02H	Amber 1000ml unpreserved	Α	7	3.8	Υ	Absent	NYTCL-8082-1200ML(7)	
L1307330-02I	Plastic 250ml NaOH preserved	Α	>12	3.8	Υ	Absent	TCN-9010(14)	
L1307330-03A	Vial Large unpreserved	В	N/A	2.4	Υ	Absent	NYTCL-8260(14)	
L1307330-03B	Amber 250ml unpreserved	В	N/A	2.4	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)	
L1307330-03C	Amber 250ml unpreserved	В	N/A	2.4	Υ	Absent	TCN-4500(14),TS(7),NYTCL-8082(14)	
L1307330-04A	Vial HCI preserved	В	N/A	2.4	Υ	Absent	NYTCL-8260(14)	
L1307330-04B	Vial HCl preserved	В	N/A	2.4	Υ	Absent	NYTCL-8260(14)	



Project Name: DELLA PENNA

Project Number: 212645

**Lab Number:** L1307330 **Report Date:** 05/01/13

Container Information										
Container ID	Container Type	Cooler	рН	Temp pH deg C		Seal	Analysis(*)			
L1307330-04C	Vial HCl preserved	В	N/A	2.4	Υ	Absent	NYTCL-8260(14)			
L1307330-04D	Amber 1000ml unpreserved	Α	7	3.8	Υ	Absent	NYTCL-8270(7),NYTCL-8270- SIM(7)			
L1307330-04E	Amber 1000ml unpreserved	Α	7	3.8	Υ	Absent	NYTCL-8270(7),NYTCL-8270- SIM(7)			
L1307330-04F	Plastic 500ml HNO3 preserved	Α	<2	3.8	Y	Absent	BA-6020T(180),SE- 6020T(180),CR-6020T(180),PB- 6020T(180),AS-6020T(180),AG- 6020T(180),CD-6020T(180),HG- T(28)			
L1307330-04G	Amber 1000ml unpreserved	Α	7	3.8	Υ	Absent	NYTCL-8082-1200ML(7)			
L1307330-04H	Amber 1000ml unpreserved	Α	7	3.8	Υ	Absent	NYTCL-8082-1200ML(7)			
L1307330-04I	Plastic 250ml NaOH preserved	Α	>12	3.8	Υ	Absent	TCN-9010(14)			
L1307330-05A	Vial Large unpreserved	В	N/A	2.4	Υ	Absent	NYTCL-8260(14)			
L1307330-05B	Amber 250ml unpreserved	В	N/A	2.4	Υ	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)			
L1307330-05C	Amber 250ml unpreserved	В	N/A	2.4	Υ	Absent	TCN-4500(14),TS(7),NYTCL-8082(14)			



L1307330

Lab Number:

Project Name: DELLA PENNA

Project Number: 212645 Report Date: 05/01/13

#### **GLOSSARY**

#### **Acronyms**

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes
or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

#### Footnotes

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

#### Terms

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".
- 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 five times (5x) 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.
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- 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 RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: DU Report with "J" Qualifiers



Project Name:DELLA PENNALab Number:L1307330Project Number:212645Report Date:05/01/13

#### Data Qualifiers

due to obvious interference.

- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- -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:DELLA PENNALab Number:L1307330Project Number:212645Report Date:05/01/13

#### REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

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 it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

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



### **Certificate/Approval Program Summary**

Last revised December 19, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

### Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

### Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 6010C, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8330, 8151A, 8260B, 8260C, 8270C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014, 9030B, 9040B, 9045C, 6010B, 6010C, 6020, 6020A, 7471A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8270D, 8330, 8151A, 8081A, 8081B, 8082, 8082A, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

### Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; Colilert OT, SM9223B; MF-SM9222D.)

Non-Potable Water (Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, NJ EPH.)

### New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010C, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012B, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260B, Page 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C,

3546, 3580A, 5030B, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID: 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID: 68-03671. *NELAP Accredited.*Drinking Water (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. *NELAP Accredited via NJ-DEP*. Refer to MA-DEP Certificate for Potable and Non-Potable Water. Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

**Texas Commisson on Environmental Quality** <u>Certificate/Lab ID</u>: T104704476. **NELAP Accredited.** *Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2<sup>-</sup> D, 510C, 5210B, 5220D, 5310C, 5540C. <u>Organic Parameters</u>: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. *NELAP Accredited.*Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, )

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 355B0, 3580A, 3630C, 6020A, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

**EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.