



# SOIL MANAGEMENT PLAN

Canal Plaza  
Portland, Maine

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COMMITMENT & INTEGRITY DRIVE RESULTS

229311  
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## 1. INTRODUCTION

Woodard & Curran has prepared this Soil Management Plan (SMP) for the Canal5Studio to assist and facilitate the proper handling, storage, characterization, transport, on-site reuse, and/or off-site reuse or disposal of excess soil generated during the redevelopment of the plaza area associated with the Canal Plaza property in Portland, Maine.

Redevelopment activities are anticipated throughout the area of the Canal Plaza property that fronts on Middle Street, and the steps that link the plaza to Union Street and the center parking area (in the direction of Exchange Street). These areas are collectively referred to as “the Site.” The approximate limits of the Site are presented in **Figure 1**.

This SMP also addresses groundwater that may incidentally be encountered during construction activities. This plan has been prepared for use during the construction process for activities such as utility and subsurface structure installation/relocation work, foundation installation, grading, paving, and landscaping.

### 1.1 BACKGROUND

Woodard & Curran understands that East Brown Cow has an interest in performing a significant enhancement to the plaza area associated with the Canal Plaza site. In addition, the project will include a stand-alone, single story building structure within the plaza. To date this building has been referred to as the “Guitar Pick” building during design coordination meetings, a name representative of the unique shape of the structure.

It is anticipated that the redevelopment activities described above will result in the disturbance of the current groundcover at the Site as well as excavation and earthwork activities associated with utilities, building foundations, re-grading, and final land and hardscaping.

### 1.2 SUMMARY OF EXPECTED SITE CONDITIONS

Woodard & Curran was retained by Canal5Studio to perform a subsurface investigation at the Site in order to assess the condition of soil that may be encountered during the anticipated redevelopment project. The focus of the subsurface investigation, which was performed on January 12, 2016, was to:

1. Assess potential contaminant concentrations in soil to evaluate potential risk to excavation and construction workers, as well as future users of the Site (i.e. commercial workers and visitors); and
2. Characterize soil that may be generated as excess during construction such that an appropriate reuse, treatment, or disposal option may be selected.

The results of this investigation were presented to Canal5Studio in a Draft Soil Characterization letter reported dated May 10, 2016. Consistent with the findings of this investigation, conditions that may be reasonably anticipated during future construction and redevelopment activities are as follows:

- Soil observed below the overlying brick and concrete hardscape of the plaza generally consisted of fill overlying glacial till and bedrock. The fill typically consisted of light to medium brown silty sand containing small rocks, gravel, pieces of concrete and brick, a black ash-like material, and a charcoal-like black material. Fill was observed at depths extending between 9 and 16 feet below the ground surface.
- Based on observed conditions and the received laboratory results of select soil samples that were analyzed as described below, shallow subsurface soil at the Site is consistent with “Urban Fill.” Urban Fill means soil mixed with other materials that has been placed over an area for the purpose of modifying the elevation of the land surface to facilitate development. Urban Fill is prevalent throughout Portland’s

peninsula and these materials and associated constituents are not necessarily indicative of a point source release of contaminants resulting from current or previous Site activities.

### 1.3 CONCLUSIONS RELATIVE TO KNOWN SITE CONDITIONS

The following is a summary of conclusions and implications relative to the proposed redevelopment activities based on the results of the January 12, 2016, subsurface investigation.

- None of the analytes detected at the Site exceed the (MEDEP) Remedial Action Guidelines (RAGs)<sup>1</sup> for the Construction Worker exposure scenario. As such, based on the available data from the subsurface investigation, conditions that may reasonably be anticipated during redevelopment activities at the Site are not expected to present a significant risk to the health of workers that may come into contact with soil during construction.
- Certain concentrations of analytes such as arsenic, lead, and polycyclic aromatic hydrocarbons (PAH) exceed the MEDEP RAGs under the scenarios that may be applicable after construction (e.g., Commercial Worker, Residential, and/or Park User). It is expected that these conditions will be managed through the use of engineering controls described below in Section 4 (i.e., soil cover systems).
- The results of the available laboratory analytical data indicate that excess soil that may be generated at the Site is unlikely to be classified as a hazardous waste. Consistent with the previous analytical results, it is probable that excess soil may be transported off-site for reuse or disposal at a MEDEP permitted facility, a commercial processing facility, or could be beneficially reused following appropriate MEDEP permitting.
- No groundwater analytical results are available for the Site. If groundwater is generated as waste during redevelopment, additional characterization will be required to assess possible handling and disposal requirements. However; based on observed soil conditions, it is probable that groundwater generated during construction, if any, may be managed and disposed of in accordance with Federal, State, and/or local permitting requirements.
- The construction of occupied residential space is not contemplated at this time at the Site. However, if residential occupancy is planned in the future, potential risk associated with possible vapor-phase contaminants will require further assessment and/or management in accordance with Section 4.4.2.

The following table presents the maximum and average detected analyte concentrations in soil at the Site as identified during the January 12, 2016, subsurface investigation.

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<sup>1</sup> Please note that the MEDEP RAGs do not currently apply to soil at the Site as it is not currently involved in the Uncontrolled Hazardous Substance Sites program, Voluntary Remedial Action Program (VRAP), Brownfields program, Superfund program, or Resource Conservation and Recovery Act (RCRA) program. However, the contaminant concentrations presented in the RAGs were developed to be protective of human health and the environment, and have therefore been used as an analogous standard to achieve similar goals during future work at the Site.

**Table 1: Summary of Known Soil Conditions**

Compound	Maximum Detected Concentration	Average Detected Concentration	Remedial Action Guideline <sup>1</sup>				
			Leaching to Groundwater	Residential	Commercial Worker	Construction Worker	Urban Fill Background UPL
<b>VOCs (mg/kg)</b>							
Naphthalene	0.5J	0.5J	1.7	2,500	10,000	10,000	0.82
<b>SVOCs (mg/kg)</b>							
Naphthalene	0.53	0.53	1.7	2,500	10,000	10,000	0.82
2-Methylnaphthalene	0.29	0.29	3.6	500	3,600	600	0.41
Acenaphthylene	0.76	0.26	68	7,500	10,000	10,000	1.4
Acenaphthene	1	0.34	170	7,500	10,000	9,800	3.5
Dibenzofuran	0.58	0.20	-	130	1,000	950	-
Fluorene	1	0.34	120	5,000	10,000	10,000	4.4
Phenanthrene	14	4.43	97	3,700	10,000	8,900	6.1
Anthracene	2.5	0.94	2,400	10,000	10,000	3,800	6.7
Carbazole	1.1	1.10	-	540	1,400	10,000	0.53
Fluoranthene	15	5.92	10,000	5,000	10,000	10,000	10
Pyrene	13	4.90	10,000	3,700	10,000	10,000	9.5
Benzo(a)anthracene	6.8	2.77	10,000	2.6	35	430	27
Chrysene	7.1	2.79	10,000	260	3,500	10,000	6.4
Benzo(b)fluoranthene	4.3	2.07	10,000	2.6	35	430	6.8
Benzo(k)fluoranthene	4.7	2.03	10,000	26	350	4,300	12
Benzo(a)pyrene	5.7	2.39	10,000	0.26	3.5	43	5.2
Indeno(1,2,3-cd)pyrene	2.9	0.99	10,000	2.6	35	430	3.3
Dibenzo(a,h)anthracene	1.5	0.51	10,000	0.26	3.5	43	4.5
Benzo(g,h,i)perylene	3.1	0.99	10,000	3,700	10,000	10,000	16
<b>Inorganics (mg/kg)</b>							
Arsenic	12	9.97	-	1.4	4.2	42	-
Barium	73	50.00	-	10,000	10,000	10,000	-
Chromium (total) <sup>2</sup>	26	19.00	-	510	5,100	2,800	-
Lead	480	180.83	10,000	340	1,100	950	-
Mercury	0.63	0.46	-	51	510	930	-
<b>TCLP (mg/L)</b>							
Lead <sup>3</sup>	1.3	0.62	-	-	-	-	-

<sup>1</sup> RAG: Maine Remedial Action Guidelines for Sites Contaminated with Hazardous Substances, Maine DEP, revised February 5, 2016

<sup>2</sup> RAG for hexavalent chromium is used for a conservative comparison. There is no RAG for total chromium.

<sup>3</sup> Regulatory limit for lead is 5 mg/L.

- = No RAG currently exists for this compound or exposure scenario

NA = sample was not analyzed for the listed analytical parameter

J = Result qualified as estimated during data validation

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## 2. RESPONSIBILITIES

The developer of the Site is responsible for adopting, implementing, and amending, as appropriate, this SMP, and ensuring that the SMP is adhered to during the construction. This responsibility may be contractually transferred to the general contractor and/or the Environmental Professional as appropriate for the project. Specific requirements to be fulfilled by the responsible party include the following:

1. Maintain record keeping of the soil excavation, monitoring, on-site management, on-site reuse, and off-site reuse and disposal activities performed during the proposed construction work;
2. Document environmental investigations conducted at the Site in conjunction with the work including sampling results, and make this information available to designated employees and applicable contractors that will be conducting work in the area where the SMP will be implemented. These environmental investigations are generally described in Section 4.3.2 and in particular apply to potential unexpected conditions;
3. Ensure that work conducted at the Site that has the potential to disturb existing soil and/or generate excess soil is monitored and conducted in accordance with this SMP;
4. Assist the earthwork contractor with the recommended soil management activities (described herein); and
5. Provide training to on-Site workers as needed as described in Section 3.2.

### 2.1 CONTACT INFORMATION

The following contact information is provided for use during the implementation of this SMP:

#### **Environmental Professional**

Jedd S. Steinglass  
Project Manager  
Woodard & Curran  
41 Hutchins Drive  
Portland, ME 04101  
207.558.3732 (o)  
207.756.2319 (c)  
[jsteinglass@woodardcurran.com](mailto:jsteinglass@woodardcurran.com)

### 3. GENERAL HEALTH & SAFETY RECOMMENDATIONS

This section has been prepared to provide general health and safety information and recommend the minimum health and safety related procedures for construction and redevelopment work at the Site. This information is focused to assist persons not otherwise required to prepare their own health and safety plan (e.g., visitors) while engaged in activities at the Site.

Please note that the information presented in this section is not appropriate for use by any personnel that are required to prepare a Health and Safety Plan (HASP) in order to comply with any applicable Federal, State, local, or other health and/or safety requirements and safe construction practices.

#### 3.1 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Level D protection, as described below in Table 3, is suggested for initial entry on-site and for all activities except where higher levels of protection are required.

<b>Table 2: Recommended PPE Summary</b>	
<b>PPE</b>	<b>Applicable Work Activities</b>
<b>Level D:</b>	
Long-sleeved shirts and long pants Composite or steel toed boots with socks Hard hats Safety glasses Reflective safety/traffic vest Cut-resistant gloves	All Site work activities
<b>Level D Modifications:</b>	
Disposable nitrile or chemical resistant gloves Tyvek® or equivalent coveralls Rubber waders or boots	Handling of visibly contaminated sediment, soil, water, and other media

No Level C work activities are anticipated; however, Site conditions should be continuously monitored by appropriately trained personnel to ensure that conditions that require Level C or higher protection are not present.

#### 3.2 TRAINING REQUIREMENTS

Based on known concentrations of contaminants as determined through previously described environmental investigations in the area of the Site, a comparison of analytical results to the MEDEP RAGs, and the activities and personnel that are anticipated to be on-site during construction and redevelopment (i.e., construction personnel and brief visits by non-construction personnel), no specific training is required. However, as a conservative measure, basic on-Site project-specific training is recommended for Site workers who may come into contact with Group 2 or 3 soil, as defined below in Section 4.3 (i.e., earthwork contractors, underground utility installers, landscapers, etc.). The Environmental Professional may provide this training. In addition, qualified personnel should continuously monitor Site conditions to identify potential unanticipated conditions that may warrant specialized training.



## 4. SOIL MANAGEMENT PLAN

### 4.1 OVERVIEW

All soil that is disturbed during the course of redevelopment (general Site construction, work in the public way, utility and other subsurface structure installation/relocation work, grading, paving, landscaping, and foundation installation, etc.) must be properly managed.

Provisions for the management and on-site reuse of soils that may generally be encountered or disturbed during construction are provided within this SMP. A portion of excavated soils may need to be transported off-site for disposal based on the design constraints of the project. In addition, dewatering may be necessary if groundwater is encountered during construction. Recommended practices to complete these activities are also described in this SMP.

Soil associated with work in the public way may be managed in accordance with this SMP but may also be transferred to the City of Portland for proper management and disposal.

The general soil and groundwater management process for the Site project is as follows:

1. **Initiation of Construction Activities:** Includes the pre-construction considerations in Section 4.2 and excavation and proper handling of soil during construction, as described in Sections 4.3 and 4.4.
2. **Soil Excavation Monitoring:** On-site material has been initially classified based on existing data. However, olfactory and visual observations are necessary throughout the project to identify potential unanticipated conditions as described in Section 4.3.
3. **On-site Reuse:** Based on existing data, soil that originated at the Site may be reused on-site without restriction, provided that it is managed in accordance with Section 4.4.
4. **Waste Characterization:** Group 2 soil (as defined below in Section 4.3) that originated from the Site and is disturbed during the course of construction and redevelopment, but cannot be reused at the Site is defined as "Special Waste." The proper handling, characterization, and off-site disposal or reuse of Special Waste are also described in the following sections. Excavated soil designated for off-site disposal (Special Waste) must be characterized by laboratory analyses prior to off-site transport as described in Section 4.6.
5. **Off-site Reuse or Disposal:** Results of the Waste Characterization will be used to determine how Special Waste will be disposed and to obtain receiving facility acceptance approval. The anticipated disposal options are as follows:
  - Off-site Disposal at Approved Landfills – Special Waste soil with concentrations below facility acceptance criteria is suitable for disposal at MEDEP permitted and approved landfills.
  - Off-site Recycling or Treatment at Other Facilities – Special Waste soil with concentrations below facility acceptance criteria is suitable for reuse or recycling off-site at a MEDEP permitted and approved facility. These facilities could reuse, recycle, or treat excess soil via asphalt batching, thermal desorption/destruction, or another permitted beneficial reuse such as in road base or other appropriate construction materials.
  - Off-site Reuse at Commercial Processing Facilities – Depending on the results of Waste Characterization activities, Special Waste soil may be acceptable for transport to commercial processing facilities in order to be reused in commercial applications (e.g., aggregate products such as road base, etc.). Each proposed reuse scenario must be approved by the Environmental Professional.

- Off-site Treatment or Disposal at Hazardous Waste Facilities – Though not anticipated, soil that meets one of the criteria for a characteristic hazardous waste as defined in 40 CFR 261 cannot be classified as a Special Waste and is classified as Group 3 soil (see definition below). This material must either be treated at a properly permitted facility to eliminate the hazardous characteristic or disposed of at a landfill or other facility permitted to accept hazardous waste.
6. **Confirmatory Sampling:** If necessary, confirmatory sampling may be conducted in select areas (to be determined by the Environmental Professional) prior to backfilling and/or redevelopment work. This is described in Section 4.7.
  7. **Dewatering/Groundwater Management:** If groundwater is encountered during excavation activities and dewatering is necessary, groundwater shall be managed in accordance with Section 4.8.

## 4.2 INITIATION OF CONSTRUCTION ACTIVITIES

### 4.2.1 Potential Permits Required for Soil Excavation

Prior to conducting subsurface activities, DIG SAFE must be notified and a DIG SAFE permit number acquired. In addition, the Site owner and/or its representative(s) will be responsible for obtaining all permits (e.g., building, sewer connection, water, gas, etc.) and approvals from the appropriate Federal, State, or local regulatory authorities needed for activities associated with the construction project.

### 4.2.2 Site Access Control

Access to the Site during the performance of construction and redevelopment work shall be adequately restricted to prevent non-construction personnel from coming into contact with existing Site soil and/or Special Waste. These controls may include temporary or permanent perimeter fencing, signage, or a combination of similar measures.

### 4.2.3 Temporary Facilities/Utilities

Water supply needs for dust suppression and decontamination will be determined by the contractor in coordination with the Portland Water District, as needed. Possible construction water supply options include a temporary water service connection to the water main, or a fire hydrant located in the area of the Site.

### 4.2.4 Dust Control

Any area of soil that is disturbed or otherwise affected during construction and redevelopment work shall be maintained to minimize the creation and dispersion of dust. These areas may include but are not necessarily limited to active excavation areas, haul roads, active soil stockpiles and loading areas, entrances and exits to the Site, and adjacent public roadways. Dust suppression shall be conducted through regular sweeping and sprinkling of water, as necessary, and/or with an appropriate commercial grade dust suppressant. Several applications of water and/or other dust suppressant may be required each day to effectively manage dust.

To prevent the tracking of Site soils into the public roadways, a tire wash area must be established and the tires of each vehicle exiting the Site must be free of visible soil and dust. All truck tires and equipment will be inspected and cleaned as necessary prior to leaving the Site. In addition, regular street sweeping shall be conducted to clean the roadways adjacent to the Site where fugitive soil or dust that is not properly addressed by the tire wash may be tracked.

All water generated during dust control activities shall be managed in accordance with Section 4.8.

## 4.3 SOIL CHARACTERIZATION

Site conditions that may be anticipated during construction have been described in previous environmental reports, and summarized in Section 1.2. However, this information shall be supplemented by olfactory and visual observations throughout the project to identify potential unanticipated conditions that may prohibit on-site reuse. The appropriate monitoring procedures are described below in Section 4.3.2.

### 4.3.1 Soil Categories

Three soil groups are applicable for all construction work at and adjacent to the Site:

- **Group 1 Soils.** Group 1 soils are clean, uncontaminated soils. They have no visible or olfactory evidence of contamination (coal, ash, cinders, debris, and/or dark brown or black color) and exhibit no field photoionization detector (PID) results of greater than 20 parts per million (ppm). Based on previous investigations, it is possible that Group 1 soils will not be present at the Site or may be fairly limited in volume.

Group 1 soils may be reused at the Site without further restriction, may be reused off-site in accordance with Section 4.5, or if necessary due to design limitations of the project, disposed in accordance with Section 4.6.

- **Group 2 Soils.** Group 2 soils have visible and/or olfactory evidence of contamination and/or field screening readings of 20 ppm or greater on a PID. Visual evidence of contamination may include coal, ash, cinders, debris, and/or dark brown or black color. Group 2 soils often have a petroleum or tar odor.

Surficial and subsurface soils containing Urban Fill have been identified throughout the Site. Urban Fill soils, which have been observed to extend from surface grade to up to 16 feet below grade, are likely to fall into the Group 2 category. Group 2 soils are considered to be contaminated unless proper laboratory testing completed in accordance with Section 4.6 determines that contaminant concentrations are less than MEDEP RAGs for the Residential scenario, which would reclassify the material as Group 1. Any reclassification of Group 2 soils must be approved by the Environmental Professional.

Group 2 soils may be reused at the Site in accordance with the requirements of Section 4.4. Group 2 soils would be considered a "Special Waste" if they cannot be reused on-site. Special Waste must be disposed in accordance with Section 4.6.

- **Group 3 Soils.** If soils from the Site or adjacent areas are found to fall into the category of Hazardous Waste on the basis of Toxic Characteristic Leaching Procedure (TCLP) or other laboratory testing, those soils are characterized as Group 3 soils. Group 3 soils cannot be reused at the Site and must be removed and properly disposed as hazardous waste. Based on previous investigations in the area, Group 3 soils are not anticipated at the Site.

### 4.3.2 Soil Excavation Monitoring

During excavation activities at the Site, an Environmental Professional should be present to monitor subsurface soil conditions, brief construction crews on soil handling and safety issues, and assist in soil classifications and handling decisions.

Site personnel shall examine excavated materials continuously for visual and/or olfactory evidence of petroleum or other impacts that may indicate Group 2 or Group 3 soil. Visual evidence will include but is not necessarily limited to the following:

- observation of discoloration or staining;

- coal, ash, cinders, trash, or debris;
- the presence of free petroleum product; and/or
- olfactory evidence including, but not necessarily limited to, odors associated with petroleum, chlorinated solvents, or unknown materials.

An interpretation of analytical results generated during previous environmental investigations in the area relative to MEDEP RAGs indicates that soil disturbed during construction can be managed during redevelopment and reused on-site as described in Section 4.4. However, **if conditions different than those anticipated at the initiation of construction activities are encountered during excavation (e.g., significant staining, odor, or free petroleum product) work shall stop. Site personnel shall then notify the Environmental Professional to assist in planning further excavation, monitoring, and documentation as required.**

Relevant contact information for the Environmental Professional is presented in Section 2.1.

#### 4.4 ON-SITE SOIL MANAGEMENT

In general, and as previously described, it is anticipated that existing soil located throughout the Site will be disturbed during construction and redevelopment activities. At a minimum, all Site soil that is disturbed during the performance of construction or redevelopment work shall be handled and stored in a manner that minimizes human contact and prevents the uncontrolled migration of soil away from the Site for the duration of the project.

##### 4.4.1 On-Site Reuse

Consistent with known conditions, it is anticipated that Group 1 and Group 2 soil that is disturbed or otherwise affected during construction and redevelopment work may be reused at the Site without restriction, provided measures to minimize direct contact with existing soil during the future operation of the Site are installed by the completion of construction and redevelopment. Features that would minimize direct contact with existing soil include but are not limited to:

- asphalt pavement, concrete, brick, pavers, or other impervious materials;
- 6 inches or greater of clean materials (e.g., loam, topsoil) and landscaping; or
- permanent building foundations.

Approval by the Environmental Professional is required before materials may be considered “clean” and acceptable for reuse below landscaping. Imported materials from appropriate sources, i.e., loam and topsoil from landscaping companies or virgin sources, do not require characterization or approval prior to use below landscaping.

Example soil reuse applications include backfill, grading, and landscaping materials. However, the Soil Characterization procedures described in Section 4.3 must be completed throughout the performance of construction and redevelopment activities to verify that on-site soil reuse is appropriate.

##### 4.4.2 Construction of Occupied Structures

No groundwater or soil vapor analytical results are available for the Site. Unless an adequate investigation of potential vapor phase contamination is conducted, which indicates that conditions are acceptable without further action, occupied structures that may be constructed at the Site in the future should include a properly designed and installed vapor barrier and/or sub-slab ventilation system. Parking garages, which are not occupied or enclosed structures, are excluded from the vapor mitigation recommendation.

#### 4.5 OFF-SITE REUSE

Group 1 soil that has been properly characterized and does not contain analyte concentrations above the available Residential RAGs may be acceptable for off-site reuse without further restriction. Each proposed off-site reuse application must not result in the significant degradation of existing environmental conditions at the reuse location. The acceptability of each proposed off-site reuse application must be verified and approved by the Environmental Professional prior to the removal of any Group 1 soil from the Site. It is unlikely that Group 2 soil will be acceptable for off-site reuse.

In addition, if significant volumes of excess naturally deposited clay that exists below fill material at the Site are generated during construction, alternative off-site reuse options may be available as approved by the Environmental Professional. This procedure would apply to undisturbed naturally deposited material that has been characterized to the satisfaction of the Environmental Professional (in concert with the MEDEP) to contain no analyte concentrations above the available Residential RAGs, and/or no concentrations of contaminants above state-wide established background concentrations for undeveloped properties. Material meeting these requirements may possibly be acceptable for reuse by commercial processing facilities (e.g., construction and earthwork contractors) in aggregate products such as road base and similar materials.

Each proposed reuse application must be non-residential and must not result in the significant degradation of existing environmental conditions at the reuse location. The acceptability of each proposed off-site reuse application must be verified and approved by the Environmental Professional prior to the removal from the Site.

#### 4.6 SPECIAL WASTE SOIL MANAGEMENT

Any soil that originated from the Site or adjacent areas and is disturbed during the course of construction and redevelopment, but cannot be reused at the Site, is defined as "Special Waste." Special Waste soil that is excavated and designated for off-site disposal, shall either be stockpiled on-site or placed directly in DOT-approved shipping containers. These materials must be handled in the following manner:

1. Stockpiled Special Waste soil that is designated for off-site disposal shall be surrounded by a physical barrier or a combination of barriers, such as temporary or permanent perimeter fencing and/or signage, to prohibit access by unauthorized persons. The barriers shall be maintained so that they effectively prohibit such access for the duration of the work;
2. Stockpiled Special Waste soil that is designated for off-site disposal shall be covered with an impermeable material that is secured to minimize human or animal contact, wind entrainment of the soil, infiltration of precipitation, and erosion;
3. Dust suppression measures shall be employed to prevent the wind-borne entrainment and migration of soil particles from stockpiled Special Waste soil designated for off-site disposal during the active working or loading of this material; and
4. Erosion control measures shall be employed, as needed, to prevent the off-site runoff of soil from the Special Waste stockpile. Standard construction erosion control measures may include staked hay bales, plastic membrane, the covering of storm drain catch basins, or other suitable means, provided that off-site soil runoff is effectively prevented for the duration of time that the stockpile is present.

Excavated Special Waste soil that is designated for off-site disposal shall not be left uncovered or unsecured at the end of the workday. Prior to the end of each workday, all Special Waste must be either:

- Placed into a temporary stockpile and covered with poly sheeting; or
- Loaded into a covered dump trailer or lined and covered roll-off containers.

## 4.6.1 Waste Characterization

### 4.6.1.1 Previously Completed Waste Characterization

An initial round of Waste Characterization sampling has been completed by Woodard & Curran as part of the January 12, 2016, subsurface investigation and the resulting data is included in **Appendix A**. This data may be suitable to receive approval from a properly permitted receiving facility to dispose of up to 1,500 tons of Special Waste soil from the Site, as described below. Facility acceptance and approval coordination for this initial 1,500 tons of Special Waste soil will be conducted by the general contractor, with documentation provided for review by the Environmental Professional.

### 4.6.1.2 Supplemental Waste Characterization

If the selected disposal facility requires further sampling and laboratory analysis prior to the removal of additional volumes of Special Waste soil from the Site, such supplemental Waste Characterization sampling shall be completed and/or documented by the Environmental Professional at the discretion of the Owner. Associated activities will include Special Waste soil sampling, laboratory analysis, data review, and facility acceptance and approval coordination. Waste characterization samples may be obtained in-situ through test pitting or may be collected from existing stockpiles or containers so long as the samples provide an accurate and unbiased representation of the waste stream.

Supplemental Specific Waste Characterization analytical requirements and sampling frequency will be specified by the presumed selected off-site disposal or off-site reuse facility. However, it is anticipated that one (1) composite sample consisting of a minimum of five (5) grab sub-samples shall be collected for each 500 cubic yards of Special Waste soil that is designated for off-site reuse or off-site disposal.

The following list describes the typical Waste Characterization analytical parameters for each Supplemental Waste Characterization sample. However, this list must be verified prior to analysis to ensure that it meets specific disposal facility acceptance criteria.

- Total RCRA 8 metals (or TCLP RCRA 8 metals if required based on total concentrations)
- Volatile Organic Compounds (VOC)
- Semi-volatile Organic Compounds (SVOC)
- Total petroleum hydrocarbons (TPH)
- Polychlorinated biphenyls (PCBs)
- pH
- Corrosivity
- Reactivity (cyanide and sulfide)
- Flashpoint
- Pesticides and herbicides
- Paint filter test for free liquids (as appropriate for moist or wet soils)

#### 4.6.2 Off-Site Disposal of Special Waste

Special Waste must be profiled and accepted at the designated MEDEP permitted receiving facility prior to off-site shipment. Proof of facility acceptance and approval, as well as the proposed shipment documentation, shall be provided to the Environmental Professional for approval prior to the removal of any Special Waste from the Site.

All Special Waste soil that is transported off-site must be shipped by a MEDEP licensed Non-Hazardous Waste Transporter under a MEDEP Nonhazardous Waste Transporter Manifest Special Waste Manifest. Following off-site transportation, clear copies of delivery tickets, acceptance tickets, weight slips, Bill of Lading forms, and/or manifests shall be provided for project documentation. An example copy of a MEDEP Non-Hazardous Waste Transporter Manifest is included for reference in **Appendix B**.

#### 4.6.3 Off-Site Disposal of Hazardous Waste

Please note that soil that meets one of the criteria for a characteristic hazardous waste as defined in 40 CFR 261 (i.e., Group 3) is not anticipated at the Site. However, if hazardous waste is identified, notice shall be provided immediately to the Environmental Professional. This material cannot be reused and it must be disposed off-site. Appropriate receiving facility profiling, acceptance, and approval by the Environmental Professional is required prior to the removal of any hazardous waste from the Site.

### 4.7 VERIFICATION / CONFIRMATORY SOIL SAMPLING

It is not anticipated that verification and/or confirmatory sampling will be required at this time. However, if conditions are different than those anticipated (e.g., levels of contamination observed during construction or waste characterization sampling are greater than expected) additional sampling may be warranted. The decision to conduct verification / confirmatory sampling, and the rationale, methodology, and data quality objectives will be established by the Environmental Professional.

### 4.8 DEWATERING / GROUNDWATER MANAGEMENT

No information concerning current groundwater conditions or depth to the water table is available; however, it is possible that groundwater will be encountered during excavation activities. If dewatering is necessary to facilitate construction, the water will be pumped from the excavation and either:

1. Discharged to the ground surface within the immediate work area, provided that appropriate best management practices are implemented (e.g., erosion and sedimentation controls, engineered infiltration basin, etc.) to prevent the off-site migration of the generated materials.
2. Reinjecting into the ground by sumps excavated on-site with the location documented by the Environmental Professional.
3. If necessary, discharged to the municipal sewer system in accordance with all local, State, and Federal approvals necessary for the discharge of the water. In this instance, the water must be containerized (i.e. fractionation tank), tested, and pretreated if necessary, prior to disposal to meet the requirements of the Portland Water District. This process must be coordinated with the City of Portland Department of Public Works Engineering Division and the Portland Water District. Typical analytical requirements are listed below:

- pH and Alkalinity
- Total Suspended Solids
- Cadmium
- Copper
- Chromium
- Lead
- Nickel
- Zinc
- Silver
- Mercury
- Arsenic
- Total Cyanide
- Flashpoint
- Total Oil and Grease
- PAH

4. Managed on-site in appropriate containers (i.e. fractionation tank) for subsequent waste characterization and off-site disposal. Waste characterization must be conducted in accordance with the selected disposal facility's acceptance requirements.

#### **4.9 DECONTAMINATION PROCEDURES**

As a general practice, tools and equipment that come into contact with soil will be decontaminated prior to taking them off-site. This requirement will be applicable to all tools, heavy machinery, and excavating and hauling equipment used during excavation, stockpiling, and handling of Site soils. Decontamination shall include removal of visible soil and dust with a dry broom/brush and subsequent inspection. In the event that the dry brush technique is not sufficient to remove visible signs of soil and dust, wet decontamination consisting of washing down equipment with high-pressure water hoses, brushes, and/or steam must be performed. In addition, all tools and equipment that come into contact with groundwater at the Site shall be decontaminated such that free liquids, dirt, and silt are removed prior to taking them off-site.

All water generated during decontamination activities shall be managed in accordance with Section 4.8.

#### **4.10 RECORDKEEPING AND REPORTING**

Records shall be kept of all soil excavation and handling activities. Recordkeeping requirements are ultimately the responsibility of the developer, but in practice shall be fulfilled by the Site general contractor with the assistance of the Environmental Professional. These records shall include but not be limited to the following:

1. A list of the contractors and any subcontractors conducting soil excavation, on-site management and reuse, and off-site transport and reuse/disposal work;
2. Copies of HASP(s) used;
3. Copies of shipping records for all Special Waste soil that is transported off-site;
4. Copies of existing conditions and as-built site plans showing the areas of pavement, concrete, landscaping, permanent building foundations, etc.;
5. Copies of analytical results for samples collected for waste characterization (Section 4.6), confirmation sampling (Section 4.7), and/or groundwater discharge (Section 4.8); and
6. Copies of plans showing locations where groundwater was reinjected into sumps, if used, after dewatering.

In the event additional or unexpected contamination is discovered, soil characterization and/or verification soil sampling records will be retained and copies provided to the Environmental Professional.

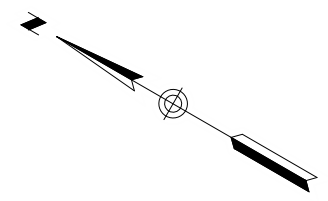


## 5. REFERENCES

Woodard & Curran, 2016. Draft Soil Characterization. May 10.

## FIGURES

### Figure 1: Soil Boring Locations



AREA OF COMPLETED SOIL BORINGS

NICKELODEON CINEMA

SATELLITE #1  
3 CANAL PLAZA

6 STORY  
BRICK BUILDING

10 STORY  
BRICK BUILDING

1 CANAL PLAZA

CANAL PLAZA AREA

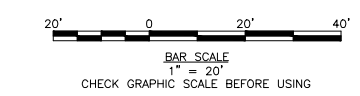
4 STORY  
BRICK BUILDING

SATELLITE #2  
2 CANAL PLAZA

TWO CITY CENTER

ONE PORTLAND SQUARE

UNION STREET



41 Hutchins Drive  
Portland, Maine 04102  
800.426.4262 | www.woodardcurran.com

**WOODARD & CURRAN**

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REV	DESCRIPTION	DATE

CHECKED BY: DAS  
DESIGNED BY: DAS  
DRAWN BY: JBC

FIGURE 1: SOIL BORING LOCATIONS

EAST BROWN COW

EAST BROWN COW  
CANAL PLAZA INFILL DEVELOPMENT

JOB NO.: 229311  
DATE: JANUARY 2016  
SCALE: AS NOTED  
SHEET: OF XXX

E:\Projects\229311 East Brown Cow - Canal Plaza Infill Dev\CIVIL\229311-C203.dwg, Job 12, 2016 - 9:38pm

## APPENDIX A: PREVIOUSLY COMPLETED WASTE CHARACTERIZATION DATA

# Laboratory Report



**Absolute Resource** *associates*

124 Heritage Avenue Portsmouth NH 03801

Jedd Steinglass  
Woodard & Curran  
41 Hutchins Drive  
Portland, ME 04102

PO Number: None  
Job ID: 35489  
Date Received: 1/14/16

Project: Canal Plaza 229311

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,  
Absolute Resource Associates

A handwritten signature in black ink that reads "Sue Sylvester (for)". The signature is written in a cursive style.

Sue Sylvester  
Principal, General Manager

Date of Approval: 1/29/2016  
Total number of pages: 52

## **Absolute Resource Associates Certifications**

New Hampshire 1732  
Maine NH903

Massachusetts M-NH902

## Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
B-6 (0.5'-2.5')	Solid	1/12/2016 7:50	35489-001	PCBs in soil by 8082 Acid & Base/Neutral Extractables in solid by 8270 Soil Digestion for ICP Analysis Silver in solids by 6010 Arsenic in solids by 6010 Barium in solids by 6010 Cadmium in solids by 6010 Chromium in solids by 6010 Mercury in solids by 7471 Lead in solids by 6010 Selenium in solids by 6010 Percent Dry Matter for Sample Calc by SM2540B,G Asbestos in solid (subcontract) Total Halogens in soil (subcontract) VOCs in solids by 8260 Total cyanide in solids by 9014 Ignitability of Solid Samples by SW1010 pH in solids by SW9045C Sulfide-soluble in solid by SM4500-S2 D+F
B-4(0.6'-7')	Solid	1/12/2016 8:40	35489-002	PCBs in soil by 8082 Acid & Base/Neutral Extractables in solid by 8270 Soil Digestion for ICP Analysis Silver in solids by 6010 Arsenic in solids by 6010 Barium in solids by 6010 Cadmium in solids by 6010 Chromium in solids by 6010 Mercury in solids by 7471 Lead in solids by 6010 Selenium in solids by 6010 Percent Dry Matter for Sample Calc by SM2540B,G Asbestos in solid (subcontract) Total Halogens in soil (subcontract) VOCs in solids by 8260 Total cyanide in solids by 9014 Ignitability of Solid Samples by SW1010 pH in solids by SW9045C Sulfide-soluble in solid by SM4500-S2 D+F
B-5(0.8'-2.8')	Solid	1/12/2016 10:00	35489-003	PCBs in soil by 8082 Acid & Base/Neutral Extractables in solid by 8270 Soil Digestion for ICP Analysis Silver in solids by 6010 Arsenic in solids by 6010 Barium in solids by 6010 Cadmium in solids by 6010 Chromium in solids by 6010 Mercury in solids by 7471 Lead in solids by 6010 Selenium in solids by 6010

### Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
B-5(0.8'-2.8')	Solid	1/12/2016 10:00	35489-003	Percent Dry Matter for Sample Calc by SM2540B,G Asbestos in solid (subcontract) Total Halogens in soil (subcontract) VOCs in solids by 8260 Total cyanide in solids by 9014 Ignitability of Solid Samples by SW1010 pH in solids by SW9045C Sulfide-soluble in solid by SM4500-S2 D+F
B-3(0.5'-4.5')	Solid	1/12/2016 11:00	35489-004	PCBs in soil by 8082 Acid & Base/Neutral Extractables in solid by 8270 Soil Digestion for ICP Analysis Silver in solids by 6010 Arsenic in solids by 6010 Barium in solids by 6010 Cadmium in solids by 6010 Chromium in solids by 6010 Mercury in solids by 7471 Lead in solids by 6010 Selenium in solids by 6010 Percent Dry Matter for Sample Calc by SM2540B,G Asbestos in solid (subcontract) Total Halogens in soil (subcontract) VOCs in solids by 8260 Total cyanide in solids by 9014 Ignitability of Solid Samples by SW1010 pH in solids by SW9045C Sulfide-soluble in solid by SM4500-S2 D+F
B-2(0.6'-4.6')	Solid	1/12/2016 12:30	35489-005	PCBs in soil by 8082 Acid & Base/Neutral Extractables in solid by 8270 Soil Digestion for ICP Analysis Silver in solids by 6010 Arsenic in solids by 6010 Barium in solids by 6010 Cadmium in solids by 6010 Chromium in solids by 6010 Mercury in solids by 7471 Lead in solids by 6010 Selenium in solids by 6010 Percent Dry Matter for Sample Calc by SM2540B,G Asbestos in solid (subcontract) Total Halogens in soil (subcontract) VOCs in solids by 8260 Total cyanide in solids by 9014 Ignitability of Solid Samples by SW1010 pH in solids by SW9045C Sulfide-soluble in solid by SM4500-S2 D+F
B-1(1'-6')	Solid	1/12/2016 13:45	35489-006	PCBs in soil by 8082 Acid & Base/Neutral Extractables in solid by 8270

## Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
B-1(1'-6')	Solid	1/12/2016 13:45	35489-006	Soil Digestion for ICP Analysis Silver in solids by 6010 Arsenic in solids by 6010 Barium in solids by 6010 Cadmium in solids by 6010 Chromium in solids by 6010 Mercury in solids by 7471 Lead in solids by 6010 Selenium in solids by 6010 Percent Dry Matter for Sample Calc by SM2540B,G Asbestos in solid (subcontract) Total Halogens in soil (subcontract) VOCs in solids by 8260 Total cyanide in solids by 9014 Ignitability of Solid Samples by SW1010 pH in solids by SW9045C Sulfide-soluble in solid by SM4500-S2 D+F
B-6 (0.5'-2.5')	TCLP	1/12/2016 7:50	35489-007	Water Digestion for ICP Analysis TCLP Extraction Lead in water by 6010
B-4(0.6'-7')	TCLP	1/12/2016 8:40	35489-008	Water Digestion for ICP Analysis TCLP Extraction Lead in water by 6010
B-1(1'-6')	TCLP	1/12/2016 13:45	35489-009	Water Digestion for ICP Analysis TCLP Extraction Lead in water by 6010



Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-001

Sample ID: B-6 (0.5'-2.5')

Matrix: Solid

Percent Dry: 88.1% Results expressed on a dry weight basis.

Sampled: 1/12/16 7:50

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
diethyl ether	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
methylene chloride	< 0.3	0.3	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
2-butanone (MEK)	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
tetrahydrofuran (THF)	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.6	0.6	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
2-hexanone	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-001

Sample ID: B-6 (0.5'-2.5')

Matrix: Solid

Percent Dry: 88.1% Results expressed on a dry weight basis.

Sampled: 1/12/16 7:50

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
o-xylene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
naphthalene	< 0.3	0.3	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	<b>84</b>	78-114	%	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
toluene-D8 SUR	<b>101</b>	88-110	%	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
4-bromofluorobenzene SUR	<b>102</b>	86-115	%	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C
a,a,a-trifluorotoluene SUR	<b>98</b>	70-130	%	1	LMM	1/19/16	8539	1/22/16	15:41	SW5035A8260C

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-002

Sample ID: B-4(0.6'-7')

Matrix: Solid

Percent Dry: 90.1% Results expressed on a dry weight basis.

Sampled: 1/12/16 8:40

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
diethyl ether	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
methylene chloride	< 0.3	0.3	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
2-butanone (MEK)	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
tetrahydrofuran (THF)	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.6	0.6	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
2-hexanone	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-002

Sample ID: B-4(0.6'-7')

Matrix: Solid

Percent Dry: 90.1% Results expressed on a dry weight basis.

Sampled: 1/12/16 8:40

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
o-xylene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
naphthalene	< 0.3	0.3	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	<b>87</b>	78-114	%	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
toluene-D8 SUR	<b>101</b>	88-110	%	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
4-bromofluorobenzene SUR	<b>100</b>	86-115	%	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C
a,a,a-trifluorotoluene SUR	<b>108</b>	70-130	%	1	LMM	1/19/16	8539	1/19/16	17:19	SW5035A8260C

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-003

Sample ID: B-5(0.8'-2.8')

Matrix: Solid

Percent Dry: 94.8% Results expressed on a dry weight basis.

Sampled: 1/12/16 10:00

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
dichlorodifluoromethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
chloromethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
vinyl chloride	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
bromomethane	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
chloroethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
trichlorofluoromethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
diethyl ether	< 0.8	0.8	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
acetone	< 4	4	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,1-dichloroethene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
methylene chloride	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
carbon disulfide	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
trans-1,2-dichloroethene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,1-dichloroethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
2-butanone (MEK)	< 0.5	0.5	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
2,2-dichloropropane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
cis-1,2-dichloroethene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
chloroform	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
bromochloromethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
tetrahydrofuran (THF)	< 0.8	0.8	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,1,1-trichloroethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,1-dichloropropene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
carbon tetrachloride	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,2-dichloroethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
benzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
trichloroethene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,2-dichloropropane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
bromodichloromethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
dibromomethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
cis-1,3-dichloropropene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
toluene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
trans-1,3-dichloropropene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
2-hexanone	< 0.8	0.8	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,1,2-trichloroethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,3-dichloropropane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
tetrachloroethene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
dibromochloromethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
chlorobenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
ethylbenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
m&p-xylenes	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-003

Sample ID: B-5(0.8'-2.8')

Matrix: Solid

Percent Dry: 94.8% Results expressed on a dry weight basis.

Sampled: 1/12/16 10:00

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
o-xylene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
styrene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
bromoform	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
isopropylbenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,2,3-trichloropropane	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
n-propylbenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
bromobenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,3,5-trimethylbenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
2-chlorotoluene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
4-chlorotoluene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
tert-butylbenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,2,4-trimethylbenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
sec-butylbenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
4-isopropyltoluene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
n-butylbenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,2,4-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
hexachlorobutadiene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
naphthalene	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
1,2,3-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	<b>90</b>	78-114	%	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
toluene-D8 SUR	<b>101</b>	88-110	%	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
4-bromofluorobenzene SUR	<b>97</b>	86-115	%	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C
a,a,a-trifluorotoluene SUR	<b>103</b>	70-130	%	1	LMM	1/19/16	8539	1/19/16	17:47	SW5035A8260C

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-004

Sample ID: B-3(0.5'-4.5')

Matrix: Solid

Percent Dry: 93.8% Results expressed on a dry weight basis.

Sampled: 1/12/16 11:00

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
bromomethane	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
diethyl ether	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
acetone	< 4	4	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
methylene chloride	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
2-butanone (MEK)	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
tetrahydrofuran (THF)	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
2-hexanone	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-004

Sample ID: B-3(0.5'-4.5')

Matrix: Solid Percent Dry: 93.8% Results expressed on a dry weight basis.

Sampled: 1/12/16 11:00

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
o-xylene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
naphthalene	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	<b>89</b>	78-114	%	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
toluene-D8 SUR	<b>102</b>	88-110	%	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
4-bromofluorobenzene SUR	<b>100</b>	86-115	%	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C
a,a,a-trifluorotoluene SUR	<b>116</b>	70-130	%	1	LMM	1/19/16	8539	1/19/16	18:14	SW5035A8260C



Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-005

Sample ID: B-2(0.6'-4.6')

Matrix: Solid

Percent Dry: 94.3% Results expressed on a dry weight basis.

Sampled: 1/12/16 12:30

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
bromomethane	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
diethyl ether	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
acetone	< 4	4	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
methylene chloride	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
2-butanone (MEK)	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
tetrahydrofuran (THF)	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.6	0.6	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
2-hexanone	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-005

Sample ID: B-2(0.6'-4.6')

Matrix: Solid Percent Dry: 94.3% Results expressed on a dry weight basis.

Sampled: 1/12/16 12:30

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
o-xylene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
naphthalene	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	<b>86</b>	78-114	%	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
toluene-D8 SUR	<b>100</b>	88-110	%	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
4-bromofluorobenzene SUR	<b>98</b>	86-115	%	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C
a,a,a-trifluorotoluene SUR	<b>106</b>	70-130	%	1	LMM	1/19/16	8539	1/19/16	18:42	SW5035A8260C

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-006

Sample ID: B-1(1'-6')

Matrix: Solid

Percent Dry: 91.4% Results expressed on a dry weight basis.

Sampled: 1/12/16 13:45

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
diethyl ether	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
methylene chloride	< 0.3	0.3	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
2-butanone (MEK)	< 0.4	0.4	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
tetrahydrofuran (THF)	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.6	0.6	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
2-hexanone	< 0.7	0.7	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-006

Sample ID: B-1(1'-6')

Matrix: Solid

Percent Dry: 91.4% Results expressed on a dry weight basis.

Sampled: 1/12/16 13:45

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
o-xylene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
naphthalene	<b>0.5</b>	0.3	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	<b>84</b>	78-114	%	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
toluene-D8 SUR	<b>100</b>	88-110	%	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
4-bromofluorobenzene SUR	<b>96</b>	86-115	%	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C
a,a,a-trifluorotoluene SUR	<b>103</b>	70-130	%	1	LMM	1/19/16	8539	1/22/16	16:09	SW5035A8260C

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-001

Sample ID: B-6 (0.5'-2.5')

Matrix: Solid

Percent Dry: 88.1% Results expressed on a dry weight basis.

Sampled: 1/12/16 7:50

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
N-nitrosodimethylamine	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
aniline	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
phenol	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2-chlorophenol	< 2.8	2.8	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
bis(2-chloroethyl)ether	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
1,3-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
1,4-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
1,2-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
benzyl alcohol	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2-methylphenol	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
bis(2-chloroisopropyl) ether	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
hexachloroethane	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
N-nitroso-di-N-propylamine	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
4-methylphenol	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
nitrobenzene	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
isophorone	< 2.8	2.8	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2-nitrophenol	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2,4-dimethylphenol	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
bis(2-chloroethoxy)methane	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2,4-dichlorophenol	< 2.8	2.8	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
1,2,4-trichlorobenzene	< 2.8	2.8	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
naphthalene	<b>0.53</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
benzoic acid	< 28	28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
4-chloroaniline	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
hexachlorobutadiene	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
4-chloro-3-methylphenol	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2-methylnaphthalene	<b>0.29</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
hexachlorocyclopentadiene	< 5.5	5.5	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2,4,6-trichlorophenol	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2,4,5-trichlorophenol	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2-chloronaphthalene	< 2.8	2.8	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2-nitroaniline	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
acenaphthylene	<b>0.29</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
dimethylphthalate	< 2.8	2.8	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2,6-dinitrotoluene	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2,4-dinitrotoluene	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
acenaphthene	<b>1.0</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
3-nitroaniline	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2,4-dinitrophenol	< 28	28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
dibenzofuran	<b>0.58</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
4-nitrophenol	< 11	11	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
fluorene	<b>1.0</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
diethyl phthalate	< 2.8	2.8	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-001

Sample ID: B-6 (0.5'-2.5')

Matrix: Solid

Percent Dry: 88.1% Results expressed on a dry weight basis.

Sampled: 1/12/16 7:50

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
4-chlorophenyl phenyl ether	< 2.8	2.8	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
4-nitroaniline	< 2.8	2.8	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
4,6-dinitro-2-methylphenol	< 11	11	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
azobenzene	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
N-nitrosodiphenylamine	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
4-bromophenyl phenyl ether	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
hexachlorobenzene	< 1.1	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
pentachlorophenol	< 5.5	5.5	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
phenanthrene	<b>14</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
anthracene	<b>2.5</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
carbazole	<b>1.1</b>	1.1	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
di-n-butylphthalate	< 2.8	2.8	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
fluoranthene	<b>15</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
benzidine	< 17	17	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
pyrene	<b>13</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
butyl benzyl phthalate	< 2.8	2.8	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
benzo(a)anthracene	<b>6.8</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
chrysene	<b>7.1</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
3,3'-dichlorobenzidine	< 17	17	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 2.8	2.8	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
di-n-octyl phthalate	< 2.8	2.8	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
benzo(b)fluoranthene	<b>4.3</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
benzo(k)fluoranthene	<b>4.7</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
benzo(a)pyrene	<b>5.7</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
indeno(1,2,3-cd)pyrene	<b>2.9</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
dibenzo(a,h)anthracene	<b>1.5</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
benzo(g,h,i)perylene	<b>3.1</b>	0.28	ug/g	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
<b>Surrogate Recovery</b>		<b>Limits</b>								
2-fluorophenol SUR	<b>61</b>	21-100	%	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
phenol-D5 SUR	<b>65</b>	10-102	%	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2,4,6-tribromophenol SUR	<b>69</b>	10-123	%	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
nitrobenzene-D5 SUR	<b>63</b>	35-114	%	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
2-fluorobiphenyl SUR	<b>68</b>	43-116	%	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D
p-terphenyl-D14 SUR	<b>69</b>	33-141	%	5	AJD	1/21/16	8547	1/26/16	14:13	SW3546/8270D

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-002

Sample ID: B-4(0.6'-7')

Matrix: Solid

Percent Dry: 90.1% Results expressed on a dry weight basis.

Sampled: 1/12/16 8:40

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
N-nitrosodimethylamine	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
aniline	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
phenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2-chlorophenol	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
bis(2-chloroethyl)ether	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
1,3-dichlorobenzene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
1,4-dichlorobenzene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
1,2-dichlorobenzene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
benzyl alcohol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2-methylphenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
hexachloroethane	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
4-methylphenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
nitrobenzene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
isophorone	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2-nitrophenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2,4-dimethylphenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2,4-dichlorophenol	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
1,2,4-trichlorobenzene	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
naphthalene	< 0.053	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
benzoic acid	< 5.3	5.3	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
4-chloroaniline	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
hexachlorobutadiene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
4-chloro-3-methylphenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2-methylnaphthalene	< 0.053	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
hexachlorocyclopentadiene	< 1.1	1.1	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2,4,6-trichlorophenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2,4,5-trichlorophenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2-chloronaphthalene	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2-nitroaniline	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
acenaphthylene	<b>0.053</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
dimethylphthalate	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2,6-dinitrotoluene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2,4-dinitrotoluene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
acenaphthene	<b>0.12</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
3-nitroaniline	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2,4-dinitrophenol	< 5.3	5.3	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
dibenzofuran	<b>0.070</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
4-nitrophenol	< 2.1	2.1	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
fluorene	<b>0.12</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
diethyl phthalate	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-002

Sample ID: B-4(0.6'-7')

Matrix: Solid

Percent Dry: 90.1% Results expressed on a dry weight basis.

Sampled: 1/12/16 8:40

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
4-nitroaniline	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
4,6-dinitro-2-methylphenol	< 2.1	2.1	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
azobenzene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
N-nitrosodiphenylamine	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
4-bromophenyl phenyl ether	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
hexachlorobenzene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
pentachlorophenol	< 1.1	1.1	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
phenanthrene	<b>1.5</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
anthracene	<b>0.37</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
carbazole	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
di-n-butylphthalate	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
fluoranthene	<b>2.1</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
benzidine	< 3.2	3.2	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
pyrene	<b>1.7</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
butyl benzyl phthalate	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
benzo(a)anthracene	<b>1.0</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
chrysene	<b>0.94</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
3,3'-dichlorobenzidine	< 3.2	3.2	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
di-n-octyl phthalate	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
benzo(b)fluoranthene	<b>0.82</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
benzo(k)fluoranthene	<b>0.70</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
benzo(a)pyrene	<b>0.89</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
indeno(1,2,3-cd)pyrene	<b>0.33</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
dibenzo(a,h)anthracene	<b>0.16</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
benzo(g,h,i)perylene	<b>0.30</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
<b>Surrogate Recovery</b>		<b>Limits</b>								
2-fluorophenol SUR	<b>63</b>	21-100	%	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
phenol-D5 SUR	<b>66</b>	10-102	%	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2,4,6-tribromophenol SUR	<b>68</b>	10-123	%	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
nitrobenzene-D5 SUR	<b>60</b>	35-114	%	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
2-fluorobiphenyl SUR	<b>63</b>	43-116	%	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D
p-terphenyl-D14 SUR	<b>71</b>	33-141	%	1	AJD	1/21/16	8547	1/26/16	16:30	SW3546/8270D



Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-003

Sample ID: B-5(0.8'-2.8')

Matrix: Solid

Percent Dry: 94.8% Results expressed on a dry weight basis.

Sampled: 1/12/16 10:00

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
N-nitrosodimethylamine	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
aniline	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
phenol	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2-chlorophenol	< 0.50	0.50	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
bis(2-chloroethyl)ether	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
1,3-dichlorobenzene	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
1,4-dichlorobenzene	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
1,2-dichlorobenzene	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
benzyl alcohol	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2-methylphenol	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
hexachloroethane	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
4-methylphenol	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
nitrobenzene	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
isophorone	< 0.50	0.50	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2-nitrophenol	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2,4-dimethylphenol	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2,4-dichlorophenol	< 0.50	0.50	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
1,2,4-trichlorobenzene	< 0.50	0.50	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
naphthalene	< 0.050	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
benzoic acid	< 5.0	5.0	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
4-chloroaniline	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
hexachlorobutadiene	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
4-chloro-3-methylphenol	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2-methylnaphthalene	< 0.050	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
hexachlorocyclopentadiene	< 1.0	1.0	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2,4,6-trichlorophenol	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2,4,5-trichlorophenol	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2-chloronaphthalene	< 0.50	0.50	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2-nitroaniline	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
acenaphthylene	<b>0.093</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
dimethylphthalate	< 0.50	0.50	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2,6-dinitrotoluene	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2,4-dinitrotoluene	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
acenaphthene	<b>0.093</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
3-nitroaniline	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2,4-dinitrophenol	< 5.0	5.0	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
dibenzofuran	<b>0.061</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
4-nitrophenol	< 2.0	2.0	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
fluorene	<b>0.099</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
diethyl phthalate	< 0.50	0.50	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-003

Sample ID: B-5(0.8'-2.8')

Matrix: Solid

Percent Dry: 94.8% Results expressed on a dry weight basis.

Sampled: 1/12/16 10:00

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.50	0.50	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
4-nitroaniline	< 0.50	0.50	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
4,6-dinitro-2-methylphenol	< 2.0	2.0	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
azobenzene	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
N-nitrosodiphenylamine	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
4-bromophenyl phenyl ether	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
hexachlorobenzene	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
pentachlorophenol	< 1.0	1.0	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
phenanthrene	<b>1.2</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
anthracene	<b>0.29</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
carbazole	< 0.20	0.20	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
di-n-butylphthalate	< 0.50	0.50	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
fluoranthene	<b>1.7</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
benzidine	< 3.0	3.0	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
pyrene	<b>1.4</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
butyl benzyl phthalate	< 0.50	0.50	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
benzo(a)anthracene	<b>0.83</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
chrysene	<b>0.78</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
3,3'-dichlorobenzidine	< 3.0	3.0	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.50	0.50	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
di-n-octyl phthalate	< 0.50	0.50	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
benzo(b)fluoranthene	<b>0.71</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
benzo(k)fluoranthene	<b>0.56</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
benzo(a)pyrene	<b>0.72</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
indeno(1,2,3-cd)pyrene	<b>0.24</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
dibenzo(a,h)anthracene	<b>0.12</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
benzo(g,h,i)perylene	<b>0.23</b>	0.050	ug/g	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
<b>Surrogate Recovery</b>		<b>Limits</b>								
2-fluorophenol SUR	<b>73</b>	21-100	%	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
phenol-D5 SUR	<b>78</b>	10-102	%	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2,4,6-tribromophenol SUR	<b>72</b>	10-123	%	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
nitrobenzene-D5 SUR	<b>70</b>	35-114	%	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
2-fluorobiphenyl SUR	<b>70</b>	43-116	%	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D
p-terphenyl-D14 SUR	<b>86</b>	33-141	%	1	AJD	1/21/16	8547	1/26/16	17:07	SW3546/8270D

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-004

Sample ID: B-3(0.5'-4.5')

Matrix: Solid

Percent Dry: 93.8% Results expressed on a dry weight basis.

Sampled: 1/12/16 11:00

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
N-nitrosodimethylamine	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
aniline	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
phenol	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2-chlorophenol	< 2.4	2.4	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
bis(2-chloroethyl)ether	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
1,3-dichlorobenzene	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
1,4-dichlorobenzene	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
1,2-dichlorobenzene	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
benzyl alcohol	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2-methylphenol	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
hexachloroethane	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
4-methylphenol	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
nitrobenzene	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
isophorone	< 2.4	2.4	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2-nitrophenol	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2,4-dimethylphenol	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2,4-dichlorophenol	< 2.4	2.4	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
1,2,4-trichlorobenzene	< 2.4	2.4	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
naphthalene	< 0.24	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
benzoic acid	< 24	24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
4-chloroaniline	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
hexachlorobutadiene	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
4-chloro-3-methylphenol	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2-methylnaphthalene	< 0.24	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
hexachlorocyclopentadiene	< 4.9	4.9	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2,4,6-trichlorophenol	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2,4,5-trichlorophenol	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2-chloronaphthalene	< 2.4	2.4	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2-nitroaniline	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
acenaphthylene	<b>0.76</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
dimethylphthalate	< 2.4	2.4	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2,6-dinitrotoluene	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2,4-dinitrotoluene	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
acenaphthene	<b>0.25</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
3-nitroaniline	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2,4-dinitrophenol	< 24	24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
dibenzofuran	< 0.24	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
4-nitrophenol	< 9.7	9.7	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
fluorene	<b>0.27</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
diethyl phthalate	< 2.4	2.4	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-004

Sample ID: B-3(0.5'-4.5')

Matrix: Solid

Percent Dry: 93.8% Results expressed on a dry weight basis.

Sampled: 1/12/16 11:00

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
4-chlorophenyl phenyl ether	< 2.4	2.4	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
4-nitroaniline	< 2.4	2.4	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
4,6-dinitro-2-methylphenol	< 9.7	9.7	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
azobenzene	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
N-nitrosodiphenylamine	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
4-bromophenyl phenyl ether	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
hexachlorobenzene	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
pentachlorophenol	< 4.9	4.9	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
phenanthrene	<b>3.7</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
anthracene	<b>0.93</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
carbazole	< 0.97	0.97	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
di-n-butylphthalate	< 2.4	2.4	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
fluoranthene	<b>6.9</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
benzidine	< 15	15	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
pyrene	<b>5.5</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
butyl benzyl phthalate	< 2.4	2.4	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
benzo(a)anthracene	<b>3.5</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
chrysene	<b>3.4</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
3,3'-dichlorobenzidine	< 15	15	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 2.4	2.4	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
di-n-octyl phthalate	< 2.4	2.4	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
benzo(b)fluoranthene	<b>2.3</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
benzo(k)fluoranthene	<b>3.0</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
benzo(a)pyrene	<b>2.9</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
indeno(1,2,3-cd)pyrene	<b>1.2</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
dibenzo(a,h)anthracene	<b>0.62</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
benzo(g,h,i)perylene	<b>1.1</b>	0.24	ug/g	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
<b>Surrogate Recovery</b>		<b>Limits</b>								
2-fluorophenol SUR	<b>61</b>	21-100	%	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
phenol-D5 SUR	<b>65</b>	10-102	%	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2,4,6-tribromophenol SUR	<b>67</b>	10-123	%	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
nitrobenzene-D5 SUR	<b>64</b>	35-114	%	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
2-fluorobiphenyl SUR	<b>66</b>	43-116	%	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D
p-terphenyl-D14 SUR	<b>67</b>	33-141	%	5	AJD	1/21/16	8547	1/26/16	14:50	SW3546/8270D

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-005

Sample ID: B-2(0.6'-4.6')

Matrix: Solid

Percent Dry: 94.3% Results expressed on a dry weight basis.

Sampled: 1/12/16 12:30

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
N-nitrosodimethylamine	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
aniline	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
phenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2-chlorophenol	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
bis(2-chloroethyl)ether	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
1,3-dichlorobenzene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
1,4-dichlorobenzene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
1,2-dichlorobenzene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
benzyl alcohol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2-methylphenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
hexachloroethane	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
4-methylphenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
nitrobenzene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
isophorone	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2-nitrophenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2,4-dimethylphenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2,4-dichlorophenol	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
1,2,4-trichlorobenzene	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
naphthalene	< 0.053	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
benzoic acid	< 5.3	5.3	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
4-chloroaniline	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
hexachlorobutadiene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
4-chloro-3-methylphenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2-methylnaphthalene	< 0.053	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
hexachlorocyclopentadiene	< 1.1	1.1	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2,4,6-trichlorophenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2,4,5-trichlorophenol	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2-chloronaphthalene	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2-nitroaniline	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
acenaphthylene	<b>0.11</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
dimethylphthalate	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2,6-dinitrotoluene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2,4-dinitrotoluene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
acenaphthene	<b>0.19</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
3-nitroaniline	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2,4-dinitrophenol	< 5.3	5.3	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
dibenzofuran	<b>0.090</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
4-nitrophenol	< 2.1	2.1	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
fluorene	<b>0.23</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
diethyl phthalate	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-005

Sample ID: B-2(0.6'-4.6')

Matrix: Solid

Percent Dry: 94.3% Results expressed on a dry weight basis.

Sampled: 1/12/16 12:30

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
4-nitroaniline	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
4,6-dinitro-2-methylphenol	< 2.1	2.1	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
azobenzene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
N-nitrosodiphenylamine	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
4-bromophenyl phenyl ether	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
hexachlorobenzene	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
pentachlorophenol	< 1.1	1.1	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
phenanthrene	<b>2.1</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
anthracene	<b>0.58</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
carbazole	< 0.21	0.21	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
di-n-butylphthalate	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
fluoranthene	<b>4.2</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
benzidine	< 3.2	3.2	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
pyrene	<b>3.1</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
butyl benzyl phthalate	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
benzo(a)anthracene	<b>1.9</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
chrysene	<b>1.8</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
3,3'-dichlorobenzidine	< 3.2	3.2	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
di-n-octyl phthalate	< 0.53	0.53	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
benzo(b)fluoranthene	<b>1.8</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
benzo(k)fluoranthene	<b>1.3</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
benzo(a)pyrene	<b>1.7</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
indeno(1,2,3-cd)pyrene	<b>0.54</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
dibenzo(a,h)anthracene	<b>0.26</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
benzo(g,h,i)perylene	<b>0.46</b>	0.053	ug/g	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
<b>Surrogate Recovery</b>		<b>Limits</b>								
2-fluorophenol SUR	<b>74</b>	21-100	%	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
phenol-D5 SUR	<b>79</b>	10-102	%	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2,4,6-tribromophenol SUR	<b>78</b>	10-123	%	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
nitrobenzene-D5 SUR	<b>70</b>	35-114	%	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
2-fluorobiphenyl SUR	<b>71</b>	43-116	%	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D
p-terphenyl-D14 SUR	<b>82</b>	33-141	%	1	AJD	1/21/16	8547	1/26/16	17:44	SW3546/8270D

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-006

Sample ID: B-1(1'-6')

Matrix: Solid

Percent Dry: 91.4% Results expressed on a dry weight basis.

Sampled: 1/12/16 13:45

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
N-nitrosodimethylamine	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
aniline	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
phenol	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2-chlorophenol	< 2.6	2.6	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
bis(2-chloroethyl)ether	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
1,3-dichlorobenzene	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
1,4-dichlorobenzene	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
1,2-dichlorobenzene	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
benzyl alcohol	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2-methylphenol	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
bis(2-chloroisopropyl) ether	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
hexachloroethane	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
N-nitroso-di-N-propylamine	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
4-methylphenol	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
nitrobenzene	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
isophorone	< 2.6	2.6	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2-nitrophenol	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2,4-dimethylphenol	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
bis(2-chloroethoxy)methane	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2,4-dichlorophenol	< 2.6	2.6	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
1,2,4-trichlorobenzene	< 2.6	2.6	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
naphthalene	< 0.26	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
benzoic acid	< 26	26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
4-chloroaniline	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
hexachlorobutadiene	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
4-chloro-3-methylphenol	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2-methylnaphthalene	< 0.26	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
hexachlorocyclopentadiene	< 5.1	5.1	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2,4,6-trichlorophenol	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2,4,5-trichlorophenol	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2-chloronaphthalene	< 2.6	2.6	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2-nitroaniline	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
acenaphthylene	< 0.26	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
dimethylphthalate	< 2.6	2.6	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2,6-dinitrotoluene	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2,4-dinitrotoluene	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
acenaphthene	<b>0.36</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
3-nitroaniline	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2,4-dinitrophenol	< 26	26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
dibenzofuran	< 0.26	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
4-nitrophenol	< 10	10	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
fluorene	<b>0.32</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
diethyl phthalate	< 2.6	2.6	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-006

Sample ID: B-1(1'-6')

Matrix: Solid

Percent Dry: 91.4% Results expressed on a dry weight basis.

Sampled: 1/12/16 13:45

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
4-chlorophenyl phenyl ether	< 2.6	2.6	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
4-nitroaniline	< 2.6	2.6	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
4,6-dinitro-2-methylphenol	< 10	10	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
azobenzene	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
N-nitrosodiphenylamine	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
4-bromophenyl phenyl ether	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
hexachlorobenzene	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
pentachlorophenol	< 5.1	5.1	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
phenanthrene	<b>4.1</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
anthracene	<b>0.94</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
carbazole	< 1.0	1.0	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
di-n-butylphthalate	< 2.6	2.6	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
fluoranthene	<b>5.6</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
benzidine	< 15	15	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
pyrene	<b>4.7</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
butyl benzyl phthalate	< 2.6	2.6	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
benzo(a)anthracene	<b>2.6</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
chrysene	<b>2.7</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
3,3'-dichlorobenzidine	< 15	15	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 2.6	2.6	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
di-n-octyl phthalate	< 2.6	2.6	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
benzo(b)fluoranthene	<b>2.5</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
benzo(k)fluoranthene	<b>1.9</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
benzo(a)pyrene	<b>2.4</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
indeno(1,2,3-cd)pyrene	<b>0.75</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
dibenzo(a,h)anthracene	<b>0.37</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
benzo(g,h,i)perylene	<b>0.76</b>	0.26	ug/g	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
<b>Surrogate Recovery</b>		<b>Limits</b>								
2-fluorophenol SUR	<b>61</b>	21-100	%	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
phenol-D5 SUR	<b>64</b>	10-102	%	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2,4,6-tribromophenol SUR	<b>58</b>	10-123	%	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
nitrobenzene-D5 SUR	<b>60</b>	35-114	%	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
2-fluorobiphenyl SUR	<b>60</b>	43-116	%	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D
p-terphenyl-D14 SUR	<b>64</b>	33-141	%	5	AJD	1/21/16	8547	1/26/16	15:27	SW3546/8270D

Note: Dilution was required due to matrix interference, causing internal standard suppression.



**Project ID:** Canal Plaza 229311

**Job ID:** 35489

**Sample#:** 35489-001

**Sample ID:** B-6 (0.5'-2.5')

**Matrix:** Solid      Percent Dry: 88.1% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 7:50

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
PCB-1016	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	16:50	SW3546/8082A
PCB-1221	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	16:50	SW3546/8082A
PCB-1232	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	16:50	SW3546/8082A
PCB-1242	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	16:50	SW3546/8082A
PCB-1248	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	16:50	SW3546/8082A
PCB-1254	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	16:50	SW3546/8082A
PCB-1260	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	16:50	SW3546/8082A
<b>Surrogate Recovery</b>		<b>Limits</b>								
tetrachloro-m-xylene SUR	<b>83</b>	30-150	%	1	AM	1/19/16	8542	1/26/16	16:50	SW3546/8082A
decachlorobiphenyl SUR	<b>73</b>	30-150	%	1	AM	1/19/16	8542	1/26/16	16:50	SW3546/8082A

**Sample#:** 35489-002

**Sample ID:** B-4(0.6'-7')

**Matrix:** Solid      Percent Dry: 90.1% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 8:40

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	17:19	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	17:19	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	17:19	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	17:19	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	17:19	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	17:19	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	17:19	SW3546/8082A
<b>Surrogate Recovery</b>		<b>Limits</b>								
tetrachloro-m-xylene SUR	<b>104</b>	30-150	%	1	AM	1/19/16	8542	1/26/16	17:19	SW3546/8082A
decachlorobiphenyl SUR	<b>90</b>	30-150	%	1	AM	1/19/16	8542	1/26/16	17:19	SW3546/8082A

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-003

Sample ID: B-5(0.8'-2.8')

Matrix: Solid Percent Dry: 94.8% Results expressed on a dry weight basis.

Sampled: 1/12/16 10:00

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
PCB-1016	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	17:49	SW3546/8082A
PCB-1221	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	17:49	SW3546/8082A
PCB-1232	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	17:49	SW3546/8082A
PCB-1242	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	17:49	SW3546/8082A
PCB-1248	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	17:49	SW3546/8082A
PCB-1254	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	17:49	SW3546/8082A
PCB-1260	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	17:49	SW3546/8082A
<b>Surrogate Recovery</b>		<b>Limits</b>								
tetrachloro-m-xylene SUR	<b>100</b>	30-150	%	1	AM	1/19/16	8542	1/26/16	17:49	SW3546/8082A
decachlorobiphenyl SUR	<b>86</b>	30-150	%	1	AM	1/19/16	8542	1/26/16	17:49	SW3546/8082A

Sample#: 35489-004

Sample ID: B-3(0.5'-4.5')

Matrix: Solid Percent Dry: 93.8% Results expressed on a dry weight basis.

Sampled: 1/12/16 11:00

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	18:18	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	18:18	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	18:18	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	18:18	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	18:18	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	18:18	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	18:18	SW3546/8082A
<b>Surrogate Recovery</b>		<b>Limits</b>								
tetrachloro-m-xylene SUR	<b>107</b>	30-150	%	1	AM	1/19/16	8542	1/26/16	18:18	SW3546/8082A
decachlorobiphenyl SUR	<b>85</b>	30-150	%	1	AM	1/19/16	8542	1/26/16	18:18	SW3546/8082A

Project ID: Canal Plaza 229311

Job ID: 35489

Sample#: 35489-005

Sample ID: B-2(0.6'-4.6')

Matrix: Solid Percent Dry: 94.3% Results expressed on a dry weight basis.

Sampled: 1/12/16 12:30

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
PCB-1016	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	18:48	SW3546/8082A
PCB-1221	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	18:48	SW3546/8082A
PCB-1232	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	18:48	SW3546/8082A
PCB-1242	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	18:48	SW3546/8082A
PCB-1248	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	18:48	SW3546/8082A
PCB-1254	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	18:48	SW3546/8082A
PCB-1260	< 0.1	0.1	ug/g	1	AM	1/19/16	8542	1/26/16	18:48	SW3546/8082A
<b>Surrogate Recovery</b>		<b>Limits</b>								
tetrachloro-m-xylene SUR	<b>105</b>	30-150	%	1	AM	1/19/16	8542	1/26/16	18:48	SW3546/8082A
decachlorobiphenyl SUR	<b>89</b>	30-150	%	1	AM	1/19/16	8542	1/26/16	18:48	SW3546/8082A

Sample#: 35489-006

Sample ID: B-1(1'-6')

Matrix: Solid Percent Dry: 91.4% Results expressed on a dry weight basis.

Sampled: 1/12/16 13:45

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	19:17	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	19:17	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	19:17	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	19:17	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	19:17	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	19:17	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	AM	1/19/16	8542	1/26/16	19:17	SW3546/8082A
<b>Surrogate Recovery</b>		<b>Limits</b>								
tetrachloro-m-xylene SUR	<b>63</b>	30-150	%	1	AM	1/19/16	8542	1/26/16	19:17	SW3546/8082A
decachlorobiphenyl SUR	<b>50</b>	30-150	%	1	AM	1/19/16	8542	1/26/16	19:17	SW3546/8082A

**Project ID:** Canal Plaza 229311

**Job ID:** 35489

**Sample#:** 35489-001

**Sample ID:** B-6 (0.5'-2.5')

**Matrix:** Solid Percent Dry: 88.1% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 7:50

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Arsenic	12	1.1	ug/g	1	AC	1/22/16	8549	1/22/16	17:43	SW3051A6010C
Barium	63	5	ug/g	1	AC	1/22/16	8549	1/22/16	17:43	SW3051A6010C
Cadmium	< 0.4	0.4	ug/g	1	AC	1/22/16	8549	1/22/16	17:43	SW3051A6010C
Chromium	23	5	ug/g	1	AC	1/22/16	8549	1/22/16	17:43	SW3051A6010C
Lead	200	1.1	ug/g	1	AC	1/22/16	8549	1/22/16	17:43	SW3051A6010C
Mercury	< 0.20	0.20	ug/g	1	AC	1/27/16	8557	1/27/16	14:01	SW7471B
Selenium	< 5	5	ug/g	1	AC	1/22/16	8549	1/22/16	17:43	SW3051A6010C
Silver	< 0.8	0.8	ug/g	1	AC	1/22/16	8549	1/22/16	17:43	SW3051A6010C

**Sample#:** 35489-002

**Sample ID:** B-4(0.6'-7')

**Matrix:** Solid Percent Dry: 90.1% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 8:40

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Arsenic	11	1.1	ug/g	1	AC	1/22/16	8549	1/22/16	17:50	SW3051A6010C
Barium	60	5	ug/g	1	AC	1/22/16	8549	1/22/16	17:50	SW3051A6010C
Cadmium	< 0.4	0.4	ug/g	1	AC	1/22/16	8549	1/22/16	17:50	SW3051A6010C
Chromium	26	5	ug/g	1	AC	1/22/16	8549	1/22/16	17:50	SW3051A6010C
Lead	220	1.1	ug/g	1	AC	1/22/16	8549	1/22/16	17:50	SW3051A6010C
Mercury	0.19	0.19	ug/g	1	AC	1/27/16	8557	1/27/16	14:03	SW7471B
Selenium	< 5	5	ug/g	1	AC	1/22/16	8549	1/22/16	17:50	SW3051A6010C
Silver	< 0.7	0.7	ug/g	1	AC	1/22/16	8549	1/22/16	17:50	SW3051A6010C

**Sample#:** 35489-003

**Sample ID:** B-5(0.8'-2.8')

**Matrix:** Solid Percent Dry: 94.8% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 10:00

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Arsenic	6.6	1.1	ug/g	1	AC	1/22/16	8549	1/22/16	17:57	SW3051A6010C
Barium	30	5	ug/g	1	AC	1/22/16	8549	1/22/16	17:57	SW3051A6010C
Cadmium	< 0.4	0.4	ug/g	1	AC	1/22/16	8549	1/22/16	17:57	SW3051A6010C
Chromium	11	5	ug/g	1	AC	1/22/16	8549	1/22/16	17:57	SW3051A6010C
Lead	78	1.1	ug/g	1	AC	1/22/16	8549	1/22/16	17:57	SW3051A6010C
Mercury	< 0.18	0.18	ug/g	1	AC	1/27/16	8557	1/28/16	12:47	SW7471B
Selenium	< 5	5	ug/g	1	AC	1/22/16	8549	1/22/16	17:57	SW3051A6010C
Silver	< 0.7	0.7	ug/g	1	AC	1/22/16	8549	1/22/16	17:57	SW3051A6010C

**Project ID:** Canal Plaza 229311

**Job ID:** 35489

**Sample#:** 35489-004

**Sample ID:** B-3(0.5'-4.5')

**Matrix:** Solid Percent Dry: 93.8% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 11:00

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Arsenic	10	1.0	ug/g	1	AC	1/22/16	8549	1/22/16	18:04	SW3051A6010C
Barium	51	5	ug/g	1	AC	1/22/16	8549	1/22/16	18:04	SW3051A6010C
Cadmium	< 0.4	0.4	ug/g	1	AC	1/22/16	8549	1/22/16	18:04	SW3051A6010C
Chromium	24	5	ug/g	1	AC	1/22/16	8549	1/22/16	18:04	SW3051A6010C
Lead	54	1.0	ug/g	1	AC	1/22/16	8549	1/22/16	18:04	SW3051A6010C
Mercury	< 0.19	0.19	ug/g	1	AC	1/27/16	8557	1/28/16	12:49	SW7471B
Selenium	< 5	5	ug/g	1	AC	1/22/16	8549	1/22/16	18:04	SW3051A6010C
Silver	< 0.7	0.7	ug/g	1	AC	1/22/16	8549	1/22/16	18:04	SW3051A6010C

**Sample#:** 35489-005

**Sample ID:** B-2(0.6'-4.6')

**Matrix:** Solid Percent Dry: 94.3% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 12:30

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Arsenic	8.2	1.1	ug/g	1	AC	1/22/16	8549	1/22/16	18:33	SW3051A6010C
Barium	23	5	ug/g	1	AC	1/22/16	8549	1/22/16	18:33	SW3051A6010C
Cadmium	< 0.4	0.4	ug/g	1	AC	1/22/16	8549	1/22/16	18:33	SW3051A6010C
Chromium	10	5	ug/g	1	AC	1/22/16	8549	1/22/16	18:33	SW3051A6010C
Lead	53	1.1	ug/g	1	AC	1/22/16	8549	1/22/16	18:33	SW3051A6010C
Mercury	0.56	0.19	ug/g	1	AC	1/27/16	8557	1/28/16	12:51	SW7471B
Selenium	< 5	5	ug/g	1	AC	1/22/16	8549	1/22/16	18:33	SW3051A6010C
Silver	< 0.7	0.7	ug/g	1	AC	1/22/16	8549	1/22/16	18:33	SW3051A6010C

**Sample#:** 35489-006

**Sample ID:** B-1(1'-6')

**Matrix:** Solid Percent Dry: 91.4% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 13:45

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Arsenic	12	1.1	ug/g	1	AC	1/22/16	8549	1/22/16	18:40	SW3051A6010C
Barium	73	5	ug/g	1	AC	1/22/16	8549	1/22/16	18:40	SW3051A6010C
Cadmium	< 0.4	0.4	ug/g	1	AC	1/22/16	8549	1/22/16	18:40	SW3051A6010C
Chromium	20	5	ug/g	1	AC	1/22/16	8549	1/22/16	18:40	SW3051A6010C
Lead	480	1.1	ug/g	1	AC	1/22/16	8549	1/22/16	18:40	SW3051A6010C
Mercury	0.63	0.19	ug/g	1	AC	1/27/16	8557	1/28/16	12:52	SW7471B
Selenium	< 5	5	ug/g	1	AC	1/22/16	8549	1/22/16	18:40	SW3051A6010C
Silver	< 0.8	0.8	ug/g	1	AC	1/22/16	8549	1/22/16	18:40	SW3051A6010C

**Project ID:** Canal Plaza 229311

**Job ID:** 35489

**Sample#:** 35489-001

**Sample ID:** B-6 (0.5'-2.5')

**Matrix:** Solid Percent Dry: 88.1% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 7:50

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Batch	Analysis		Reference
		Limit	Units	Factor	Analyst			Date	Time	
Cyanide, total	< 0.6	0.6	ug/g	1	APA	1600167	1/19/16		E9014	
Sulfide-soluble	< 0.5	0.5	ug/g	1	APA	1600162	1/19/16		SM4500-S2 D+F	
Ignitability	<b>NonIgnitable</b>			1	AM	1600193	1/21/16		SW1010	
pH	<b>7.8</b>		pH	1	APA	1600161	1/19/16	3:55	SW9045C	

**Sample#:** 35489-002

**Sample ID:** B-4(0.6'-7')

**Matrix:** Solid Percent Dry: 90.1% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 8:40

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Batch	Analysis		Reference
		Limit	Units	Factor	Analyst			Date	Time	
Cyanide, total	< 0.6	0.6	ug/g	1	APA	1600167	1/19/16		E9014	
Sulfide-soluble	< 0.4	0.4	ug/g	1	APA	1600162	1/19/16		SM4500-S2 D+F	
Ignitability	<b>NonIgnitable</b>			1	AM	1600193	1/21/16		SW1010	
pH	<b>8.6</b>		pH	1	APA	1600161	1/19/16	4:00	SW9045C	

**Sample#:** 35489-003

**Sample ID:** B-5(0.8'-2.8')

**Matrix:** Solid Percent Dry: 94.8% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 10:00

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Batch	Analysis		Reference
		Limit	Units	Factor	Analyst			Date	Time	
Cyanide, total	< 0.5	0.5	ug/g	1	APA	1600167	1/19/16		E9014	
Sulfide-soluble	< 0.4	0.4	ug/g	1	APA	1600162	1/19/16		SM4500-S2 D+F	
Ignitability	<b>NonIgnitable</b>			1	AM	1600193	1/21/16		SW1010	
pH	<b>10.1</b>		pH	1	APA	1600161	1/19/16	4:05	SW9045C	

**Sample#:** 35489-004

**Sample ID:** B-3(0.5'-4.5')

**Matrix:** Solid Percent Dry: 93.8% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 11:00

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Batch	Analysis		Reference
		Limit	Units	Factor	Analyst			Date	Time	
Cyanide, total	< 0.5	0.5	ug/g	1	APA	1600167	1/19/16		E9014	
Sulfide-soluble	< 0.4	0.4	ug/g	1	APA	1600162	1/19/16		SM4500-S2 D+F	
Ignitability	<b>NonIgnitable</b>			1	AM	1600193	1/21/16		SW1010	
pH	<b>10.6</b>		pH	1	APA	1600161	1/19/16	4:10	SW9045C	

**Project ID:** Canal Plaza 229311

**Job ID:** 35489

**Sample#:** 35489-005

**Sample ID:** B-2(0.6'-4.6')

**Matrix:** Solid      Percent Dry: 94.3% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 12:30

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Cyanide, total	< 0.5	0.5	ug/g	1	APA		1600167	1/19/16		E9014
Sulfide-soluble	< 0.4	0.4	ug/g	1	APA		1600162	1/19/16		SM4500-S2 D+F
Ignitability	<b>Nonignitable</b>			1	AM		1600193	1/21/16		SW1010
pH	<b>9.1</b>		pH	1	APA		1600161	1/19/16	4:15	SW9045C

**Sample#:** 35489-006

**Sample ID:** B-1(1'-6')

**Matrix:** Solid      Percent Dry: 91.4% Results expressed on a dry weight basis.

**Sampled:** 1/12/16 13:45

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Cyanide, total	< 0.5	0.5	ug/g	1	APA		1600167	1/19/16		E9014
Sulfide-soluble	< 0.4	0.4	ug/g	1	APA		1600162	1/19/16		SM4500-S2 D+F
Ignitability	<b>Nonignitable</b>			1	AM		1600193	1/21/16		SW1010
pH	<b>9.7</b>		pH	1	APA		1600161	1/19/16	4:20	SW9045C

**Project ID:** 229311 Canal Plaza

**Job ID:** 35489

**Sample #:** 35489-007

**Sample ID:** B-6 (0.5'-2.5')

**Matrix:** TCLP Extract

**Sampled:** 1/12/16 7:50

**TCLP:** 1/25/16

Parameter	Reporting		TCLP	Units	Instr Dil'n		Prep Date	Batch	Analysis		Reference
	Result	Limit	Limit		Factor	Analyst			Date	Time	
Lead	0.11	0.080	5	mg/L	1	AC	1/26/16	8553	1/26/16	15:49	SW1311 SW3005A6010C

**Sample #:** 35489-008

**Sample ID:** B-4(0.6'-7')

**Matrix:** TCLP Extract

**Sampled:** 1/12/16 8:40

**TCLP:** 1/25/16

Parameter	Reporting		TCLP	Units	Instr Dil'n		Prep Date	Batch	Analysis		Reference
	Result	Limit	Limit		Factor	Analyst			Date	Time	
Lead	1.3	0.080	5	mg/L	1	AC	1/26/16	8553	1/26/16	15:56	SW1311 SW3005A6010C

**Sample #:** 35489-009

**Sample ID:** B-1(1'-6')

**Matrix:** TCLP Extract

**Sampled:** 1/12/16 13:45

**TCLP:** 1/25/16

Parameter	Reporting		TCLP	Units	Instr Dil'n		Prep Date	Batch	Analysis		Reference
	Result	Limit	Limit		Factor	Analyst			Date	Time	
Lead	0.44	0.080	5	mg/L	1	AC	1/26/16	8553	1/26/16	16:25	SW1311 SW3005A6010C



# Quality Control Report



124 Heritage Avenue Unit 16  
Portsmouth, NH 03801  
[www.absoluteresourceassociates.com](http://www.absoluteresourceassociates.com)



**Case Narrative**  
**Lab # 35489**

**Sample Receiving and Chain of Custody Discrepancies**

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Samples were received in acceptable condition, at 2 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

The asbestos analysis was subcontracted to Asbestos Identification Laboratory of Woburn, MA.

The halogen analysis was subcontracted to TestAmerica Laboratories, Inc., of Nashville, TN.

**Calibration**

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No exceptions noted.

**Method Blank**

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No exceptions noted.

**Surrogate Recoveries**

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No exceptions noted.

**Laboratory Control Sample Results**

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VOC: The MLCS8539 did not meet the acceptance criteria for bromomethane, 4-methyl-2-pentanone (MIBK), bromoform, and naphthalene. The MLCSD8539 did not meet the acceptance criteria for dibromochloromethane, bromoform, and 1,2-dibromo-3-chloropropane (DBCP). Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.

**Matrix Spike/Matrix Spike Duplicate/Duplicate Results**

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Not requested for this project.

**Other**

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SVOC: The following sample required a re-analysis at a dilution due to internal standard interferences caused by matrix effect: 35489-006.

Reporting Limits: Dilutions performed during the analysis are noted on the result pages.

No other exceptions noted.

- QC Report -

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260C	MB8539	dichlorodifluoromethane		<	0.1	ug/g				
		chloromethane		<	0.1	ug/g				
		vinyl chloride		<	0.1	ug/g				
		bromomethane		<	0.2	ug/g				
		chloroethane		<	0.1	ug/g				
		trichlorofluoromethane		<	0.1	ug/g				
		diethyl ether		<	0.5	ug/g				
		acetone		<	2.5	ug/g				
		1,1-dichloroethene		<	0.1	ug/g				
		methylene chloride		<	0.2	ug/g				
		carbon disulfide		<	0.1	ug/g				
		methyl t-butyl ether (MTBE)		<	0.1	ug/g				
		trans-1,2-dichloroethene		<	0.1	ug/g				
		1,1-dichloroethane		<	0.1	ug/g				
		2-butanone (MEK)		<	0.5	ug/g				
		2,2-dichloropropane		<	0.1	ug/g				
		cis-1,2-dichloroethene		<	0.1	ug/g				
		chloroform		<	0.1	ug/g				
		bromochloromethane		<	0.1	ug/g				
		tetrahydrofuran (THF)		<	0.5	ug/g				
		1,1,1-trichloroethane		<	0.1	ug/g				
		1,1-dichloropropene		<	0.1	ug/g				
		carbon tetrachloride		<	0.1	ug/g				
		1,2-dichloroethane		<	0.1	ug/g				
		benzene		<	0.1	ug/g				
		trichloroethene		<	0.1	ug/g				
		1,2-dichloropropane		<	0.1	ug/g				
		bromodichloromethane		<	0.1	ug/g				
		dibromomethane		<	0.1	ug/g				
		4-methyl-2-pentanone (MIBK)		<	0.5	ug/g				
		cis-1,3-dichloropropene		<	0.1	ug/g				
		toluene		<	0.1	ug/g				
		trans-1,3-dichloropropene		<	0.1	ug/g				
		2-hexanone		<	0.5	ug/g				
		1,1,2-trichloroethane		<	0.1	ug/g				
		1,3-dichloropropane		<	0.1	ug/g				
		tetrachloroethene		<	0.1	ug/g				
		dibromochloromethane		<	0.1	ug/g				
		1,2-dibromoethane (EDB)		<	0.1	ug/g				
		chlorobenzene		<	0.1	ug/g				
		1,1,1,2-tetrachloroethane		<	0.1	ug/g				
		ethylbenzene		<	0.1	ug/g				
		m&p-xylenes		<	0.1	ug/g				
		o-xylene		<	0.1	ug/g				
		styrene		<	0.1	ug/g				
		bromoform		<	0.1	ug/g				
		isopropylbenzene		<	0.1	ug/g				
		1,1,1,2-tetrachloroethane		<	0.1	ug/g				
		1,2,3-trichloropropane		<	0.1	ug/g				
		n-propylbenzene		<	0.1	ug/g				

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260C	MB8539	bromobenzene		<	0.1	ug/g				
		1,3,5-trimethylbenzene		<	0.1	ug/g				
		2-chlorotoluene		<	0.1	ug/g				
		4-chlorotoluene		<	0.1	ug/g				
		tert-butylbenzene		<	0.1	ug/g				
		1,2,4-trimethylbenzene		<	0.1	ug/g				
		sec-butylbenzene		<	0.1	ug/g				
		1,3-dichlorobenzene		<	0.1	ug/g				
		4-isopropyltoluene		<	0.1	ug/g				
		1,4-dichlorobenzene		<	0.1	ug/g				
		1,2-dichlorobenzene		<	0.1	ug/g				
		n-butylbenzene		<	0.1	ug/g				
		1,2-dibromo-3-chloropropane (DBCP)		<	0.1	ug/g				
		1,2,4-trichlorobenzene		<	0.1	ug/g				
		hexachlorobutadiene		<	0.1	ug/g				
		naphthalene		<	0.2	ug/g				
		1,2,3-trichlorobenzene		<	0.1	ug/g				
		dibromofluoromethane SUR			81	%		78	114	
		toluene-D8 SUR			100	%		88	110	
		4-bromofluorobenzene SUR			95	%		86	115	
		a,a,a-trifluorotoluene SUR			111	%		70	130	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260C	MLCS8539	dichlorodifluoromethane		0.8	ug/g	1	80	70	130	
		chloromethane		1.0	ug/g	1	102	70	130	
		vinyl chloride		0.9	ug/g	1	86	70	130	
		bromomethane		0.6	ug/g	1	59 *	70	130	
		chloroethane		1.1	ug/g	1	105	70	130	
		trichlorofluoromethane		1.0	ug/g	1	101	70	130	
		diethyl ether		1.2	ug/g	1	116	70	130	
		acetone	<	2.5	ug/g	1	131			
		1,1-dichloroethene		1.1	ug/g	1	106	70	130	
		methylene chloride		1.1	ug/g	1	110	70	130	
		carbon disulfide		0.7	ug/g	1	75	70	130	
		methyl t-butyl ether (MTBE)		1.1	ug/g	1	109	70	130	
		trans-1,2-dichloroethene		1.1	ug/g	1	108	70	130	
		1,1-dichloroethane		1.0	ug/g	1	102	70	130	
		2-butanone (MEK)		1.2	ug/g	1	124	70	130	
		2,2-dichloropropane		0.9	ug/g	1	94	70	130	
		cis-1,2-dichloroethene		1.0	ug/g	1	104	70	130	
		chloroform		1.0	ug/g	1	99	70	130	
		bromochloromethane		1.0	ug/g	1	96	70	130	
		tetrahydrofuran (THF)		1.3	ug/g	1	127	70	130	
		1,1,1-trichloroethane		1.0	ug/g	1	97	70	130	
		1,1-dichloropropene		1.0	ug/g	1	105	70	130	
		carbon tetrachloride		0.8	ug/g	1	84	70	130	
		1,2-dichloroethane		1.1	ug/g	1	107	70	130	
		benzene		1.1	ug/g	1	107	70	130	
		trichloroethene		1.0	ug/g	1	102	70	130	
		1,2-dichloropropane		1.0	ug/g	1	101	70	130	
		bromodichloromethane		0.8	ug/g	1	83	70	130	
		dibromomethane		1.0	ug/g	1	99	70	130	
		4-methyl-2-pentanone (MIBK)		1.3	ug/g	1	131 *	70	130	
		cis-1,3-dichloropropene		0.9	ug/g	1	88	70	130	
		toluene		1.1	ug/g	1	109	70	130	
		trans-1,3-dichloropropene		0.9	ug/g	1	87	70	130	
		2-hexanone		1.2	ug/g	1	124	70	130	
		1,1,2-trichloroethane		1.0	ug/g	1	104	70	130	
		1,3-dichloropropane		1.0	ug/g	1	104	70	130	
		tetrachloroethene		1.0	ug/g	1	101	70	130	
		dibromochloromethane		0.7	ug/g	1	71	70	130	
		1,2-dibromoethane (EDB)		1.1	ug/g	1	106	70	130	
		chlorobenzene		1.0	ug/g	1	104	70	130	
		1,1,1,2-tetrachloroethane		0.8	ug/g	1	83	70	130	
		ethylbenzene		1.1	ug/g	1	106	70	130	
		m&p-xylenes		2.2	ug/g	2	108	70	130	
		o-xylene		1.1	ug/g	1	109	70	130	
		styrene		1.1	ug/g	1	109	70	130	
		bromoform		0.6	ug/g	1	63 *	70	130	
		isopropylbenzene		1.0	ug/g	1	101	70	130	
		1,1,2,2-tetrachloroethane		1.0	ug/g	1	102	70	130	
		1,2,3-trichloropropane		1.1	ug/g	1	109	70	130	
		n-propylbenzene		1.0	ug/g	1	98	70	130	
		bromobenzene		1.0	ug/g	1	98	70	130	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260C	MLCS8539	1,3,5-trimethylbenzene		1.0	ug/g	1	103	70	130	
		2-chlorotoluene		1.0	ug/g	1	100	70	130	
		4-chlorotoluene		1.0	ug/g	1	103	70	130	
		tert-butylbenzene		1.0	ug/g	1	97	70	130	
		1,2,4-trimethylbenzene		1.0	ug/g	1	101	70	130	
		sec-butylbenzene		1.0	ug/g	1	98	70	130	
		1,3-dichlorobenzene		1.0	ug/g	1	104	70	130	
		4-isopropyltoluene		1.0	ug/g	1	102	70	130	
		1,4-dichlorobenzene		1.0	ug/g	1	103	70	130	
		1,2-dichlorobenzene		1.1	ug/g	1	105	70	130	
		n-butylbenzene		1.0	ug/g	1	99	70	130	
		1,2-dibromo-3-chloropropane (DBCP)		0.8	ug/g	1	78	70	130	
		1,2,4-trichlorobenzene		1.1	ug/g	1	114	70	130	
		hexachlorobutadiene		1.0	ug/g	1	97	70	130	
		naphthalene		1.4	ug/g	1	141 *	70	130	
		1,2,3-trichlorobenzene		1.3	ug/g	1	127	70	130	
		dibromofluoromethane SUR		94	%			78	114	
		toluene-D8 SUR		104	%			88	110	
		4-bromofluorobenzene SUR		101	%			86	115	
		a,a,a-trifluorotoluene SUR		102	%			70	130	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260C	MLCSD8539	dichlorodifluoromethane		0.8	ug/g	1	77	70 130	4	30
		chloromethane		1.0	ug/g	1	97	70 130	4	30
		vinyl chloride		0.9	ug/g	1	85	70 130	1	30
		bromomethane		0.7	ug/g	1	72	70 130	20	30
		chloroethane		1.0	ug/g	1	101	70 130	4	30
		trichlorofluoromethane		1.0	ug/g	1	97	70 130	4	30
		diethyl ether		1.1	ug/g	1	112	70 130	4	30
		acetone	<	2.5	ug/g	1	127		3	30
		1,1-dichloroethene		1.0	ug/g	1	103	70 130	3	30
		methylene chloride		1.1	ug/g	1	107	70 130	3	30
		carbon disulfide		0.7	ug/g	1	72	70 130	3	30
		methyl t-butyl ether (MTBE)		1.0	ug/g	1	104	70 130	5	30
		trans-1,2-dichloroethene		1.1	ug/g	1	105	70 130	3	30
		1,1-dichloroethane		1.0	ug/g	1	100	70 130	1	30
		2-butanone (MEK)		1.1	ug/g	1	115	70 130	7	30
		2,2-dichloropropane		0.9	ug/g	1	89	70 130	5	30
		cis-1,2-dichloroethene		1.0	ug/g	1	101	70 130	3	30
		chloroform		1.0	ug/g	1	96	70 130	3	30
		bromochloromethane		0.9	ug/g	1	91	70 130	5	30
		tetrahydrofuran (THF)		1.1	ug/g	1	110	70 130	14	30
		1,1,1-trichloroethane		0.9	ug/g	1	94	70 130	4	30
		1,1-dichloropropene		1.0	ug/g	1	101	70 130	4	30
		carbon tetrachloride		0.8	ug/g	1	81	70 130	3	30
		1,2-dichloroethane		1.0	ug/g	1	104	70 130	3	30
		benzene		1.1	ug/g	1	105	70 130	2	30
		trichloroethene		1.0	ug/g	1	101	70 130	2	30
		1,2-dichloropropane		1.0	ug/g	1	98	70 130	2	30
		bromodichloromethane		0.8	ug/g	1	80	70 130	4	30
		dibromomethane		0.9	ug/g	1	93	70 130	6	30
		4-methyl-2-pentanone (MIBK)		1.1	ug/g	1	113	70 130	15	30
		cis-1,3-dichloropropene		0.9	ug/g	1	85	70 130	3	30
		toluene		1.1	ug/g	1	106	70 130	3	30
		trans-1,3-dichloropropene		0.8	ug/g	1	83	70 130	4	30
		2-hexanone		1.1	ug/g	1	111	70 130	11	30
		1,1,2-trichloroethane		1.0	ug/g	1	98	70 130	6	30
		1,3-dichloropropane		1.0	ug/g	1	102	70 130	2	30
		tetrachloroethene		1.0	ug/g	1	100	70 130	1	30
		dibromochloromethane		0.7	ug/g	1	69 *	70 130	3	30
		1,2-dibromoethane (EDB)		1.0	ug/g	1	100	70 130	6	30
		chlorobenzene		1.0	ug/g	1	105	70 130	1	30
		1,1,1,2-tetrachloroethane		0.8	ug/g	1	81	70 130	4	30
		ethylbenzene		1.0	ug/g	1	104	70 130	2	30
		m&p-xylenes		2.1	ug/g	2	107	70 130	1	30
		o-xylene		1.1	ug/g	1	107	70 130	1	30
		styrene		1.1	ug/g	1	108	70 130	1	30
		bromoform		0.6	ug/g	1	58 *	70 130	8	30
		isopropylbenzene		1.0	ug/g	1	100	70 130	1	30
		1,1,2,2-tetrachloroethane		0.9	ug/g	1	95	70 130	7	30
		1,2,3-trichloropropane		1.0	ug/g	1	101	70 130	8	30
		n-propylbenzene		1.0	ug/g	1	97	70 130	1	30
		bromobenzene		1.0	ug/g	1	97	70 130	2	30

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260C	MLCSD8539	1,3,5-trimethylbenzene		1.0	ug/g	1	103	70 130	0	30
		2-chlorotoluene		1.0	ug/g	1	100	70 130	0	30
		4-chlorotoluene		1.0	ug/g	1	103	70 130	0	30
		tert-butylbenzene		1.0	ug/g	1	99	70 130	1	30
		1,2,4-trimethylbenzene		1.0	ug/g	1	100	70 130	1	30
		sec-butylbenzene		1.0	ug/g	1	96	70 130	2	30
		1,3-dichlorobenzene		1.0	ug/g	1	102	70 130	2	30
		4-isopropyltoluene		1.0	ug/g	1	100	70 130	3	30
		1,4-dichlorobenzene		1.0	ug/g	1	101	70 130	2	30
		1,2-dichlorobenzene		1.0	ug/g	1	102	70 130	3	30
		n-butylbenzene		1.0	ug/g	1	98	70 130	1	30
		1,2-dibromo-3-chloropropane (DBCP)		0.7	ug/g	1	66 *	70 130	17	30
		1,2,4-trichlorobenzene		1.1	ug/g	1	106	70 130	8	30
		hexachlorobutadiene		0.9	ug/g	1	95	70 130	2	30
		naphthalene		1.2	ug/g	1	124	70 130	13	30
		1,2,3-trichlorobenzene		1.2	ug/g	1	116	70 130	9	30
		dibromofluoromethane SUR		94	%			78 114		
		toluene-D8 SUR		101	%			88 110		
		4-bromofluorobenzene SUR		104	%			86 115		
		a,a,a-trifluorotoluene SUR		100	%			70 130		



Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit		
SW3546/8082A	BLK8542	PCB-1016		<	0.1	ug/g						
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260		<	0.1	ug/g						
		tetrachloro-m-xylene SUR			109	%			30	150		
		decachlorobiphenyl SUR			90	%			30	150		
SW3546/8082A	LCS8542	PCB-1016			2.0	ug/g	2	99	40	140		
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260			2.2	ug/g	2	111	40	140		
		tetrachloro-m-xylene SUR			115	%			30	150		
		decachlorobiphenyl SUR			98	%			30	150		
SW3546/8082A	LCS8542	PCB-1016			2.2	ug/g	2	109	40	140	10	30
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260			2.5	ug/g	2	123	40	140	10	30
		tetrachloro-m-xylene SUR			120	%			30	150		
		decachlorobiphenyl SUR			103	%			30	150		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270D	BLK8547	N-nitrosodimethylamine		<	0.20	ug/g				
		aniline		<	0.20	ug/g				
		phenol		<	0.20	ug/g				
		2-chlorophenol		<	0.50	ug/g				
		bis(2-chloroethyl)ether		<	0.20	ug/g				
		1,3-dichlorobenzene		<	0.20	ug/g				
		1,4-dichlorobenzene		<	0.20	ug/g				
		1,2-dichlorobenzene		<	0.20	ug/g				
		benzyl alcohol		<	0.20	ug/g				
		2-methylphenol		<	0.20	ug/g				
		bis(2-chloroisopropyl) ether		<	0.20	ug/g				
		hexachloroethane		<	0.20	ug/g				
		N-nitroso-di-N-propylamine		<	0.20	ug/g				
		4-methylphenol		<	0.20	ug/g				
		nitrobenzene		<	0.20	ug/g				
		isophorone		<	0.50	ug/g				
		2-nitrophenol		<	0.20	ug/g				
		2,4-dimethylphenol		<	0.20	ug/g				
		bis(2-chloroethoxy)methane		<	0.50	ug/g				
		2,4-dichlorophenol		<	0.50	ug/g				
		1,2,4-trichlorobenzene		<	0.50	ug/g				
		naphthalene		<	0.050	ug/g				
		benzoic acid		<	5.0	ug/g				
		4-chloroaniline		<	0.20	ug/g				
		hexachlorobutadiene		<	0.20	ug/g				
		4-chloro-3-methylphenol		<	0.20	ug/g				
		2-methylnaphthalene		<	0.050	ug/g				
		hexachlorocyclopentadiene		<	1.0	ug/g				
		2,4,6-trichlorophenol		<	0.20	ug/g				
		2,4,5-trichlorophenol		<	0.20	ug/g				
		2-chloronaphthalene		<	0.50	ug/g				
		2-nitroaniline		<	0.20	ug/g				
		acenaphthylene		<	0.050	ug/g				
		dimethylphthalate		<	0.50	ug/g				
		2,6-dinitrotoluene		<	0.20	ug/g				
		2,4-dinitrotoluene		<	0.20	ug/g				
		acenaphthene		<	0.050	ug/g				
		3-nitroaniline		<	0.20	ug/g				
		2,4-dinitrophenol		<	5.0	ug/g				
		dibenzofuran		<	0.050	ug/g				
		4-nitrophenol		<	1.0	ug/g				
		fluorene		<	0.050	ug/g				
		diethyl phthalate		<	0.50	ug/g				
		4-chlorophenyl phenyl ether		<	0.50	ug/g				
		4-nitroaniline		<	0.50	ug/g				
		4,6-dinitro-2-methylphenol		<	2.0	ug/g				
		azobenzene		<	0.20	ug/g				
		N-nitrosodiphenylamine		<	0.20	ug/g				
		4-bromophenyl phenyl ether		<	0.20	ug/g				
		hexachlorobenzene		<	0.20	ug/g				
		pentachlorophenol		<	1.0	ug/g				

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270D	BLK8547	phenanthrene		< 0.050	ug/g					
		anthracene		< 0.050	ug/g					
		carbazole		< 0.20	ug/g					
		di-n-butylphthalate		< 0.50	ug/g					
		fluoranthene		< 0.050	ug/g					
		benzidine		< 3.0	ug/g					
		pyrene		< 0.050	ug/g					
		butyl benzyl phthalate		< 0.50	ug/g					
		benzo(a)anthracene		< 0.050	ug/g					
		chrysene		< 0.050	ug/g					
		3,3'-dichlorobenzidine		< 3.0	ug/g					
		bis(2-ethylhexyl)phthalate		< 0.50	ug/g					
		di-n-octyl phthalate		< 0.20	ug/g					
		benzo(b)fluoranthene		< 0.050	ug/g					
		benzo(k)fluoranthene		< 0.050	ug/g					
		benzo(a)pyrene		< 0.020	ug/g					
		indeno(1,2,3-cd)pyrene		< 0.050	ug/g					
		dibenzo(a,h)anthracene		< 0.050	ug/g					
		benzo(g,h,i)perylene		< 0.050	ug/g					
		2-fluorophenol SUR		69	%			21	100	
		phenol-D5 SUR		72	%			10	102	
		2,4,6-tribromophenol SUR		78	%			10	123	
		nitrobenzene-D5 SUR		69	%			35	114	
		2-fluorobiphenyl SUR		69	%			43	116	
		p-terphenyl-D14 SUR		86	%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270D	LCS8547	N-nitrosodimethylamine		2.2	ug/g	4	54	40	140	
		aniline		1.7	ug/g	4	43	40	140	
		phenol		2.9	ug/g	4	72	30	130	
		2-chlorophenol		2.7	ug/g	4	66	30	130	
		bis(2-chloroethyl)ether		2.9	ug/g	4	73	40	140	
		1,3-dichlorobenzene		2.3	ug/g	4	58	40	140	
		1,4-dichlorobenzene		2.1	ug/g	4	53	40	140	
		1,2-dichlorobenzene		2.5	ug/g	4	62	40	140	
		benzyl alcohol		2.8	ug/g	4	69	30	130	
		2-methylphenol		2.8	ug/g	4	70	30	130	
		bis(2-chloroisopropyl) ether		2.5	ug/g	4	62	40	140	
		hexachloroethane		2.4	ug/g	4	60	40	140	
		N-nitroso-di-N-propylamine		2.6	ug/g	4	66	40	140	
		4-methylphenol		2.8	ug/g	4	71	30	130	
		nitrobenzene		2.7	ug/g	4	67	40	140	
		isophorone		2.7	ug/g	4	68	40	140	
		2-nitrophenol		2.5	ug/g	4	63	30	130	
		2,4-dimethylphenol		2.6	ug/g	4	66	30	130	
		bis(2-chloroethoxy)methane		2.8	ug/g	4	71	40	140	
		2,4-dichlorophenol		2.6	ug/g	4	66	30	130	
		1,2,4-trichlorobenzene		2.4	ug/g	4	60	40	140	
		naphthalene		2.5	ug/g	4	62	40	140	
		benzoic acid	<	5.0	ug/g					
		4-chloroaniline		2.1	ug/g	4	52	40	140	
		hexachlorobutadiene		2.3	ug/g	4	57	40	140	
		4-chloro-3-methylphenol		3.1	ug/g	4	77	30	130	
		2-methylnaphthalene		2.7	ug/g	4	68	40	140	
		hexachlorocyclopentadiene		2.1	ug/g	4	52	40	140	
		2,4,6-trichlorophenol		2.8	ug/g	4	70	30	130	
		2,4,5-trichlorophenol		2.8	ug/g	4	71	30	130	
		2-chloronaphthalene		2.6	ug/g	4	64	40	140	
		2-nitroaniline		3.3	ug/g	4	81	40	140	
		acenaphthylene		3.0	ug/g	4	74	40	140	
		dimethylphthalate		3.2	ug/g	4	80	40	140	
		2,6-dinitrotoluene		3.1	ug/g	4	77	40	140	
		2,4-dinitrotoluene		3.2	ug/g	4	81	40	140	
		acenaphthene		2.7	ug/g	4	67	40	140	
		3-nitroaniline		2.9	ug/g	4	72	40	140	
		2,4-dinitrophenol	<	5.0	ug/g					
		dibenzofuran		2.9	ug/g	4	74	40	140	
		4-nitrophenol		4.2	ug/g	4	106	30	130	
		fluorene		3.2	ug/g	4	79	40	140	
		diethyl phthalate		3.4	ug/g	4	86	40	140	
		4-chlorophenyl phenyl ether		2.9	ug/g	4	72	40	140	
		4-nitroaniline		3.3	ug/g	4	82	40	140	
		4,6-dinitro-2-methylphenol		2.9	ug/g					
		azobenzene		3.1	ug/g	4	77	40	140	
		di-n-butylphthalate		3.1	ug/g	4	78	40	140	
		fluoranthene		3.0	ug/g	4	74	40	140	
		benzidine	<	3.0	ug/g					
		pyrene		2.9	ug/g	4	74	40	140	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270D	LCS8547	butyl benzyl phthalate		3.5	ug/g	4	88	40	140	
		benzo(a)anthracene		3.2	ug/g	4	81	40	140	
		chrysene		3.3	ug/g	4	82	40	140	
		3,3'-dichlorobenzidine	<	3.0	ug/g					
		bis(2-ethylhexyl)phthalate		3.1	ug/g	4	77	40	140	
		di-n-octyl phthalate		3.2	ug/g	4	80	40	140	
		benzo(b)fluoranthene		2.9	ug/g	4	72	40	140	
		benzo(k)fluoranthene		3.2	ug/g	4	81	40	140	
		benzo(a)pyrene		3.2	ug/g	4	79	40	140	
		indeno(1,2,3-cd)pyrene		3.3	ug/g	4	82	40	140	
		dibenzo(a,h)anthracene		3.2	ug/g	4	80	40	140	
		benzo(g,h,i)perylene		3.2	ug/g	4	80	40	140	
		2-fluorophenol SUR		70	%			21	100	
		phenol-D5 SUR		73	%			10	102	
		2,4,6-tribromophenol SUR		86	%			10	123	
		nitrobenzene-D5 SUR		70	%			35	114	
		2-fluorobiphenyl SUR		72	%			43	116	
		p-terphenyl-D14 SUR		87	%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3005A6010C	BLK8553	Lead		< 0.01	mg/L					
SW3005A6010C	LCS8553	Lead		0.50	mg/L	0.5	101	80 120		
SW3005A6010C	LCS8553	Lead		0.52	mg/L	0.5	104	80 120	3	20
SW3005A6010C	MS8553	Lead	35489-009	5.6	mg/L	5	104	75 125		
SW3051A6010C	BLK8549	Silver		< 0.25	ug/g					
		Arsenic		< 0.50	ug/g					
		Barium		< 2.5	ug/g					
		Cadmium		< 0.20	ug/g					
		Chromium		< 2.5	ug/g					
		Lead		< 0.50	ug/g					
		Selenium		< 2.5	ug/g					
SW3051A6010C	CRM8549	Silver		48	ug/g	38		25.1 51.9		
		Arsenic		430	ug/g	400		292 508		
		Barium		23	ug/g	25		0 51.3		
		Cadmium		16	ug/g	15		8.71 22		
		Chromium		14	ug/g	14		2.45 24.7		
		Lead		5500	ug/g	5100		3750 6470		
		Selenium		8.1	ug/g	6.6		0 18.4		
SW3051A6010C	CRMD8549	Silver		46	ug/g	38		25.1 51.9	5	35
		Arsenic		430	ug/g	400		292 508	1	35
		Barium		25	ug/g	25		0 51.3	11	35
		Cadmium		16	ug/g	15		8.71 22	4	35
		Chromium		15	ug/g	14		2.45 24.7	6	35
		Lead		5600	ug/g	5100		3750 6470	1	35
		Selenium		7.7	ug/g	6.6		0 18.4	5	35
SW3051A6010C	DUP8549	Arsenic	35527-001	4.7	ug/g				8	35
		Selenium	35527-001	< 9.5	ug/g				53	35
SW3051A6010C	MS8549	Arsenic	35527-001	99	ug/g	101	93	75 125		
		Selenium	35527-001	89	ug/g	101	86	75 125		
SW7471B	BLK8557	Mercury		< 0.14	ug/g					
SW7471B	CRM8557	Mercury		1.7	ug/g	1.1		0.49 1.76		
SW7471B	CRMD8557	Mercury		1.7	ug/g	1.1		0.49 1.76	0	35
SW7471B	MS8557	Mercury	35527-001	0.85	ug/g	0.825	89	80 120		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
E9014	LCS1600167	Cyanide, total		12	ug/g	12	97	75 125		
E9014	LCSD1600167	Cyanide, total		12	ug/g	12	98	75 125	1	20
E9014	PB1600167	Cyanide, total		< 0.5	ug/g					
SM4500-S2 D+F	LCS1600162	Sulfide-soluble		9.2	ug/g	10	92	90 110		
SM4500-S2 D+F	LCSD1600162	Sulfide-soluble		9.1	ug/g	10	91	90 110		20
SM4500-S2 D+F	PB1600162	Sulfide-soluble		< 0.4	ug/g					
SW9045C	DUP1600161	pH	35489-006	9.6	pH					

# Absolute Resource

associates



124 Heritage Avenue #16  
 Portsmouth, NH 03801  
 603-436-2001  
 absoluteresourceassociates.com

## CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

# 35489

Company Name: <b>Woodard &amp; Curran</b>		Project Name: <b>Canal Plaza</b>	
Company Address: <b>11 Hutchins Dr., Portland, ME</b>		Project #: <b>229311</b>	
Report To: <b>Jedd Steinglass 04102</b>		Project Location: NH MA ME VT NY Other	
Phone #: <b>(207) 756-2319</b>		Protocol: FICRA SDWA NPDES MCP NHDDES OTHER	
Invoice to Email: <b>jsteinglass@woodardcurran.com</b>		Reporting Limits: QAPP GW-1 S-1 EPA DW Other	
<input type="checkbox"/> Hard Copy Invoice Required		Quote # _____ <input type="checkbox"/> NH Reimbursement Pricing	
		PO # _____	

### ANALYSIS REQUEST

<input checked="" type="checkbox"/> VOC 8260	<input type="checkbox"/> VOC 8260 MDES	<input type="checkbox"/> VOC 8260 MADEP	<input type="checkbox"/> VOC 824	<input type="checkbox"/> VOC BTEX	<input type="checkbox"/> MSE, only	<input type="checkbox"/> VOC 8021VT	<input type="checkbox"/> VPH MADEP	<input type="checkbox"/> MEGRO	<input type="checkbox"/> GRO 8015	<input type="checkbox"/> 1,4-Dioxane	<input type="checkbox"/> VOC 824.2	<input type="checkbox"/> VOC 524.2 NH List	<input type="checkbox"/> Gases-List:	<input type="checkbox"/> TPH	<input type="checkbox"/> DR0 8015	<input type="checkbox"/> MEDRO	<input type="checkbox"/> EPH MADEP	<input type="checkbox"/> TPH Fingerprint	<input type="checkbox"/> B270PAH	<input checked="" type="checkbox"/> B270ABN	<input type="checkbox"/> 625	<input type="checkbox"/> EDB	<input checked="" type="checkbox"/> 8082 PCB	<input type="checkbox"/> 8081 Pesticides	<input type="checkbox"/> 608 Pest/PCB w/metals	<input type="checkbox"/> 08G 1664	<input type="checkbox"/> Mineral O&G SM6520F	<input type="checkbox"/> pH	<input type="checkbox"/> BOD	<input type="checkbox"/> Conductivity	<input type="checkbox"/> Turbidity	<input type="checkbox"/> TSS	<input type="checkbox"/> TDS	<input type="checkbox"/> TS	<input type="checkbox"/> TVS	<input type="checkbox"/> Alkalinity	<input type="checkbox"/> PCRA Metals	<input type="checkbox"/> Priority Pollutant Metals	<input type="checkbox"/> TAL Metals	<input type="checkbox"/> Hardness	<input checked="" type="checkbox"/> Total Metals-List: <b>PCRA 8 per table 1/15/16</b>	<input type="checkbox"/> Dissolved Metals-List:	<input type="checkbox"/> Ammonia	<input type="checkbox"/> COD	<input type="checkbox"/> TRN	<input type="checkbox"/> TN	<input type="checkbox"/> TON	<input type="checkbox"/> TOC	<input type="checkbox"/> T-Phosphorus	<input type="checkbox"/> Phenols	<input type="checkbox"/> Bacteria P/A	<input type="checkbox"/> Bacteria MPN	<input type="checkbox"/> Cyanide	<input type="checkbox"/> Sulfide	<input type="checkbox"/> Nitrate + Nitrite	<input type="checkbox"/> Ortho P	<input type="checkbox"/> Nitrate	<input type="checkbox"/> Nitrite	<input type="checkbox"/> Chloride	<input type="checkbox"/> Sulfate	<input type="checkbox"/> Bromide	<input type="checkbox"/> Fluoride	<input checked="" type="checkbox"/> Corrosivity	<input checked="" type="checkbox"/> Reactive CN	<input checked="" type="checkbox"/> Reactive S-	<input checked="" type="checkbox"/> Ignitibility/FP	<input checked="" type="checkbox"/> TCLP Metals	<input type="checkbox"/> TCLP VOC	<input type="checkbox"/> TCLP SVOC	<input type="checkbox"/> TCLP Pesticide	<input type="checkbox"/> Pesticide <b>PCRA 8</b>	Subcontract: <input type="checkbox"/> Grain Size <input type="checkbox"/> Herbicides <input type="checkbox"/> Formaldehyde	<b>% Solids, Asbestos, pH as Corrosivity</b>	<b>TOX *w/ABN</b>	Grab (S) or Composite (C)
--	--	---	----------------------------------	-----------------------------------	------------------------------------	-------------------------------------	------------------------------------	--------------------------------	-----------------------------------	--------------------------------------	------------------------------------	--	--------------------------------------	------------------------------	-----------------------------------	--------------------------------	------------------------------------	--	----------------------------------	---	------------------------------	------------------------------	--	--	--	-----------------------------------	--	-----------------------------	------------------------------	---------------------------------------	------------------------------------	------------------------------	------------------------------	-----------------------------	------------------------------	-------------------------------------	--------------------------------------	--	-------------------------------------	-----------------------------------	--	---	----------------------------------	------------------------------	------------------------------	-----------------------------	------------------------------	------------------------------	---------------------------------------	----------------------------------	---------------------------------------	---------------------------------------	----------------------------------	----------------------------------	--	----------------------------------	----------------------------------	----------------------------------	-----------------------------------	----------------------------------	----------------------------------	-----------------------------------	---	---	---	---	---	-----------------------------------	------------------------------------	---	--	--	--	-------------------	---------------------------

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix			Preservation Method					Sampling																													
			WATER	SOLID	OTHER	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	MeOH	VOL	DATE	TIME	SAMPLER																										
			35489-01	B-6 (0.5-2.5')	5		X					X		1-12-16	0750	DD																								
-02	B-4 (0.6-7')	5		X				X		1-12-16	0840	DD																												
-03	B-5 (0.5-2.8')	5		X				X		1-12-16	1000	DD																												
-04	B-3 (0.5-4.5')	5		X				X		1-12-16	1100	DD																												
-05	B-2 (0.6-4.6')	5		X				X		1-12-16	1230	DD																												
-06	B-1 (1'-6')	5		X				X		1-12-16	1345	DD																												

**TAT REQUESTED**

Priority (24 hr)\*

Expedited (48 hr)\*

Standard (10 Business Days)

\*Date Needed \_\_\_\_\_

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

**SPECIAL INSTRUCTIONS**

*Homogenize samples in preparation for analysis.*

*TCLP for RCRA 8 metals*

**REPORTING INSTRUCTIONS**  PDF (e-mail address) \_\_\_\_\_

HARD COPY REQUIRED  FAX (FAX#) \_\_\_\_\_

RECEIVED ON ICE  YES  NO

TEMPERATURE 2 °C

## CUSTODY RECORD

QSD-01 Revision 10/14/15

Relinquished by Sampler: <i>J. Curran</i>	Date: <u>1/14/16</u> Time: <u>1100</u>	Received by: <i>J. Curran</i>	Date: <u>1/14/16</u> Time: <u>1100</u>
Relinquished by: <i>J. Curran</i>	Date: <u>1/14/16</u> Time: <u>1410</u>	Received by:	Date: _____ Time: _____
Relinquished by:	Date: _____ Time: _____	Received by Laboratory: <i>Albion</i>	Date: <u>1/14/16</u> Time: <u>14:10</u>





## Asbestos Identification Laboratory

165 New Boston St., Ste 271  
Woburn, MA 01801  
781-932-9600

Web: [www.asbestosidentificationlab.com](http://www.asbestosidentificationlab.com)  
Email: [mikemanning@asbestosidentificationlab.com](mailto:mikemanning@asbestosidentificationlab.com)

Batch: 11061



January 21, 2016

Aaron DeWees  
Absolute Resource Associates  
124 Heritage Ave  
Apt 10  
Portsmouth, NH 03801

**Project Number:**  
**Project Name:** 35489

**Date Sampled:** 2016-01-12  
**Work Received:** 2016-01-19

**Analysis Method:** PLM POINT COUNT

Dear Aaron DeWees,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project.

The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations Department of Health Certification: AAL-121

Thank you Aaron DeWees for your business.

Michael Manning  
Owner/Director

January 21, 2016

Aaron DeWees  
Absolute Resource Associates  
124 Heritage Ave  
Apt 10  
Portsmouth, NH 03801

**Project Number:**  
**Project Name:** 35489

**Date Sampled:** 2016-01-12  
**Work Received:** 2016-01-19

**Analysis Method:** PLM POINT COUNT

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
35989-01	B-6(0.5'-2.5')		brown	Non-Fibrous 100	None Detected
119675					
35989-02	B-4(0.6'-7')		brown	Non-Fibrous 100	None Detected
119676					
35989-03	B-5(0.8'-2.8')		brown	Non-Fibrous 100	None Detected
119677					
35989-04	B-3(0.5'-4.5')		brown	Non-Fibrous 100	None Detected
119678					
35989-05	B-2(0.6'-4.6')		brown	Cellulose 2 Non-Fibrous 98	None Detected
119679					
35989-06	B-1(1'-6')		brown	Non-Fibrous 100	None Detected
119680					

Thursday 21 January  
Analyzed by:



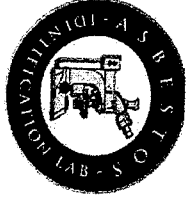
End of Report  
**Batch:** 11061

Page 1 of 1

BATCH # 11061

Client: ARRA  
 Address: Portsmouth, NH  
 Project Site & #: 35489  
 Phone / FAX#: 603-436-2001  
 Contact: Aaron Delves  
 Relinquish by date: 11/8/16 David Paul  
 Received by/date: Carl Pa 11/9/16  
 # of Samples Received: 6

**CHAIN OF CUSTODY**  
 EPA/600/R-93/116  
**Asbestos Identification Lab**  
 165-U New Boston St.  
 Suite 271  
 Woburn, MA 01801  
 (781)932-9600  
 www.asbestosidentificationlab.com



Date Sampled: 11/21/16  
 Method for the determination of asbestos in bulk building materials.

Turnaround Time      Sample Method

Rush       Bulk

Same Day       Soil

Next Day       Wipe

Two Day       Point Count

Stop on 1st Positive?      Yes/No

Notify Method: Mail/E-Mail/Verbal

Analyzed by: Michael

Date: 11/21/16

Lab ID# (Lab Use Only)	Field ID/Sample Date (Client Reference)	Material / Location	Stereo Scope				Optical Properties						Non-Asbestos Percentage (%)													
			Temp In Celsius =	% of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	Fiberglass	Mineral Wood	Cellulose	Hair	Synthetic	Other	Non-Fibrous				
119675		B-6(10.5'-2.5')																								
		Location 35489-01																								
		Material B-4(10.6'-7.1')																								
		Location 35489-02																								
		Material B-5(10.8'-2.8')																								
		Location 35489-03																								

Material	Location	Material	Location	Material	Location	Material	Location	Material	Location	Material	Location	Material	Location	Material	Location	Material	Location	Material	Location	Material	Location	Material	Location	Material	Location	Material	Location	

Lab ID# (Lab Use Only)			Field ID/Sample Date (Client Reference)		Temp In Celsius = 21	Stereo Scope					Optical Properties							Non-Asbestos Percentage (%)							
Material / Location					% of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI	Fiberglass	Mineral Wood	Cellulose	Hair	Synthetic	Other	Non-Fibrous	
78		B-3 (0.5'-4.5')	Material	Location						Chrysotile															
										Amosite															
										Crocidolite															
										Tremolite															
										Anthrophyllite															
										Actinolite															
										Chrysotile															
										Amosite															
										Crocidolite															
										Tremolite															
										Anthrophyllite															
										Actinolite															
										Chrysotile															
										Amosite															
										Crocidolite															
										Tremolite															
										Anthrophyllite															
										Actinolite															
										Chrysotile															
										Amosite															
										Crocidolite															
										Tremolite															
										Anthrophyllite															
										Actinolite															
										Chrysotile															
										Amosite															
										Crocidolite															
										Tremolite															
										Anthrophyllite															
										Actinolite															
										Chrysotile															
										Amosite															
										Crocidolite															
										Tremolite															
										Anthrophyllite															
										Actinolite															
										Chrysotile															
										Amosite															
										Crocidolite															
										Tremolite															
										Anthrophyllite															
										Actinolite															
										Chrysotile															
										Amosite															
										Crocidolite															
										Tremolite															
										Anthrophyllite															
										Actinolite															
										Chrysotile															
										Amosite															
										Crocidolite															
										Tremolite															
										Anthrophyllite															
										Actinolite															
										Chrysotile															
										Amosite															
										Crocidolite															
										Tremolite															
										Anthrophyllite															
										Actinolite															
										Chrysotile															
										Amosite															
										Crocidolite															
										Tremolite															
										Anthrophyllite															
										Actinolite															
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										Crocidolite															
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										Crocidolite															
										Tremolite															
										Anthrophyllite															
										Actinolite															
										Chrysotile															
										Amosite															
										Crocidolite															
										Tremolite															
										Anthrophyllite															
										Actinolite															
										Chrysotile															

**Absolute Resource**  
associates



124 Heritage Avenue #16  
Portsmouth, NH 03801  
603-436-2001  
absoluteresourceassociates.com

**CHAIN-OF-CUSTODY RECORD  
AND ANALYSIS REQUEST**

35489

Company Name: Woodard & Curran  
Company Address: 11 Hutchins Dr., Portland, ME  
Report To: Jedd Steinglass 04102  
Phone #: (207) 756-2319  
Invoice to Email: jsteinglass@woodardcurran.com  
 Hard Copy Invoice Required

Project Name: Canal Plaza  
Project #: 229311  
Project Location: NH MA ME VT NY Other  
Protocol: FICRA SDWA NPDES MCP NHDDES OTHER  
Reporting Limits: QAPP GW-1 S-1 EPA DW Other  
Quote # \_\_\_\_\_  NH Reimbursement Pricing  
PO # \_\_\_\_\_

**ANALYSIS REQUEST**

<input checked="" type="checkbox"/> VOC 8260	<input type="checkbox"/> VOC 8260 MDES	<input type="checkbox"/> VOC 8260 MADEP	<input type="checkbox"/> VOC 8260	<input type="checkbox"/> VOC BTEX	<input type="checkbox"/> MSE, only	<input type="checkbox"/> VOC 9021VT	<input type="checkbox"/> VOC 824	<input type="checkbox"/> VOC BTEX	<input type="checkbox"/> MBE, only	<input type="checkbox"/> VOC 9021VT	<input type="checkbox"/> VPH MADEP	<input type="checkbox"/> MEGRO	<input type="checkbox"/> GRO 8015	<input type="checkbox"/> 1,4-Dioxane	<input type="checkbox"/> VOC 524.2	<input type="checkbox"/> VOC 524.2 NH List	<input type="checkbox"/> Gases-List:	<input type="checkbox"/> TPH	<input type="checkbox"/> DR0 8015	<input type="checkbox"/> MEDRO	<input type="checkbox"/> EPH MADEP	<input type="checkbox"/> TPH Fingerprint	<input type="checkbox"/> 8270PAH	<input checked="" type="checkbox"/> 8270ABN	<input type="checkbox"/> 625	<input type="checkbox"/> EDB	<input checked="" type="checkbox"/> 8082 PCB	<input type="checkbox"/> 8081 Pesticides	<input type="checkbox"/> 608 Pest/PCB w/metals	<input type="checkbox"/> 0&G 1664	<input type="checkbox"/> Mineral O&G SM6520F	<input type="checkbox"/> pH	<input type="checkbox"/> BOD	<input type="checkbox"/> Conductivity	<input type="checkbox"/> Turbidity	<input type="checkbox"/> TSS	<input type="checkbox"/> TDS	<input type="checkbox"/> TS	<input type="checkbox"/> TVS	<input type="checkbox"/> Alkalinity	<input type="checkbox"/> PCRA Metals	<input type="checkbox"/> Priority Pollutant Metals	<input type="checkbox"/> TAL Metals	<input type="checkbox"/> Hardness	<input checked="" type="checkbox"/> Total Metals-List: <u>PCRA 8 metals 1/15/16</u>	<input type="checkbox"/> Dissolved Metals-List:	<input type="checkbox"/> Ammonia	<input type="checkbox"/> COD	<input type="checkbox"/> TRN	<input type="checkbox"/> TN	<input type="checkbox"/> TON	<input type="checkbox"/> TOC	<input type="checkbox"/> T-Phosphorus	<input type="checkbox"/> Phenols	<input type="checkbox"/> Bacteria P/A	<input type="checkbox"/> Bacteria MPN	<input type="checkbox"/> Cyanide	<input type="checkbox"/> Sulfide	<input type="checkbox"/> Nitrate + Nitrite	<input type="checkbox"/> Ortho P	<input type="checkbox"/> Nitrate	<input type="checkbox"/> Nitrite	<input type="checkbox"/> Chloride	<input type="checkbox"/> Sulfate	<input type="checkbox"/> Bromide	<input type="checkbox"/> Fluoride	<input checked="" type="checkbox"/> Corrosivity	<input checked="" type="checkbox"/> Reactive CN	<input checked="" type="checkbox"/> Reactive S-	<input checked="" type="checkbox"/> Ignitibility/FP	<input checked="" type="checkbox"/> TCLP Metals	<input type="checkbox"/> TCLP VOC	<input type="checkbox"/> TCLP SVOC	<input type="checkbox"/> TCLP Pesticide	<input type="checkbox"/> Pesticide <u>PCRA 8</u>	<input type="checkbox"/> Subcontract: Grain Size	<input type="checkbox"/> Herbicides	<input type="checkbox"/> Formaldehyde	<input type="checkbox"/> % Solids, Asbestos, pH as Corrosivity	<input type="checkbox"/> TOX *w/ABN	<input type="checkbox"/> Grab (G) or Composite (C)
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Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix			Preservation Method					Sampling			
			WATER	SOLID	OTHER	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	MeOH	VOL	DATE	TIME	SAMPLER
35489-01	B-6 (0.5-2.5')	5		X					X		1-12-16	0750	DD	1
-02	B-4 (0.6-7')	5		X					X		1-12-16	0840	DD	1
-03	B-5 (0.5-2.8')	5		X					X		1-12-16	1000	DD	1
-04	B-3 (0.5-4.5')	5		X					X		1-12-16	1100	DD	1
-05	B-2 (0.6-4.6')	5		X					X		1-12-16	1230	DD	1
-06	B-1 (1'-6')	5		X					X		1-12-16	1345	DD	1

**TAT REQUESTED**  
Priority (24 hr)\*   
Expedited (48 hr)\*   
Standard (10 Business Days)   
\*Date Needed \_\_\_\_\_

**SPECIAL INSTRUCTIONS**  
Homogenize samples in preparation for analysis.  
TCLP for PCRA 8 metals

**REPORTING INSTRUCTIONS**  PDF (e-mail address) \_\_\_\_\_  
 HARD COPY REQUIRED  FAX (FAX#) \_\_\_\_\_

RECEIVED ON ICE  YES  NO  
TEMPERATURE 2 °C

**CUSTODY RECORD**  
QSD-01 Revision 10/14/15

Relinquished by Sampler: <u>[Signature]</u>	Date: <u>1/14/16</u> Time: <u>1100</u>	Received by: <u>[Signature]</u>	Date: <u>1/14/16</u> Time: <u>1100</u>
Relinquished by: <u>[Signature]</u>	Date: <u>1/14/16</u> Time: <u>1410</u>	Received by:	Date: _____ Time: _____
Relinquished by:	Date: _____ Time: _____	Received by Laboratory: <u>[Signature]</u>	Date: <u>1/14/16</u> Time: <u>14:10</u>

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Nashville  
2960 Foster Creighton Drive  
Nashville, TN 37204  
Tel: (615)726-0177

TestAmerica Job ID: 490-95934-1  
TestAmerica Sample Delivery Group: 35489  
Client Project/Site: TOX

For:  
Absolute Resource Associates  
124 Heritage Ave  
Unit 16  
Portsmouth, New Hampshire 03801

Attn: Aaron DeWees



Authorized for release by:  
1/21/2016 4:29:41 PM

Ken Hayes, Project Manager II  
(615)301-5035  
[ken.hayes@testamericainc.com](mailto:ken.hayes@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-95934-1	35489-01	Solid	01/12/16 07:50	01/19/16 13:00
490-95934-2	35489-02	Solid	01/12/16 08:40	01/19/16 13:00
490-95934-3	35489-03	Solid	01/12/16 10:00	01/19/16 13:00
490-95934-4	35489-04	Solid	01/12/16 11:00	01/19/16 13:00
490-95934-5	35489-05	Solid	01/12/16 12:30	01/19/16 13:00
490-95934-6	35489-06	Solid	01/12/16 13:45	01/19/16 13:00

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# Case Narrative

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

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**Job ID: 490-95934-1**

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**Laboratory: TestAmerica Nashville**

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**Narrative**

**Job Narrative  
490-95934-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 1/19/2016 1:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.1° C.

**General Chemistry**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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## Definitions/Glossary

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

**Client Sample ID: 35489-01**

**Date Collected: 01/12/16 07:50**

**Date Received: 01/19/16 13:00**

**Lab Sample ID: 490-95934-1**

**Matrix: Solid**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Extractable Organic	ND		50.0		mg/Kg		01/20/16 12:00	01/21/16 09:00	1

# Client Sample Results

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

**Client Sample ID: 35489-02**

**Date Collected: 01/12/16 08:40**

**Date Received: 01/19/16 13:00**

**Lab Sample ID: 490-95934-2**

**Matrix: Solid**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Extractable Organic	ND		51.0		mg/Kg		01/20/16 12:00	01/21/16 09:00	1

# Client Sample Results

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

**Client Sample ID: 35489-03**

**Date Collected: 01/12/16 10:00**

**Date Received: 01/19/16 13:00**

**Lab Sample ID: 490-95934-3**

**Matrix: Solid**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Extractable Organic	ND		47.1		mg/Kg		01/20/16 12:00	01/21/16 09:00	1

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# Client Sample Results

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

**Client Sample ID: 35489-04**

**Date Collected: 01/12/16 11:00**

**Date Received: 01/19/16 13:00**

**Lab Sample ID: 490-95934-4**

**Matrix: Solid**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Extractable Organic	ND		48.1		mg/Kg		01/20/16 12:00	01/21/16 09:00	1

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# Client Sample Results

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

**Client Sample ID: 35489-05**

**Date Collected: 01/12/16 12:30**

**Date Received: 01/19/16 13:00**

**Lab Sample ID: 490-95934-5**

**Matrix: Solid**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Extractable Organic	ND		50.0		mg/Kg		01/20/16 12:00	01/21/16 09:00	1

# Client Sample Results

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

**Client Sample ID: 35489-06**

**Date Collected: 01/12/16 13:45**

**Date Received: 01/19/16 13:00**

**Lab Sample ID: 490-95934-6**

**Matrix: Solid**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Extractable Organic	ND		51.0		mg/Kg		01/20/16 12:00	01/21/16 09:00	1

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# QC Sample Results

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

## Method: 9023 - Organic Halides, Extractable (EOX)

**Lab Sample ID: MB 490-313847/1-A**  
**Matrix: Solid**  
**Analysis Batch: 314025**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 313847**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Extractable Organic	ND		50.0		mg/Kg		01/20/16 12:00	01/20/16 14:00	1

**Lab Sample ID: LCS 490-313847/2-A**  
**Matrix: Solid**  
**Analysis Batch: 314025**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 313847**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Halogens, Extractable Organic	1000	1049		mg/Kg		105	80 - 120

**Lab Sample ID: 490-95934-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 314025**

**Client Sample ID: 35489-01**  
**Prep Type: Total/NA**  
**Prep Batch: 313847**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Halogens, Extractable Organic	ND		1000	935.1		mg/Kg		91	70 - 130

**Lab Sample ID: 490-95934-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 314025**

**Client Sample ID: 35489-01**  
**Prep Type: Total/NA**  
**Prep Batch: 313847**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Halogens, Extractable Organic	ND		1000	1066		mg/Kg		104	70 - 130	13	20

# QC Association Summary

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

## General Chemistry

### Prep Batch: 313847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-95934-1	35489-01	Total/NA	Solid	9023	
490-95934-1 MS	35489-01	Total/NA	Solid	9023	
490-95934-1 MSD	35489-01	Total/NA	Solid	9023	
490-95934-2	35489-02	Total/NA	Solid	9023	
490-95934-3	35489-03	Total/NA	Solid	9023	
490-95934-4	35489-04	Total/NA	Solid	9023	
490-95934-5	35489-05	Total/NA	Solid	9023	
490-95934-6	35489-06	Total/NA	Solid	9023	
LCS 490-313847/2-A	Lab Control Sample	Total/NA	Solid	9023	
MB 490-313847/1-A	Method Blank	Total/NA	Solid	9023	

### Analysis Batch: 314025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-95934-1	35489-01	Total/NA	Solid	9023	313847
490-95934-1 MS	35489-01	Total/NA	Solid	9023	313847
490-95934-1 MSD	35489-01	Total/NA	Solid	9023	313847
490-95934-2	35489-02	Total/NA	Solid	9023	313847
490-95934-3	35489-03	Total/NA	Solid	9023	313847
490-95934-4	35489-04	Total/NA	Solid	9023	313847
490-95934-5	35489-05	Total/NA	Solid	9023	313847
490-95934-6	35489-06	Total/NA	Solid	9023	313847
LCS 490-313847/2-A	Lab Control Sample	Total/NA	Solid	9023	313847
MB 490-313847/1-A	Method Blank	Total/NA	Solid	9023	313847

# Lab Chronicle

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

**Client Sample ID: 35489-01**

**Date Collected: 01/12/16 07:50**

**Date Received: 01/19/16 13:00**

**Lab Sample ID: 490-95934-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9023			1.00 g	1 mL	313847	01/20/16 12:00	CLJ	TAL NSH
Total/NA	Analysis	9023		1	1.00 g	1 mL	314025	01/21/16 09:00	CLJ	TAL NSH

**Client Sample ID: 35489-02**

**Date Collected: 01/12/16 08:40**

**Date Received: 01/19/16 13:00**

**Lab Sample ID: 490-95934-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9023			0.99 g	1 mL	313847	01/20/16 12:00	CLJ	TAL NSH
Total/NA	Analysis	9023		1	0.99 g	1 mL	314025	01/21/16 09:00	CLJ	TAL NSH

**Client Sample ID: 35489-03**

**Date Collected: 01/12/16 10:00**

**Date Received: 01/19/16 13:00**

**Lab Sample ID: 490-95934-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9023			1.03 g	1 mL	313847	01/20/16 12:00	CLJ	TAL NSH
Total/NA	Analysis	9023		1	1.03 g	1 mL	314025	01/21/16 09:00	CLJ	TAL NSH

**Client Sample ID: 35489-04**

**Date Collected: 01/12/16 11:00**

**Date Received: 01/19/16 13:00**

**Lab Sample ID: 490-95934-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9023			1.02 g	1 mL	313847	01/20/16 12:00	CLJ	TAL NSH
Total/NA	Analysis	9023		1	1.02 g	1 mL	314025	01/21/16 09:00	CLJ	TAL NSH

**Client Sample ID: 35489-05**

**Date Collected: 01/12/16 12:30**

**Date Received: 01/19/16 13:00**

**Lab Sample ID: 490-95934-5**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9023			1.00 g	1 mL	313847	01/20/16 12:00	CLJ	TAL NSH
Total/NA	Analysis	9023		1	1.00 g	1 mL	314025	01/21/16 09:00	CLJ	TAL NSH

**Client Sample ID: 35489-06**

**Date Collected: 01/12/16 13:45**

**Date Received: 01/19/16 13:00**

**Lab Sample ID: 490-95934-6**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9023			0.99 g	1 mL	313847	01/20/16 12:00	CLJ	TAL NSH
Total/NA	Analysis	9023		1	0.99 g	1 mL	314025	01/21/16 09:00	CLJ	TAL NSH

TestAmerica Nashville

# Lab Chronicle

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

**Laboratory References:**

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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# Method Summary

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

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Method	Method Description	Protocol	Laboratory
9023	Organic Halides, Extractable (EOX)	SW846	TAL NSH

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**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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# Certification Summary

Client: Absolute Resource Associates  
Project/Site: TOX

TestAmerica Job ID: 490-95934-1  
SDG: 35489

## Laboratory: TestAmerica Nashville

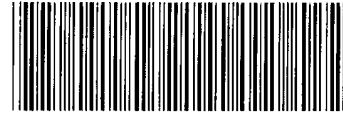
Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-16

Analysis Method	Prep Method	Matrix	Analyte
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## COOLER RECEIPT FORM 490-95934 Chain of Custody

Cooler Received/Opened On 1-19-16 @ 1300  
Time Samples Removed From Cooler 0900 Time Samples Placed In Storage 0919 (2 Hour Window)

1. Tracking # 27299 (last 4 digits, FedEx) Courier: VPS  
IR Gun ID 18290455 pH Strip Lot HC554612 Chlorine Strip Lot 072815A

- 2. Temperature of rep. sample or temp blank when opened: 1.1 Degrees Celsius
- 3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO... NA
- 4. Were custody seals on outside of cooler? YES... NO...NA  
If yes, how many and where: \_\_\_\_\_
- 5. Were the seals intact, signed, and dated correctly? YES...NO... NA
- 6. Were custody papers inside cooler?  YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) MDM

- 7. Were custody seals on containers: YES  NO and Intact YES...NO... NA  
Were these signed and dated correctly? YES...NO... NA
- 8. Packing mat'l used?  Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None
- 9. Cooling process:  Ice Ice-pack Ice (direct contact) Dry ice Other None
- 10. Did all containers arrive in good condition (unbroken)?  YES...NO...NA
- 11. Were all container labels complete (#, date, signed, pres., etc)?  YES...NO...NA
- 12. Did all container labels and tags agree with custody papers?  YES...NO...NA
- 13a. Were VOA vials received?  YES...NO...NA
- b. Was there any observable headspace present in any VOA vial? YES...NO... NA
- 14. Was there a Trip Blank in this cooler? YES...NO... NA If multiple coolers, sequence # \_\_\_\_\_

I certify that I unloaded the cooler and answered questions 7-14 (initial) glt

- 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO... NA
- b. Did the bottle labels indicate that the correct preservatives were used YES...NO... NA
- 16. Was residual chlorine present? YES...NO... NA

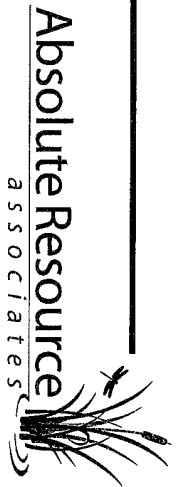
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) glt

- 17. Were custody papers properly filled out (ink, signed, etc)?  YES...NO...NA
- 18. Did you sign the custody papers in the appropriate place?  YES...NO...NA
- 19. Were correct containers used for the analysis requested?  YES...NO...NA
- 20. Was sufficient amount of sample sent in each container?  YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) glt

I certify that I attached a label with the unique LIMS number to each container (initial) glt

- 21. Were there Non-Conformance issues at login? YES... NO Was a NCM generated? YES... NO...# \_\_\_\_\_



124 Heritage Avenue #16  
 Portsmouth, NH 03801  
 603-436-2001  
 absoluteresourceassociates.com

*Test America Ashville*

PAGE 1 OF 1

Company Name: See Above

Company Address: See Above

Report To: Aaron DeVries

Phone #: \_\_\_\_\_

Invoice to Email: same

Project #: 35489

Project Location: NH MA ME VT NY

Protocol: RCRA SDWA NPDES MCP NHDES OTHER

Reporting: QAPP GW-1 S-1

Quote #: 35489

PO # 35489

Matrix: WATER SOLID OTHER

Preservation Method: HCl HNO<sub>3</sub> H<sub>2</sub>SO<sub>4</sub> NaOH MeOH

Sampling: DATE TIME SAMPLER

Lab Sample ID: 35489-01

Field ID: 1

# CONTAINERS: 1

**ANALYSIS REQUEST**

<input type="checkbox"/> VOC 8260	<input type="checkbox"/> VOC 8260 NHDES	<input type="checkbox"/> VOC 8260 MADEP
<input type="checkbox"/> VOC 624	<input type="checkbox"/> VOC BTEX	<input type="checkbox"/> MtBE, only
<input type="checkbox"/> VPH MADEP	<input type="checkbox"/> MEGRO	<input type="checkbox"/> GRO 8015
<input type="checkbox"/> VOC 524.2	<input type="checkbox"/> VOC 524.2 NH List	<input type="checkbox"/> Gases-List:
<input type="checkbox"/> TPH	<input type="checkbox"/> DRO 8015	<input type="checkbox"/> MEDRO
<input type="checkbox"/> 8270PAH	<input type="checkbox"/> 8270ABN	<input type="checkbox"/> 625
<input type="checkbox"/> 8082 PCB	<input type="checkbox"/> 8081 Pesticides	<input type="checkbox"/> 608 Pest/PCB
<input type="checkbox"/> O&G 1664	<input type="checkbox"/> Mineral O&G SM5520F	
<input type="checkbox"/> pH	<input type="checkbox"/> BOD	<input type="checkbox"/> Conductivity
<input type="checkbox"/> TSS	<input type="checkbox"/> TDS	<input type="checkbox"/> TS
<input type="checkbox"/> RCRA Metals	<input type="checkbox"/> Priority Pollutant Metals	<input type="checkbox"/> TAL Metals
<input type="checkbox"/> Total Metals-list:		
<input type="checkbox"/> Dissolved Metals-list:		
<input type="checkbox"/> Ammonia	<input type="checkbox"/> COD	<input type="checkbox"/> TKN
<input type="checkbox"/> T-Phosphorus	<input type="checkbox"/> Phenols	<input type="checkbox"/> Bacteria P/A
<input type="checkbox"/> Cyanide	<input type="checkbox"/> Sulfide	<input type="checkbox"/> Nitrate + Nitrite
<input type="checkbox"/> Nitrate	<input type="checkbox"/> Nitrite	<input type="checkbox"/> Chloride
<input type="checkbox"/> Corrosivity	<input type="checkbox"/> Reactive CN	<input type="checkbox"/> Reactive S-
<input type="checkbox"/> TCLP Metals	<input type="checkbox"/> TCLP VOC	<input type="checkbox"/> TCLP SVOC
<input type="checkbox"/> Subcontract:	<input type="checkbox"/> Grain Size	<input type="checkbox"/> Herbicides

Loc: 490  
 95934

X

**TAT REQUESTED**  
 Priority (24 hr)\*  
 Expedited (48 hr)\*  
 Standard (10 Business Days)  
 \*Date Needed \_\_\_\_\_

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

**REPORTING INSTRUCTIONS**  
 HARD COPY REQUIRED  
 FAX (FAX#) \_\_\_\_\_  
 PDF (e-mail address) Cathy + carand

**CUSTODY RECORD**  
 OSD-01 Revision 10/14/15

Reinquired by: [Signature] Date: 1/18/16 Time: 13:32

Received by: UPS

Reinquired by: [Signature] Date: 1/18/16 Time: 13:32

Received by Laboratory: [Signature] Date: 1/18/16 Time: 13:32



## Login Sample Receipt Checklist

Client: Absolute Resource Associates

Job Number: 490-95934-1

SDG Number: 35489

**Login Number: 95934**

**List Number: 1**

**Creator: Vest, Laura E**

**List Source: TestAmerica Nashville**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## **APPENDIX B: EXAMPLE MEDEP NON-HAZARDOUS WASTE TRANSPORTER MANIFEST**

CATEGORY

A

STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NONHAZARDOUS WASTE TRANSPORTER  
MANIFEST

NONHAZARDOUS WASTE TRANSPORTER  
DECAL NUMBER

--	--	--	--	--	--	--	--	--	--	--	--

GENERATOR (SOURCE)

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

TOWN \_\_\_\_\_ PHONE \_\_\_\_\_

WASTE TYPE

SPECIAL WASTE (specify) \_\_\_\_\_

SCRAP TIRES

CONSTRUCTION/DEMOLITION DEBRIS

TRANSPORTER

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

TOWN \_\_\_\_\_ PHONE \_\_\_\_\_

QUANTITY LOADED \_\_\_\_\_

DATE LOADED \_\_\_\_\_

DRIVER'S NAME \_\_\_\_\_

By signing this manifest form I certify that the information  
contained herein is true, correct, and accurate to the  
best of my ability.

DRIVER'S SIGNATURE \_\_\_\_\_

DATE SIGNED \_\_\_\_\_

DISPOSAL FACILITY OR SITE

CODE 

--	--	--	--	--	--	--	--	--	--	--	--

NAME \_\_\_\_\_

LOCATION \_\_\_\_\_

PHONE \_\_\_\_\_

QUANTITY RECEIVED \_\_\_\_\_

DATE RECEIVED \_\_\_\_\_

OPERATOR'S NAME \_\_\_\_\_

OPERATOR'S SIGNATURE \_\_\_\_\_

DATE SIGNED \_\_\_\_\_

See Instructions on the back of this form

OTHER INFORMATION: