
INTERIM REMEDIAL MEASURES (IRM) WORK PLAN

295 MARYLAND STREET SITE

**295 MARYLAND STREET
BUFFALO, NEW YORK**

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Prepared for:

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CERTIFICATION

I, Thomas H. Forbes, P.E., certify that I am currently a NYS registered professional engineer and that this Interim Remedial Measures (IRM) Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Thomas H. Forbes, P.E.

Date

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IRM WORK PLAN

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1.0 INTRODUCTION

This document presents the proposed scope of work for completion of an Interim Remedial Measure (IRM) at the 295 Maryland Street Site in Buffalo, New York (see Figures 1 and 2). The IRM will be performed on behalf of 295 Maryland, LLC through the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP).

The BCP Site consists of 1.495 acres of contiguous property at 295 Maryland and 129 West Avenue. The IRM work will be performed for the purpose of expeditiously remediating impacted soil/fill to levels acceptable for redevelopment of the property in a restricted residential use capacity. 295 Maryland, LLC intends to integrate the remedial work with construction of a residential apartment complex comprised of approximately 54 living units in a three-story building (see Figure 3). The majority of the redevelopment activities will take place on the BCP Site, with some additional improvements (surface parking) on an adjoining parcel at 305 Maryland Street.

1.1 Background

The Site was historically used in a residential and commercial capacity, with the property at 295 Maryland Street most recently occupied by Lamar Advertising, Inc., a firm specializing in the sale of billboard advertising space and erection of billboard signs. Lamar relocated to another location within the City in December 2000; the associated commercial buildings and facilities on 295 Maryland Street as well as former residential dwellings at 121-129 West Avenue have been demolished. Currently, the Site is vacant and undeveloped; surrounding property is a mixed use commercial/residential neighborhood.

A Phase I Environmental Site Assessment (ESA) was performed for the former Lamar Advertising property in January 2000, prior to facility demolition (Ref. 1). A separate Phase I ESA was prepared in 2001 for 121-129 West Avenue on behalf of the Buffalo Neighborhood Revitalization Corporation (BNRC) (Ref. 2). The ESA reports indicate that 129 West Avenue was historically used for residential purposes, with 295 Maryland Street historically improved with an office, commercial building, and two multiple bay garages. Potential recognized environmental conditions (RECs) at 295 Maryland Street included:

- Vehicle maintenance
- Use and storage of paints, adhesives, and other flammables

- Underground gasoline storage tanks (USTs); 550-gallon and 4,000-gallon gasoline USTs were reportedly removed from the Site in 1974 and 1997, respectively. In addition, a small UST containing benzene was reportedly discovered and removed during facility decommissioning.

A Phase II Site Investigation (Ref. 3) was completed at 295 Maryland Street on behalf of the BNRC by Benchmark Environmental Engineering & Science, PLLC (Benchmark) in November 2001. The Phase II identified surface and subsurface soil/fill materials exceeding NY State soil cleanup guidance values (i.e., as compared to NYSDEC Technical Assistance and Guidance Memorandum [TAGM] HWR-94-4046, the applicable NYSDEC cleanup guidance in place at that time) for certain parameters, including arsenic, lead, mercury, and several polyaromatic hydrocarbons (PAHs). These same parameters are elevated with respect to more recent Soil Cleanup Objectives (SCOs) for restricted residential use as published in 6NYCRR Part 375.

In addition to the November 2001 Phase II, a site groundwater assessment and supplemental soil investigation was performed in September 2010 for the purpose of verifying the absence of significant groundwater impacts on the site and checking for the presence and character of fill soils on 129 West Avenue. A second round of groundwater sampling was conducted in March 2011. Groundwater impacts potentially associated with historic site-related conditions were identified at low levels in one of the wells, fill soils were identified on 129 West Avenue but with generally lower concentrations of the constituents identified on 295 Maryland. Section 2.0 discusses the findings of the November 2001 Phase II and supplemental investigations in greater detail.

295 Maryland, LLC submitted a BCP application to the NYSDEC on March 2011. The BCP application was accepted by the NYSDEC and public notice was made on April 13, 2011. The review and comment period concluded on May 13, 2011. The NYSDEC deemed 295 Maryland and 129 West Avenue eligible for the BCP.

1.2 Purpose and Scope

Based upon the extensive characterization of surface and subsurface soils performed in 2001, the supplemental investigation performed in 2010 & 2011, and the planned redevelopment of the property in a restricted residential use capacity (necessitating some degree of soil/fill remediation and confirmatory sampling), an IRM approach involving excavation of soil/fill having constituents exceeding restricted residential SCOs will be

undertaken. This approach will expedite the soil/fill remediation and allow for integration of the cleanup work with redevelopment activities, thereby providing for lower site preparation costs and fewer disruptions to the community while allowing the property to be placed back into productive use in a timely manner.

This IRM Work Plan has been prepared in accordance with Section 5.3.b of NYSDEC's May 2010 DER-10 Technical Guidance for Site Investigation and Remediation (Ref. 5). Accordingly, it addresses the following items:

- Site characterization with a description of the data from prior investigations and the results of groundwater characterization from 2010 and 2011 (Section 3.0).
- The approach for implementation of interim remedial measures (Section 3.0).
- Reporting requirements along with the anticipated schedule (Section 4.0).
- References for the report (Section 5.0).

1.3 Project Organization and Responsibilities

Benchmark will implement the interim remedial measure on a design-build basis on behalf of 295 Maryland, LLC. An experienced and qualified contractor will be retained to implement the soil/fill removal work; Benchmark will observe and document the remedial activities and perform community air monitoring. The NYSDEC Division of Environmental Remediation will monitor the remedial actions to verify that the work is performed in accordance with the approved Work Plan.

2.0 SITE CHARACTERIZATION

2.1 2001 Investigation Approach

Investigation activities undertaken on 295 Maryland Street in 2001 included an electromagnetic (EM) survey to check for the presence of buried metallic objects across the property, and a test pit investigation to further investigate the source of EM anomalies and allow for surface and subsurface soil/fill characterization. A summary of the 2001 investigation activities is presented below. Analytical results are discussed in Section 2.3.3.

2.1.1 EM-61 Survey

On September 13-14, 2001, Benchmark's designated subcontractor, Geomatrix Consultants, Inc. performed an electromagnetic (EM-61) geophysical survey across 295 Maryland Street. The purpose of the EM-61 survey was to identify and define areas within the site boundary that may be indicative of buried metal or other highly conductive materials. A Geonics EM61 high-resolution time domain electromagnetic (TDEM) metal detector capable of detecting both ferrous and nonferrous metallic objects was used to collect the subsurface data. The EM61 has an approximate effective depth of up to 10 feet below ground surface (fbgs).

Results of the geophysical survey, included in Appendix A, indicated a number of suspect buried metallic anomalies across the property. Based on discussions with the former owner (Lamar advertising) several of the anomalies were suspected to be structural (reinforced) concrete. In addition, the prior owner provided documentation substantiating removal of two former underground storage tanks (USTs) historically used for gasoline storage and a small UST historically containing benzene. Nevertheless, Benchmark and the BNRC agreed that additional intrusive investigation would be required to positively identify the source of the anomalies.

2.1.2 EM Anomaly Test Pits

On October 22, 2001, a total of ten test pits (EM-1 through EM-10; see Figure 4) were excavated at suspect anomaly locations identified during the EM survey. The test

pits were excavated with a track-mounted excavator until the geophysical anomaly was positively identified, which occurred at depths ranging from 6-inches to 4 feet below ground surface (fbgs). During test pit excavation, a Benchmark engineer logged the test pit lithology and anomaly findings, and characterized excavated soil fill for visual and/or olfactory evidence of contamination. Soil/fill materials were also screened for volatile organic vapors with a photoionization detector (PID) as a further indicator of potential contamination.

Fill was generally present at each location to a depth of 3-4 feet below ground surface (bgs). A thin layer of native topsoil overlying native clayey soils with silt were typically encountered below the fill materials. Groundwater was not encountered, excluding some instances of perched water over clayey soils. The fill material consisted of generally fine grained and very loose soil with mixtures of brick, concrete, ash, slag and various metallic debris. All EM test pits positively identified each geophysical anomaly as metallic debris (e.g., steel channeling, plates, angles, etc.) and/or reinforced concrete; no vessels or containers were discovered. None of the test pits exhibited field evidence of impact with the exception of test pit EM-6, where a slight petroleum odor and staining was noted in the excavated fill soils. Based on these observations, the test pit was extended approximately 6 feet the northern direction to provide an indication of the extent of the impacts. As the test pit was continued in this direction, visual and olfactory evidence of petroleum became less evident to the point that no impacts were observed. In addition, perched water was encountered at the apparent native soil interface (approximately 3 feet below grade), with a slight sheen observed on the perched water surface.

In order to characterize the impacted soil/fill, a composite sample was collected from the side wall of test pit EM-6 for laboratory analysis of: "full list" volatile organic compounds (i.e. NYSDEC STARS List volatiles and Target Compound List volatiles); Target Compound List (TCL) semi-volatile organic compounds (SVOCs); Target Analyte List (TAL) inorganics; and PCBs.

2.1.3 Soil Characterization Test Pits

On October 23, 2001 ten soil characterization test pits (TP-1 through TP-10; see Figure 4) were completed across the 295 Maryland Street parcel. Each test pit was

completed to a depth of 8-feet below grade or refusal, whichever occurred first. At each location, Benchmark recorded pertinent field observations including fill types, depth to native soil (if encountered), visual or olfactory evidence of contamination, and photoionization detector (PID) readings. Test pit logs are presented in Appendix B.

As indicated in Appendix B, the investigation test pit lithology was similar to the EM test pits, with the upper 6 inches to 1 foot of soil at each test pit location generally comprised of topsoil and clayey soils mixed with fragments of brick and stone. Approximately 2 - 3 feet of reworked clay fill generally underlies this upper fill layer followed by a thin (2"-4") historic topsoil layer. Deeper native soils are characterized by brown clayey soils containing some silt.

Soil samples were collected by the on-site environmental engineer at each test pit location. Separate composite samples of the surficial (0-6" below grade) and subsurface (1' below grade to completion) soils were collected from each test pit. Samples were either retrieved using a stainless steel trowel or the backhoe bucket, depending on sample depth. All shallow (0-6") samples were collected for analysis of TCL SVOCs, PCBs, and TAL inorganics. Deeper samples (6" to completion) were collected for these same parameters as well as TCL VOCs.

All environmental samples were cooled to 4°C and transferred under chain-of-custody to Friend Laboratory for analysis in accordance with USEPA Method SW-846 protocols.

2.2 2010-2011 Supplemental Investigation Approach

Benchmark installed four groundwater monitoring wells (MW-1 to MW-4) in September 2010 to allow for collection of representative groundwater samples across the site and determine groundwater elevation & flow direction. In addition, the drill rig advanced one soil boring (SB-5) on the 129 West Avenue parcel to establish soil lithology and allow for sample collection on that lot, which was not assessed during the 2001 Phase II investigation.

2.2.1 Soil Borings

Benchmark retained the services of Earth Dimensions, Inc. to drill the four well borings and SB-5 soil boring using 4-1/4-inch hollow stem augers. Drilling work was

undertaken on September 13-14, 2010. As shown on the field borehole logs in Appendix C, split-spoon samples were collected (2-inch diameter) at 2-foot intervals continuously through the fill and into the native soil. Stratigraphic field borehole logs were prepared by a qualified geologist from ground surface to the bottom of the borehole. Borings MW-1 through MW-4 were drilled to a nominal depth of 22 feet below ground surface (fbgs), and SB-5 to 6 fbgs. Each 2-foot split-spoon soil sample was scanned for total organic vapors with a MiniRae 2000 Photoionization Detector (PID) equipped with a 10.6 eV lamp. Soil descriptions, PID scan results, and visual/olfactory observations recorded during boring advancement are presented on the Field Borehole Logs in Appendix C. As indicated, there were no organic vapors detected above background levels or any visual observations of impact identified in any of the overburden soil samples collected except at MW-2 at a depth of 20 to 22 fbgs (1.6 ppm).

Two soil samples were collected during soil boring advancement. Sample MW-3 (4-6') was collected to discretely characterize native soil layer, as the 2001 program involved collection of a composite of subsurface soil/fill samples which straddled both the fill and native soil intervals. Sample SB-5 (0-2') was collected to characterize fill materials on the 129 West Avenue Parcel. Soil samples were collected from borings using dedicated stainless steel sampling tools. Representative soil samples were placed in pre-cleaned sample bottles. Two soil samples were submitted under chain-of-custody to Test America Laboratories Inc., for analysis of TCL VOCs, TCL SVOCs, PCBs, pesticides, and TAL inorganics.

2.2.2 Monitoring Well Construction and Sampling

Following borehole advancement, 2-inch diameter monitoring wells were installed within soil borings MW-1 to MW-4 at the locations shown on Figure 4. Appendix C includes the monitoring well installation logs. The well screens were installed from approximate depths of 12 to 22 fbgs, and were set into the sandy silt layer underlying the native clay soils. The wells were constructed with 2-inch diameter, flush-joint Schedule 40 PVC, and completed in flush mount protective locking curb boxes. The newly installed monitoring wells were developed on September 18, 2010.

Elevations of the wells were made relative to an arbitrary vertical datum designated at 500.00 feet. The survey was completed on October 12, 2010 by Benchmark personnel. Groundwater was sampled on September 23, 2010 and March 1, 2011. Prior to and

immediately following collection of groundwater samples, field measurements for pH, specific conductance, temperature, turbidity, dissolved oxygen, water level, and visual and olfactory field observations were recorded.

Groundwater grab samples were collected from each monitoring well using dedicated disposable polyethylene bailers. The samples were transferred into laboratory provided pre-preserved sample vials for analysis of TCL VOCs, TCL SVOCs, Pesticides/PCBs, and TAL inorganic compounds and general chemistry parameter total cyanide. The samples were cooled to 4°C in the field, and transported under chain-of-custody to Test America Laboratories, Inc. The soil and groundwater samples were analyzed using United States Environmental Protection Agency (USEPA) SW-846 methods, and a Category B deliverable package was prepared. Appendix D contains the groundwater sampling summary logs and laboratory analytical reports.

2.3 Investigation Findings

2.3.1 Physical Soil Description

As represented by 20 test pits and 5 borings, the soil at the Site consists of fill generally present at each location on 295 Maryland Street to a depth between 3 and 4 fbgs. Reworked and native clay soils underlying a thin layer of native topsoil were typically encountered below the fill materials. No fill materials were encountered during advancement of MW-1, suggesting that fill thickness thins toward West Avenue consistent with Site topography (see Figure 4). Groundwater was not encountered within the fill, excluding some instances of perched water over clayey soils. The fill material generally consisted of fine-grained soil (silt and clay) with mixtures of brick, concrete, ash, slag, and varying types of metallic debris. Underlying the fill material was a layer of brown clayey soils containing some silt typically extending to approximately 15 fbgs (20 fbgs in MW-4). A sandy silt layer beneath the clay layer was saturated and represents the uppermost water bearing unit at the Site.

2.3.2 Groundwater Contours

Table 3 summarizes the groundwater elevations measured on September 23, 2010. As shown on the groundwater isopotential map (see Figure 7), overburden groundwater

flows toward the southwest, MW-2 is a downgradient well, and MW-4 is an upgradient well for the Site.

2.3.3 Soil Sample Results

Table 1 summarizes the analytical results of soil samples collected during the 2001 Phase II investigation and the 2010 soil boring program. Sample locations are identified on Figure 4.

As indicated on Table 1, surficial (0-0.5') and subsurface soil (>0.5') testing identified several polycyclic aromatic hydrocarbons (PAHs) and five inorganic compounds at levels in excess of the NYSDEC soil cleanup objectives (SCOs) for restricted-residential use (see Figures 5 and 6), primarily in the central portion of 295 Maryland Street. The compounds detected above restricted-residential SCOs in at least one of the samples include: benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3)pyrene, dibenz(a,h)anthracene, arsenic, barium, cadmium, lead, and mercury.

In general, concentrations were higher in the samples from 0-0.5' as compared to the deeper samples (>0.5'). A sample from the clay layer (MW-3 at 4-6') did not contain any exceedances of the unrestricted use SCOs, suggesting that removal of the upper few feet of soil/fill may achieve the unrestricted use SCOs. This is supported by the concentrations detected below unrestricted-use SCOs in TP-1 (0.5-8'), TP-2 (0.5-8'), and TP-5 (0.5-8').

2.3.4 Groundwater Sample Analytical Results

Table 2 summarizes the groundwater sample analytical results. As indicated, VOCs and SVOCs were detected in the sample from well MW-2 at concentrations exceeding NYSDEC groundwater quality standards and guidance values (GWQSGVs). The VOCs and SVOCs detected above the standards include: benzene, ethylbenzene, toluene, and xylenes (BTEX); 1,2,4-trimethylbenzene; isopropylbenzene; benzo(a)anthracene; and naphthalene, all of which are constituents of petroleum products (e.g., gasoline or diesel). Individual VOC and SVOC concentrations at MW-2 were less than 100 micrograms per liter (ug/L). The total VOC concentration from each of the two sampling rounds was 196 and 263 ug/L, respectively; well below the 1,000 ug/L threshold typically employed

by the NYSDEC for inactivation of petroleum spill sites. Benzo(a)anthracene and naphthalene are relatively immobile in groundwater (i.e., high octanol-water partition coefficient and low water solubility). No other VOCs or SVOCs exceeded GWQS.

Pesticides were also detected in the groundwater from all four wells. Pesticide exceedances of the GWQS were reported in wells MW-2, MW-3, and MW-4 for one or more of the following: alpha-BHC, beta-BHC, dieldrin, gamma-chlordane, and heptachlor. Concentrations were all less than 1 ug/L. Higher levels of pesticides were identified in wells MW-4 (upgradient) and MW-3, suggesting groundwater transport onto the Site from an upgradient source. Downgradient well MW-2 had one exceedance (beta-BHC) of the GWQS at a concentration of 0.06 ug/L during the September 23, 2010 sampling event. Well MW-1 did not contain any exceedances for pesticides.

Groundwater from all four wells contained levels of sodium greater than the GWQS. Groundwater from well MW-4 contained a slight exceedance of manganese (0.315 mg/L) as compared to the GWQS (0.3 mg/L). Sodium and manganese are naturally-occurring minerals. Their presence in the upgradient wells indicates ambient conditions.

2.3.5 Chemicals of Potential Concern

Based on the foregoing, chemicals of potential concern (COPCs) in soil as defined by exceedances of restricted-residential SCOs include the following PAHs: benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3)pyrene, and dibenz(a,h)anthracene. In addition, the following inorganic compounds were detected in at least one sample in excess of the restricted-residential SCOs and are considered COPCs: arsenic, barium, cadmium, lead, and mercury.

The groundwater contamination apparently attributable to the Site (i.e., in lieu of upgradient conditions) includes VOC and SVOC compounds commonly associated with petroleum products (e.g., gasoline or diesel). While groundwater samples from well MW-2 exceeded GWQSGVs for certain petroleum VOCs and SVOCs, the concentrations present are not indicative of a large release; rather, these results are indicative of residual contamination in *de minimis* quantities. Further, the contaminants are subject to natural degradation due to sorption and biodegradation. The likely source of VOCs has been removed (i.e., historic USTs) and the soil/fill removal IRM proposed herein will further

mitigate the potential for any remaining sources of impact. Consequently, the levels of VOCs will naturally continue to degrade over time. In addition, residents in Buffalo are served by municipal-supplied public water obtained from Lake Erie; therefore, exposure to contaminants is unlikely as there are no drinking water receptors.

3.0 IRM Approach

3.1 Purpose and Scope

Based on the findings of the investigation work described in Section 2.0, an IRM will be performed to address contaminated soil/fill. The primary goal of the IRM will be removal of the fill layer across the BCP Site as necessary to achieve restricted-residential SCOs. This will assure levels protective of site reuse under the anticipated redevelopment scenario without reliance on engineering controls (i.e., Track II cleanup approach).

To the extent practical, the soil/fill removal work may be extended to achieve residential or Track 1 unrestricted SCOs, further reducing site use restrictions. Conversely, if unanticipated conditions are encountered which preclude achieving restricted residential SCOs throughout the site the excavation will be of sufficient depth to allow for 2 feet of clean soil import in areas not anticipated to be covered by hardscape, facilitating a Track IV cleanup approach.

This section of the IRM Work Plan describes the excavation and off-site disposal of impacted soil/fill. The primary tasks of the planned remedial work are:

- Testing of the soil/fill to determine waste profile.
- Excavation of impacted soil/fill across the Site to achieve the above-described cleanup goal (i.e., conformance with Track 1 Unrestricted or Track 2 restricted residential SCOs).
- Verification sampling on a grid basis to assess the degree of residual contamination and evaluate possibility of additional removal to achieve a higher degree of protection (e.g., Track 1 Unrestricted SCOs).
- Off-site transportation and disposal of impacted soil/fill at a permitted solid waste disposal facility.

This Work Plan also addresses the following tasks:

- Pre-mobilization tasks
- Health, safety, and community air monitoring procedures
- Dust, storm water, and erosion control measures required for minimizing potential release of soils outside the work zone during construction
- Equipment decontamination requirements
- IRM documentation

- Implementation scheduling
- Post-IRM reporting

3.2 Pre-Mobilization Tasks

3.2.1 Public Information and Outreach

A fact sheet containing information about the planned IRM will be direct-mailed by 295 Maryland, LLC to those individuals on the Brownfield Site Contact List, including property owners and residents adjacent to the Site, environmental groups, local political representatives, and interested regulatory agencies. Furthermore, a copy of this Work Plan will be made available for public review at the NYSDEC Region 9 office and the Niagara Branch of the Buffalo and Erie County Public Library, the designated document repository.

3.2.2 Underground Utilities Location

The remediation contractor will contact underground facilities protection organization (Dig Safely New York, UFPO) to locate utility lines within the work area.

3.2.3 Health and Safety Plan Development

As described in Section 3.4, a Health and Safety Plan (HASP) has been prepared to cover all on-site remedial activities, and will be enforced by the remediation contractor in accordance with the requirements of 29 CFR 1910.120. Benchmark will be responsible for Site control and for the health and safety of its authorized Site workers. For informational purposes, Benchmark's HASP is provided in Appendix E. The remediation contractor will be required to develop and implement a HASP as or more stringent than Benchmark's HASP.

3.2.4 Waste Disposal Characterization

Benchmark will coordinate with the Solid Waste Disposal Facility (SWDF) for disposition of the soil/fill to be removed from the Site. Given the detected concentrations of lead in soil (i.e., maximum 8,160 mg/kg in TP-5 (0-0.5')), the soil/fill must be tested to determine whether it is considered a hazardous waste. A composite

sample will be collected from the vicinity of TP-4 and TP-5 where the highest concentrations of total lead were observed. As illustrated on Figure 8, representative samples will be collected by compositing discrete samples of soil/fill at a frequency agreeable to the SWDF. A grab sample from the fill interval will be obtained at each of the nine locations and composited. The composite sample will be tested by the Toxic Characteristic Leaching Procedure (TCLP) for full list of parameters, ignitability, reactivity, and corrosivity. For the purposes of the discussion below, the assumption has been made that the impacted soil/fill is non-hazardous. If the soil/fill is determined to be a characteristic hazardous waste, this Work Plan will be modified.

3.3 IRM Activities

3.3.1 Mobilization and Site Preparation

The remediation contractor's field operations at the Site will commence with mobilizing equipment and materials to the Site and erecting safety fencing and other temporary controls as described below.

3.3.2 Temporary Facilities and Controls

Temporary facilities for use during the remedial work may include a construction field trailer and portable toilets. Temporary controls will be employed for protection against off-site migration of soil and safety hazards during construction, including safety fencing, dust suppression, and erosion control as further described below.

3.3.2.1 Access Controls

Temporary safety construction fencing (i.e., 3-foot high orange plastic or 6-foot chain link) will be placed around the perimeter of the work area(s) to distinguish the work zone and discourage trespassing. The fencing will not be removed until the excavation/backfilling work is complete.

As a requirement of the Program, a sign will be placed along Maryland Street to identify the Site as a BCP Site. The sign will conform to NYSDEC standards.

3.3.2.2 Dust Monitoring and Controls

As described in Section 3.4, a Community Air Monitoring Plan (CAMP) will be implemented during Site excavation work. If community air monitoring indicates the need for dust suppression or if dust is visually observed leaving the Site, the remediation contractor will apply a water spray across the excavation and surrounding areas, and on haul areas as necessary to mitigate airborne dust formation and migration. Potable water will be obtained from either a public hydrant or the on-site water service, if available. Other dust suppression techniques that may be used to supplement the water spray include:

- Hauling materials in properly tarped containers or vehicles
- Restricting vehicle speeds on-site
- Hydro-seeding of final grades

3.3.2.3 Erosion and Sedimentation Control

Provisions will be made for erosion and sedimentation control at the work perimeter during remediation activities. Erosion and sedimentation controls to be followed during remedial activities include silt fencing, hay baling, mulching, and other measures as warranted to prevent offsite migration of soil/fill materials.

3.3.2.4 Haul Road/Driveway

A haul road will be built on site that will consist of slag/gravel/crushed concrete that will be used to maintain traffic flow across the site and will keep the truck tires from contacting the contaminated soil. This will also prevent the haul trucks from carrying the soil into the streets. Any soil tracked into the streets by the haul trucks will be cleaned-up.

3.3.3 Soil/Fill Excavation

Based on observations during the subsurface investigations as documented in the test pit and boring logs, the average excavation depth is estimated to be approximately 4 feet below grade. Although fill is expected to be shallower within the western portion of 129 West Avenue, the southern portion of 295 Maryland contains more substantial

impacts from PAHs and metals in the upper 4-ft soil horizon. Accordingly, it is assumed that an additional 2 feet of soil on average would be removed from this portion of the Site, with the overall quantity of soil/fill to be excavated estimated between 9,500 to 11,800 cubic yards. The depth of excavation will be determined from verification sample results, the presence of nuisance conditions, and PID readings. Depending on the results of the soil sampling and other site conditions (such as presence of subsurface obstructions or utilities), a decision will be made to determine whether to excavate further. Specifically, if the conditions of the soil/fill are favorable for excavation (no obstructions and perimeter sample test results are below unrestricted SCOs), then additional soil/fill will be excavated in an attempt to achieve residential or unrestricted use SCOs. If a different type of waste or discoloration is encountered during excavation, additional surface and/or subsurface sampling may be required. NYSDEC may split any waste, soil, or groundwater sample during the IRM implementation.

Excavation of impacted subsurface soil/fill will proceed methodically across the Site digging progressively from one side of the Site to the other. A track-mounted crawler excavator with a mechanically operated bucket will be used to unearth the soil/fill. Verification samples will be collected to confirm that restricted-residential SCOs have been attained. If active utilities (e.g., electric service) are encountered or anticipated, hand digging will be performed to expose the utility line within the planned excavation horizon (2 feet or deeper if needed) and limit the potential for damage to the utility(s).

Excavated materials will be direct-loaded into dump trucks or trailers for off-site disposal at a SWDF. All excavation work will be observed by an experienced Benchmark environmental scientist. If disposal truck scheduling necessitates stockpiling of excavated soil/fill, the stockpiles will be placed on and covered with plastic sheeting during non-working hours.

3.3.4 Post-Excavation Verification Sampling

Post-excavation verification composite samples will be collected from the side walls and bottom of the excavations. The perimeter of the excavation is expected to be approximately 1,600 linear feet. Per the requirements of DER-10 (Ref. 5), the following samples are proposed:

- One composite sample from the sidewall surface soils (0-0.5") every 30 feet along the perimeter will be collected by collecting a grab sample at 10 foot

intervals along the perimeter. These samples will be obtained using dedicated or precleaned (alconox & analyte free water) stainless steel collection equipment and thoroughly mixed in a precleaned stainless steel bowl or dedicated aluminum pan. A representative portion of the mixture will be separated into individual sample containers for the requisite analysis. If apparent contamination (discoloration is encountered, this location will be included in the compositing procedure.

- One sample from the sidewall subsurface soils will be prepared using similar procedures that will be used for the surficial sidewall sample. This will include observing the sidewall for signs of discoloration. If the sidewall is not visually impacted, then 3 grab samples will be collected from the midpoint of the excavation depth at 10 foot intervals for each 30 foot section of sidewall. If discolored soils are identified on the sidewall, then preferentially, this sample will be obtained and mixed with the other two grab samples to create the composite sample for analysis
- One composite sample for each 900 square feet of excavation bottom will be collected from 4 grabs equally spaced within the 900 SF area. The excavator will be used to assist in collecting samples at depths >4 feet below grade. Dedicated or precleaned stainless steel spoons will be used to transfer the sample from the bucket of the excavation floor to precleaned or dedicated aluminum pans for compositing in the same manner as described above.

All post-excavation verification sampling will be scheduled in the presence of the NYSDEC representative. All samples will be analyzed by a NYS ASP-CLP certified analytical laboratory for the PAHs and inorganics listed below. In addition, PCB analysis via Method 8082 will also be included if Track 1 Unrestricted SCOs appear achievable.

PAHs (Method 8270)	Inorganic Compounds (Method 6010/7470)
Benzo(a)anthracene	Arsenic
Benzo(a)pyrene	Barium
Benzo(b)fluoranthene	Cadmium
Benzo(k)fluoranthene	Copper
Chrysene	Lead
Dibenz(a,h)anthracene	Mercury
indeno(1,2,3)pyrene	Silver
	Zinc

Samples will be analyzed using USEPA Methodology with an equivalent Category B deliverables package to facilitate data evaluation by a third-party validation expert. A two to three-business day turnaround time will be requested for the analytical results to minimize the time that the excavation remains open.

Quality assurance (QA) samples will be collected to support the verification sample data evaluation. The QA samples will include a minimum of one matrix spike (MS), one matrix spike duplicate (MSD), and one blind duplicate per 20 verification samples. Dedicated equipment will be used to avoid the need for equipment blanks.

3.3.5 Off-Site Disposal

To confirm that the impacted soil/fill is acceptable for disposal at a permitted solid waste disposal facility, samples will be collected from the impacted area and analyzed for waste profile characterization parameters as required by the disposal facility (see Section 3.2.4). Waste profile samples will be collected prior to excavation activities to characterize the soil/fill and facilitate disposal. Samples will be analyzed in accordance with USEPA SW-846 methodology. QA samples will not be collected for the waste characterization.

3.3.6 Backfill and Compaction

A “select fill” or virgin source of soil will be identified and pre-qualified in accordance with DER-10 Section 5.4(e) and Table 5.4(e) 10 (Ref. 5), as appropriate. Assuming the soil test results show consistency and meet all of the restricted-residential SCOs requirements (or less restrictive use limits, as may be appropriate depending on the results of the verification sampling) a reduced sampling and testing frequency is proposed as shown for soil volumes in excess of 5,000 CY.

Soil Quantity	Discrete Samples¹ - VOCs	Composite Samples²
Initial 5,000 CY	15 + 1 MS, 1 MSD, 1 Blind Duplicate	6 + 1 MS, 1 MSD, 1 Blind Duplicate
Additional Soil	1/1,000 CY	1/2,000 CY

1. Discrete grab samples will be tested for VOCs per Section 5.3.6.1.

2. Composite samples will be tested for SVOCs, inorganic compounds, PCBs, and pesticides per Section 5.3.6.1.

Each composite will be comprised of a minimum of three grab samples. The grab samples will be mixed then placed in laboratory provided jars.

3.3.6.1 Testing Requirements

Samples will be analyzed for the following constituents in accordance with USEPA SW-846 methodology:

- TCL VOCs (plus TICs) - Method 8260B
- TCL SVOCs (plus TICs)- Method 8270C
- TCL Organochlorine Pesticides and PCBs - Method 8081A/8082
- TAL Metals - Method 6010B
- Cyanide - Method 9013
- Herbicides - Method 8051A

Characterization testing for off-site sources will be performed by an independent, NYSDOH ELAP-approved laboratory. An equivalent Category B deliverables package will be furnished with the data to allow data evaluation and preparation of a Data Usability Summary Report (DUSR) by an independent, third-party data validation expert. QA samples will be collected to support the data evaluation. The QA samples will include a minimum of one MS, one MSD, and one blind duplicate per 20 verification samples.

The NYSDEC will be copied on sample test results for all materials proposed for import for approval prior to import of materials to the Site.

3.3.6.2 Placement and Compaction

Backfilling will closely follow the excavation work to minimize the amount of open excavation, but will necessarily pend the results of the analytical testing. Backfilling will be scheduled with the NYSDEC and NYSDOH prior to backfilling. Backfill soil will be maintained at a sufficient distance from the working face of the excavation to prevent contact or mixing with soil/fill designated for removal. Wetting of the backfill soil during placement, spreading, and compacting will be performed as required to control fugitive dust within the CAMP action limits.

Backfilling of select material will be completed to the final subgrade elevations established by the owner's architect. Backfill will be placed in maximum 1-ft thick lifts and compacted by compaction equipment approved by the on-site engineer's representative. Compaction testing of each borrow source will be completed. Standard proctor tests will be employed to establish a maximum compaction. Backfill will be compacted to achieve at least 90% of maximum dry density as determined by the Modified Proctor Test (or as approved by the Owner's geotechnical engineer). The handling, spreading, and compacting will be directed toward obtaining a stable and homogeneous fill that is free of stratifications, lenses, or pockets. Backfill will not occur when soils are frozen or moisture content is too high/low to achieve compaction requirements. Admixing of wet soils with dry backfill material and addition of water will be permitted to achieve suitable moisture content.

3.3.6.3 Groundwater Sampling

Monitoring wells MW-2, MW-3 and MW-4 will be resampled during the IRM using the procedures included in Section 2.2.2. The MW-2 sample will be tested for NYSDEC STARS List volatile organic compounds (VOCs) via USEPA Method 8260. Samples from MW-3 and MW-4 will be tested for pesticides via Method 8081. Testing will include MS and MSD and will include an equivalent ASP Category B deliverables package.

3.4 Health and Safety Plan

Benchmark has prepared a HASP for use by Benchmark employees in accordance with 40 CFR 300.150 of the NCP and 29 CFR 1910.120. The HASP, provided as Appendix E, includes the following site-specific information:

- Hazard assessment
- Training requirements
- Definition of exclusion, contaminant reduction, and other work zones
- Monitoring procedures for Site operations
- Safety procedures
- Personal protective clothing and equipment requirements for various field operations
- Disposal and decontamination procedures

- Emergency response plan that addresses potential site-specific emergencies

Health and safety activities will be monitored throughout the remedial field activities. A member of the field team will be designated to serve as the Site Safety and Health Officer (SSHO) throughout the field program. This person will report directly to the Project Manager and the Corporate Health and Safety Coordinator. The HASP will be subject to revision as necessary, based on new information that is discovered during the remedial activities.

Real-time community air monitoring will be performed during remedial activities at the Site. Particulate monitoring will be performed along the downwind perimeter of the work area during subgrade excavation, backfilling, grading, and soil/fill handling activities in accordance with the Community Air Monitoring Plan (CAMP), a component of the HASP. The CAMP is consistent with the requirements for community air monitoring at remediation sites as established by the NYSDOH and NYSDEC. Accordingly, it follows procedures and practices outlined under NYSDOH's Generic Community Air Monitoring Plan (Appendix 1A of DER-10) and Fugitive Dust and Particulate Monitoring (Appendix 1B of DER-10).

4.0 REPORTING AND SCHEDULE

4.1.1 IRM Activities Reporting

Benchmark will provide full-time on-site inspection to document all IRM activities. Monitoring and documentation of the field activities will include: construction stake-out; record drawings; daily reports of activities; community air monitoring results; pre- and post-excavation sampling and analysis; and progress photographs and sketches.

4.1.2 Construction Monitoring

Standard daily reporting procedures will include preparation of an Inspector's Daily Report and, when appropriate, problem identification and corrective measures reports. Appendix F contains sample project documentation forms. Information that may be included on the daily report form includes:

- Processes and locations of construction under way
- Equipment and personnel working in the area, including subcontractors
- Number and type of truckloads of soil/fill removed from the Site
- Approximate sampling locations (sketches) or GPS (Trimble) coordinates and sample designations for pre-excavation characterization and post-excavation verification
- Grid locations and depths being excavated

The completed reports will be available on-site and submitted to the NYSDEC as part of the Final Engineering Report. The NYSDEC will be promptly notified of problems requiring modifications to this Work Plan prior to proceeding or completion of the construction item.

Photo documentation of the remedial activities will be prepared by a field representative throughout the duration of the project as necessary to convey typical work activities, changed conditions, and/or special circumstances.

4.1.3 Alternatives Analysis Report (AAR)

Following completion of IRM activities an Alternatives Analysis Report (AAR) will be prepared in accordance with the requirements of Section 4.1 of DER-10.

The primary goal of the AAR will be to screen the “no further action” alternative (i.e., considering successful completion of the IRM activities) against the following criteria as described in 6NYCRR 375-1.8(f):

- Protection of Human Health and the Environment
- Compliance with Standards, Criteria, & Guidance (SCGs)
- Short-term Effectiveness & Impacts
- Long-term Effectiveness & Permanence
- Reduction of Toxicity, Mobility, or Volume
- Implementability
- Cost
- Land Use

In addition, the AAR will screen other alternatives, if applicable (e.g., achieving a less restrictive site use condition, if the IRM has not achieved unrestricted use). The “protection of human health and the environment” criteria will consider residual concentrations in soil and groundwater in considering whether the IRM is fully protective and satisfies site-specific Remedial Action Objectives (RAOs) designed to meet this criterion.

Following the screening of alternatives, a comparative analysis will be performed against the above criteria. The comparative analysis will allow for better understanding of the relative advantages and disadvantages of each of the alternatives, and will facilitate recommendation of a remedial action or justifying the IRM as the final remedial measure.

Upon NYSDEC review and acceptance of the final AAR, it is anticipated that a Decision Document will be issued by the Department. Notice of the Decision Document findings and solicitation of comments will be made via a Fact Sheet similar to that described in Section 3.2.1.

4.1.4 Final Engineering Report

A Final Engineering Report (FER) will be prepared at the conclusion of remedial activities and recording of the final Decision Document. The FER will include the following information and documentation, consistent with the NYSDEC’s DER-10 Technical Guidance for Site Remediation (Ref. 5):

- Introduction and background

- A Site or area planimetric map showing the parcel(s) remediated, including significant site features
- A Site map showing the lateral limits of any excavations
- Tabular summaries of unit quantities including: volume of soil excavated and disposition of excavated soil
- Planimetric map showing location of all verification and other sampling locations with sample identification labels/codes
- Tabular comparison of verification and other sample analytical results to SCOs. An explanation shall be provided for any results exceeding acceptance criteria
- Documentation on the disposition of impacted soil removed from the Site
- Copies of daily inspection reports and, if applicable, problem identification and corrective measure reports
- Photo documentation of remedial activities
- Text describing the remedial activities performed; a description of any deviations from the Work Plan and associated corrective measures taken; and other pertinent information necessary to document that the Site activities were carried out in accordance with this Work Plan

In addition, Benchmark will subcontract for third-party data review of post-excavation verification data by a qualified, independent data validation expert. Specifically, a DUSR will be prepared, with appropriate data qualifiers added to the results. The DUSR format will follow the NYSDEC's September 1997 DUSR guidelines and DER-10 guidance (Ref. 5). The DUSR and any necessary qualifications to the data will be appended to the FER.

4.1.5 Site Management Plan

For any BCP site not cleaned up to NYSDEC Part 375 unrestricted SCOs, preparation of a Site Management Plan (SMP) that describes site-specific Institutional Controls and/or Engineering Controls (IC/EC) is a required component of the final remedy. Therefore, an SMP will be prepared as part of the final remedy for the Site. Consistent with NYSDEC BCP requirements, components of the SMP will include:

- ***Engineering and Institutional Controls Plan.*** Engineering controls include any physical barrier or method employed to actively or passively contain, stabilize, or monitor contaminants; restrict the movement of contaminants; or eliminate potential exposure pathways to contaminants. Institutional controls

at the Site will include groundwater use restrictions and restrictions for use of the Site (i.e., residential or commercial purposes). Should the excavation of soil/fill achieve unrestricted (Track 1) SCOs, IC/ECs will not be required for the Site.

- ***Operation and Maintenance Plan*** will not be a requirement of the SMP as there are no systems containing mechanical components that will be operated, monitored, and maintained.
- ***Excavation Work Plan*** to assure that future intrusive activities and soil/fill handling at the Site are completed in a safe and environmentally responsible manner unless the Site has been remediated to unrestricted SCOs.
- ***Site Monitoring Plan*** that includes: provisions for a groundwater monitoring plan and a Site-wide inspection program to assure that the IC/ECs have not been altered and remain effective.
- ***Environmental Easement*** filed with Erie County.

4.1.6 Project Schedule

The anticipated project schedule for the major tasks to be performed in support of the IRM is as follows:

- *August 2011* – Conduct pre-excavation characterization sampling
- *September-October 2011* – Perform remedial excavation fieldwork
- *October-November 2011* – Submit Alternatives Analysis Report
- *November-December 2011* – NYSDEC issues Decision Document
- *December 2011* – Submit Site Management Plan (if required) and Final Engineering Report
- *October 2011 to July 2012* – Construct building

5.0 REFERENCES

1. Clayton Group Services, Inc. Excerpts of the January 2000 *Phase I Environmental Site Assessment and Trench Sampling Report of the Lamar Outdoor Advertising Facility, 295 Maryland Street, Buffalo, New York.*
2. Benchmark Environmental Engineering & Science, PLLC. 2001. *Phase I Environmental Site Assessment at 291 Maryland Street & 121-129 West Avenue.*
3. Benchmark Environmental Engineering & Science, PLLC. November 2001. *Phase II Environmental Site Investigation Report 295 Maryland Street Buffalo, NY.*
4. New York State Department of Environmental Conservation. 2004. *Draft Brownfield Cleanup Program Guide.* May.
5. New York State Department of Environmental Conservation. May 3, 2010. *DER-10/Technical Guidance for Site Investigation and Remediation.*

TABLES

TABLE 1

SUMMARY OF SOIL ANALYTICAL RESULTS

295 Maryland, LLC
295 Maryland Street Site
Buffalo, New York

Parameter	TP-1	TP-1	TP-2	TP-2	TP-3	TP-3	TP-4	TP-4	TP-5	TP-5	TP-6	TP-6	TP-7	TP-7	TP-8	TP-8	TP-9	TP-9	TP-10	TP-10	EM-6 Composite	MW-3 4-6'	SB-5 0-2'	SCOs	SCOs	SCOs
	0-0.5'	0.5-8'	0-0.5'	0.5-8'	0-0.5'	0.5-8'	0-0.5'	0.5-8'	0-0.5'	0.5-8'	0-0.5'	0.5-8'	0-0.5'	0.5-5.5'	0-0.5'	0.5-8'	0-0.5'	0.5-8'	0-0.5'	0.5-8'				Restricted Residential	Residential	Unrestricted
Volatile Organics (µg/kg)																										
Benzene	NA	ND	NA	ND	NA	ND	NA	0.8	NA	ND	NA	ND	3	ND	ND	4800	2900	60								
Methylene chloride	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	7.9	3.5	100,000	5,100	50								
Semi-Volatiles (µg/kg)																										
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	69 J	ND	ND	ND	--	--	--										
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	250 J	ND	ND	ND	100,000	100,000	20,000										
Anthracene	ND	ND	ND	ND	220 J	ND	2100 J	ND	330	ND	280 J	98 J	200 J	ND	440 J	200 J	2500 J	280 J	4700 J	930	ND	ND	20 J	100,000	100,000	100,000
Benzo(a)anthracene	150 J	ND	85 J	ND	840	ND	4900	110 J	1200	ND	1800	290 J	1700	290 J	2000	900	8700	760	17000	2000	2700 J	ND	73 J	1,000	1,000	1,000
Benzo(a)pyrene	110 J	ND	ND	ND	750	ND	3600	ND	1200	ND	2100	250 J	3000	370	2000	900	7100	670	13000	1600	ND	ND	59 J	1,000	1,000	1,000
Benzo(b)fluoranthene	ND	ND	ND	ND	1100	ND	5100	ND	1800	ND	3000	360	3900	350	3000	1300	9900	1000	19000	2600	ND	ND	84 J	1,000	1,000	1,000
Benzo(g,h,i)perylene	ND	ND	ND	ND	330	ND	1400 J	ND	770	ND	1800	99 J	2700	720	1300	470	3300 J	260 J	5700 J	680	ND	ND	47 J	100,000	100,000	100,000
Benzo(k)fluoranthene	ND	ND	ND	ND	410	ND	1900 J	ND	540	ND	900	140 J	1200	ND	1100	540	3800 J	330	8100	980	ND	ND	31 J	3,900	1,000	800
Bis-2-ethylhexyl phthalate	ND	250 J	970	ND	ND	ND	ND	ND	ND	ND	ND	ND	120 J	--	--	--										
Butyl benzyl phthalate	ND	ND	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--										
Carbazole	ND	150 J	ND	ND	ND	ND	ND	160 J	ND	400	ND	ND	ND	--	--	--										
Chrysene	120 J	ND	75 J	ND	710	ND	4100	98 J	1100	ND	1600	240 J	1700	420	1700	830	7400	660	14000	1700	2800 J	ND	77 J	3,900	1,000	1,000
Dibenz(a,h)anthracene	ND	420	ND	610	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	330	330	330									
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	230 J	ND	ND	ND	59,000	14,000	7,000										
Di-n-octyl phthalate	ND	ND	ND	73 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	130 J	ND	ND	ND	--	--	--						
Fluoranthene	230 J	ND	ND	ND	1700	ND	13000	240 J	2500	ND	2200	570	1400	320	3600	2400	19000	1600	38000	4800	ND	ND	150 J	100,000	100,000	100,000
Fluorene	ND	ND	ND	ND	ND	ND	610 J	ND	72 J	ND	61 J	ND	ND	ND	61 J	ND	86 J	1200 J	250 J	ND	ND	ND	ND	100,000	100,000	30,000
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	390	ND	1700	ND	830	ND	1800	ND	3000	410	1300	550	4300	290 J	7000	740	ND	ND	43 J	500	500	500
Naphthalene	ND	ND	ND	ND	61 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	150 J	ND	ND	ND	100,000	100,000	12,000
Phenanthrene	190 J	ND	79 J	ND	980	63 J	10000	160 J	1500	ND	1200	510	740	250 J	2200	1300	13000	1200	25000	4000	ND	ND	100 J	100,000	100,000	100,000
Pyrene	230 J	ND	130 J	ND	1600	110 J	10000	190 J	3600	ND	6400	530	5500	1900	4800	2200	18000	1500	35000	4100	ND	ND	120 J	100,000	100,000	100,000
PCBs (µg/kg)																										
Aroclor 1016	ND	ND	ND	ND	ND	ND*	ND	ND	ND	ND	ND*	ND	ND	--	--	--										
Aroclor 1221	ND	ND	ND	ND	ND	ND*	ND	ND	ND	ND	ND*	ND	ND	--	--	--										
Aroclor 1232	ND	ND	ND	ND	ND	ND*	ND	ND	ND	ND	ND*	ND	ND	--	--	--										
Aroclor 1242	ND	ND	ND	ND	ND	ND*	ND	ND	ND	ND	ND*	ND	ND	--	--	--										
Aroclor 1248	ND	ND	ND	ND	ND	ND*	ND	ND	ND	ND	ND*	ND	ND	--	--	--										
Aroclor 1254	ND	ND	ND	ND	ND	42	12	ND	48	ND	61	ND	57	ND	91	ND*	211	ND	765	ND	ND*	ND	ND	--	--	--
Aroclor 1260	ND	ND	ND	ND	ND	ND*	ND	ND	ND	ND	ND*	ND	ND	--	--	--										
Total PCBs	ND	ND	ND	ND	ND	42	12	ND	48	ND	61	ND	57	ND	91	ND	211	ND	765	ND	ND	ND	ND	1,000	1,000	100
Pesticides (ug/kg)																										
4,4'-DDE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	4.1	8900	1800	3.3										
4,4'-DDT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	4	7900	1700	3.3										
Inorganic Compounds (mg/kg)																										
Aluminum	6,820	9,980	7,760	8,260	7,980	11,000	8,930	7,710	8,450	8,870	5,690	11,100	4,470	4,410	4,490	5,710	6,720	8,240	10,800	7,270	NA	11,600	13,800	--	--	--
Antimony	ND	8.11	ND	ND	ND	ND	7.18	ND	7.83	ND	ND	8.45	ND	ND	NA	ND	ND	--	--	--						
Arsenic	2.9	3.5	7.8	2.8	7.2	3.3	16	2.4	23	3.1	4.2	5.2	3.1	4.1	4.7	7.8	4.1	7.5	1.1	3.2	NA	4.5	6.4	16	16	13
Barium	97	82.7	90.2	67.4	218	95.5	327	80	516	78.2	213	106	61.8	552	98.8	192	143	150	140	73.5	NA	136	133	400	350	350
Beryllium	0.486	0.539	0.646	0.477	0.536	0.676	0.596	0.46	0.601	0.506	0.603	0.628	0.543	0.244	0.493	0.478	0.778	0.508	2.03	0.467	NA	0.562	0.649	72	14	7.2
Cadmium	ND	0.608	ND	0.885	1.29	ND	3.17	0.775	4.2	0.673	1.44	0.599	0.872	1.41	0.651	2.26	2.91	1.81	1.87	0.697	NA	ND	0.621	4	2.5	2.5
Calcium	43,100	55,300	35,900	66,900	40,700	70,800	59,900	69,100	45,900	67,100	105,000	45,900	161,000	53,500	179,000	83,000	84,900	48,000	94,200	65,400	NA	55,100	13,200	--	--	--
Chromium	8.84	11.5	9.08	10.5	65.4	14.4	37.4	11.3	71.6	11.8	17.2	15.3	11	10.7	13.6	13.8	30	18.9	18	11	NA	14.3	19.2	180	36	30

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295 Maryland Street Site
Buffalo, New York

Parameter	TP-1	TP-1	TP-2	TP-2	TP-3	TP-3	TP-4	TP-4	TP-5	TP-5	TP-6	TP-6	TP-7	TP-7	TP-8	TP-8	TP-9	TP-9	TP-10	TP-10	EM-6 Composite	MW-3 4-6'	SB-5 0-2'	SCOs	SCOs	SCOs
	0-0.5'	0.5-8'	0-0.5'	0.5-8'	0-0.5'	0.5-8'	0-0.5'	0.5-8'	0-0.5'	0.5-8'	0-0.5'	0.5-8'	0-0.5'	0.5-5.5'	0-0.5'	0.5-8'	0-0.5'	0.5-8'	0-0.5'	0.5-8'				Restricted Residential	Residential	Unrestricted
Inorganic Compounds (mg/kg)																										
Cobalt	5.34	7.83	5.61	7.87	7.42	8.85	6.96	7.15	6.91	9.2	3.74	7.64	1.9	5.38	2.9	5.4	5.15	6.45	3.83	6.09	NA	13	11.8	--	--	--
Copper	23.8	19.3	25.7	18.5	141	39.5	52.3	17.2	52.3	18	28.8	23.3	19.9	33.4	23.2	49.3	35	28	30.7	22.5	NA	19.4	22.7	270	270	50
Iron	11,100	14,600	8,830	14,600	14,500	19,700	15,200	13,000	15,700	15,200	8,850	17,200	6,390	9,990	7,620	14,500	17,300	19,700	11,700	13,000	NA	18,000	23,600	--	--	--
Lead	302	55.2	182	34.3	3610	126	3270	167	8160	36.3	632	150	71.4	1420	176	503	602	344	328	97.6	NA	14.7	85.3	400	400	63
Magnesium	7,170	16,600	9,630	21,100	12,000	22,900	9,830	20,100	12,000	24,500	15,800	17,900	18,200	9,160	13,600	9,960	23,500	16,000	28,500	21,600	NA	20,600	9,340	--	--	--
Manganese	274	510	231	451	540	463	413	388	394	498	655	455	376	291	375	365	533	474	1120	386	NA	648	904	2,000	2,000	1,600
Mercury	0.31	ND	0.3	ND	1	0.3	0.94	0.19	1	ND	ND	0.062	ND	ND	0.11	0.92	0.35	0.25	ND	ND	NA	0.0218	0.167	0.81	0.81	0.18
Nickel	11.1	16.7	11.6	17.6	17.8	20.3	16.2	15.2	15.5	18.3	14.8	19	9.55	10.6	9.59	20	15	17.2	14.9	15.1	NA	22	21.6	310	140	30
Potassium	1120	1570	1320	1250	1250	1770	1410	1360	1370	1690	881	1620	579	803	726	996	983	1350	1030	1310	NA	1820	1910	--	--	--
Selenium	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	180	36	3.9													
Silver	ND	1.19	ND	31.8	1.41	9.39	ND	6.91	1.26	1.4	ND	3.85	ND	NA	ND	ND	180	36	2							
Sodium	149	159	1080	258	299	172	255	155	224	218	379	210	233	339	315	306	208	170	446	228	NA	260	ND	--	--	--
Thallium	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	--	--	--													
Vanadium	14.9	19.9	20.7	17.7	19.9	26.2	20.1	17.2	19.1	19.5	12.2	22.6	10.2	12.2	8.37	17.1	11.9	18.8	10.3	15.3	NA	21.6	28.5	--	--	--
Zinc	112	78	60.9	63.9	342	102	683	75.8	784	66.7	141	103	80	546	131	885	850	265	661	170	NA	66.5	135	10,000	2,200	109

Notes:

BOLD	= Exceeds the Restricted Residential SCO
BOLD	= Exceeds the Residential SCO
BOLD	= Exceeds the Unrestricted SCO

By extension of the above, the concentrations that exceed restricted residential SCO also exceed the residential and unrestricted SCO, and likewise for residential vs. unrestricted SCO.

Definitions:

- "-" = Not available
- ND = Not detected
- J = Result estimated below the quantitation limit
- " * " = Elevated detection limit due to sample matrix interference.
- NA = Not analyzed

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

295 Maryland, LLC
295 Maryland Street Site
Buffalo, New York

Parameter ¹	Sample (Date)									Groundwater Standard ²
	MW-1		MW-2		MW-3		MW-4		Blind Dup ³	
	(9/23/10)	(3/1/11)	(9/23/10)	(3/1/11) ⁴	(9/23/10)	(3/1/11)	(9/23/10)	(3/1/11) ⁴	(3/1/11)	
Volatile Organics (µg/L)										
1,2,4-Trimethylbenzene	ND	ND	ND	19	ND	ND	ND	ND	ND	5
1,3,5-Trimethylbenzene	--	ND	--	1.2	--	ND	--	ND	ND	5
Acetone	5	ND	ND	ND	ND	ND	ND	ND	ND	50
Benzene	ND	ND	38	20	ND	ND	ND	ND	ND	1
Chloroform	2	ND	4.2	ND	5.4	ND	2.8	ND	ND	7
Ethylbenzene	ND	ND	39	46	ND	ND	ND	ND	ND	5
Isopropylbenzene	ND	ND	ND	4.6	ND	ND	ND	ND	ND	5
m/p-Xylenes	--	ND	ND	43	ND	ND	ND	ND	ND	5
Methyl-t-Butyl Ether (MTBE)	ND	ND	ND	2.3	ND	ND	ND	ND	ND	10
o-Xylenes	--	ND	--	35	ND	ND	ND	ND	ND	5
Toluene	ND	ND	18	14	ND	ND	ND	ND	ND	5
Xylenes(Total)	ND	ND	97	78	ND	ND	ND	ND	ND	5
Semi-Volatile Organics (ug/L)										
2-Methylphenol	ND	--	1.3	--	ND	--	ND	--	--	5
Acetophenone	ND	--	2.8	--	1.1	--	ND	--	--	--
Benzo (a) anthracene	ND	--	0.35	ND	ND	--	ND	--	--	0.002
Butyl benzyl phthalate	0.51	--	0.71	--	0.58	--	0.72	--	--	50
Di-n-butyl phthalate	0.51	--	0.65	--	0.55	--	1.1	--	--	50
Fluoranthene	ND	--	0.47	ND	ND	--	ND	--	--	50
Naphthalene	ND	--	21	92	ND	--	ND	--	--	10
Phenanthrene	ND	--	0.58	ND	0.46	--	ND	--	--	50
Pyrene	ND	--	0.42	ND	ND	--	ND	--	--	50
Pesticides & PCBs (ug/L)										
4,4'-DDD	ND	--	ND	--	0.23	0.04 J	0.25	0.036 J	0.022 J	0.3
4,4'-DDT	0.082	--	ND	--	ND	0.017 J	0.2	ND	ND	0.2
alpha-BHC	ND	--	ND	--	0.18	ND	ND	ND	ND	0.01
beta-BHC	ND	--	0.06	--	0.13	ND	0.21	ND	ND	0.04
Dieldrin	ND	--	ND	--	ND	ND	0.14	0.027 J	0.031 J	0.004
Endosulfan I	ND	--	ND	--	ND	ND	0.07	ND	ND	--
Endosulfan II	0.069	--	0.11	--	0.14	ND	0.14	0.016 J	ND	--
Endosulfan sulfate	ND	--	ND	--	ND	ND	0.092	ND	ND	--
Endrin aldehyde	ND	--	ND	--	ND	ND	ND	0.022 J	ND	5
gamma-Chlordane	0.036	--	0.041	--	0.13	0.03 J	0.15	ND	ND	0.05
Heptachlor	ND	--	ND	--	0.11	ND	0.14	ND	ND	0.04
Heptachlor epoxide	0.018	--	ND	--	ND	ND	ND	ND	ND	0.03
Methoxychlor	0.059	--	0.098	--	0.2	ND	0.16	0.024 J	ND	35
PCBs	ND	--	ND	--	ND	--	ND	--	--	0.00009
Inorganic Compounds (mg/L)										
Barium	0.0542	--	0.332	--	0.0985	--	0.0687	--	--	1
Calcium	75.6	--	119	--	123	--	150	--	--	--
Magnesium	45.3	--	107	--	98.3	--	151	--	--	--
Manganese	0.0739	--	0.204	--	0.195	--	0.315	--	--	0.3
Nickel	ND	--	ND	--	0.0159	--	ND	--	--	0.1
Potassium	4.5	--	6.41	--	10	--	12.2	--	--	--
Sodium	25.1	--	59.2	--	88.8	--	34.4	--	--	20
General Chemistry Parameters (mg/L)										
Total Cyanide	ND	--	ND	--	ND	--	ND	--	--	0.2

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
3. Blind Duplicate collected at monitoring well MW-3.
4. MS/MSD collected at monitoring wells MW-2 and MW-4.

Bold

= Exceeds the NYSDEC TOGS 1.1.1 Groundwater Standard or Guidance Value

Definitions:

N/A = Not available

ND = Not detected

J = Result estimated below the quantitation limit



TABLE 3

SUMMARY OF GROUNDWATER ELEVATIONS

**295 Maryland, LLC
295 Maryland Street Site
Buffalo, New York**

Monitoring Location	Grade	Top of PVC Riser Elev.	18-Sep-10		23-Sep-10	
			Water Level from Top of Riser	Groundwater Elevation	Water Level from Top of Riser	Groundwater Elevation
MW-1	492.4	491.78	7.94	483.84	8.09	483.69
MW-2	493.4	495.85	14.78	481.07	15.00	480.85
MW-3	497.2	499.49	15.08	484.41	15.25	484.24
MW-4	497.5	499.83	14.07	485.76	14.46	485.37

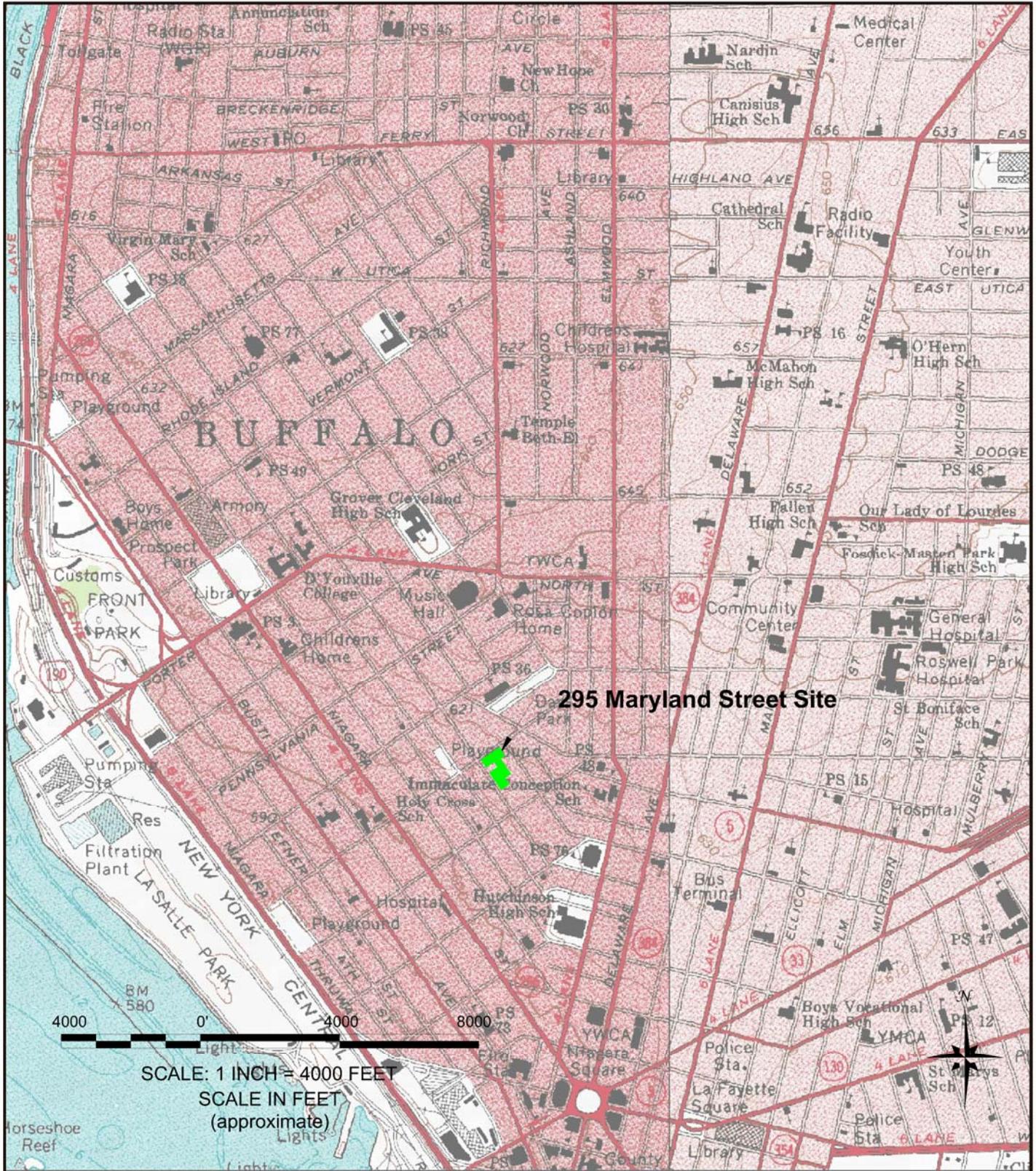
Notes:

1. All wells were surveyed on 10/12/10 with site specific datum of 500 feet.

FIGURES

FIGURE 1

F:\CAD\Benchmark\295 Maryland\Renredial Action Work Plan\Figure 1 - Site Location Map.dwg



295 Maryland Street Site

4000 0 4000 8000

SCALE: 1 INCH = 4000 FEET
SCALE IN FEET (approximate)



2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

SITE LOCATION AND VICINITY MAP

IRM WORK PLAN

295 MARYLAND STREET SITE
295 MARYLAND STREET
BUFFALO, NEW YORK

PREPARED FOR
295 MARYLAND, LLC

PROJECT NO.: 0222-001-100

DATE: DECEMBER 2010

DRAFTED BY: JCT

FIGURE 2



SCALE: 1 INCH = 100 FEET
 SCALE IN FEET
 (approximate)



LEGEND

- PARCEL BOUNDARY
- SITE BOUNDARY



2558 HAMBURG TURNPIKE
 SUITE 300
 BUFFALO, NY 14218
 (716) 856-0599

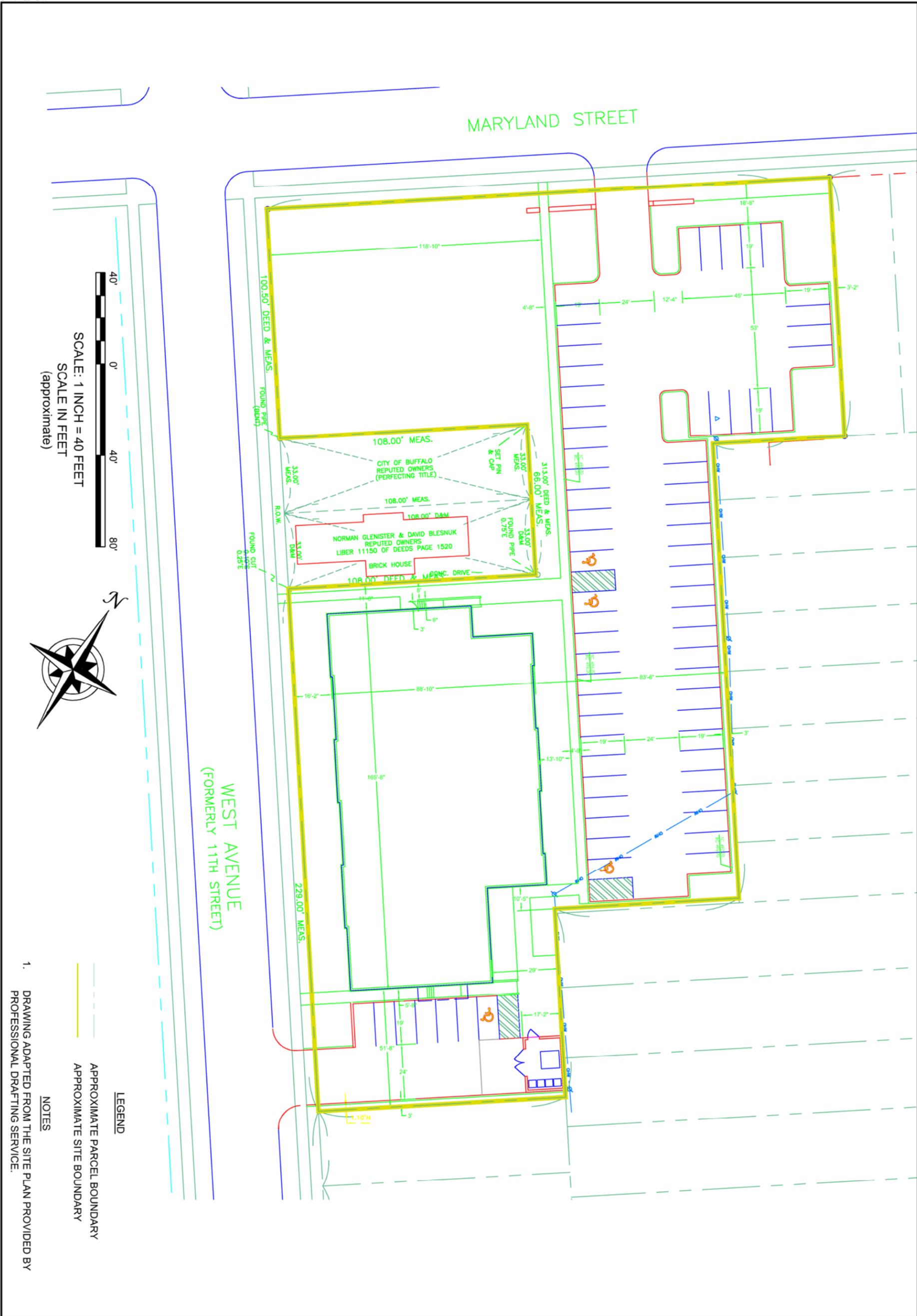
SITE PLAN (AERIAL)
 IRM WORK PLAN

295 MARYLAND STREET SITE
 295 MARYLAND STREET
 BUFFALO, NEW YORK
 PREPARED FOR
 295 MARYLAND, LLC

PROJECT NO.: 0222-001-100

DATE: MAY 2011

DRAFTED BY: JCT



LEGEND
 --- APPROXIMATE PARCEL BOUNDARY
 --- APPROXIMATE SITE BOUNDARY

NOTES

1. DRAWING ADAPTED FROM THE SITE PLAN PROVIDED BY PROFESSIONAL DRAFTING SERVICE.

FIGURE 3

REDEVELOPMENT PLAN

IRM WORK PLAN

295 MARYLAND STREET SITE
 295 MARYLAND STREET
 BUFFALO, NEW YORK
 PREPARED FOR
 295 MARYLAND, LLC



2568 HAMBURG TURNPIKE
 SUITE 300
 BUFFALO, NY 14218
 (716) 858-0599

JOB NO.: 0222-001-100

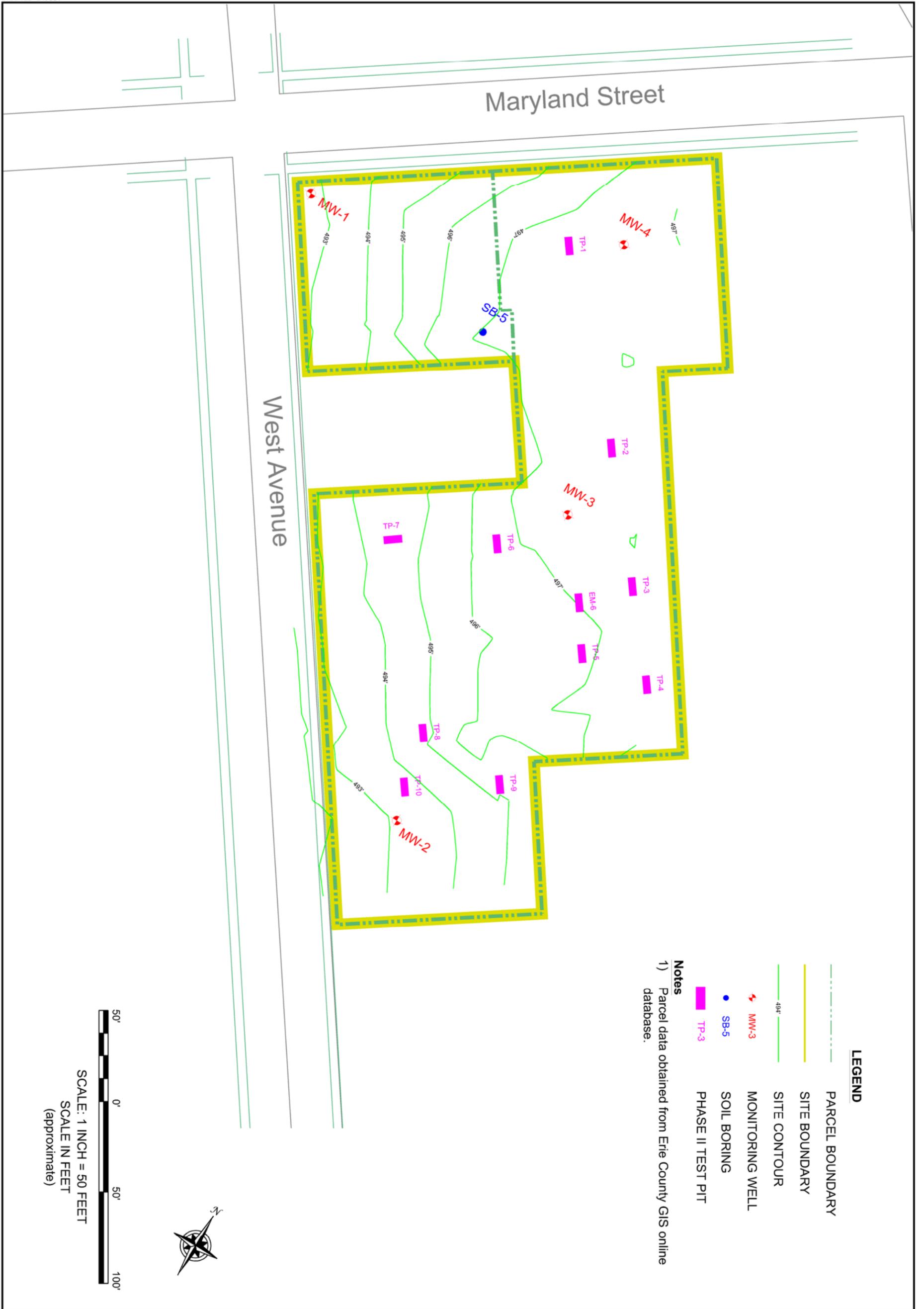


FIGURE 4

EXPLORATION LOCATION PLAN

IRM WORK PLAN

295 MARYLAND STREET SITE
295 MARYLAND STREET
BUFFALO, NEW YORK

PREPARED FOR
295 MARYLAND, LLC



2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: 0222-001-101

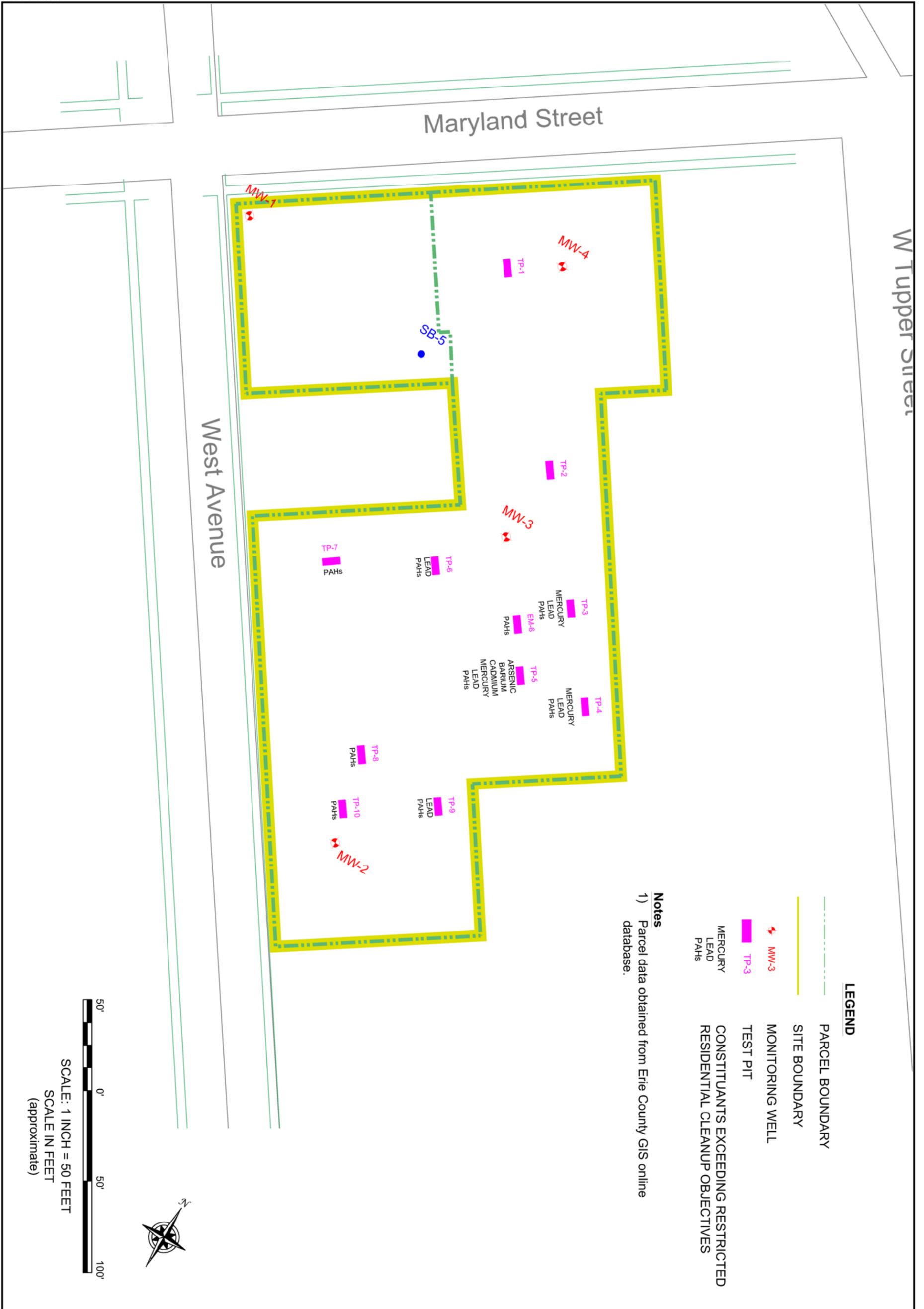
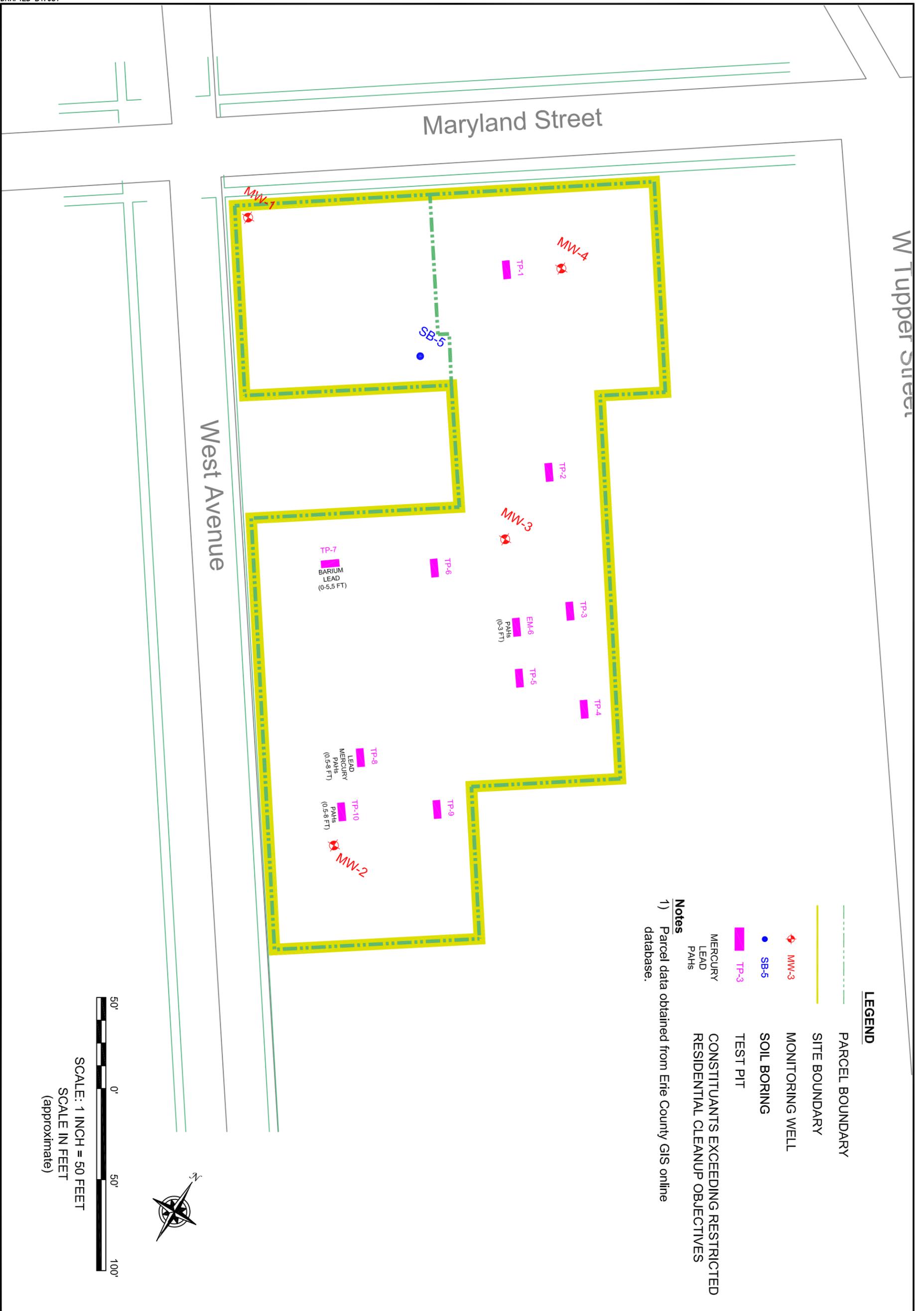


FIGURE 5	<p>SURFICIAL SOIL SAMPLE RESULTS EXCEEDING RESTRICTED RESIDENTIAL SCOs</p> <p>IRM WORK PLAN</p> <p>295 MARYLAND STREET SITE 295 MARYLAND STREET BUFFALO, NEW YORK</p> <p>PREPARED FOR 295 MARYLAND, LLC</p>	 <p>2558 HAMBURG TURNPIKE SUITE 300 BUFFALO, NY 14218 (716) 856-0599</p> <p>JOB NO.: 0222-001-100</p>
-----------------	--	--



SUBSURFACE SOIL SAMPLE RESULTS EXCEEDING RESTRICTED RESIDENTIAL SCOs

IRM WORK PLAN

295 MARYLAND STREET SITE
295 MARYLAND STREET
BUFFALO, NEW YORK

PREPARED FOR
295 MARYLAND, LLC

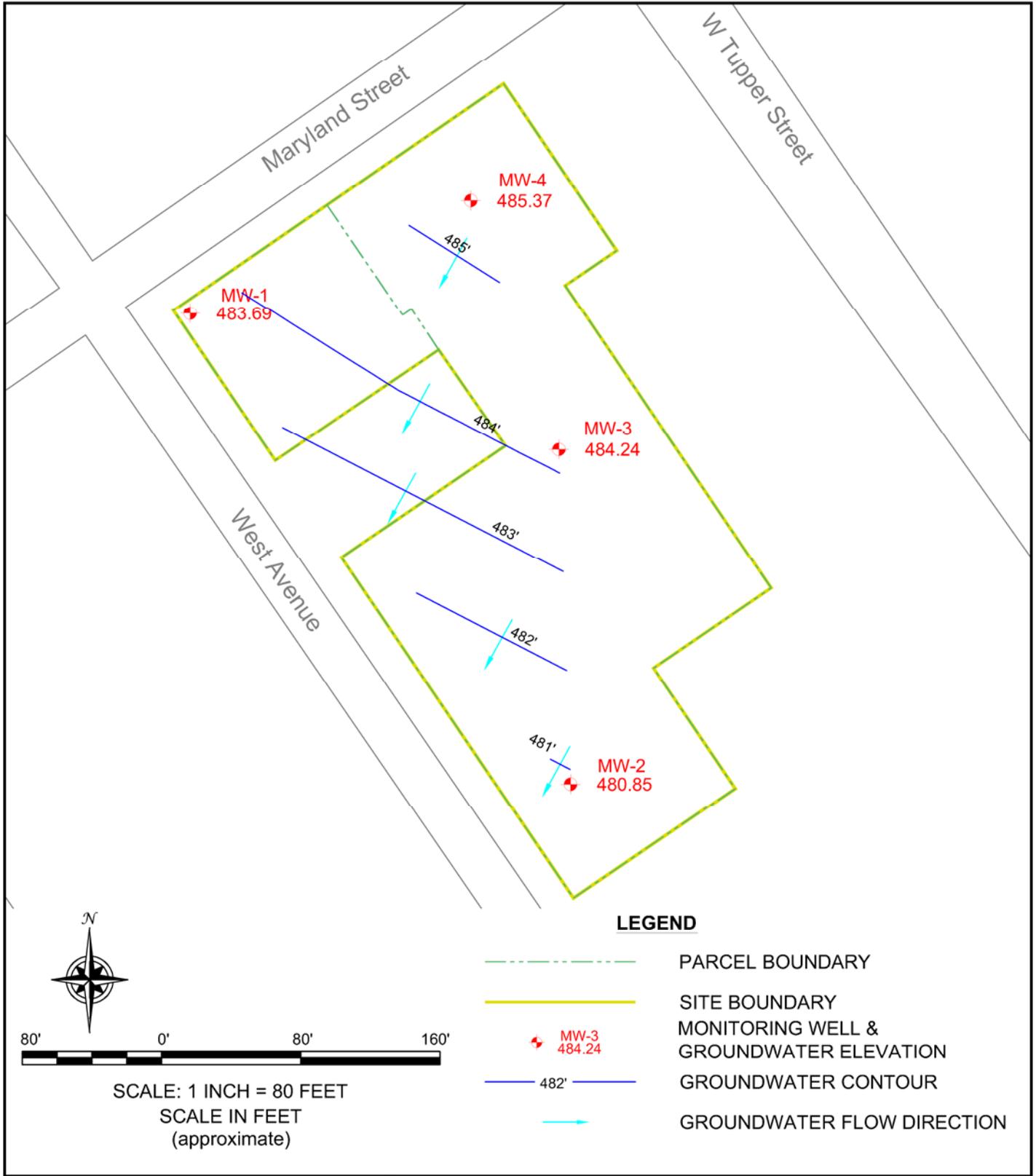


2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: 0222-001-100

FIGURE 6

FIGURE 7



BENCHMARK
 ENVIRONMENTAL
 ENGINEERING &
 SCIENCE, PLLC

2558 HAMBURG TURNPIKE
 SUITE 300
 BUFFALO, NY 14218
 (716) 856-0599

PROJECT NO.: 0222-001-100

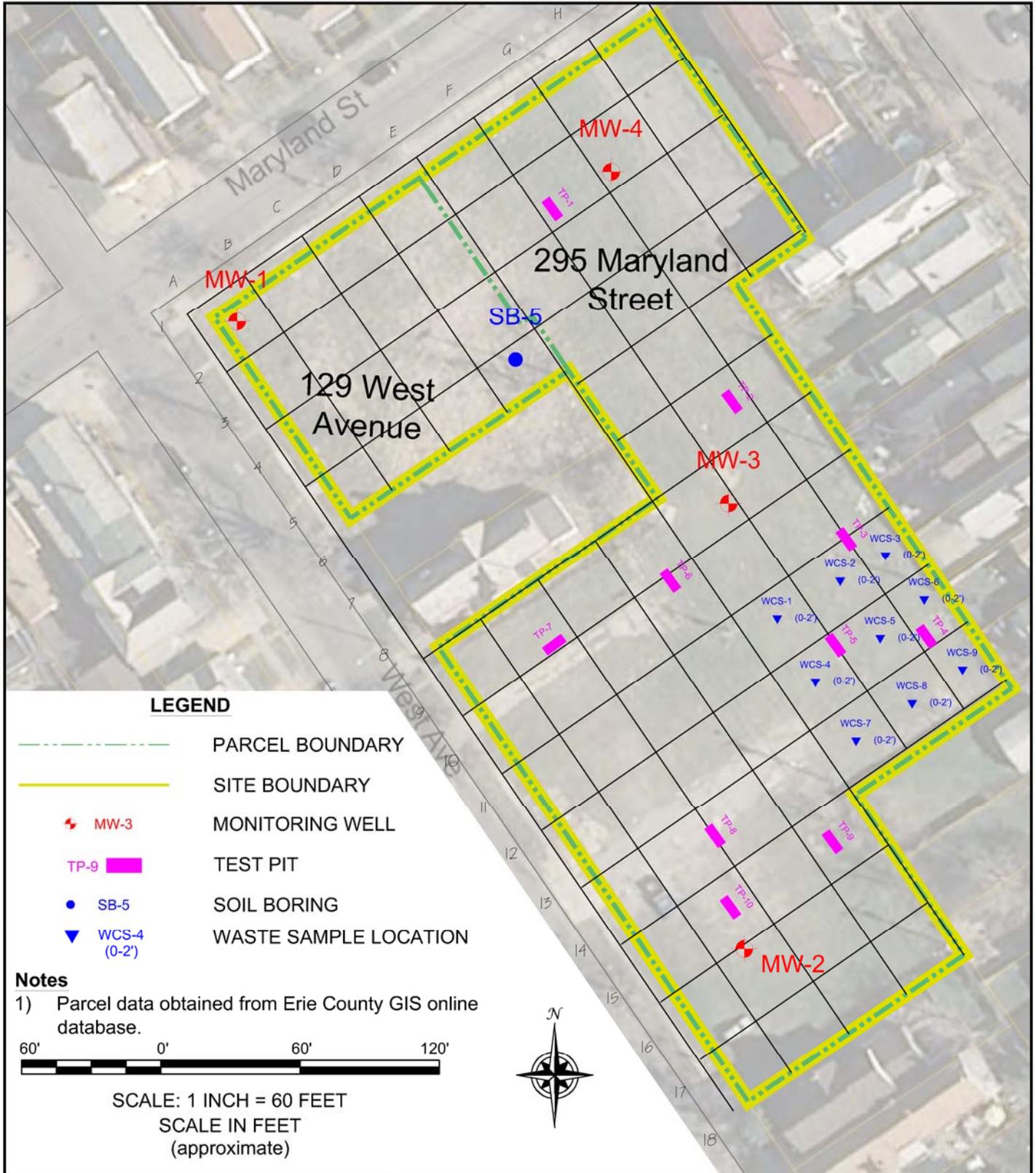
DATE: MAY 2011

DRAFTED BY: JCT

**GROUNDWATER CONTOUR MAP
 (SEPTEMBER 2010)**
 IRM WORK PLAN

295 MARYLAND STREET SITE
 295 MARYLAND STREET
 BUFFALO, NEW YORK
 PREPARED FOR
 295 MARYLAND, LLC

FIGURE 8



LEGEND

- PARCEL BOUNDARY
- SITE BOUNDARY
- MW-3 MONITORING WELL
- TP-9 TEST PIT
- SB-5 SOIL BORING
- WCS-4 (0-2) WASTE SAMPLE LOCATION

Notes

- 1) Parcel data obtained from Erie County GIS online database.



SCALE: 1 INCH = 60 FEET
SCALE IN FEET
(approximate)



2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

WASTE CHARACTERIZATION SAMPLING

IRM WORK PLAN

295 MARYLAND STREET SITE

295 MARYLAND STREET

BUFFALO, NEW YORK

PREPARED FOR

295 MARYLAND LLC

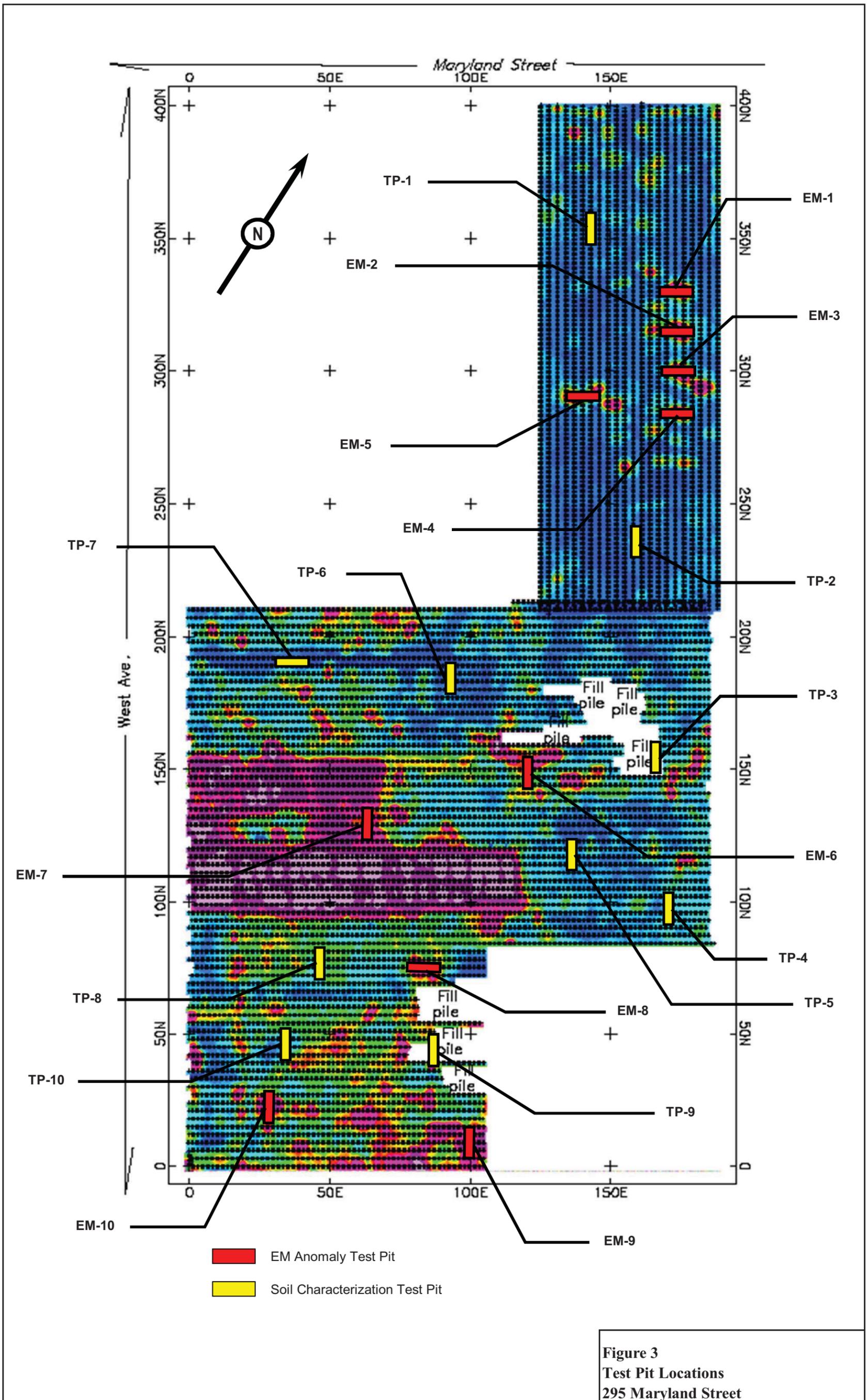
PROJECT NO.: 0222-001-100

DATE: JUNE 2011

DRAFTED BY: JCT

APPENDIX A

ELECTROMAGNETIC SURVEY RESULTS & TEST PIT LOGS



ELECTROMAGNETIC ANOMALY TEST PIT LOGS

(EM-1 to EM-10)

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland St

DATE 10-22-01

JOB NO. 0009-005-100

WEATHER: SUN

CONTRACTOR Zoladz

Temp: 55°F

SUBJECT EM Test Pit Investigation

Wind: 5-10 MPH

Precip: N/A

EM-1 E ^{N/E}
 185 ~~N~~ 340 N

Brown/Gray soil, clay some brick, to concrete

Located approx 2' x 2' x 3' D concrete footer @ 1' BGS

No PED measurement > background (0.0 ppm)

No odors, No visual contam

Signature: *Paul F...*

Title: Project Mgr

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland St

DATE 10-22-01

JOB NO. 0009-005-100

WEATHER: Sun

CONTRACTOR Zoladz

Temp: 58°F

SUBJECT Em Test Pits

Wind: 5-10 MPH

Precip: N/A

TP EM-2:

Same as EM-1 = conc. footer approx 28" diameter, 3' D
1' BGS - 8" x 8" steel plate on top of footer

Approx 1' fill w/ stone, brick over native br. clay

No odor, no visual contain, 0.0 ppm of PCB

Signature: [Signature]

Title: Project Mgr

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland

DATE 10-22-01

JOB NO. 009-05-100

WEATHER: Sun

CONTRACTOR Zoladz

Temp: 58°F

SUBJECT EM Test Pits

Wind: 5-10 MPH

Precip: N/A

Test Pit EM-3

6" fill w/ stone, brick gray-brown over mostly native br
clay. Some fill lenses @ 2-3' bgs

Located approx 30" diameter x 3' D concrete footer 6" BGS

No odor, No PED, No visual content

Signature: [Signature]

Title: Project Mgr

FIELD INVESTIGATION REPORT

PROJECT Maryland St.

DATE 10-22-01

JOB NO. 0009-005-100

WEATHER: Sun

CONTRACTOR Zoladz

Temp: 58°F

SUBJECT EM Test Pits

Wind: 5-10 mph

Precip: N/A

Test Pit EM-4:

Clay w fill lense @ 2' BGS 0-6" fill w brick, stone
small amt perched water @ 2.5'

Concrete footer 30" D x 3' D present 6" BGS

No odors, no visual indication of contamination, 0.0 ppm on PEA

Signature: [Signature]

Title: Project Mgr



FIELD INVESTIGATION REPORT

PROJECT 295 Maryland St

DATE 10-22-01

JOB NO. 2009-005-103

WEATHER: Sun

CONTRACTOR Zoladz

Temp: 58°F

SUBJECT EM Test Pits

Wind: 5-10 MPH

Precip: N/A

TP EM-5:

Excavated 3' x 8' test pit to 2' BGS
Fill soil - Br / Dk Brown w/ brick, stone.
Located concrete-encased I beam (possible former footer)
@ 1' BGS

No odors, No visual carbon evident, 0.0 ppm on PID

Signature: _____

Title: _____

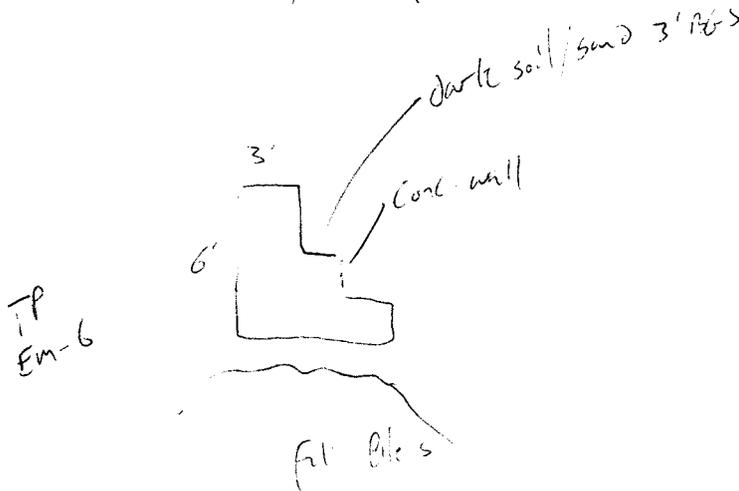
FIELD INVESTIGATION REPORT

PROJECT 295 Maryland St
JOB NO. 0009-005700
CONTRACTOR Zola22
SUBJECT Em Test Pits

DATE 10-22-01
WEATHER: Sun
Temp: 60°F
Wind: 5-10 mph
Precip: N/A

Brick, concrete & stone fill @ surface; encountered small stub: 2' L) of 4' CI pipe which may have been the source of the EM anomaly in addition to concrete fragments

Encountered blackish stained sand @ approx 3' BGS w/ slight-moderate kerosene-like odor. Tr. sheen on perched water @ 3' as well 0.0 ppm on PTD. Appears to be localized (closed to south) ran into softer soil/clay w no odor. Collected sample for VOCs, SVOCs, PCBs, TAL metals. Also retained aliquot for ~~pH/TOC~~ ^{TIN} ~~comparative~~



Signature: Thom Fahn

Title: Project Mgr

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland ST

DATE 10-22-01

JOB NO. 0009-005-100

WEATHER: Sun

CONTRACTOR Zoladz

Temp: 55°F

SUBJECT EM Test pits

Wind: 5-10 mph

Precip: N/A

Test pit EM-7

Approx 1' of soil fill w/ large amounts of brick over
competent concrete pad

No visual/olfactory evidence of contamination
0.0 ppm on PED

Signature: [Signature]

Title: Project Mgr

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland ST

DATE 10-22-01

JOB NO. 0009-005-100

WEATHER: SUN

CONTRACTOR Zolad 2

Temp: 50°F

SUBJECT Em Test Pits

Wind: 5-10 MPH

Precip: N/A

Test Pit EM-8

2-3" of gravel over concrete pad, also uncovered 2 small steel bars
(6" x 2" x 2') No doors, No visual contain, @ opp. in pad

Signature: J. Paul Fahren

Title: Project Manager

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland ST

DATE 10-22-01

JOB NO. 0009-005-100

WEATHER: Sun

CONTRACTOR Zuladz

Temp: 50°F

SUBJECT Em Test Pits

Wind: 5-10 mph

Precip: N/A

Test Pit EM-89 TP

Uncovered 5' length of steel C channel, 1' piece angle iron
0-6" BGS, excavated 3' x 6' x 4' D test pit. 1' fill, mixed w/
topsoil, over native br. clay. water pooled @ 3' BGS

No visual contain, no odors, O.A. PID

Also excavated shallow soil east of TP EM-~~8~~⁹ to verify anomaly
uncovered add'l steel banding and channel

Signature: James Fikes

Title: Proj. Mgr

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland St

DATE 10-22-01

JOB NO. 0009-005-100

WEATHER: Sun

CONTRACTOR Zoladz

Temp: 48°F

SUBJECT EM Test Pits

Wind: 5-10 MPH

Precip: N/A

Test Pit EM-10:

Located several sections of steel angle @ 0-1' BGS
Soils consist of 1' topsoil intermingled w/ fill over native br. clay
Test Pit 3' w x 6' L completed to 3' BGS

No visual / olfactory evidence of contamination, 00 ppm on PCD

Signature: Diana Foster

Title: 10-22-01 Proj mg

APPENDIX B

2001 TEST PIT LOGS

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland St

DATE 10/23/01

JOB NO. 0009-005-100

WEATHER: overcast

CONTRACTOR Zoladz

Temp: 55°F

SUBJECT Investigation Test Pits

Wind: 15 MPH

Precip: N/A

Investigation Test Pit 1 (TP-1):

Excavated to a depth of 8' BGS, 3 W x 6' L
8" fill over clay/topsoil mix - appears to have been
original native layer 3' bgs - based on presence of
darker topsoil layer at 17" depth.

Native brown soil below (clay) ^{silty}

No odor, visual indications of contain. 0.0 ppm on PED
samples collected surface (0-6") and subsurface
(6"-8") @ 8' 15" am

Signature: Paul Forles

Title: Proj Mgr

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland Street

DATE 10-23-01

JOB NO. 0009-005-100

WEATHER: Overcast

CONTRACTOR Zoladz

Temp: 55°F

SUBJECT Investigation Test Pits

Wind: 20 mph

Precip: N/A

Investigation Test Pit 2 (TP-2)

3' W x 10' L x 8' D

Greyish ash/cinders 0-8" over brown clay 8"-2'

Sand layer w/ some perched water at 2'

NATIVE brown clay 2'-8'

No odors or visual contamination evident

00 ppm on PED

collected samples @ 840 am collected MS/MSD from
(0-6") (6-8') 6"-8' interval

Signature: [Signature]

Title: [Signature]

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland St

DATE 10-23-01

JOB NO. 0009-005-100

WEATHER: Overcast

CONTRACTOR Zoladz

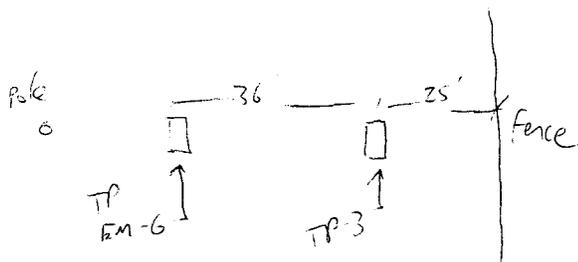
Temp: 55°F

SUBJECT Investigation test pits

Wind: 20 mph

Precip: N/A

Investigation test Pit TP-3



Excavated test pit 3' w x 9' L x 9' D

Fill ~~at~~^{the} dark brown w some rock & brick
0-1'

Fill extends to approx 2' BGS @ southern end of pit

Perched water @ 2' on southern end

Native br clay 2' - 8'

No odors or indications of contamination. 0.2 ppm or PED

Signature: John Faler

Title: Project Manager

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland ST

DATE 10/23/01

JOB NO. 0009-005-100

WEATHER: clouds/sun

CONTRACTOR Zoladz

Temp: 53°F

SUBJECT Test Pit Investigation

Wind: 20 mph

Precip: N/A

Investigation Test Pit 4 (TP-4):

Excavated TP-4 @ 3' x 10' x approx 9'D

1' fill w/ brick, stone, clay over approx 2' clay

0" topsoil / darker soil lens @ 3' bgs

brown native clay 3'-9' bgs

no water

no visual or olfactory evidence of contamination

0-0 ppm on PED

collected samples @ 9:40 am from 0-6" & 6"-9" intervals

Signature: Thom Fales

Title: Proj Mgr

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland St

DATE 10-23-01

JOB NO. 0009-05-100

WEATHER: Overcast

CONTRACTOR Zolad

Temp: 60°F

SUBJECT Test Pit Investigation

Wind: 20 MPH

Precip: N/A

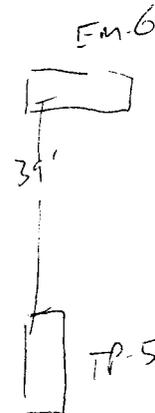
Test Pit 5 (TP-5)

Excavated 3'W x 10'L x 3'D

Similar to TP-4: 1' fill w/ some stone
& brick over 2' clay, sandy topsoil
less @ 3' BGS, native br. clay below

No odors or visual contamination evident
00 ppm on PID

Collected samples from 0.6" & 6"-9"
@ 10⁰⁰ am



Signature: Tom Ferts

Title: Project mg

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland St

DATE 10-23-01

JOB NO. 0009-005-100

WEATHER: clouds/sun

CONTRACTOR Zoladz

Temp: 60°F

SUBJECT Investigation Test Pits

Wind: 20 mph

Precip: nil

Investigation Test Pit 6 (TP-6)

Excavated TP-6 3'W x 10'L x 8'D

Fill soils w/ some mix debris, plastic & brick to approx 2' bgs

(3.5 bgs ~~of~~ on s. side) v. trified clay pipe (2" diameter) noted openings on east & west sides of pit near so. side

No odors, no visible contain indicated. oxygen in P.D

Samples of 0-6" & 6"-9" intervals collected @ 10:30 am

Signature: James Forster

Title: Proj. Mgr.

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland St

DATE 10/23/01

JOB NO. 0009-005-100

WEATHER: clouds/sun

CONTRACTOR Zoladz

Temp: 60°F

SUBJECT Test Pit Investigation

Wind: 20 mph

Precip: N/A

Test Pit TP-17

Excavated 3'W x 10'L x 5.5'D

Encountered refusal (old concrete floor) @ 5.5'D

Appears to have been a former wooden structure demolished in-place. Fill materials consist of wood, stone, concrete, shingles plastic & cloth. No visual contamination, odors appear to be related to rotting wood & shingles (slight asphalt odor)

Samples collected at 11⁰⁰ am 0-6" & 6"-5.5' BGS

Signature: Tom Foster

Title: Proj Mgr

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland St

DATE 10-23-01

JOB NO. 0009-005-100

WEATHER: Sun/clouds

CONTRACTOR Zdadz

Temp: 65°F

SUBJECT Test Pit Investigation

Wind: 20 MPH

Precip: N/A

Test Pit TP-8

Excavated approx 3'W x 10'L x 8'D

Significant amounts of fill mths encountered to 6' BGS

Fill comprised of soil, brick, rock w/ some metal debris

Buried 1" elect. conduit running E/W encountered approx 2.5' BGS

Native clay soil @ 6-8' BGS

Some perched water on S side of pit @ 6' BGS

Samples collected @ 1140 am

Signature: Jim Fahn

Title: Proj. Mgr

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland ST

DATE 10/23/01

JOB NO. 0009-005-100

WEATHER: Sun/clouds

CONTRACTOR Zoladz

Temp: 60°F

SUBJECT Test Pit Investigation

Wind: 20 mph

Precip: N/A

Test Pit TP-9:

Excavated 3'W x 10'L x 9'D test pit

2' soil fill w/ some brick, wood, stone & metal

Encountered former cinder block foundation on east side of test pit
clay on W side begins @ 2' BGS

No perched water

No odors or visual indications of contamination

0.0 ppm on PCD

collected sample from 0-6" & 6"-8" @ 12:00 pm

Signature: Thom Forke

Title: Project Manager

FIELD INVESTIGATION REPORT

PROJECT 295 Maryland Street

DATE 10-23-01

JOB NO. 0009-005-100

WEATHER: Clouds/sun

CONTRACTOR Zoladz

Temp: 60°F

SUBJECT Test Pit Investigation

Wind: 20-25 MPH

Precip: N/A

Test Pit TP-10:

Excavated 3' W x 8' L x 8' D

Fill w/ some brick, stone & rock 0-3.5' BGS

OLD stone floor @ 3.5' BGS - Excavator broke thru, continued to 8' BGS

Native brown/red clay 4'-8' BGS

No odors or visual / olfactory evidence of contamination

D.O. ppm or PED

Collected samples of 0-6" & 6"-8' @ 12:30 pm

Signature: Thom Forth

Title: Project Manager

APPENDIX C

FIELD BOREHOLE LOGS/WELL INSTALLATION DETAILS

Project No: 0222-001-100

Borehole Number: MW-1



Project: Phase II Investigation

A.K.A.:

Client: 295 Maryland LLC.

Logged By: TAB

Site Location: 295 Maryland, Buffalo, NY

Checked By: BCH

Benchmark Environmental Engineering & Science, PLLC
 2558 Hamburg Turnpike, Suite 300
 Buffalo, NY 14218
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 12.5 25	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
	0.0	Top soil Brown, moist, mostly nonplastic fines, trace subrounded coarse sand, trace fine gravel medium dense rootlets.	S1	52	2.0	▲	0.0		
	-2.0	Silt Reddish brown, moist, non plastic fines, trace fine sand, very dense, medium to high dry strength.	S2	27	1.5	▲	0.0		
	-4.0	As above, medium dense.	S3	55	2.0	▲	0.0		
	-6.0	Lean Clay Reddish Brown, moist, low plasticity fines, hard, high toughness.	S4	37	2.0	▲	0.0		
	-8.0	As above, trace coarse sand.	S5	41	2.0	▲	0.0		
	-8.0	As above, mostly low to medium plastic fines, little coarse sand, slight laminations.							
	-13.0	Reddish brown, moist, medium to high plasticity fines, stiff.	S6	13		▲	0.0		
	-14.5	Silt with Sand Reddish brown, wet, mostly non plastic fines with some fine sand, medium dense.							
	-18.0	As above.	S7	57	1.9	▲	0.0		
	-19.5	Lean Clay Reddish brown, wet, high plasticity fines, with few fine sand, hard, high toughness	S8	54	1.4	▲	0.0		
	-20.5	As Above							
	-22.0	Silt with Sand Reddish brown, wet, mostly non plastic fines with some fine sand, medium dense.							
	-22.0	End of Borehole							

Drilled By: Earth Dimensions, Inc.
 Drill Rig Type: CME 550
 Drill Method: 4.25-inch Continuous SS w/HSA
 Comments:
 Drill Date(s): 9 13 10

Hole Size: 8 1/2 - inch
 Stick-up: Flush Mount
 Datum: NA

Sheet: 1 of 1

Project No: 0222-001-100

Borehole Number: MW-2

Project: Phase II Investigation

A.K.A.:

Client: 295 Maryland LLC.

Logged By: TAB

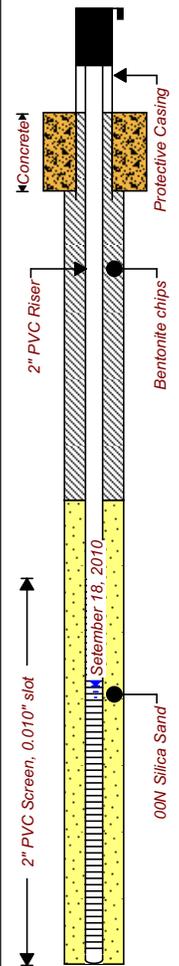
Site Location: 295 Maryland, Buffalo, NY

Checked By: BCH



Benchmark Environmental Engineering & Science, PLLC
 2558 Hamburg Turnpike, Suite 300
 Buffalo, NY 14218
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 12.5 25	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
-3.0		Ground Surface							
	0.0 / 0.0	Lean Clay w/Fill Reddish brown with black, moist, non to low plastic fines, few fine sand, trace fine gravel, very stiff, with concrete and cinders, wood fragments, medium toughness.	S1	16	2.0	▲	0.0		
2.0	-2.0 / 2.0	As above no black, no wood fragments, cinders or concrete, moist, orange brick fragments, rootlets, trace coarse sand and fine gravel.	S2	12	1.4	▲	0.0		
	-4.0 / 4.0	Lean Clay Reddish Brown, moist, low plasticity fines, very stiff, medium toughness.	S3	29	2.0	▲	0.0		
7.0	-6.0 / 6.0	As above, trace coarse sand.	S4	37	2.0	▲	0.0		
	-10.0 / 10.0	As above, mostly medium plastic fines, trace fine sand, trace fine gravel, orange fine sand areas, medium toughness	S5	20	2.0	▲	0.0		
12.0	-15.0 / 15.0	Silt with Sand Brown, wet, mostly non plastic fines with some fine sand, dense, rapid dilatancy.	S6	37	1.4	▲	0.0		
17.0	-20.0 / 20.0	As above, slight odor..	S7	24	1.3	▲	1.6		
22.0	-22.0 / 22.0	End of Borehole							
27.0									



Drilled By: Earth Dimensions, Inc.
 Drill Rig Type: CME 550
 Drill Method: 4 1/4-inch HSA w/Continuous SS
 Comments:
 Drill Date(s): 9 13 10

Hole Size: 8 1/2-inch
 Stick-up: 2.5-foot
 Datum: NA
 Sheet: 1 of 1

Project No: 0222-001-100

Borehole Number: MW-3



Project: Phase II Investigation

A.K.A.:

Client: 295 Maryland LLC.

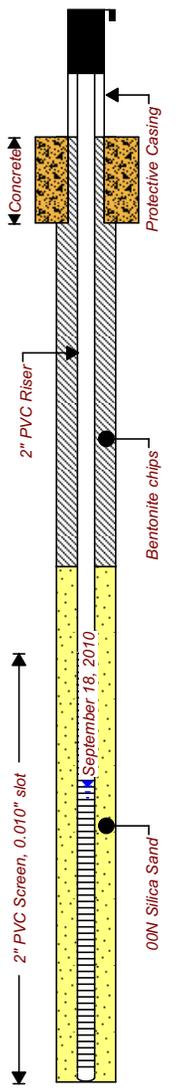
Logged By: TAB

Site Location: 295 Maryland, Buffalo NY

Checked By: BCH

Benchmark Environmental Engineering & Science, PLLC
 2558 Hamburg Turnpike, Suite 300
 Buffalo, NY 14218
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 12.5 25	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
-3.0	0.0	Ground Surface							
	0.0	Top Soil Brown, moist, mostly low plastic fines, trace subrounded coarse sand, trace fine gravel medium dense rootlets.	S1	28	1.5	▲	0.0	See analytical table	
	-2.0	Lean Clay w/ Fill Reddish brown, moist, dense mostly low plasticity fines, trace fine sand, trace fine to coarse gravel, orange brick.	S2	15	1.5	▲	0.0		
	-4.0	As above, ash layer .5-inch thick at (3.0) fbgs.	S3	17	1.4	▲	0.0		
	4.0	Lean Clay Reddish brown, moist, low to medium plastic fines, trace fine sand, stiff, rootlets, high toughness.	S4	36	1.9	▲	0.0		
	-8.0	As above, trace coarse sand.	S5	34	2.0	▲	0.0		
	8.0	As above, grey fine sand filled fractures.	S6	37	2.0	▲	0.0		
	-10.0	As above, trace, fine and coarse gravel.	S7	22	2.0	▲	0.0		
	10.0	As above, iron stained fine sand lenses.	S8	14	1.8	▲	0.0		
	-12.0	As above.	S9	18	1.5	▲	0.0		
	12.0	Sandy Silt Brown, wet, mostly, non-plastic fines, with some fine sand, medium dense.	S10	46	1.4	▲	0.0		
	-14.0	As above	S11	29	1.3	▲	0.0		
	14.0	As above.							
	-15.0								
	15.0								
	-18.0								
	18.0								
	-20.0								
	20.0								
	-22.0								
	22.0	End of Borehole							



Drilled By: Earth Dimensions, Inc
 Drill Rig Type: CME 550
 Drill Method: 4 1/4-inch HSA w/Continuous SS
 Comments:
 Drill Date(s): 9 14 10

Hole Size: 8 1/2-inch
 Stick-up: 2.5-fbgs
 Datum: NA
 Sheet: 1 of 1

Project No: 0222-001-100

Borehole Number: MW-4

Project: Phase II Investigation

A.K.A.:

Client: 295 Maryland LLC.

Logged By: TAB

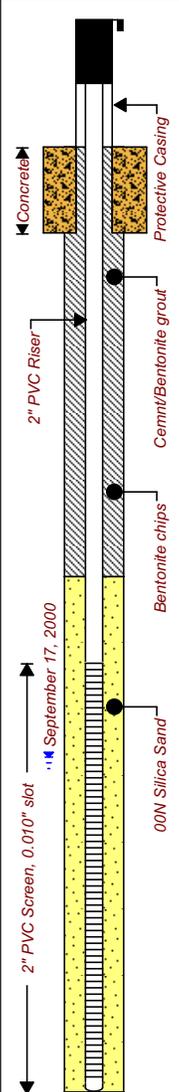
Site Location: 295 Maryland, Buffalo, NY

Checked By: BCH



TurnKey Environmental Restoration, LLC
 2558 Hamburg Turnpike, Suite 300
 Buffalo, NY 14218
 (716) 856-0635

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 12.5 25	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
-3.0									
	0.0 0.0	Ground Surface							
		Lean Clay W/Fill Brown, moist, mostly non to low plasticity fines with some fine sand, few coarse sand and fine gravel asphalt and brick.	S1	18	1.3	▲			
2.0									
	-5.0 5.0	Lean Clay Reddish brown, moist, mostly medium plastic fines with trace fine sand, very stiff, trace coarse sand, grey fine sand partings, medium toughness.	S2	23	2.0	▲			
7.0									
	-10.0 10.0	As above, with brown fine sand lenses 0.05 to 0.1-inch thick.	S3	36	2.0	▲			
12.0									
	-15.0 15.0	As above, no brown fine sand lenses.	S4	12	2.0	▲			
17.0									
	-20.0 20.0	Sandy Silt Brown, wet, mostly non plastic fines with some fine sand, very dense, trace fine gravel.	S5	61	1.6	▲			
22.0	-22.0 22.0	End of Borehole							



Drilled By: Earth Dimensions, Inc.
 Drill Rig Type: CME 550
 Drill Method: 4 1/4-inch HSA w/Continuous SS
 Comments:
 Drill Date(s): 9 14 10

Hole Size: 8 1/2-inch
 Stick-up: 2.5-feet
 Datum: NA
 Sheet: 1 of 1

Project No: 0222-001-100

Borehole Number: SB-5

Project: Phase II investigation

A.K.A.:

Client: 295 Maryland LLC.

Logged By: TAB

Site Location: 295 Maryland, Buffalo, NY

Checked By: BCH



Benchmark Environmental Engineering & Science, PLLC
 2558 Hamburg Turnpike, Suite 300
 Buffalo, NY 14218
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 12.5 25	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0 0.0	Ground Surface							
		Lean Clay w/Fill Reddish brown, moist, low to non plastic fines, trace fine sand, very stiff, asphalt and glass pieces, cinders.	S1	20	2.0	0.0			
	-2.0 2.0	As above.	S2	20	1.4	0.0			
	-4.0 4.0	Lean Clay Reddish brown, moist, low plasticity fines, trace fine sand, very stiff, medium toughness.	S3	27	2.0	0.0		See analytical tables	
	-6.0 6.0	End of Borehole							

Drilled By: Earth Dimensions, Inc.
Drill Rig Type: CME 550
Drill Method: 4 1/4-inch HSA w/ Continuous SS
Comments:
Drill Date(s): 9 13 10

Hole Size: 8 1/2-inch
Stick-up: NA
Datum: Mean Sea Level
Sheet: 1 of 1

APPENDIX D

GROUNDWATER SAMPLING LOGS AND ANALYTICAL DATA

Project Name: 295 Maryland St Date: 3/1/11
Location: 295 Maryland Project No.: _____ Field Team: RLO

Well No. <u>MW-1</u>			Diameter (inches): <u>2</u>			Sample Date / Time: <u>3/1/11</u>			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled: <u>11.40</u>			
DTW (static) (fbTOR): <u>5.85</u>			One Well Volume (gal):			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <u>21.52</u>			Total Volume Purged (gal):			Purge Method: <u>Low Flow</u>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0	Initial								
1	7.35	.25	8.02	11.1	1158	59	1.91	+77	clear
2	8.00	.50	7.74	9.9	1160	58	1.89	+91	" "
3	8.40	.75	7.81	9.3	1166	61	2.27	+101	" "
4	10.1	1.0	7.69	9.5	1160	62	1.78	+105	" "
5									
6									
7									
8									
9									
10									
Sample Information:									
1030	S1	71.40	7.55	9.3	1071	63	2.08	+103	clear
	S2								

Well No. <u>MW-2</u>			Diameter (inches): <u>2"</u>			Sample Date / Time: <u>3/1/11</u>			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR): <u>13.30</u>			One Well Volume (gal):			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <u>24.77</u>			Total Volume Purged (gal):			Purge Method: <u>Low Flow</u>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0	Initial								
1202	14.3	.15	7.37	9.5	1882	>100	3.48	+96	TURBID
2	15.6	.50	7.27	10.3	1851	85	3.91	+92	Turbid / odor
3	16.4	.75	7.02	10.7	1846	77	3.03	+69	Turbid / odor
4	16.4	1	7.01	10.7	1844	66	2.79	+56	cloudy / odor
5									
6									
7									
8									
9									
10									
Sample Information:									
1220	S1	19.65	7.07	11.3	1870	53	2.49	-1	svoc type odor
	S2								

REMARKS: MS/MSD FOR PAHs collected at mw-2

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Note: All water level measurements are in feet, distance from top of riser.

PREPARED BY: RLO

Project Name: 295 Mary Ln

Date: 3/1/11

Location: 295 Mary Ln

Project No.:

Field Team: RLO

Well No. <u>mw-3</u>			Diameter (inches): <u>2</u>			Sample Date / Time: <u>3/1/11</u>			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR): <u>12.35</u>			One Well Volume (gal):			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <u>24.87</u>			Total Volume Purged (gal):			Purge Method: <u>Low Flow</u>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0	Initial								
11:37	13.2	.25	7.27	9.1	2843	>100	4.14	+196	Turbid
	14.8	.75	6.97	10.2	2846	90	4.65	+209	" "
	15.8	1	6.93	10.1	2831	95	4.17	+219	" "
	16.4	1.25	6.96	9.8	2834	99	3.98	+220	" "
5									
6									
7									
8									
9									
10									
Sample Information:									
11:49	S1 19.9		6.97	10.1	2832	88	2.93	+172	Turbid
	S2								

Well No. <u>mw-4</u>			Diameter (inches): <u>2</u>			Sample Date / Time: <u>3/1/11</u>			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR): <u>10.19</u>			One Well Volume (gal):			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <u>24.72</u>			Total Volume Purged (gal):			Purge Method: <u>Low Flow</u>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0	Initial								
1	11.8	.50	7.21	8.4	1850	78	4.85	+114	Cloudy
2	13.2	.75	7.17	9.0	1836	>100	4.88	+115	Turbid
3	15.3	1	7.18	8.4	1852	>100	4.89	+126	" "
4									
5									
6									
7									
8									
9									
10									
Sample Information:									
11:18	S1 21.45	5	7.16	10	1281	>100	1.72	+121	Turbid
	S2								

REMARKS: Blow Apptate taken at mw-3 For
VOCs & Pesticides

10000 collected at mw-4 VOCs & Pesticides

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Analytical Report

SDG Number: RTI0959

Project Description(s)

Work Order RTI0959 - Benchmark - 295 Maryland St. site

Work Order RTI1016 - Benchmark - 295 Maryland St. site

For:

Tom Forbes

Benchmark Environmental & Engineering Science

2558 Hamburg Turnpike, Suite 300

Lackawanna, NY 14218



Brian Fischer

Project Manager

Brian.Fischer@testamericainc.com

Thursday, September 30, 2010

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exception to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project manager who has signed this report.

TestAmerica Buffalo Current Certifications

As of 08/16/2010

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA, NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA, CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP, SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA	10026
North Dakota	CWA, RCRA	R-176
Oklahoma	CWA, RCRA	9421
Oregon*	CWA, RCRA	NY200003
Pennsylvania*	NELAP CWA, RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
Virginia	SDWA	278
Washington*	NELAP CWA, RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA, RCRA	252

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

SDG Number: RTI0959

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/14/10-09/15/10

Reported: 09/30/10 11:33

CASE NARRATIVE

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverables has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Brian Fischer
Project Manager

Thursday, September 30, 2010

There are pertinent documents appended to this report, 2 pages, are included and are an integral part of this report. Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

SDG Number: RTI0959

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/14/10-09/15/10

Reported: 09/30/10 11:33

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

<u>SpecificMethod</u>	<u>Analyte</u>	<u>Units</u>	<u>Client RL</u>	<u>Lab PQL</u>
8270C	4-Methylphenol	ug/kg dry	170	330

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DATA QUALIFIERS AND DEFINITIONS

- B** Analyte was detected in the associated Method Blank.
- B1** Analyte was detected in the associated method / calibration blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.
- C** Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected above the laboratory PQL, data not impacted.
- C8** Calibration Verification recovery was above the method control limit for this analyte. A high bias may be indicated.
- D02** Dilution required due to sample matrix effects
- J** Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
- L** Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.
- M7** The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
- M8** The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
- QFL** Florisil clean-up (EPA 3620) performed on extract.
- QSU** Sulfur (EPA 3660) clean-up performed on extract.
- NR** Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

ADDITIONAL COMMENTS

Results are reported on a wet weight basis unless otherwise noted.

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SDG Number: RTI0959

Received: 09/14/10-09/15/10

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Project: Benchmark - 295 Maryland St. site

Project Number: TURN-0066

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: MW-3 (4-6) (RTI1016-01 - Solid)						Sampled: 09/14/10 10:40		Recvd: 09/15/10 14:45		
<u>Volatile Organic Compounds by EPA 8260B</u>										
Methylene Chloride	7.9		5.4	2.5	ug/kg dry	1.00	09/21/10 22:14	CDC	10I1494	8260B
<u>Total Metals by SW 846 Series Methods</u>										
Aluminum	11600		10.2	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Arsenic	4.5		2.0	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Barium	136		0.511	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Beryllium	0.562		0.204	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Calcium	55100		51.1	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Chromium	14.3		0.511	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Cobalt	13.0		0.511	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Copper	19.4		1.0	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Iron	18000		10.2	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Lead	14.7		1.0	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Magnesium	20600		20.4	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Manganese	648	B1, B	0.2	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Nickel	22.0		5.11	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Potassium	1820		30.7	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Sodium	260		143	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Vanadium	21.6		0.511	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Zinc	68.6		2.0	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Mercury	0.0218		0.0213	NR	mg/kg dry	1.00	09/20/10 15:32	JRK	10I1343	7471A

General Chemistry Parameters

Percent Solids	90		0.010	NR	%	1.00	09/16/10 16:43	JRR	10I1002	Dry Weight
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Client ID: SB-5 (0-2) (RTI0959-01 - Solid)

Sampled: 09/13/10 10:50

Recvd: 09/14/10 12:10

Volatile Organic Compounds by EPA 8260B

Methylene Chloride	3.5	J	6.3	2.9	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
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Semivolatile Organics by GC/MS

Anthracene	20	J	210	5.4	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Benzo(a)anthracene	73	J	210	3.6	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Benzo(a)pyrene	59	J	210	5.1	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Benzo(b)fluoranthene	84	J	210	4.1	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Benzo(ghi)perylene	47	J	210	2.5	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Benzo(k)fluoranthene	31	J	210	2.3	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Bis(2-ethylhexyl) phthalate	120	J	210	68	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Chrysene	77	J	210	2.1	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Fluoranthene	150	J	210	3.1	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Indeno(1,2,3-cd)pyrene	43	J	210	5.8	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Phenanthrene	100	J	210	4.4	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Pyrene	120	J	210	1.4	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C

Organochlorine Pesticides by EPA Method 8081A

4,4'-DDE [2C]	4.1		2.1	0.31	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
4,4'-DDT [2C]	4.0		2.1	0.21	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A

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www.testamericainc.com

Benchmark Environmental & Engineering Science
 2558 Hamburg Turnpike, Suite 300
 Lackawanna, NY 14218

SDG Number: RTI0959

Project: Benchmark - 295 Maryland St. site
 Project Number: TURN-0066

Received: 09/14/10-09/15/10

Reported: 09/30/10 11:33

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: SB-5 (0-2) (RTI0959-01 - Solid) - cont.						Sampled: 09/13/10 10:50		Recvd: 09/14/10 12:10		
<u>Total Metals by SW 846 Series Methods</u>										
Aluminum	13800		12.3	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Arsenic	6.4		2.5	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Barium	133		0.613	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Beryllium	0.649		0.245	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Cadmium	0.621		0.245	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Calcium	13200		61.3	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Chromium	19.2		0.613	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Cobalt	11.8		0.613	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Copper	22.7		1.2	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Iron	23600		12.3	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Lead	85.3		1.2	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Magnesium	9340		24.5	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Manganese	904	B1, B	0.2	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Nickel	21.6		6.13	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Potassium	1910		36.8	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Vanadium	28.5		0.613	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Zinc	135		2.5	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Mercury	0.167		0.0249	NR	mg/kg dry	1.00	09/20/10 15:30	JRK	10I1343	7471A
<u>General Chemistry Parameters</u>										
Percent Solids	79		0.010	NR	%	1.00	09/16/10 10:26	JRR	10I0914	Dry Weight

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
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SDG Number: RTI0959

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/14/10-09/15/10

Reported: 09/30/10 11:33

Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
MW-3 (4-6)	RTI1016-01	Solid	09/14/10 10:40	09/15/10 14:45	
SB-5 (0-2)	RTI0959-01	Solid	09/13/10 10:50	09/14/10 12:10	

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 2558 Hamburg Turnpike, Suite 300
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Project: Benchmark - 295 Maryland St. site
 Project Number: TURN-0066

Received: 09/14/10-09/15/10

Reported: 09/30/10 11:33

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: MW-3 (4-6) (RTI1016-01 - Solid)			Sampled: 09/14/10 10:40				Recvd: 09/15/10 14:45			
<u>Volatile Organic Compounds by EPA 8260B</u>										
1,1,1-Trichloroethane	ND		5.4	0.39	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
1,1,2,2-Tetrachloroethane	ND		5.4	0.88	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
1,1,2-Trichloroethane	ND		5.4	0.71	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.4	1.2	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
1,1-Dichloroethane	ND		5.4	0.66	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
1,1-Dichloroethene	ND		5.4	0.67	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
1,2,4-Trichlorobenzene	ND		5.4	0.33	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
1,2-Dibromo-3-chloropropane	ND		5.4	2.7	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
1,2-Dibromoethane	ND		5.4	0.70	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
1,2-Dichlorobenzene	ND		5.4	0.43	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
1,2-Dichloroethane	ND		5.4	0.27	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
1,2-Dichloropropane	ND		5.4	2.7	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
1,3-Dichlorobenzene	ND		5.4	0.28	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
1,4-Dichlorobenzene	ND		5.4	0.76	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
2-Butanone	ND		27	2.0	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
2-Hexanone	ND		27	2.7	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
4-Methyl-2-pentanone	ND		27	1.8	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Acetone	ND		27	4.6	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Benzene	ND		5.4	0.27	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Bromodichloromethane	ND		5.4	0.73	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Bromoform	ND		5.4	2.7	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Bromomethane	ND		5.4	0.49	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Carbon disulfide	ND		5.4	2.7	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Carbon Tetrachloride	ND		5.4	0.53	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Chlorobenzene	ND		5.4	0.72	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Dibromochloromethane	ND		5.4	0.70	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Chloroethane	ND		5.4	1.2	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Chloroform	ND		5.4	0.34	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Chloromethane	ND		5.4	0.33	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
cis-1,2-Dichloroethene	ND		5.4	0.70	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
cis-1,3-Dichloropropene	ND		5.4	0.78	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Cyclohexane	ND		5.4	0.76	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Dichlorodifluoromethane	ND		5.4	0.45	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Ethylbenzene	ND		5.4	0.38	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Isopropylbenzene	ND		5.4	0.82	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Methyl Acetate	ND	L	5.4	1.0	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Methyl-t-Butyl Ether (MTBE)	ND		5.4	0.53	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Methylcyclohexane	ND		5.4	0.83	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Methylene Chloride	7.9		5.4	2.5	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Styrene	ND		5.4	0.27	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Tetrachloroethene	ND		5.4	0.73	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Toluene	ND		5.4	0.41	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
trans-1,2-Dichloroethene	ND		5.4	0.56	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
trans-1,3-Dichloropropene	ND		5.4	2.4	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Trichloroethene	ND		5.4	1.2	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Trichlorofluoromethane	ND		5.4	0.51	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B
Vinyl chloride	ND		5.4	0.66	ug/kg dry	1.00	09/21/10 22:14	CDC	101494	8260B

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Reported: 09/30/10 11:33

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: MW-3 (4-6) (RTI1016-01 - Solid) - cont.							Sampled: 09/14/10 10:40		Recvd: 09/15/10 14:45	

Volatile Organic Compounds by EPA 8260B - cont.

Xylenes, total	ND		11	0.91	ug/kg dry	1.00	09/21/10 22:14	CDC	10I1494	8260B
1,2-Dichloroethane-d4	101 %		Surr Limits: (64-126%)				09/21/10 22:14	CDC	10I1494	8260B
4-Bromofluorobenzene	100 %		Surr Limits: (72-126%)				09/21/10 22:14	CDC	10I1494	8260B
Toluene-d8	107 %		Surr Limits: (71-125%)				09/21/10 22:14	CDC	10I1494	8260B

Semivolatile Organics by GC/MS

2,4,5-Trichlorophenol	ND		190	41	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
2,4,6-Trichlorophenol	ND		190	12	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
2,4-Dichlorophenol	ND		190	9.8	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
2,4-Dimethylphenol	ND		190	50	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
2,4-Dinitrophenol	ND		360	65	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
2,4-Dinitrotoluene	ND		190	29	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
2,6-Dinitrotoluene	ND		190	46	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
2-Chloronaphthalene	ND		190	13	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
2-Chlorophenol	ND		190	9.5	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
2-Methylnaphthalene	ND		190	2.3	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
2-Methylphenol	ND		190	5.7	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
2-Nitroaniline	ND		360	60	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
2-Nitrophenol	ND		190	8.5	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
3,3'-Dichlorobenzidine	ND		190	160	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
3-Nitroaniline	ND		360	43	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
4,6-Dinitro-2-methylphenol	ND		360	64	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
4-Bromophenyl phenyl ether	ND		190	59	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
4-Chloro-3-methylphenol	ND		190	7.7	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
4-Chloroaniline	ND		190	55	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
4-Chlorophenyl phenyl ether	ND		190	4.0	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
4-Methylphenol	ND		190	10	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
4-Nitroaniline	ND		360	21	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
4-Nitrophenol	ND		360	45	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Acenaphthene	ND		190	2.2	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Acenaphthylene	ND		190	1.5	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Acetophenone	ND		190	9.6	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Anthracene	ND		190	4.8	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Atrazine	ND		190	8.3	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Benzaldehyde	ND		190	20	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Benzo(a)anthracene	ND		190	3.2	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Benzo(a)pyrene	ND		190	4.5	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Benzo(b)fluoranthene	ND		190	3.6	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Benzo(ghi)perylene	ND		190	2.2	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Benzo(k)fluoranthene	ND		190	2.1	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Biphenyl	ND		190	12	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Bis(2-chloroethoxy)methane	ND		190	10	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Bis(2-chloroethyl)ether	ND		190	16	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
2,2'-Oxybis(1-Chloropropane)	ND		190	19	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Bis(2-ethylhexyl)phthalate	ND		190	60	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

SDG Number: RTI0959

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/14/10-09/15/10

Reported: 09/30/10 11:33

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: MW-3 (4-6) (RTI1016-01 - Solid) - cont.			Sampled: 09/14/10 10:40				Recvd: 09/15/10 14:45			

Semivolatile Organics by GC/MS - cont.

Butyl benzyl phthalate	ND		190	50	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Caprolactam	ND		190	81	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Carbazole	ND		190	2.2	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Chrysene	ND		190	1.9	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Dibenzo(a,h)anthracene	ND		190	2.2	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Dibenzofuran	ND		190	1.9	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Diethyl phthalate	ND		190	5.6	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Dimethyl phthalate	ND		190	4.9	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Di-n-butyl phthalate	ND		190	64	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Di-n-octyl phthalate	ND		190	4.4	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Fluoranthene	ND		190	2.7	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Fluorene	ND		190	4.3	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Hexachlorobenzene	ND		190	9.3	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Hexachlorobutadiene	ND		190	9.5	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Hexachlorocyclopentadiene	ND		190	56	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Hexachloroethane	ND		190	14	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Indeno(1,2,3-cd)pyrene	ND		190	5.2	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Isophorone	ND		190	9.3	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Naphthalene	ND		190	3.1	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Nitrobenzene	ND		190	8.3	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
N-Nitrosodi-n-propylamine	ND		190	15	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
N-Nitrosodiphenylamine	ND		190	10	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Pentachlorophenol	ND		360	64	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Phenanthrene	ND		190	3.9	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Phenol	ND		190	20	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C
Pyrene	ND		190	1.2	ug/kg dry	1.00	09/22/10 23:32	JLG	10I1091	8270C

2,4,6-Tribromophenol	109 %		<i>Surr Limits: (39-146%)</i>				09/22/10 23:32	JLG	10I1091	8270C
2-Fluorobiphenyl	90 %		<i>Surr Limits: (37-120%)</i>				09/22/10 23:32	JLG	10I1091	8270C
2-Fluorophenol	76 %		<i>Surr Limits: (18-120%)</i>				09/22/10 23:32	JLG	10I1091	8270C
Nitrobenzene-d5	89 %		<i>Surr Limits: (34-132%)</i>				09/22/10 23:32	JLG	10I1091	8270C
Phenol-d5	83 %		<i>Surr Limits: (11-120%)</i>				09/22/10 23:32	JLG	10I1091	8270C
p-Terphenyl-d14	79 %		<i>Surr Limits: (58-147%)</i>				09/22/10 23:32	JLG	10I1091	8270C

Organochlorine Pesticides by EPA Method 8081A

4,4'-DDD [2C]	ND		1.8	0.35	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
4,4'-DDE [2C]	ND		1.8	0.27	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
4,4'-DDT [2C]	ND		1.8	0.18	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
Aldrin [2C]	ND		1.8	0.44	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
alpha-BHC [2C]	ND		1.8	0.32	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
beta-BHC [2C]	ND		1.8	0.19	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
Chlordane [2C]	ND		18	4.0	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
delta-BHC [2C]	ND		1.8	0.24	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
Dieldrin [2C]	ND		1.8	0.43	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
Endosulfan I [2C]	ND		1.8	0.23	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
Endosulfan II [2C]	ND		1.8	0.32	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
Endosulfan sulfate [2C]	ND		1.8	0.33	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
Endrin [2C]	ND		1.8	0.25	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
Endrin aldehyde [2C]	ND		1.8	0.46	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A

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Reported: 09/30/10 11:33

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
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Client ID: MW-3 (4-6) (RTI1016-01 - Solid) - cont.

Sampled: 09/14/10 10:40

Recvd: 09/15/10 14:45

Organochlorine Pesticides by EPA Method 8081A - cont.

gamma-BHC (Lindane) [2C]	ND		1.8	0.31	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
Heptachlor [2C]	ND		1.8	0.28	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
Heptachlor epoxide [2C]	ND		1.8	0.46	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
Methoxychlor [2C]	ND		1.8	0.25	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
Toxaphene [2C]	ND		18	10	ug/kg dry	1.00	09/18/10 15:22	tchro	10I1075	8081A
<i>Decachlorobiphenyl</i> [2C]	91 %		<i>Surr Limits: (42-146%)</i>				09/18/10 15:22	tchro	10I1075	8081A
<i>Tetrachloro-m-xylene</i> [2C]	82 %		<i>Surr Limits: (37-136%)</i>				09/18/10 15:22	tchro	10I1075	8081A

Polychlorinated Biphenyls by EPA Method 8082

Aroclor 1016	ND		18	3.5	ug/kg dry	1.00	09/19/10 00:58	JxM	10I1073	8082
Aroclor 1221	ND		18	3.5	ug/kg dry	1.00	09/19/10 00:58	JxM	10I1073	8082
Aroclor 1232	ND		18	3.5	ug/kg dry	1.00	09/19/10 00:58	JxM	10I1073	8082
Aroclor 1242	ND		18	3.9	ug/kg dry	1.00	09/19/10 00:58	JxM	10I1073	8082
Aroclor 1248	ND		18	3.5	ug/kg dry	1.00	09/19/10 00:58	JxM	10I1073	8082
Aroclor 1254	ND		18	3.8	ug/kg dry	1.00	09/19/10 00:58	JxM	10I1073	8082
Aroclor 1260	ND		18	8.4	ug/kg dry	1.00	09/19/10 00:58	JxM	10I1073	8082
<i>Decachlorobiphenyl</i>	95 %		<i>Surr Limits: (34-148%)</i>				09/19/10 00:58	JxM	10I1073	8082
<i>Tetrachloro-m-xylene</i>	82 %		<i>Surr Limits: (35-134%)</i>				09/19/10 00:58	JxM	10I1073	8082

Total Metals by SW 846 Series Methods

Aluminum	11600		10.2	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Antimony	ND		15.3	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Arsenic	4.5		2.0	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Barium	136		0.511	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Beryllium	0.562		0.204	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Cadmium	ND		0.204	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Calcium	55100		51.1	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Chromium	14.3		0.511	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Cobalt	13.0		0.511	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Copper	19.4		1.0	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Iron	18000		10.2	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Lead	14.7		1.0	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Magnesium	20600		20.4	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Manganese	648	B1, B	0.2	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Nickel	22.0		5.11	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Potassium	1820		30.7	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Selenium	ND		4.1	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Silver	ND		0.511	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Sodium	260		143	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Thallium	ND		6.1	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Vanadium	21.6		0.511	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Zinc	68.6		2.0	NR	mg/kg dry	1.00	09/22/10 18:47	DAN	10I1415	6010B
Mercury	0.0218		0.0213	NR	mg/kg dry	1.00	09/20/10 15:32	JRK	10I1343	7471A

General Chemistry Parameters

Percent Solids	90		0.010	NR	%	1.00	09/16/10 16:43	JRR	10I1002	Dry Weight
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Benchmark Environmental & Engineering Science
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SDG Number: RTI0959

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

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Reported: 09/30/10 11:33

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: MW-3 (4-6) (RTI1016-01 - Solid) - cont.						Sampled: 09/14/10 10:40		Recvd: 09/15/10 14:45		
<u>General Chemistry Parameters - cont.</u>										
Total Cyanide	ND		1.0	0.5	mg/kg dry	1.00	09/21/10 09:21	jmm	10I1387	9012A

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: SB-5 (0-2) (RTI0959-01 - Solid)			Sampled: 09/13/10 10:50				Recvd: 09/14/10 12:10			
<u>Volatile Organic Compounds by EPA 8260B</u>										
1,1,1-Trichloroethane	ND		6.3	0.46	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,1,2,2-Tetrachloroethane	ND		6.3	1.0	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,1,2-Trichloroethane	ND		6.3	0.82	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.3	1.4	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,1-Dichloroethane	ND		6.3	0.77	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,1-Dichloroethene	ND		6.3	0.77	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,2,4-Trichlorobenzene	ND		6.3	0.38	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,2-Dibromo-3-chloropropane	ND		6.3	3.1	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,2-Dibromoethane	ND		6.3	0.81	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,2-Dichlorobenzene	ND		6.3	0.49	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,2-Dichloroethane	ND		6.3	0.32	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,2-Dichloropropane	ND		6.3	3.1	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,3-Dichlorobenzene	ND		6.3	0.32	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,4-Dichlorobenzene	ND		6.3	0.88	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
2-Butanone	ND		31	2.3	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
2-Hexanone	ND		31	3.1	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
4-Methyl-2-pentanone	ND		31	2.1	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Acetone	ND		31	5.3	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Benzene	ND		6.3	0.31	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Bromodichloromethane	ND		6.3	0.84	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Bromoform	ND		6.3	3.1	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Bromomethane	ND		6.3	0.57	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Carbon disulfide	ND		6.3	3.1	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Carbon Tetrachloride	ND		6.3	0.61	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Chlorobenzene	ND		6.3	0.83	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Dibromochloromethane	ND		6.3	0.81	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Chloroethane	ND		6.3	1.4	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Chloroform	ND		6.3	0.39	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Chloromethane	ND		6.3	0.38	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
cis-1,2-Dichloroethene	ND		6.3	0.81	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
cis-1,3-Dichloropropene	ND		6.3	0.91	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Cyclohexane	ND		6.3	0.88	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Dichlorodifluoromethane	ND		6.3	0.52	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Ethylbenzene	ND		6.3	0.43	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Isopropylbenzene	ND		6.3	0.95	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Methyl Acetate	ND		6.3	1.2	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Methyl-t-Butyl Ether (MTBE)	ND		6.3	0.62	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Methylcyclohexane	ND		6.3	0.96	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Methylene Chloride	3.5	J	6.3	2.9	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Styrene	ND		6.3	0.31	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Tetrachloroethene	ND		6.3	0.84	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Toluene	ND		6.3	0.48	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
trans-1,2-Dichloroethene	ND		6.3	0.65	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
trans-1,3-Dichloropropene	ND		6.3	2.8	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Trichloroethene	ND		6.3	1.4	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Trichlorofluoromethane	ND		6.3	0.60	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
Vinyl chloride	ND		6.3	0.77	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B

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Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/14/10-09/15/10

Reported: 09/30/10 11:33

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: SB-5 (0-2) (RTI0959-01 - Solid) - cont.			Sampled: 09/13/10 10:50				Recvd: 09/14/10 12:10			

Volatile Organic Compounds by EPA 8260B - cont.

Xylenes, total	ND		13	1.1	ug/kg dry	1.00	09/18/10 16:20	PJQ	10I1220	8260B
1,2-Dichloroethane-d4	106 %		Surr Limits: (64-126%)				09/18/10 16:20	PJQ	10I1220	8260B
4-Bromofluorobenzene	103 %		Surr Limits: (72-126%)				09/18/10 16:20	PJQ	10I1220	8260B
Toluene-d8	111 %		Surr Limits: (71-125%)				09/18/10 16:20	PJQ	10I1220	8260B

Semivolatile Organics by GC/MS

2,4,5-Trichlorophenol	ND		210	46	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2,4,6-Trichlorophenol	ND		210	14	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2,4-Dichlorophenol	ND		210	11	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2,4-Dimethylphenol	ND		210	57	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2,4-Dinitrophenol	ND		410	74	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2,4-Dinitrotoluene	ND		210	33	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2,6-Dinitrotoluene	ND		210	52	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2-Chloronaphthalene	ND		210	14	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2-Chlorophenol	ND		210	11	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2-Methylnaphthalene	ND		210	2.6	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2-Methylphenol	ND		210	6.5	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2-Nitroaniline	ND		410	68	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2-Nitrophenol	ND		210	9.7	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
3,3'-Dichlorobenzidine	ND		210	190	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
3-Nitroaniline	ND		410	49	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
4,6-Dinitro-2-methylphenol	ND		410	73	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
4-Bromophenyl phenyl ether	ND		210	67	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
4-Chloro-3-methylphenol	ND		210	8.7	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
4-Chloroaniline	ND		210	62	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
4-Chlorophenyl phenyl ether	ND		210	4.5	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
4-Methylphenol	ND		210	12	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
4-Nitroaniline	ND		410	24	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
4-Nitrophenol	ND		410	51	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Acenaphthene	ND		210	2.5	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Acenaphthylene	ND		210	1.7	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Acetophenone	ND		210	11	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Anthracene	20	J	210	5.4	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Atrazine	ND		210	9.4	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Benzaldehyde	ND		210	23	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Benzo(a)anthracene	73	J	210	3.6	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Benzo(a)pyrene	59	J	210	5.1	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Benzo(b)fluoranthene	84	J	210	4.1	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Benzo(ghi)perylene	47	J	210	2.5	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Benzo(k)fluoranthene	31	J	210	2.3	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Biphenyl	ND		210	13	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Bis(2-chloroethoxy)methane	ND		210	11	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Bis(2-chloroethyl)ether	ND		210	18	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2,2'-Oxybis(1-Chloropropane)	ND		210	22	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Bis(2-ethylhexyl)phthalate	120	J	210	68	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

SDG Number: RTI0959

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Received: 09/14/10-09/15/10

Reported: 09/30/10 11:33

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: SB-5 (0-2) (RTI0959-01 - Solid) - cont.							Sampled: 09/13/10 10:50	Recvd: 09/14/10 12:10		

Semivolatile Organics by GC/MS - cont.

Butyl benzyl phthalate	ND		210	57	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Caprolactam	ND		210	91	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Carbazole	ND		210	2.4	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Chrysene	77	J	210	2.1	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Dibenzo(a,h)anthracene	ND		210	2.5	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Dibenzofuran	ND		210	2.2	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Diethyl phthalate	ND		210	6.4	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Dimethyl phthalate	ND		210	5.5	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Di-n-butyl phthalate	ND		210	73	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Di-n-octyl phthalate	ND		210	4.9	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Fluoranthene	150	J	210	3.1	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Fluorene	ND		210	4.9	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Hexachlorobenzene	ND		210	11	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Hexachlorobutadiene	ND		210	11	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Hexachlorocyclopentadiene	ND		210	64	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Hexachloroethane	ND		210	16	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Indeno(1,2,3-cd)pyrene	43	J	210	5.8	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Isophorone	ND		210	11	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Naphthalene	ND		210	3.5	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Nitrobenzene	ND		210	9.4	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
N-Nitrosodi-n-propylamine	ND		210	17	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
N-Nitrosodiphenylamine	ND		210	12	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Pentachlorophenol	ND		410	72	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Phenanthrene	100	J	210	4.4	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Phenol	ND		210	22	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
Pyrene	120	J	210	1.4	ug/kg dry	1.00	09/22/10 23:09	JLG	10I1091	8270C
2,4,6-Tribromophenol	106 %		Surr Limits: (39-146%)				09/22/10 23:09	JLG	10I1091	8270C
2-Fluorobiphenyl	86 %		Surr Limits: (37-120%)				09/22/10 23:09	JLG	10I1091	8270C
2-Fluorophenol	71 %		Surr Limits: (18-120%)				09/22/10 23:09	JLG	10I1091	8270C
Nitrobenzene-d5	84 %		Surr Limits: (34-132%)				09/22/10 23:09	JLG	10I1091	8270C
Phenol-d5	77 %		Surr Limits: (11-120%)				09/22/10 23:09	JLG	10I1091	8270C
p-Terphenyl-d14	76 %		Surr Limits: (58-147%)				09/22/10 23:09	JLG	10I1091	8270C

Organochlorine Pesticides by EPA Method 8081A

4,4'-DDD [2C]	ND		2.1	0.41	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
4,4'-DDE [2C]	4.1		2.1	0.31	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
4,4'-DDT [2C]	4.0		2.1	0.21	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
Aldrin [2C]	ND		2.1	0.51	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
alpha-BHC [2C]	ND		2.1	0.38	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
beta-BHC [2C]	ND		2.1	0.23	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
Chlordane [2C]	ND		2.1	4.6	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
delta-BHC [2C]	ND		2.1	0.28	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
Dieldrin [2C]	ND		2.1	0.50	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
Endosulfan I [2C]	ND		2.1	0.26	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
Endosulfan II [2C]	ND		2.1	0.38	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
Endosulfan sulfate [2C]	ND		2.1	0.39	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
Endrin [2C]	ND		2.1	0.29	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
Endrin aldehyde [2C]	ND		2.1	0.53	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
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Client ID: SB-5 (0-2) (RTI0959-01 - Solid) - cont.

Sampled: 09/13/10 10:50

Recvd: 09/14/10 12:10

Organochlorine Pesticides by EPA Method 8081A - cont.

gamma-BHC (Lindane) [2C]	ND		2.1	0.36	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
Heptachlor [2C]	ND		2.1	0.33	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
Heptachlor epoxide [2C]	ND		2.1	0.54	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
Methoxychlor [2C]	ND		2.1	0.29	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
Toxaphene [2C]	ND		21	12	ug/kg dry	1.00	09/18/10 14:46	MAN	10I1075	8081A
<i>Decachlorobiphenyl [2C]</i>	98 %		<i>Surr Limits: (42-146%)</i>				09/18/10 14:46	MAN	10I1075	8081A
<i>Tetrachloro-m-xylene [2C]</i>	83 %		<i>Surr Limits: (37-136%)</i>				09/18/10 14:46	MAN	10I1075	8081A

Polychlorinated Biphenyls by EPA Method 8082

Aroclor 1016 [2C]	ND	QSU, D02	210	40	ug/kg dry	10.0	09/16/10 17:45	JxM	10I0937	8082
Aroclor 1221 [2C]	ND	QSU, D02	210	40	ug/kg dry	10.0	09/16/10 17:45	JxM	10I0937	8082
Aroclor 1232 [2C]	ND	QSU, D02	210	40	ug/kg dry	10.0	09/16/10 17:45	JxM	10I0937	8082
Aroclor 1242 [2C]	ND	QSU, D02	210	45	ug/kg dry	10.0	09/16/10 17:45	JxM	10I0937	8082
Aroclor 1248 [2C]	ND	QSU, D02	210	40	ug/kg dry	10.0	09/16/10 17:45	JxM	10I0937	8082
Aroclor 1254 [2C]	ND	QSU, D02	210	43	ug/kg dry	10.0	09/16/10 17:45	JxM	10I0937	8082
Aroclor 1260 [2C]	ND	QSU, D02	210	96	ug/kg dry	10.0	09/16/10 17:45	JxM	10I0937	8082
<i>Decachlorobiphenyl [2C]</i>	89 %	QSU, D02	<i>Surr Limits: (34-148%)</i>				09/16/10 17:45	JxM	10I0937	8082
<i>Tetrachloro-m-xylene [2C]</i>	134 %	QSU, D02	<i>Surr Limits: (35-134%)</i>				09/16/10 17:45	JxM	10I0937	8082

Total Metals by SW 846 Series Methods

Aluminum	13800		12.3	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Antimony	ND		18.4	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Arsenic	6.4		2.5	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Barium	133		0.613	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Beryllium	0.649		0.245	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Cadmium	0.621		0.245	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Calcium	13200		61.3	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Chromium	19.2		0.613	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Cobalt	11.8		0.613	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Copper	22.7		1.2	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Iron	23600		12.3	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Lead	85.3		1.2	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Magnesium	9340		24.5	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Manganese	904	B1, B	0.2	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Nickel	21.6		6.13	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Potassium	1910		36.8	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Selenium	ND		4.9	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Silver	ND		0.613	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Sodium	ND		172	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Thallium	ND		7.4	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Vanadium	28.5		0.613	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Zinc	135		2.5	NR	mg/kg dry	1.00	09/22/10 18:41	DAN	10I1415	6010B
Mercury	0.167		0.0249	NR	mg/kg dry	1.00	09/20/10 15:30	JRK	10I1343	7471A

General Chemistry Parameters

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Client ID: SB-5 (0-2) (RTI0959-01 - Solid) - cont.						Sampled: 09/13/10 10:50		Recvd: 09/14/10 12:10		
<u>General Chemistry Parameters - cont.</u>										
Percent Solids	79		0.010	NR	%	1.00	09/16/10 10:26	JRR	10I0914	Dry Weight
Total Cyanide	ND		1.2	0.6	mg/kg dry	1.00	09/18/10 11:52	RJF	10I1023	9012A

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SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
General Chemistry Parameters									
9012A	10I1023	RTI0959-01	0.51	g	50.00	mL	09/16/10 12:27	AMP	Cn Digestion
Dry Weight	10I0914	RTI0959-01	10.00	g	10.00	g	09/15/10 09:15	JRR	Dry Weight
Organochlorine Pesticides by EPA Method 8081A									
8081A	10I1075	RTI0959-01	30.08	g	10.00	mL	09/17/10 07:30	EKD	3550B GC
Polychlorinated Biphenyls by EPA Method 8082									
8082	10I0937	RTI0959-01	30.66	g	10.00	mL	09/15/10 17:00	LTT	3550B GC
Semivolatile Organics by GC/MS									
8270C	10I1091	RTI0959-01	30.16	g	1.00	mL	09/17/10 07:00	EKD	3550B MB
Total Metals by SW 846 Series Methods									
6010B	10I1415	RTI0959-01	0.51	g	50.00	mL	09/21/10 17:50	MDM	3050B
7471A	10I1343	RTI0959-01	0.61	g	50.00	mL	09/20/10 13:25	JRK	7471A_
Volatile Organic Compounds by EPA 8260B									
8260B	10I1220	RTI0959-01	5.00	g	5.00	mL	09/18/10 10:16	PJQ	5030B MS

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
General Chemistry Parameters									
9012A	10I1387	RTI1016-01	0.54	g	50.00	mL	09/20/10 19:39	RMB	Cn Digestion
Dry Weight	10I1002	RTI1016-01	10.00	g	10.00	g	09/16/10 09:15	JRR	Dry Weight
Organochlorine Pesticides by EPA Method 8081A									
8081A	10I1075	RTI1016-01	30.88	g	10.00	mL	09/17/10 07:30	EKD	3550B GC
Polychlorinated Biphenyls by EPA Method 8082									
8082	10I1073	RTI1016-01	30.88	g	10.00	mL	09/17/10 07:00	EKD	3550B GC
Semivolatile Organics by GC/MS									
8270C	10I1091	RTI1016-01	30.06	g	1.00	mL	09/17/10 07:00	EKD	3550B MB
Total Metals by SW 846 Series Methods									
6010B	10I1415	RTI1016-01	0.54	g	50.00	mL	09/21/10 17:50	MDM	3050B
7471A	10I1343	RTI1016-01	0.62	g	50.00	mL	09/20/10 13:25	JRK	7471A_
Volatile Organic Compounds by EPA 8260B									
8260B	10I1494	RTI1016-01	5.09	g	5.00	mL	09/21/10 18:03	CDC	5035A MS

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Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/14/10-09/15/10

Reported: 09/30/10 11:33

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Blank Analyzed: 09/18/10 (Lab Number:10I1220-BLK1, Batch: 10I1220)											
1,1,1-Trichloroethane			5.0	0.36	ug/kg wet	ND					
1,1,2,2-Tetrachloroethane			5.0	0.81	ug/kg wet	ND					
1,1,2-Trichloroethane			5.0	0.65	ug/kg wet	ND					
1,1,2-Trichloro-1,2,2-trifluoroethane			5.0	1.1	ug/kg wet	ND					
1,1-Dichloroethane			5.0	0.61	ug/kg wet	ND					
1,1-Dichloroethene			5.0	0.61	ug/kg wet	ND					
1,2,4-Trichlorobenzene			5.0	0.30	ug/kg wet	ND					
1,2-Dibromo-3-chloropropane			5.0	2.5	ug/kg wet	ND					
1,2-Dibromoethane			5.0	0.64	ug/kg wet	ND					
1,2-Dichlorobenzene			5.0	0.39	ug/kg wet	ND					
1,2-Dichloroethane			5.0	0.25	ug/kg wet	ND					
1,2-Dichloropropane			5.0	2.5	ug/kg wet	ND					
1,3-Dichlorobenzene			5.0	0.26	ug/kg wet	ND					
1,4-Dichlorobenzene			5.0	0.70	ug/kg wet	ND					
2-Butanone			25	1.8	ug/kg wet	ND					
2-Hexanone			25	2.5	ug/kg wet	ND					
4-Methyl-2-pentanone			25	1.6	ug/kg wet	ND					
Acetone			25	4.2	ug/kg wet	ND					
Benzene			5.0	0.24	ug/kg wet	ND					
Bromodichloromethane			5.0	0.67	ug/kg wet	ND					
Bromoform			5.0	2.5	ug/kg wet	ND					
Bromomethane			5.0	0.45	ug/kg wet	ND					
Carbon disulfide			5.0	2.5	ug/kg wet	ND					
Carbon Tetrachloride			5.0	0.48	ug/kg wet	ND					
Chlorobenzene			5.0	0.66	ug/kg wet	ND					
Dibromochloromethane			5.0	0.64	ug/kg wet	ND					
Chloroethane			5.0	1.1	ug/kg wet	ND					
Chloroform			5.0	0.31	ug/kg wet	ND					
Chloromethane			5.0	0.30	ug/kg wet	ND					
cis-1,2-Dichloroethene			5.0	0.64	ug/kg wet	ND					
cis-1,3-Dichloropropene			5.0	0.72	ug/kg wet	ND					
Cyclohexane			5.0	0.70	ug/kg wet	ND					
Dichlorodifluoromethane			5.0	0.41	ug/kg wet	ND					
Ethylbenzene			5.0	0.34	ug/kg wet	ND					
Isopropylbenzene			5.0	0.75	ug/kg wet	ND					
Methyl Acetate			5.0	0.93	ug/kg wet	ND					

Benchmark Environmental & Engineering Science
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SDG Number: RTI0959

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Blank Analyzed: 09/18/10 (Lab Number:10I1220-BLK1, Batch: 10I1220)											
Methyl-t-Butyl Ether (MTBE)			5.0	0.49	ug/kg wet	ND					
Methylcyclohexane			5.0	0.76	ug/kg wet	ND					
Methylene Chloride			5.0	2.3	ug/kg wet	ND					
Styrene			5.0	0.25	ug/kg wet	ND					
Tetrachloroethene			5.0	0.67	ug/kg wet	ND					
Toluene			5.0	0.38	ug/kg wet	ND					
trans-1,2-Dichloroethene			5.0	0.52	ug/kg wet	ND					
trans-1,3-Dichloropropene			5.0	2.2	ug/kg wet	ND					
Trichloroethene			5.0	1.1	ug/kg wet	ND					
Trichlorofluoromethane			5.0	0.47	ug/kg wet	ND					
Vinyl chloride			5.0	0.61	ug/kg wet	ND					
Xylenes, total			10	0.84	ug/kg wet	ND					
<i>Surrogate:</i>					<i>ug/kg wet</i>		100	64-126			
<i>1,2-Dichloroethane-d4</i>											
<i>Surrogate:</i>					<i>ug/kg wet</i>		102	72-126			
<i>4-Bromofluorobenzene</i>											
<i>Surrogate: Toluene-d8</i>					<i>ug/kg wet</i>		111	71-125			
LCS Analyzed: 09/18/10 (Lab Number:10I1220-BS1, Batch: 10I1220)											
1,1,1-Trichloroethane			5.0	0.36	ug/kg wet	ND		77-121			
1,1,1,2-Tetrachloroethane			5.0	0.81	ug/kg wet	ND		80-120			
1,1,2-Trichloroethane			5.0	0.65	ug/kg wet	ND		78-122			
1,1,2-Trichloro-1,2,2-trifluoroethane			5.0	1.1	ug/kg wet	ND		60-140			
1,1-Dichloroethane		50.0	5.0	0.61	ug/kg wet	45.0	90	79-126			
1,1-Dichloroethene		50.0	5.0	0.61	ug/kg wet	45.8	92	65-153			
1,2,4-Trichlorobenzene			5.0	0.30	ug/kg wet	ND		64-120			
1,2-Dibromo-3-chloropropane			5.0	2.5	ug/kg wet	ND		63-124			
1,2-Dibromoethane			5.0	0.64	ug/kg wet	ND		78-120			
1,2-Dichlorobenzene		50.0	5.0	0.39	ug/kg wet	47.9	96	75-120			
1,2-Dichloroethane		50.0	5.0	0.25	ug/kg wet	46.5	93	77-122			
1,2-Dichloropropane			5.0	2.5	ug/kg wet	ND		75-124			
1,3-Dichlorobenzene			5.0	0.26	ug/kg wet	ND		74-120			
1,4-Dichlorobenzene			5.0	0.70	ug/kg wet	ND		73-120			
2-Butanone			25	1.8	ug/kg wet	ND		70-134			
2-Hexanone			25	2.5	ug/kg wet	ND		59-130			
4-Methyl-2-pentanone			25	1.6	ug/kg wet	ND		65-133			
Acetone			25	4.2	ug/kg wet	ND		61-137			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
LCS Analyzed: 09/18/10 (Lab Number:10I1220-BS1, Batch: 10I1220)											
Benzene		50.0	5.0	0.24	ug/kg wet	45.6	91	79-127			
Bromodichloromethane			5.0	0.67	ug/kg wet	ND		80-122			
Bromoform			5.0	2.5	ug/kg wet	ND		68-126			
Bromomethane			5.0	0.45	ug/kg wet	ND		37-149			
Carbon disulfide			5.0	2.5	ug/kg wet	ND		64-131			
Carbon Tetrachloride			5.0	0.48	ug/kg wet	ND		75-135			
Chlorobenzene		50.0	5.0	0.66	ug/kg wet	50.7	101	76-124			
Dibromochloromethane			5.0	0.64	ug/kg wet	ND		76-125			
Chloroethane			5.0	1.1	ug/kg wet	ND		69-135			
Chloroform			5.0	0.31	ug/kg wet	ND		80-118			
Chloromethane			5.0	0.30	ug/kg wet	ND		63-127			
cis-1,2-Dichloroethene		50.0	5.0	0.64	ug/kg wet	44.9	90	81-117			
cis-1,3-Dichloropropene			5.0	0.72	ug/kg wet	ND		82-120			
Cyclohexane			5.0	0.70	ug/kg wet	ND		70-130			
Dichlorodifluoromethane			5.0	0.41	ug/kg wet	ND		57-142			
Ethylbenzene		50.0	5.0	0.34	ug/kg wet	50.4	101	80-120			
Isopropylbenzene			5.0	0.75	ug/kg wet	ND		72-120			
Methyl Acetate			5.0	0.93	ug/kg wet	ND		60-140			
Methyl-t-Butyl Ether (MTBE)		50.0	5.0	0.49	ug/kg wet	42.1	84	63-125			
Methylcyclohexane			5.0	0.76	ug/kg wet	ND		60-140			
Methylene Chloride			5.0	2.3	ug/kg wet	4.15		61-127			J
Styrene			5.0	0.25	ug/kg wet	ND		80-120			
Tetrachloroethene		50.0	5.0	0.67	ug/kg wet	50.7	101	74-122			
Toluene		50.0	5.0	0.38	ug/kg wet	50.3	101	74-128			
trans-1,2-Dichloroethene		50.0	5.0	0.52	ug/kg wet	46.7	93	78-126			
trans-1,3-Dichloropropene			5.0	2.2	ug/kg wet	ND		73-123			
Trichloroethene		50.0	5.0	1.1	ug/kg wet	46.7	93	77-129			
Trichlorofluoromethane			5.0	0.47	ug/kg wet	ND		65-146			
Vinyl chloride			5.0	0.61	ug/kg wet	ND		61-133			
Xylenes, total		150	10	0.84	ug/kg wet	156	104	80-120			
<i>Surrogate:</i>					<i>ug/kg wet</i>		<i>100</i>	<i>64-126</i>			
<i>1,2-Dichloroethane-d4</i>											
<i>Surrogate:</i>					<i>ug/kg wet</i>		<i>106</i>	<i>72-126</i>			
<i>4-Bromofluorobenzene</i>											
<i>Surrogate: Toluene-d8</i>					<i>ug/kg wet</i>		<i>110</i>	<i>71-125</i>			

Volatile Organic Compounds by EPA 8260B

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Blank Analyzed: 09/21/10 (Lab Number:1011494-BLK1, Batch: 1011494)											
1,1,1-Trichloroethane			5.0	0.36	ug/kg wet	ND					
1,1,2,2-Tetrachloroethane			5.0	0.81	ug/kg wet	ND					
1,1,2-Trichloroethane			5.0	0.65	ug/kg wet	ND					
1,1,2-Trichloro-1,2,2-trifluoroethane			5.0	1.1	ug/kg wet	ND					
1,1-Dichloroethane			5.0	0.61	ug/kg wet	ND					
1,1-Dichloroethene			5.0	0.61	ug/kg wet	ND					
1,2,4-Trichlorobenzene			5.0	0.30	ug/kg wet	ND					
1,2-Dibromo-3-chloropropane			5.0	2.5	ug/kg wet	ND					
1,2-Dibromoethane			5.0	0.64	ug/kg wet	ND					
1,2-Dichlorobenzene			5.0	0.39	ug/kg wet	ND					
1,2-Dichloroethane			5.0	0.25	ug/kg wet	ND					
1,2-Dichloropropane			5.0	2.5	ug/kg wet	ND					
1,3-Dichlorobenzene			5.0	0.26	ug/kg wet	ND					
1,4-Dichlorobenzene			5.0	0.70	ug/kg wet	ND					
2-Butanone			25	1.8	ug/kg wet	ND					
2-Hexanone			25	2.5	ug/kg wet	ND					
4-Methyl-2-pentanone			25	1.6	ug/kg wet	ND					
Acetone			25	4.2	ug/kg wet	ND					
Benzene			5.0	0.24	ug/kg wet	ND					
Bromodichloromethane			5.0	0.67	ug/kg wet	ND					
Bromoform			5.0	2.5	ug/kg wet	ND					
Bromomethane			5.0	0.45	ug/kg wet	ND					
Carbon disulfide			5.0	2.5	ug/kg wet	ND					
Carbon Tetrachloride			5.0	0.48	ug/kg wet	ND					
Chlorobenzene			5.0	0.66	ug/kg wet	ND					
Dibromochloromethane			5.0	0.64	ug/kg wet	ND					
Chloroethane			5.0	1.1	ug/kg wet	ND					
Chloroform			5.0	0.31	ug/kg wet	ND					
Chloromethane			5.0	0.30	ug/kg wet	ND					
cis-1,2-Dichloroethene			5.0	0.64	ug/kg wet	ND					
cis-1,3-Dichloropropene			5.0	0.72	ug/kg wet	ND					
Cyclohexane			5.0	0.70	ug/kg wet	ND					
Dichlorodifluoromethane			5.0	0.41	ug/kg wet	ND					
Ethylbenzene			5.0	0.34	ug/kg wet	ND					
Isopropylbenzene			5.0	0.75	ug/kg wet	ND					
Methyl Acetate			5.0	0.93	ug/kg wet	ND					

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Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Blank Analyzed: 09/21/10 (Lab Number:1011494-BLK1, Batch: 1011494)											
Methyl-t-Butyl Ether (MTBE)			5.0	0.49	ug/kg wet	ND					
Methylcyclohexane			5.0	0.76	ug/kg wet	ND					
Methylene Chloride			5.0	2.3	ug/kg wet	ND					
Styrene			5.0	0.25	ug/kg wet	ND					
Tetrachloroethene			5.0	0.67	ug/kg wet	ND					
Toluene			5.0	0.38	ug/kg wet	ND					
trans-1,2-Dichloroethene			5.0	0.52	ug/kg wet	ND					
trans-1,3-Dichloropropene			5.0	2.2	ug/kg wet	ND					
Trichloroethene			5.0	1.1	ug/kg wet	ND					
Trichlorofluoromethane			5.0	0.47	ug/kg wet	ND					
Vinyl chloride			5.0	0.61	ug/kg wet	ND					
Xylenes, total			10	0.84	ug/kg wet	ND					
<i>Surrogate:</i>						ug/kg wet	92	64-126			
<i>1,2-Dichloroethane-d4</i>											
<i>Surrogate:</i>						ug/kg wet	97	72-126			
<i>4-Bromofluorobenzene</i>											
<i>Surrogate: Toluene-d8</i>						ug/kg wet	104	71-125			
LCS Analyzed: 09/21/10 (Lab Number:1011494-BS1, Batch: 1011494)											
1,1,1-Trichloroethane		50.0	5.0	0.36	ug/kg wet	48.3	97	77-121			
1,1,2,2-Tetrachloroethane		50.0	5.0	0.81	ug/kg wet	42.6	85	80-120			
1,1,2-Trichloroethane		50.0	5.0	0.65	ug/kg wet	47.0	94	78-122			
1,1,2-Trichloro-1,2,2-trifluoroethane		50.0	5.0	1.1	ug/kg wet	55.2	110	60-140			
1,1-Dichloroethane		50.0	5.0	0.61	ug/kg wet	51.9	104	79-126			
1,1-Dichloroethene		50.0	5.0	0.61	ug/kg wet	46.5	93	65-153			
1,2,4-Trichlorobenzene		50.0	5.0	0.30	ug/kg wet	43.4	87	64-120			
1,2-Dibromo-3-chloropropane		50.0	5.0	2.5	ug/kg wet	36.5	73	63-124			
1,2-Dibromoethane		50.0	5.0	0.64	ug/kg wet	47.1	94	78-120			
1,2-Dichlorobenzene		50.0	5.0	0.39	ug/kg wet	48.3	97	75-120			
1,2-Dichloroethane		50.0	5.0	0.25	ug/kg wet	46.9	94	77-122			
1,2-Dichloropropane		50.0	5.0	2.5	ug/kg wet	47.6	95	75-124			
1,3-Dichlorobenzene		50.0	5.0	0.26	ug/kg wet	50.4	101	74-120			
1,4-Dichlorobenzene		50.0	5.0	0.70	ug/kg wet	49.1	98	73-120			
2-Butanone		250	25	1.8	ug/kg wet	244	98	70-134			
2-Hexanone		250	25	2.5	ug/kg wet	248	99	59-130			
4-Methyl-2-pentanone		250	25	1.6	ug/kg wet	250	100	65-133			
Acetone		250	25	4.2	ug/kg wet	244	98	61-137			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
LCS Analyzed: 09/21/10 (Lab Number:10I1494-BS1, Batch: 10I1494)											
Benzene		50.0	5.0	0.24	ug/kg wet	48.9	98	79-127			
Bromodichloromethane		50.0	5.0	0.67	ug/kg wet	45.6	91	80-122			
Bromoform		50.0	5.0	2.5	ug/kg wet	40.1	80	68-126			
Bromomethane		50.0	5.0	0.45	ug/kg wet	53.8	108	37-149			
Carbon disulfide		50.0	5.0	2.5	ug/kg wet	50.0	100	64-131			
Carbon Tetrachloride		50.0	5.0	0.48	ug/kg wet	46.1	92	75-135			
Chlorobenzene		50.0	5.0	0.66	ug/kg wet	51.0	102	76-124			
Dibromochloromethane		50.0	5.0	0.64	ug/kg wet	44.6	89	76-125			
Chloroethane		50.0	5.0	1.1	ug/kg wet	51.6	103	69-135			
Chloroform		50.0	5.0	0.31	ug/kg wet	49.2	98	80-118			
Chloromethane		50.0	5.0	0.30	ug/kg wet	55.1	110	63-127			
cis-1,2-Dichloroethene		50.0	5.0	0.64	ug/kg wet	51.2	102	81-117			
cis-1,3-Dichloropropene		50.0	5.0	0.72	ug/kg wet	44.2	88	82-120			
Cyclohexane		50.0	5.0	0.70	ug/kg wet	53.1	106	70-130			
Dichlorodifluoromethane		50.0	5.0	0.41	ug/kg wet	44.2	88	57-142			
Ethylbenzene		50.0	5.0	0.34	ug/kg wet	50.5	101	80-120			
Isopropylbenzene		50.0	5.0	0.75	ug/kg wet	45.0	90	72-120			
Methyl Acetate		50.0	5.0	0.93	ug/kg wet	95.9	192	60-140			L
Methyl-t-Butyl Ether (MTBE)		50.0	5.0	0.49	ug/kg wet	44.2	88	63-125			
Methylcyclohexane		50.0	5.0	0.76	ug/kg wet	53.3	107	60-140			
Methylene Chloride		50.0	5.0	2.3	ug/kg wet	51.6	103	61-127			
Styrene		50.0	5.0	0.25	ug/kg wet	46.5	93	80-120			
Tetrachloroethene		50.0	5.0	0.67	ug/kg wet	52.6	105	74-122			
Toluene		50.0	5.0	0.38	ug/kg wet	51.3	103	74-128			
trans-1,2-Dichloroethene		50.0	5.0	0.52	ug/kg wet	50.2	100	78-126			
trans-1,3-Dichloropropene		50.0	5.0	2.2	ug/kg wet	44.9	90	73-123			
Trichloroethene		50.0	5.0	1.1	ug/kg wet	48.6	97	77-129			
Trichlorofluoromethane		50.0	5.0	0.47	ug/kg wet	58.5	117	65-146			
Vinyl chloride		50.0	5.0	0.61	ug/kg wet	49.0	98	61-133			
Xylenes, total		150	10	0.84	ug/kg wet	156	104	80-120			
Surrogate:					ug/kg wet		99	64-126			
<i>1,2-Dichloroethane-d4</i>											
Surrogate:					ug/kg wet		110	72-126			
<i>4-Bromofluorobenzene</i>											
Surrogate: Toluene-d8					ug/kg wet		111	71-125			

Matrix Spike Analyzed: 09/22/10 (Lab Number:10I1494-MS1, Batch: 10I1494)

QC Source Sample: RTI1016-01

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Matrix Spike Analyzed: 09/22/10 (Lab Number:1011494-MS1, Batch: 1011494)											
QC Source Sample: RTI1016-01											
1,1,1-Trichloroethane	ND	54.6	5.5	0.40	ug/kg dry	45.5	83	77-121			
1,1,2,2-Tetrachloroethane	ND	54.6	5.5	0.89	ug/kg dry	29.2	54	80-120			M8
1,1,2-Trichloroethane	ND	54.6	5.5	0.71	ug/kg dry	38.5	70	78-122			M8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	54.6	5.5	1.2	ug/kg dry	52.8	97	60-140			
1,1-Dichloroethane	ND	54.6	5.5	0.67	ug/kg dry	48.8	89	79-126			
1,1-Dichloroethene	ND	54.6	5.5	0.67	ug/kg dry	42.8	78	65-153			
1,2,4-Trichlorobenzene	ND	54.6	5.5	0.33	ug/kg dry	26.7	49	64-120			M8
1,2-Dibromo-3-chloropropane	ND	54.6	5.5	2.7	ug/kg dry	20.2	37	63-124			M8
1,2-Dibromoethane	ND	54.6	5.5	0.70	ug/kg dry	35.6	65	78-120			M8
1,2-Dichlorobenzene	ND	54.6	5.5	0.43	ug/kg dry	37.8	69	75-120			M8
1,2-Dichloroethane	ND	54.6	5.5	0.27	ug/kg dry	40.6	74	77-122			M8
1,2-Dichloropropane	ND	54.6	5.5	2.7	ug/kg dry	43.9	80	75-124			
1,3-Dichlorobenzene	ND	54.6	5.5	0.28	ug/kg dry	40.0	73	74-120			M8
1,4-Dichlorobenzene	ND	54.6	5.5	0.76	ug/kg dry	39.1	72	73-120			M8
2-Butanone	ND	273	27	2.0	ug/kg dry	136	50	70-134			M8
2-Hexanone	ND	273	27	2.7	ug/kg dry	144	53	59-130			M8
4-Methyl-2-pentanone	ND	273	27	1.8	ug/kg dry	155	57	65-133			M8
Acetone	ND	273	27	4.6	ug/kg dry	143	52	61-137			M8
Benzene	ND	54.6	5.5	0.27	ug/kg dry	46.7	86	79-127			
Bromodichloromethane	ND	54.6	5.5	0.73	ug/kg dry	40.4	74	80-122			M8
Bromoform	ND	54.6	5.5	2.7	ug/kg dry	28.0	51	68-126			M8
Bromomethane	ND	54.6	5.5	0.49	ug/kg dry	85.4	156	37-149			M7
Carbon disulfide	ND	54.6	5.5	2.7	ug/kg dry	47.3	87	64-131			
Carbon Tetrachloride	ND	54.6	5.5	0.53	ug/kg dry	43.5	80	75-135			
Chlorobenzene	ND	54.6	5.5	0.72	ug/kg dry	46.6	85	76-124			
Dibromochloromethane	ND	54.6	5.5	0.70	ug/kg dry	36.4	67	76-125			M8
Chloroethane	ND	54.6	5.5	1.2	ug/kg dry	67.3	123	69-135			
Chloroform	ND	54.6	5.5	0.34	ug/kg dry	46.8	86	80-118			
Chloromethane	ND	54.6	5.5	0.33	ug/kg dry	56.6	104	63-127			
cis-1,2-Dichloroethene	ND	54.6	5.5	0.70	ug/kg dry	47.2	87	81-117			
cis-1,3-Dichloropropene	ND	54.6	5.5	0.79	ug/kg dry	36.0	66	82-120			M8
Cyclohexane	ND	54.6	5.5	0.76	ug/kg dry	47.4	87	70-130			
Dichlorodifluoromethane	ND	54.6	5.5	0.45	ug/kg dry	44.0	81	57-142			
Ethylbenzene	ND	54.6	5.5	0.38	ug/kg dry	46.8	86	80-120			
Isopropylbenzene	ND	54.6	5.5	0.82	ug/kg dry	39.8	73	72-120			
Methyl Acetate	ND	54.6	5.5	1.0	ug/kg dry	61.4	112	60-140			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Matrix Spike Analyzed: 09/22/10 (Lab Number:1011494-MS1, Batch: 1011494)											
QC Source Sample: RTI1016-01											
Methyl-t-Butyl Ether (MTBE)	ND	54.6	5.5	0.54	ug/kg dry	33.1	61	63-125			M8
Methylcyclohexane	ND	54.6	5.5	0.83	ug/kg dry	45.2	83	60-140			
Methylene Chloride	7.86	54.6	5.5	2.5	ug/kg dry	52.3	81	61-127			
Styrene	ND	54.6	5.5	0.27	ug/kg dry	40.6	74	80-120			M8
Tetrachloroethene	ND	54.6	5.5	0.73	ug/kg dry	46.8	86	74-122			
Toluene	ND	54.6	5.5	0.41	ug/kg dry	48.7	89	74-128			
trans-1,2-Dichloroethene	ND	54.6	5.5	0.56	ug/kg dry	47.2	87	78-126			
trans-1,3-Dichloropropene	ND	54.6	5.5	2.4	ug/kg dry	35.5	65	73-123			M8
Trichloroethene	ND	54.6	5.5	1.2	ug/kg dry	44.7	82	77-129			
Trichlorofluoromethane	ND	54.6	5.5	0.52	ug/kg dry	62.0	114	65-146			
Vinyl chloride	ND	54.6	5.5	0.67	ug/kg dry	51.1	94	61-133			
Xylenes, total	ND	164	11	0.92	ug/kg dry	142	87	80-120			
<i>Surrogate:</i>						<i>ug/kg dry</i>	<i>86</i>	<i>64-126</i>			
<i>1,2-Dichloroethane-d4</i>											
<i>Surrogate:</i>						<i>ug/kg dry</i>	<i>107</i>	<i>72-126</i>			
<i>4-Bromofluorobenzene</i>											
<i>Surrogate: Toluene-d8</i>						<i>ug/kg dry</i>	<i>115</i>	<i>71-125</i>			
Matrix Spike Dup Analyzed: 09/22/10 (Lab Number:1011494-MSD1, Batch: 1011494)											
QC Source Sample: RTI1016-01											
1,1,1-Trichloroethane	ND	53.6	5.4	0.39	ug/kg dry	44.8	83	77-121	2	20	
1,1,2,2-Tetrachloroethane	ND	53.6	5.4	0.87	ug/kg dry	29.9	56	80-120	2	20	M8
1,1,2-Trichloroethane	ND	53.6	5.4	0.70	ug/kg dry	38.5	72	78-122	0.1	20	M8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	53.6	5.4	1.2	ug/kg dry	50.9	95	60-140	4	20	
1,1-Dichloroethane	ND	53.6	5.4	0.65	ug/kg dry	47.8	89	79-126	2	20	
1,1-Dichloroethene	ND	53.6	5.4	0.66	ug/kg dry	42.2	79	65-153	1	22	
1,2,4-Trichlorobenzene	ND	53.6	5.4	0.33	ug/kg dry	25.6	48	64-120	4	20	M8
1,2-Dibromo-3-chloropropane	ND	53.6	5.4	2.7	ug/kg dry	20.6	38	63-124	2	20	M8
1,2-Dibromoethane	ND	53.6	5.4	0.69	ug/kg dry	36.2	67	78-120	1	20	M8
1,2-Dichlorobenzene	ND	53.6	5.4	0.42	ug/kg dry	36.4	68	75-120	4	20	M8
1,2-Dichloroethane	ND	53.6	5.4	0.27	ug/kg dry	39.6	74	77-122	3	20	M8
1,2-Dichloropropane	ND	53.6	5.4	2.7	ug/kg dry	43.7	81	75-124	0.6	20	
1,3-Dichlorobenzene	ND	53.6	5.4	0.28	ug/kg dry	38.1	71	74-120	5	20	M8
1,4-Dichlorobenzene	ND	53.6	5.4	0.75	ug/kg dry	37.4	70	73-120	5	20	M8
2-Butanone	ND	268	27	2.0	ug/kg dry	141	53	70-134	3	20	M8
2-Hexanone	ND	268	27	2.7	ug/kg dry	151	56	59-130	5	20	M8

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Matrix Spike Dup Analyzed: 09/22/10 (Lab Number:1011494-MSD1, Batch: 1011494)											
QC Source Sample: RTI1016-01											
4-Methyl-2-pentanone	ND	268	27	1.8	ug/kg dry	162	61	65-133	5	20	M8
Acetone	ND	268	27	4.5	ug/kg dry	146	55	61-137	2	15	M8
Benzene	ND	53.6	5.4	0.26	ug/kg dry	45.8	85	79-127	2	20	
Bromodichloromethane	ND	53.6	5.4	0.72	ug/kg dry	40.0	75	80-122	1	20	M8
Bromoform	ND	53.6	5.4	2.7	ug/kg dry	28.5	53	68-126	2	20	M8
Bromomethane	ND	53.6	5.4	0.48	ug/kg dry	80.2	150	37-149	6	20	M7
Carbon disulfide	ND	53.6	5.4	2.7	ug/kg dry	46.3	86	64-131	2	20	
Carbon Tetrachloride	ND	53.6	5.4	0.52	ug/kg dry	43.1	80	75-135	0.9	20	
Chlorobenzene	ND	53.6	5.4	0.71	ug/kg dry	45.0	84	76-124	3	25	
Dibromochloromethane	ND	53.6	5.4	0.69	ug/kg dry	36.6	68	76-125	0.6	20	M8
Chloroethane	ND	53.6	5.4	1.2	ug/kg dry	64.6	120	69-135	4	20	
Chloroform	ND	53.6	5.4	0.33	ug/kg dry	46.1	86	80-118	1	20	
Chloromethane	ND	53.6	5.4	0.32	ug/kg dry	55.1	103	63-127	3	20	
cis-1,2-Dichloroethene	ND	53.6	5.4	0.69	ug/kg dry	46.5	87	81-117	2	20	
cis-1,3-Dichloropropene	ND	53.6	5.4	0.77	ug/kg dry	36.2	68	82-120	0.5	20	M8
Cyclohexane	ND	53.6	5.4	0.75	ug/kg dry	46.4	86	70-130	2	20	
Dichlorodifluoromethane	ND	53.6	5.4	0.44	ug/kg dry	43.6	81	57-142	1	20	
Ethylbenzene	ND	53.6	5.4	0.37	ug/kg dry	45.1	84	80-120	4	20	
Isopropylbenzene	ND	53.6	5.4	0.81	ug/kg dry	38.6	72	72-120	3	20	
Methyl Acetate	ND	53.6	5.4	1.0	ug/kg dry	69.6	130	60-140	13	20	
Methyl-t-Butyl Ether (MTBE)	ND	53.6	5.4	0.53	ug/kg dry	34.2	64	63-125	3	20	
Methylcyclohexane	ND	53.6	5.4	0.82	ug/kg dry	44.0	82	60-140	3	20	
Methylene Chloride	7.86	53.6	5.4	2.5	ug/kg dry	52.8	84	61-127	0.8	15	
Styrene	ND	53.6	5.4	0.27	ug/kg dry	38.9	73	80-120	4	20	M8
Tetrachloroethene	ND	53.6	5.4	0.72	ug/kg dry	45.9	86	74-122	2	20	
Toluene	ND	53.6	5.4	0.41	ug/kg dry	47.7	89	74-128	2	20	
trans-1,2-Dichloroethene	ND	53.6	5.4	0.55	ug/kg dry	46.5	87	78-126	2	20	
trans-1,3-Dichloropropene	ND	53.6	5.4	2.4	ug/kg dry	35.3	66	73-123	0.5	20	M8
Trichloroethene	ND	53.6	5.4	1.2	ug/kg dry	43.9	82	77-129	2	24	
Trichlorofluoromethane	ND	53.6	5.4	0.51	ug/kg dry	58.7	109	65-146	6	20	
Vinyl chloride	ND	53.6	5.4	0.65	ug/kg dry	49.1	91	61-133	4	20	
Xylenes, total	ND	161	11	0.90	ug/kg dry	137	85	80-120	3	20	

Surrogate: 1,2-Dichloroethane-d4 ug/kg dry 86 64-126
 Surrogate: 4-Bromofluorobenzene ug/kg dry 109 72-126
 Surrogate: Toluene-d8 ug/kg dry 114 71-125

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Semivolatile Organics by GC/MS											
Blank Analyzed: 09/22/10 (Lab Number:1011091-BLK1, Batch: 1011091)											
2,4,5-Trichlorophenol			170	36	ug/kg wet	ND					
2,4,6-Trichlorophenol			170	11	ug/kg wet	ND					
2,4-Dichlorophenol			170	8.7	ug/kg wet	ND					
2,4-Dimethylphenol			170	45	ug/kg wet	ND					
2,4-Dinitrophenol			320	58	ug/kg wet	ND					
2,4-Dinitrotoluene			170	26	ug/kg wet	ND					
2,6-Dinitrotoluene			170	41	ug/kg wet	ND					
2-Chloronaphthalene			170	11	ug/kg wet	ND					
2-Chlorophenol			170	8.5	ug/kg wet	ND					
2-Methylnaphthalene			170	2.0	ug/kg wet	ND					
2-Methylphenol			170	5.1	ug/kg wet	ND					
2-Nitroaniline			320	53	ug/kg wet	ND					
2-Nitrophenol			170	7.6	ug/kg wet	ND					
3,3'-Dichlorobenzidine			170	150	ug/kg wet	ND					
3-Nitroaniline			320	38	ug/kg wet	ND					
4,6-Dinitro-2-methylphenol			320	57	ug/kg wet	ND					
4-Bromophenyl phenyl ether			170	53	ug/kg wet	ND					
4-Chloro-3-methylphenol			170	6.8	ug/kg wet	ND					
4-Chloroaniline			170	49	ug/kg wet	ND					
4-Chlorophenyl phenyl ether			170	3.5	ug/kg wet	ND					
4-Methylphenol			170	9.2	ug/kg wet	ND					
4-Nitroaniline			320	19	ug/kg wet	ND					
4-Nitrophenol			320	40	ug/kg wet	ND					
Acenaphthene			170	2.0	ug/kg wet	ND					
Acenaphthylene			170	1.4	ug/kg wet	ND					
Acetophenone			170	8.5	ug/kg wet	ND					
Anthracene			170	4.3	ug/kg wet	ND					
Atrazine			170	7.4	ug/kg wet	ND					
Benzaldehyde			170	18	ug/kg wet	ND					
Benzo(a)anthracene			170	2.9	ug/kg wet	ND					
Benzo(a)pyrene			170	4.0	ug/kg wet	ND					
Benzo(b)fluoranthene			170	3.2	ug/kg wet	ND					
Benzo(ghi)perylene			170	2.0	ug/kg wet	ND					
Benzo(k)fluoranthene			170	1.8	ug/kg wet	ND					
Biphenyl			170	10	ug/kg wet	ND					

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Semivolatile Organics by GC/MS											
Blank Analyzed: 09/22/10 (Lab Number:10I1091-BLK1, Batch: 10I1091)											
Bis(2-chloroethoxy)methane			170	9.0	ug/kg wet	ND					
Bis(2-chloroethyl)ether			170	14	ug/kg wet	ND					
2,2'-Oxybis(1-Chloropropane)			170	17	ug/kg wet	ND					
Bis(2-ethylhexyl)phthalate			170	54	ug/kg wet	ND					
Butyl benzyl phthalate			170	45	ug/kg wet	ND					
Caprolactam			170	72	ug/kg wet	ND					
Carbazole			170	1.9	ug/kg wet	ND					
Chrysene			170	1.7	ug/kg wet	ND					
Dibenzo(a,h)anthracene			170	2.0	ug/kg wet	ND					
Dibenzofuran			170	1.7	ug/kg wet	ND					
Diethyl phthalate			170	5.0	ug/kg wet	ND					
Dimethyl phthalate			170	4.3	ug/kg wet	ND					
Di-n-butyl phthalate			170	57	ug/kg wet	ND					
Di-n-octyl phthalate			170	3.9	ug/kg wet	ND					
Fluoranthene			170	2.4	ug/kg wet	ND					
Fluorene			170	3.8	ug/kg wet	ND					
Hexachlorobenzene			170	8.3	ug/kg wet	ND					
Hexachlorobutadiene			170	8.5	ug/kg wet	ND					
Hexachlorocyclopentadiene			170	50	ug/kg wet	ND					
Hexachloroethane			170	13	ug/kg wet	ND					
Indeno(1,2,3-cd)pyrene			170	4.6	ug/kg wet	ND					
Isophorone			170	8.3	ug/kg wet	ND					
Naphthalene			170	2.8	ug/kg wet	ND					
Nitrobenzene			170	7.4	ug/kg wet	ND					
N-Nitrosodi-n-propylamine			170	13	ug/kg wet	ND					
N-Nitrosodiphenylamine			170	9.1	ug/kg wet	ND					
Pentachlorophenol			320	57	ug/kg wet	ND					
Phenanthrene			170	3.5	ug/kg wet	ND					
Phenol			170	17	ug/kg wet	ND					
Pyrene			170	1.1	ug/kg wet	ND					
Surrogate: 2,4,6-Tribromophenol					ug/kg wet		110	39-146			
Surrogate: 2-Fluorobiphenyl					ug/kg wet		89	37-120			
Surrogate: 2-Fluorophenol					ug/kg wet		78	18-120			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Semivolatile Organics by GC/MS											
Blank Analyzed: 09/22/10 (Lab Number:10I1091-BLK1, Batch: 10I1091)											
Surrogate:					ug/kg wet		89	34-132			
Nitrobenzene-d5											
Surrogate: Phenol-d5					ug/kg wet		82	11-120			
Surrogate:					ug/kg wet		77	58-147			
p-Terphenyl-d14											
LCS Analyzed: 09/22/10 (Lab Number:10I1091-BS1, Batch: 10I1091)											
2,4,5-Trichlorophenol			170	37	ug/kg wet	ND		59-126			
2,4,6-Trichlorophenol			170	11	ug/kg wet	ND		59-123			
2,4-Dichlorophenol			170	8.8	ug/kg wet	ND		52-120			
2,4-Dimethylphenol			170	45	ug/kg wet	ND		36-120			
2,4-Dinitrophenol			330	59	ug/kg wet	ND		35-146			
2,4-Dinitrotoluene		3310	170	26	ug/kg wet	3290	99	55-125			
2,6-Dinitrotoluene			170	41	ug/kg wet	ND		66-128			
2-Chloronaphthalene			170	11	ug/kg wet	ND		57-120			
2-Chlorophenol		3310	170	8.5	ug/kg wet	2620	79	38-120			
2-Methylnaphthalene			170	2.0	ug/kg wet	ND		47-120			
2-Methylphenol			170	5.2	ug/kg wet	ND		48-120			
2-Nitroaniline			330	54	ug/kg wet	ND		61-130			
2-Nitrophenol			170	7.7	ug/kg wet	ND		50-120			
3,3'-Dichlorobenzidine			170	150	ug/kg wet	ND		48-126			
3-Nitroaniline			330	39	ug/kg wet	ND		61-127			
4,6-Dinitro-2-methylphenol			330	58	ug/kg wet	ND		49-155			
4-Bromophenyl phenyl ether			170	53	ug/kg wet	ND		58-131			
4-Chloro-3-methylphenol		3310	170	6.9	ug/kg wet	2980	90	49-125			
4-Chloroaniline			170	49	ug/kg wet	ND		49-120			
4-Chlorophenyl phenyl ether			170	3.6	ug/kg wet	ND		63-124			
4-Methylphenol			170	9.3	ug/kg wet	ND		50-119			
4-Nitroaniline			330	19	ug/kg wet	ND		63-128			
4-Nitrophenol		3310	330	41	ug/kg wet	2710	82	43-137			
Acenaphthene		3310	170	2.0	ug/kg wet	2920	88	53-120			
Acenaphthylene			170	1.4	ug/kg wet	ND		58-121			
Acetophenone			170	8.6	ug/kg wet	ND		66-120			
Anthracene			170	4.3	ug/kg wet	ND		62-129			
Atrazine			170	7.5	ug/kg wet	ND		73-133			
Benzaldehyde			170	18	ug/kg wet	ND		21-120			
Benzo(a)anthracene			170	2.9	ug/kg wet	ND		65-133			
Benzo(a)pyrene			170	4.0	ug/kg wet	ND		64-127			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Semivolatile Organics by GC/MS</u>											
LCS Analyzed: 09/22/10 (Lab Number:10I1091-BS1, Batch: 10I1091)											
Benzo(b)fluoranthene			170	3.3	ug/kg wet	ND		64-135			
Benzo(ghi)perylene			170	2.0	ug/kg wet	ND		50-152			
Benzo(k)fluoranthene			170	1.8	ug/kg wet	ND		58-138			
Biphenyl			170	10	ug/kg wet	ND		71-120			
Bis(2-chloroethoxy)methane			170	9.1	ug/kg wet	ND		61-133			
Bis(2-chloroethyl)ether			170	14	ug/kg wet	ND		45-120			
2,2'-Oxybis(1-Chloropropane)			170	18	ug/kg wet	ND		44-120			
Bis(2-ethylhexyl) phthalate		3310	170	54	ug/kg wet	3650	110	61-133			
Butyl benzyl phthalate			170	45	ug/kg wet	ND		61-129			
Caprolactam			170	73	ug/kg wet	ND		54-133			
Carbazole			170	1.9	ug/kg wet	ND		59-129			
Chrysene			170	1.7	ug/kg wet	ND		64-131			
Dibenzo(a,h)anthracene			170	2.0	ug/kg wet	ND		54-148			
Dibenzofuran			170	1.7	ug/kg wet	ND		56-120			
Diethyl phthalate			170	5.1	ug/kg wet	ND		66-126			
Dimethyl phthalate			170	4.4	ug/kg wet	ND		65-124			
Di-n-butyl phthalate			170	58	ug/kg wet	ND		58-130			
Di-n-octyl phthalate			170	3.9	ug/kg wet	ND		62-133			
Fluoranthene			170	2.4	ug/kg wet	ND		62-131			
Fluorene		3310	170	3.9	ug/kg wet	3170	96	63-126			
Hexachlorobenzene			170	8.3	ug/kg wet	ND		60-132			
Hexachlorobutadiene			170	8.6	ug/kg wet	ND		45-120			
Hexachlorocyclopentadiene			170	51	ug/kg wet	ND		31-120			
Hexachloroethane		3310	170	13	ug/kg wet	2320	70	41-120			
Indeno(1,2,3-cd)pyrene			170	4.6	ug/kg wet	ND		56-149			
Isophorone			170	8.4	ug/kg wet	ND		56-120			
Naphthalene			170	2.8	ug/kg wet	ND		46-120			
Nitrobenzene			170	7.4	ug/kg wet	ND		49-120			
N-Nitrosodi-n-propylamine		3310	170	13	ug/kg wet	2960	89	46-120			
N-Nitrosodiphenylamine			170	9.2	ug/kg wet	ND		20-119			
Pentachlorophenol		3310	330	57	ug/kg wet	3360	102	33-136			
Phenanthrene			170	3.5	ug/kg wet	ND		60-130			
Phenol		3310	170	18	ug/kg wet	2390	72	36-120			
Pyrene		3310	170	1.1	ug/kg wet	3220	97	51-133			

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Reported: 09/30/10 11:33

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
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Semivolatile Organics by GC/MS

LCS Analyzed: 09/22/10 (Lab Number:10I1091-BS1, Batch: 10I1091)

Surrogate:					ug/kg wet		107	39-146			
2,4,6-Tribromophenol											
Surrogate:					ug/kg wet		86	37-120			
2-Fluorobiphenyl											
Surrogate:					ug/kg wet		71	18-120			
2-Fluorophenol											
Surrogate:					ug/kg wet		84	34-132			
Nitrobenzene-d5											
Surrogate: Phenol-d5					ug/kg wet		76	11-120			
Surrogate:					ug/kg wet		85	58-147			
p-Terphenyl-d14											

Matrix Spike Analyzed: 09/22/10 (Lab Number:10I1091-MS1, Batch: 10I1091)

QC Source Sample: RTI1016-01

2,4,5-Trichlorophenol	ND		180	40	ug/kg dry	ND		59-126			
2,4,6-Trichlorophenol	ND		180	12	ug/kg dry	ND		59-123			
2,4-Dichlorophenol	ND		180	9.5	ug/kg dry	ND		52-120			
2,4-Dimethylphenol	ND		180	49	ug/kg dry	ND		36-120			
2,4-Dinitrophenol	ND		360	64	ug/kg dry	ND		35-146			
2,4-Dinitrotoluene	ND	3590	180	28	ug/kg dry	3780	105	55-125			
2,6-Dinitrotoluene	ND		180	44	ug/kg dry	ND		66-128			
2-Chloronaphthalene	ND		180	12	ug/kg dry	ND		57-120			
2-Chlorophenol	ND	3590	180	9.2	ug/kg dry	3110	87	38-120			
2-Methylnaphthalene	ND		180	2.2	ug/kg dry	ND		47-120			
2-Methylphenol	ND		180	5.6	ug/kg dry	ND		48-120			
2-Nitroaniline	ND		360	58	ug/kg dry	ND		61-130			
2-Nitrophenol	ND		180	8.3	ug/kg dry	ND		50-120			
3,3'-Dichlorobenzidine	ND		180	160	ug/kg dry	ND		48-126			
3-Nitroaniline	ND		360	42	ug/kg dry	ND		61-127			
4,6-Dinitro-2-methylphenol	ND		360	63	ug/kg dry	ND		49-155			
4-Bromophenyl phenyl ether	ND		180	58	ug/kg dry	ND		58-131			
4-Chloro-3-methylphenol	ND	3590	180	7.5	ug/kg dry	3490	97	49-125			
4-Chloroaniline	ND		180	53	ug/kg dry	ND		49-120			
4-Chlorophenyl phenyl ether	ND		180	3.9	ug/kg dry	ND		63-124			
4-Methylphenol	ND		180	10	ug/kg dry	ND		50-119			
4-Nitroaniline	ND		360	20	ug/kg dry	ND		63-128			
4-Nitrophenol	ND	3590	360	44	ug/kg dry	3210	89	43-137			
Acenaphthene	ND	3590	180	2.1	ug/kg dry	3300	92	53-120			
Acenaphthylene	ND		180	1.5	ug/kg dry	ND		58-121			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Semivolatile Organics by GC/MS</u>											
Matrix Spike Analyzed: 09/22/10 (Lab Number:10I1091-MS1, Batch: 10I1091)											
QC Source Sample: RTI1016-01											
Acetophenone	ND		180	9.3	ug/kg dry	ND		66-120			
Anthracene	ND		180	4.7	ug/kg dry	ND		62-129			
Atrazine	ND		180	8.1	ug/kg dry	ND		73-133			
Benzaldehyde	ND		180	20	ug/kg dry	ND		21-120			
Benzo(a)anthracene	ND		180	3.1	ug/kg dry	ND		65-133			
Benzo(a)pyrene	ND		180	4.4	ug/kg dry	ND		64-127			
Benzo(b)fluoranthene	ND		180	3.5	ug/kg dry	ND		64-135			
Benzo(ghi)perylene	ND		180	2.2	ug/kg dry	ND		50-152			
Benzo(k)fluoranthene	ND		180	2.0	ug/kg dry	ND		58-138			
Biphenyl	ND		180	11	ug/kg dry	ND		71-120			
Bis(2-chloroethoxy)methane	ND		180	9.9	ug/kg dry	ND		61-133			
Bis(2-chloroethyl)ether	ND		180	16	ug/kg dry	ND		45-120			
2,2'-Oxybis(1-Chloropropane)	ND		180	19	ug/kg dry	ND		44-120			
Bis(2-ethylhexyl)phthalate	ND	3590	180	59	ug/kg dry	4250	118	61-133			
Butyl benzyl phthalate	ND		180	49	ug/kg dry	ND		61-129			
Caprolactam	ND		180	79	ug/kg dry	ND		54-133			
Carbazole	ND		180	2.1	ug/kg dry	ND		59-129			
Chrysene	ND		180	1.8	ug/kg dry	ND		64-131			
Dibenzo(a,h)anthracene	ND		180	2.1	ug/kg dry	ND		54-148			
Dibenzofuran	ND		180	1.9	ug/kg dry	ND		56-120			
Diethyl phthalate	ND		180	5.5	ug/kg dry	ND		66-126			
Dimethyl phthalate	ND		180	4.7	ug/kg dry	ND		65-124			
Di-n-butyl phthalate	ND		180	63	ug/kg dry	ND		58-130			
Di-n-octyl phthalate	ND		180	4.2	ug/kg dry	ND		62-133			
Fluoranthene	ND		180	2.6	ug/kg dry	53.1		62-131			J
Fluorene	ND	3590	180	4.2	ug/kg dry	3560	99	63-126			
Hexachlorobenzene	ND		180	9.0	ug/kg dry	ND		60-132			
Hexachlorobutadiene	ND		180	9.3	ug/kg dry	ND		45-120			
Hexachlorocyclopentadiene	ND		180	55	ug/kg dry	ND		31-120			
Hexachloroethane	ND	3590	180	14	ug/kg dry	2830	79	41-120			
Indeno(1,2,3-cd)pyrene	ND		180	5.0	ug/kg dry	ND		56-149			
Isophorone	ND		180	9.1	ug/kg dry	ND		56-120			
Naphthalene	ND		180	3.0	ug/kg dry	ND		46-120			
Nitrobenzene	ND		180	8.1	ug/kg dry	ND		49-120			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
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Semivolatile Organics by GC/MS

Matrix Spike Analyzed: 09/22/10 (Lab Number:10I1091-MS1, Batch: 10I1091)

QC Source Sample: RTI1016-01

N-Nitrosodi-n-propylamine	ND	3590	180	14	ug/kg dry	3500	98	46-120			
N-Nitrosodiphenylamine	ND		180	9.9	ug/kg dry	ND		20-119			
Pentachlorophenol	ND	3590	360	62	ug/kg dry	3760	105	33-136			
Phenanthrene	ND		180	3.8	ug/kg dry	ND		60-130			
Phenol	ND	3590	180	19	ug/kg dry	2770	77	36-120			
Pyrene	ND	3590	180	1.2	ug/kg dry	3660	102	51-133			
<i>Surrogate:</i>					<i>ug/kg dry</i>		<i>117</i>	<i>39-146</i>			
<i>2,4,6-Tribromophenol</i>					<i>ug/kg dry</i>		<i>91</i>	<i>37-120</i>			
<i>Surrogate:</i>					<i>ug/kg dry</i>		<i>79</i>	<i>18-120</i>			
<i>2-Fluorobiphenyl</i>					<i>ug/kg dry</i>		<i>93</i>	<i>34-132</i>			
<i>Surrogate:</i>					<i>ug/kg dry</i>		<i>82</i>	<i>11-120</i>			
<i>2-Fluorophenol</i>					<i>ug/kg dry</i>		<i>91</i>	<i>58-147</i>			
<i>Surrogate:</i>					<i>ug/kg dry</i>						
<i>Nitrobenzene-d5</i>					<i>ug/kg dry</i>						
<i>Surrogate: Phenol-d5</i>					<i>ug/kg dry</i>						
<i>Surrogate:</i>					<i>ug/kg dry</i>						
<i>p-Terphenyl-d14</i>					<i>ug/kg dry</i>						

Matrix Spike Dup Analyzed: 09/22/10 (Lab Number:10I1091-MSD1, Batch: 10I1091)

QC Source Sample: RTI1016-01

2,4,5-Trichlorophenol	ND		190	41	ug/kg dry	ND		59-126		18	
2,4,6-Trichlorophenol	ND		190	12	ug/kg dry	ND		59-123		19	
2,4-Dichlorophenol	ND		190	9.7	ug/kg dry	ND		52-120		19	
2,4-Dimethylphenol	ND		190	50	ug/kg dry	ND		36-120		42	
2,4-Dinitrophenol	ND		360	65	ug/kg dry	ND		35-146		22	
2,4-Dinitrotoluene	ND	3670	190	29	ug/kg dry	3390	92	55-125	11	20	
2,6-Dinitrotoluene	ND		190	46	ug/kg dry	ND		66-128		15	
2-Chloronaphthalene	ND		190	12	ug/kg dry	ND		57-120		21	
2-Chlorophenol	ND	3670	190	9.5	ug/kg dry	2470	67	38-120	23	25	
2-Methylnaphthalene	ND		190	2.3	ug/kg dry	ND		47-120		21	
2-Methylphenol	ND		190	5.7	ug/kg dry	ND		48-120		27	
2-Nitroaniline	ND		360	60	ug/kg dry	ND		61-130		15	
2-Nitrophenol	ND		190	8.5	ug/kg dry	ND		50-120		18	
3,3'-Dichlorobenzidine	ND		190	160	ug/kg dry	ND		48-126		25	
3-Nitroaniline	ND		360	43	ug/kg dry	ND		61-127		19	
4,6-Dinitro-2-methylphenol	ND		360	64	ug/kg dry	ND		49-155		15	
4-Bromophenyl phenyl ether	ND		190	59	ug/kg dry	ND		58-131		15	
4-Chloro-3-methylphenol	ND	3670	190	7.7	ug/kg dry	3120	85	49-125	11	27	

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Semivolatiles Organics by GC/MS</u>											
Matrix Spike Dup Analyzed: 09/22/10 (Lab Number:1011091-MSD1, Batch: 1011091)											
QC Source Sample: RTI1016-01											
4-Chloroaniline	ND		190	55	ug/kg dry	ND		49-120		22	
4-Chlorophenyl phenyl ether	ND		190	4.0	ug/kg dry	ND		63-124		16	
4-Methylphenol	ND		190	10	ug/kg dry	ND		50-119		24	
4-Nitroaniline	ND		360	21	ug/kg dry	ND		63-128		24	
4-Nitrophenol	ND	3670	360	45	ug/kg dry	2900	79	43-137	10	25	
Acenaphthene	ND	3670	190	2.2	ug/kg dry	3060	83	53-120	7	35	
Acenaphthylene	ND		190	1.5	ug/kg dry	ND		58-121		18	
Acetophenone	ND		190	9.5	ug/kg dry	ND		66-120		20	
Anthracene	ND		190	4.8	ug/kg dry	ND		62-129		15	
Atrazine	ND		190	8.3	ug/kg dry	ND		73-133		20	
Benzaldehyde	ND		190	20	ug/kg dry	ND		21-120		20	
Benzo(a)anthracene	ND		190	3.2	ug/kg dry	ND		65-133		15	
Benzo(a)pyrene	ND		190	4.5	ug/kg dry	ND		64-127		15	
Benzo(b)fluoranthene	ND		190	3.6	ug/kg dry	ND		64-135		15	
Benzo(ghi)perylene	ND		190	2.2	ug/kg dry	ND		50-152		15	
Benzo(k)fluoranthene	ND		190	2.0	ug/kg dry	ND		58-138		22	
Biphenyl	ND		190	12	ug/kg dry	ND		71-120		20	
Bis(2-chloroethoxy)methane	ND		190	10	ug/kg dry	ND		61-133		17	
Bis(2-chloroethyl)ether	ND		190	16	ug/kg dry	ND		45-120		21	
2,2'-Oxybis(1-Chloropropane)	ND		190	19	ug/kg dry	ND		44-120		24	
Bis(2-ethylhexyl)phthalate	ND	3670	190	60	ug/kg dry	3890	106	61-133	9	15	
Butyl benzyl phthalate	ND		190	50	ug/kg dry	ND		61-129		16	
Caprolactam	ND		190	80	ug/kg dry	ND		54-133		20	
Carbazole	ND		190	2.2	ug/kg dry	ND		59-129		20	
Chrysene	ND		190	1.9	ug/kg dry	ND		64-131		15	
Dibenzo(a,h)anthracene	ND		190	2.2	ug/kg dry	ND		54-148		15	
Dibenzofuran	ND		190	1.9	ug/kg dry	ND		56-120		15	
Diethyl phthalate	ND		190	5.6	ug/kg dry	ND		66-126		15	
Dimethyl phthalate	ND		190	4.9	ug/kg dry	ND		65-124		15	
Di-n-butyl phthalate	ND		190	64	ug/kg dry	ND		58-130		15	
Di-n-octyl phthalate	ND		190	4.3	ug/kg dry	ND		62-133		16	
Fluoranthene	ND		190	2.7	ug/kg dry	49.2		62-131	8	15	J
Fluorene	ND	3670	190	4.3	ug/kg dry	3290	90	63-126	8	15	
Hexachlorobenzene	ND		190	9.2	ug/kg dry	ND		60-132		15	
Hexachlorobutadiene	ND		190	9.5	ug/kg dry	ND		45-120		44	

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Semivolatiles Organics by GC/MS</u>											
Matrix Spike Dup Analyzed: 09/22/10 (Lab Number:1011091-MSD1, Batch: 1011091)											
QC Source Sample: RT11016-01											
Hexachlorocyclopentadiene	ND		190	56	ug/kg dry	ND		31-120		49	
Hexachloroethane	ND	3670	190	14	ug/kg dry	2300	63	41-120	21	46	
Indeno(1,2,3-cd)pyrene	ND		190	5.1	ug/kg dry	ND		56-149		15	
Isophorone	ND		190	9.3	ug/kg dry	ND		56-120		17	
Naphthalene	ND		190	3.1	ug/kg dry	ND		46-120		29	
Nitrobenzene	ND		190	8.2	ug/kg dry	ND		49-120		24	
N-Nitrosodi-n-propylamine	ND	3670	190	15	ug/kg dry	3020	82	46-120	15	31	
N-Nitrosodiphenylamine	ND		190	10	ug/kg dry	ND		20-119		15	
Pentachlorophenol	ND	3670	360	64	ug/kg dry	3400	93	33-136	10	35	
Phenanthrene	ND		190	3.9	ug/kg dry	ND		60-130		15	
Phenol	ND	3670	190	20	ug/kg dry	2340	64	36-120	17	35	
Pyrene	ND	3670	190	1.2	ug/kg dry	3400	93	51-133	7	35	
<i>Surrogate:</i>					<i>ug/kg dry</i>		<i>99</i>	<i>39-146</i>			
<i>2,4,6-Tribromophenol</i>					<i>ug/kg dry</i>		<i>78</i>	<i>37-120</i>			
<i>Surrogate:</i>					<i>ug/kg dry</i>		<i>60</i>	<i>18-120</i>			
<i>2-Fluorobiphenyl</i>					<i>ug/kg dry</i>		<i>71</i>	<i>34-132</i>			
<i>Surrogate:</i>					<i>ug/kg dry</i>		<i>66</i>	<i>11-120</i>			
<i>2-Fluorophenol</i>					<i>ug/kg dry</i>		<i>81</i>	<i>58-147</i>			
<i>Surrogate:</i>					<i>ug/kg dry</i>						
<i>Nitrobenzene-d5</i>					<i>ug/kg dry</i>						
<i>Surrogate: Phenol-d5</i>					<i>ug/kg dry</i>						
<i>Surrogate:</i>					<i>ug/kg dry</i>						
<i>p-Terphenyl-d14</i>					<i>ug/kg dry</i>						

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Organochlorine Pesticides by EPA Method 8081A											
Blank Analyzed: 09/18/10 (Lab Number:10I1075-BLK1, Batch: 10I1075)											
4,4'-DDD			1.6	0.32	ug/kg wet	ND					QSU
4,4'-DDD [2C]			1.6	0.32	ug/kg wet	ND					QSU
4,4'-DDE			1.6	0.25	ug/kg wet	ND					QSU
4,4'-DDE [2C]			1.6	0.25	ug/kg wet	ND					QSU
4,4'-DDT			1.6	0.17	ug/kg wet	ND					QSU
4,4'-DDT [2C]			1.6	0.17	ug/kg wet	ND					QSU
Aldrin			1.6	0.40	ug/kg wet	ND					QSU
Aldrin [2C]			1.6	0.40	ug/kg wet	ND					QSU
alpha-BHC			1.6	0.30	ug/kg wet	ND					QSU
alpha-BHC [2C]			1.6	0.30	ug/kg wet	ND					QSU
beta-BHC			1.6	0.18	ug/kg wet	ND					QSU
beta-BHC [2C]			1.6	0.18	ug/kg wet	ND					QSU
Chlordane			16	3.6	ug/kg wet	ND					QSU
Chlordane [2C]			16	3.6	ug/kg wet	ND					QSU
delta-BHC			1.6	0.22	ug/kg wet	ND					QSU
delta-BHC [2C]			1.6	0.22	ug/kg wet	ND					QSU
Dieldrin			1.6	0.39	ug/kg wet	ND					QSU
Dieldrin [2C]			1.6	0.39	ug/kg wet	ND					QSU
Endosulfan I			1.6	0.21	ug/kg wet	ND					QSU
Endosulfan I [2C]			1.6	0.21	ug/kg wet	ND					QSU
Endosulfan II			1.6	0.30	ug/kg wet	ND					QSU
Endosulfan II [2C]			1.6	0.30	ug/kg wet	ND					QSU
Endosulfan sulfate			1.6	0.31	ug/kg wet	ND					QSU
Endosulfan sulfate [2C]			1.6	0.31	ug/kg wet	ND					QSU
Endrin			1.6	0.23	ug/kg wet	ND					QSU
Endrin [2C]			1.6	0.23	ug/kg wet	ND					QSU
Endrin aldehyde			1.6	0.42	ug/kg wet	ND					QSU
Endrin aldehyde [2C]			1.6	0.42	ug/kg wet	ND					QSU
gamma-BHC (Lindane)			1.6	0.29	ug/kg wet	ND					QSU
gamma-BHC (Lindane) [2C]			1.6	0.29	ug/kg wet	ND					QSU
Heptachlor			1.6	0.26	ug/kg wet	ND					QSU
Heptachlor [2C]			1.6	0.26	ug/kg wet	ND					QSU
Heptachlor epoxide			1.6	0.42	ug/kg wet	ND					QSU
Heptachlor epoxide [2C]			1.6	0.42	ug/kg wet	ND					QSU
Methoxychlor			1.6	0.23	ug/kg wet	ND					QSU
Methoxychlor [2C]			1.6	0.23	ug/kg wet	ND					QSU
Toxaphene			16	9.6	ug/kg wet	ND					QSU

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SDG Number: RTI0959

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

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Reported: 09/30/10 11:33

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Organochlorine Pesticides by EPA Method 8081A											
Blank Analyzed: 09/18/10 (Lab Number:10I1075-BLK1, Batch: 10I1075)											
Toxaphene [2C]			16	9.6	ug/kg wet	ND					QSU
<i>Surrogate:</i>					ug/kg wet		116	42-146			QSU,C8
<i>Decachlorobiphenyl</i>											
<i>Surrogate:</i>					ug/kg wet		90	42-146			QSU
<i>Decachlorobiphenyl [2C]</i>											
<i>Surrogate:</i>					ug/kg wet		70	37-136			QSU
<i>Tetrachloro-m-xylene</i>											
<i>Surrogate:</i>					ug/kg wet		79	37-136			QSU
<i>Tetrachloro-m-xylene</i>											
LCS Analyzed: 09/20/10 (Lab Number:10I1075-BS1, Batch: 10I1075)											
4,4'-DDD		16.6	1.7	0.32	ug/kg wet	13.9	84	55-129			QSU
4,4'-DDD [2C]		16.6	1.7	0.32	ug/kg wet	14.5	87	55-129			QSU
4,4'-DDE		16.6	1.7	0.25	ug/kg wet	13.6	82	59-120			QSU
4,4'-DDE [2C]		16.6	1.7	0.25	ug/kg wet	14.4	87	59-120			QSU
4,4'-DDT		16.6	1.7	0.17	ug/kg wet	14.0	84	47-145			QSU
4,4'-DDT [2C]		16.6	1.7	0.17	ug/kg wet	13.6	82	47-145			QSU
Aldrin		16.6	1.7	0.41	ug/kg wet	10.7	64	35-120			QSU
Aldrin [2C]		16.6	1.7	0.41	ug/kg wet	11.7	70	35-120			QSU
alpha-BHC		16.6	1.7	0.30	ug/kg wet	10.9	66	49-120			QSU
alpha-BHC [2C]		16.6	1.7	0.30	ug/kg wet	12.2	73	49-120			QSU
beta-BHC		16.6	1.7	0.18	ug/kg wet	12.7	76	56-120			QSU
beta-BHC [2C]		16.6	1.7	0.18	ug/kg wet	13.5	81	56-120			QSU
delta-BHC		16.6	1.7	0.22	ug/kg wet	12.4	74	45-123			QSU
delta-BHC [2C]		16.6	1.7	0.22	ug/kg wet	13.2	79	45-123			QSU
Dieldrin		16.6	1.7	0.40	ug/kg wet	13.4	80	57-120			QSU
Dieldrin [2C]		16.6	1.7	0.40	ug/kg wet	14.0	84	57-120			QSU
Endosulfan I		16.6	1.7	0.21	ug/kg wet	11.6	69	29-125			QSU
Endosulfan I [2C]		16.6	1.7	0.21	ug/kg wet	12.2	73	29-125			QSU
Endosulfan II		16.6	1.7	0.30	ug/kg wet	12.7	76	39-121			QSU
Endosulfan II [2C]		16.6	1.7	0.30	ug/kg wet	12.5	75	39-121			QSU
Endosulfan sulfate		16.6	1.7	0.31	ug/kg wet	12.8	77	43-120			QSU
Endosulfan sulfate [2C]		16.6	1.7	0.31	ug/kg wet	12.6	76	43-120			QSU
Endrin		16.6	1.7	0.23	ug/kg wet	13.1	79	54-127			QSU
Endrin [2C]		16.6	1.7	0.23	ug/kg wet	13.4	81	54-127			QSU
Endrin aldehyde		16.6	1.7	0.43	ug/kg wet	11.1	67	33-120			QSU
Endrin aldehyde [2C]		16.6	1.7	0.43	ug/kg wet	11.2	67	33-120			QSU
gamma-BHC (Lindane)		16.6	1.7	0.29	ug/kg wet	12.2	73	50-120			QSU
gamma-BHC (Lindane) [2C]		16.6	1.7	0.29	ug/kg wet	13.0	78	50-120			QSU

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Organochlorine Pesticides by EPA Method 8081A											
LCS Analyzed: 09/20/10 (Lab Number:10I1075-BS1, Batch: 10I1075)											
Heptachlor		16.6	1.7	0.26	ug/kg wet	11.6	70	47-120			QSU
Heptachlor [2C]		16.6	1.7	0.26	ug/kg wet	12.6	76	47-120			QSU
Heptachlor epoxide		16.6	1.7	0.43	ug/kg wet	13.0	78	44-122			QSU
Heptachlor epoxide [2C]		16.6	1.7	0.43	ug/kg wet	13.4	80	44-122			QSU
Methoxychlor		16.6	1.7	0.23	ug/kg wet	14.0	84	46-152			QSU
Methoxychlor [2C]		16.6	1.7	0.23	ug/kg wet	14.2	85	46-152			QSU
<i>Surrogate:</i>					<i>ug/kg wet</i>		94	42-146			QSU,C8
<i>Decachlorobiphenyl</i>											
<i>Surrogate:</i>					<i>ug/kg wet</i>		91	42-146			QSU
<i>Decachlorobiphenyl [2C]</i>											
<i>Surrogate:</i>					<i>ug/kg wet</i>		70	37-136			QSU
<i>Tetrachloro-m-xylene</i>											
<i>Surrogate:</i>					<i>ug/kg wet</i>		83	37-136			QSU
<i>Tetrachloro-m-xylene</i>											
Matrix Spike Analyzed: 09/18/10 (Lab Number:10I1075-MS1, Batch: 10I1075)											
QC Source Sample: RTI0959-01											
4,4'-DDD	ND	20.8	2.1	0.40	ug/kg dry	18.6	90	55-129			
4,4'-DDD [2C]	ND	20.8	2.1	0.40	ug/kg dry	18.7	90	55-129			
4,4'-DDE	3.79	20.8	2.1	0.31	ug/kg dry	18.6	71	59-120			
4,4'-DDE [2C]	4.09	20.8	2.1	0.31	ug/kg dry	19.1	72	59-120			
4,4'-DDT	3.82	20.8	2.1	0.21	ug/kg dry	19.0	73	47-145			
4,4'-DDT [2C]	4.00	20.8	2.1	0.21	ug/kg dry	18.3	69	47-145			
Aldrin	ND	20.8	2.1	0.51	ug/kg dry	15.5	75	35-120			
Aldrin [2C]	ND	20.8	2.1	0.51	ug/kg dry	16.1	78	35-120			
alpha-BHC	ND	20.8	2.1	0.37	ug/kg dry	16.5	80	49-120			
alpha-BHC [2C]	ND	20.8	2.1	0.37	ug/kg dry	16.9	82	49-120			
beta-BHC	ND	20.8	2.1	0.22	ug/kg dry	17.7	85	56-120			
beta-BHC [2C]	ND	20.8	2.1	0.22	ug/kg dry	18.0	87	56-120			
delta-BHC	ND	20.8	2.1	0.27	ug/kg dry	17.4	84	45-123			
delta-BHC [2C]	ND	20.8	2.1	0.27	ug/kg dry	17.7	85	45-123			
Dieldrin	ND	20.8	2.1	0.50	ug/kg dry	18.1	87	57-120			
Dieldrin [2C]	ND	20.8	2.1	0.50	ug/kg dry	18.1	87	57-120			
Endosulfan I	ND	20.8	2.1	0.26	ug/kg dry	15.7	76	29-125			
Endosulfan I [2C]	ND	20.8	2.1	0.26	ug/kg dry	15.8	76	29-125			
Endosulfan II	ND	20.8	2.1	0.37	ug/kg dry	17.2	83	39-121			
Endosulfan II [2C]	ND	20.8	2.1	0.37	ug/kg dry	16.8	81	39-121			
Endosulfan sulfate	ND	20.8	2.1	0.39	ug/kg dry	20.2	97	43-120			
Endosulfan sulfate [2C]	ND	20.8	2.1	0.39	ug/kg dry	18.7	90	43-120			
Endrin	ND	20.8	2.1	0.29	ug/kg dry	18.0	87	54-127			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Organochlorine Pesticides by EPA Method 8081A											
Matrix Spike Analyzed: 09/18/10 (Lab Number:10I1075-MS1, Batch: 10I1075)											
QC Source Sample: RTI0959-01											
Endrin [2C]	ND	20.8	2.1	0.29	ug/kg dry	17.9	86	54-127			
Endrin aldehyde	ND	20.8	2.1	0.53	ug/kg dry	19.1	92	33-120			
Endrin aldehyde [2C]	ND	20.8	2.1	0.53	ug/kg dry	18.9	91	33-120			
gamma-BHC (Lindane)	ND	20.8	2.1	0.36	ug/kg dry	17.5	85	50-120			
gamma-BHC (Lindane) [2C]	ND	20.8	2.1	0.36	ug/kg dry	18.0	87	50-120			
Heptachlor	ND	20.8	2.1	0.32	ug/kg dry	16.9	81	47-120			
Heptachlor [2C]	ND	20.8	2.1	0.32	ug/kg dry	17.0	82	47-120			
Heptachlor epoxide	ND	20.8	2.1	0.54	ug/kg dry	18.0	87	44-122			
Heptachlor epoxide [2C]	ND	20.8	2.1	0.54	ug/kg dry	17.7	85	44-122			
Methoxychlor	ND	20.8	2.1	0.29	ug/kg dry	19.3	93	46-152			
Methoxychlor [2C]	ND	20.8	2.1	0.29	ug/kg dry	19.5	94	46-152			
<i>Surrogate:</i>					ug/kg dry		97	42-146			
<i>Decachlorobiphenyl</i>					ug/kg dry		93	42-146			
<i>Surrogate:</i>					ug/kg dry		73	37-136			
<i>Decachlorobiphenyl [2C]</i>					ug/kg dry		75	37-136			
<i>Surrogate:</i>					ug/kg dry						
<i>Tetrachloro-m-xylene</i>					ug/kg dry		75	37-136			
<i>Surrogate:</i>					ug/kg dry						
<i>Tetrachloro-m-xylene</i>					ug/kg dry						
Matrix Spike Dup Analyzed: 09/18/10 (Lab Number:10I1075-MSD1, Batch: 10I1075)											
QC Source Sample: RTI0959-01											
4,4'-DDD	ND	20.4	2.0	0.40	ug/kg dry	19.0	93	55-129	2	21	
4,4'-DDD [2C]	ND	20.4	2.0	0.40	ug/kg dry	18.7	92	55-129	0.2	21	
4,4'-DDE	3.79	20.4	2.0	0.31	ug/kg dry	18.6	73	59-120	0.06	18	
4,4'-DDE [2C]	4.09	20.4	2.0	0.31	ug/kg dry	19.4	75	59-120	2	18	
4,4'-DDT	3.82	20.4	2.0	0.21	ug/kg dry	19.5	77	47-145	3	25	
4,4'-DDT [2C]	4.00	20.4	2.0	0.21	ug/kg dry	18.7	72	47-145	2	25	
Aldrin	ND	20.4	2.0	0.50	ug/kg dry	15.4	76	35-120	0.3	12	
Aldrin [2C]	ND	20.4	2.0	0.50	ug/kg dry	16.2	80	35-120	0.5	12	
alpha-BHC	ND	20.4	2.0	0.37	ug/kg dry	16.0	79	49-120	3	15	
alpha-BHC [2C]	ND	20.4	2.0	0.37	ug/kg dry	16.1	79	49-120	5	15	
beta-BHC	ND	20.4	2.0	0.22	ug/kg dry	16.6	81	56-120	7	19	
beta-BHC [2C]	ND	20.4	2.0	0.22	ug/kg dry	16.9	83	56-120	7	19	
delta-BHC	ND	20.4	2.0	0.27	ug/kg dry	16.8	83	45-123	3	14	
delta-BHC [2C]	ND	20.4	2.0	0.27	ug/kg dry	17.3	85	45-123	2	14	
Dieldrin	ND	20.4	2.0	0.49	ug/kg dry	17.8	87	57-120	2	12	
Dieldrin [2C]	ND	20.4	2.0	0.49	ug/kg dry	18.0	88	57-120	0.8	12	
Endosulfan I	ND	20.4	2.0	0.26	ug/kg dry	15.3	75	29-125	3	18	

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Organochlorine Pesticides by EPA Method 8081A											
Matrix Spike Dup Analyzed: 09/18/10 (Lab Number:1011075-MSD1, Batch: 1011075)											
QC Source Sample: RT10959-01											
Endosulfan I [2C]	ND	20.4	2.0	0.26	ug/kg dry	15.6	77	29-125	1	18	
Endosulfan II	ND	20.4	2.0	0.37	ug/kg dry	17.3	85	39-121	0.6	26	
Endosulfan II [2C]	ND	20.4	2.0	0.37	ug/kg dry	16.9	83	39-121	0.6	26	
Endosulfan sulfate	ND	20.4	2.0	0.38	ug/kg dry	20.2	99	43-120	0.3	35	
Endosulfan sulfate [2C]	ND	20.4	2.0	0.38	ug/kg dry	18.4	90	43-120	2	35	
Endrin	ND	20.4	2.0	0.28	ug/kg dry	18.0	88	54-127	0.1	20	
Endrin [2C]	ND	20.4	2.0	0.28	ug/kg dry	17.9	88	54-127	0.2	20	
Endrin aldehyde	ND	20.4	2.0	0.52	ug/kg dry	18.2	89	33-120	5	47	
Endrin aldehyde [2C]	ND	20.4	2.0	0.52	ug/kg dry	17.9	88	33-120	5	47	
gamma-BHC (Lindane)	ND	20.4	2.0	0.35	ug/kg dry	16.7	82	50-120	5	12	
gamma-BHC (Lindane) [2C]	ND	20.4	2.0	0.35	ug/kg dry	17.3	85	50-120	4	12	
Heptachlor	ND	20.4	2.0	0.32	ug/kg dry	17.9	88	47-120	6	22	
Heptachlor [2C]	ND	20.4	2.0	0.32	ug/kg dry	16.5	81	47-120	3	22	
Heptachlor epoxide	ND	20.4	2.0	0.53	ug/kg dry	17.5	86	44-122	3	15	
Heptachlor epoxide [2C]	ND	20.4	2.0	0.53	ug/kg dry	17.4	85	44-122	2	15	
Methoxychlor	ND	20.4	2.0	0.28	ug/kg dry	19.5	96	46-152	0.8	24	
Methoxychlor [2C]	ND	20.4	2.0	0.28	ug/kg dry	21.1	104	46-152	8	24	
<i>Surrogate:</i>						ug/kg dry	93	42-146			
<i>Decachlorobiphenyl</i>						ug/kg dry	86	42-146			
<i>Surrogate:</i>						ug/kg dry	72	37-136			
<i>Decachlorobiphenyl [2C]</i>						ug/kg dry	75	37-136			
<i>Surrogate:</i>						ug/kg dry					
<i>Tetrachloro-m-xylene</i>						ug/kg dry					
<i>Surrogate:</i>						ug/kg dry					
<i>Tetrachloro-m-xylene</i>						ug/kg dry					

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Polychlorinated Biphenyls by EPA Method 8082</u>											
Blank Analyzed: 09/16/10 (Lab Number:10I0937-BLK1, Batch: 10I0937)											
Aroclor 1016			16	3.2	ug/kg wet	ND					QSU
Aroclor 1016 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1221			16	3.2	ug/kg wet	ND					QSU
Aroclor 1221 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1232			16	3.2	ug/kg wet	ND					QSU
Aroclor 1232 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1242			16	3.5	ug/kg wet	ND					QSU
Aroclor 1242 [2C]			16	3.5	ug/kg wet	ND					QSU
Aroclor 1248			16	3.2	ug/kg wet	ND					QSU
Aroclor 1248 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1254			16	3.4	ug/kg wet	ND					QSU
Aroclor 1254 [2C]			16	3.4	ug/kg wet	ND					QSU
Aroclor 1260			16	7.6	ug/kg wet	ND					QSU
Aroclor 1260 [2C]			16	7.6	ug/kg wet	ND					QSU,C
<i>Surrogate:</i>					<i>ug/kg wet</i>		112	34-148			QSU
<i>Decachlorobiphenyl</i>											
<i>Surrogate:</i>					<i>ug/kg wet</i>		106	34-148			QSU
<i>Decachlorobiphenyl [2C]</i>											
<i>Surrogate:</i>					<i>ug/kg wet</i>		89	35-134			QSU
<i>Tetrachloro-m-xylene</i>											
<i>Surrogate:</i>					<i>ug/kg wet</i>		92	35-134			QSU
<i>Tetrachloro-m-xylene</i>											
LCS Analyzed: 09/16/10 (Lab Number:10I0937-BS1, Batch: 10I0937)											
Aroclor 1016		163	16	3.2	ug/kg wet	160	98	59-154			QSU
Aroclor 1016 [2C]		163	16	3.2	ug/kg wet	149	92	59-154			QSU
Aroclor 1221			16	3.2	ug/kg wet	ND					QSU
Aroclor 1221 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1232			16	3.2	ug/kg wet	ND					QSU
Aroclor 1232 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1242			16	3.5	ug/kg wet	ND					QSU
Aroclor 1242 [2C]			16	3.5	ug/kg wet	ND					QSU
Aroclor 1248			16	3.2	ug/kg wet	ND					QSU
Aroclor 1248 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1254			16	3.4	ug/kg wet	ND					QSU
Aroclor 1254 [2C]			16	3.4	ug/kg wet	ND					QSU
Aroclor 1260		163	16	7.6	ug/kg wet	170	104	51-179			QSU
Aroclor 1260 [2C]		163	16	7.6	ug/kg wet	162	99	51-179			QSU,C
<i>Surrogate:</i>					<i>ug/kg wet</i>		108	34-148			QSU
<i>Decachlorobiphenyl</i>											

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Polychlorinated Biphenyls by EPA Method 8082</u>											
LCS Analyzed: 09/16/10 (Lab Number:10I0937-BS1, Batch: 10I0937)											
Surrogate:					ug/kg wet		104	34-148			QSU
Decachlorobiphenyl [2C]											
Surrogate:					ug/kg wet		88	35-134			QSU
Tetrachloro-m-xylene											
Surrogate:					ug/kg wet		88	35-134			QSU
Tetrachloro-m-xylene											
<u>Polychlorinated Biphenyls by EPA Method 8082</u>											
Blank Analyzed: 09/18/10 (Lab Number:10I1073-BLK1, Batch: 10I1073)											
Aroclor 1016			16	3.2	ug/kg wet	ND					QSU
Aroclor 1016 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1221			16	3.2	ug/kg wet	ND					QSU
Aroclor 1221 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1232			16	3.2	ug/kg wet	ND					QSU
Aroclor 1232 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1242			16	3.6	ug/kg wet	ND					QSU
Aroclor 1242 [2C]			16	3.6	ug/kg wet	ND					QSU
Aroclor 1248			16	3.2	ug/kg wet	ND					QSU
Aroclor 1248 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1254			16	3.5	ug/kg wet	ND					QSU
Aroclor 1254 [2C]			16	3.5	ug/kg wet	ND					QSU
Aroclor 1260			16	7.7	ug/kg wet	ND					QSU
Aroclor 1260 [2C]			16	7.7	ug/kg wet	ND					QSU
Surrogate:					ug/kg wet		96	34-148			QSU
Decachlorobiphenyl											
Surrogate:					ug/kg wet		96	34-148			QSU
Decachlorobiphenyl [2C]											
Surrogate:					ug/kg wet		83	35-134			QSU
Tetrachloro-m-xylene											
Surrogate:					ug/kg wet		84	35-134			QSU
Tetrachloro-m-xylene											
LCS Analyzed: 09/18/10 (Lab Number:10I1073-BS1, Batch: 10I1073)											
Aroclor 1016		162	16	3.2	ug/kg wet	160	99	59-154			QSU
Aroclor 1016 [2C]		162	16	3.2	ug/kg wet	150	92	59-154			QSU
Aroclor 1221			16	3.2	ug/kg wet	ND					QSU
Aroclor 1221 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1232			16	3.2	ug/kg wet	ND					QSU
Aroclor 1232 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1242			16	3.5	ug/kg wet	ND					QSU
Aroclor 1242 [2C]			16	3.5	ug/kg wet	ND					QSU

Benchmark Environmental & Engineering Science
 2558 Hamburg Turnpike, Suite 300
 Lackawanna, NY 14218

SDG Number: RTI0959

Project: Benchmark - 295 Maryland St. site
 Project Number: TURN-0066

Received: 09/14/10-09/15/10

Reported: 09/30/10 11:33

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Polychlorinated Biphenyls by EPA Method 8082</u>											
LCS Analyzed: 09/18/10 (Lab Number:10I1073-BS1, Batch: 10I1073)											
Aroclor 1248			16	3.2	ug/kg wet	ND					QSU
Aroclor 1248 [2C]			16	3.2	ug/kg wet	ND					QSU
Aroclor 1254			16	3.4	ug/kg wet	ND					QSU
Aroclor 1254 [2C]			16	3.4	ug/kg wet	ND					QSU
Aroclor 1260		162	16	7.6	ug/kg wet	158	98	51-179			QSU
Aroclor 1260 [2C]		162	16	7.6	ug/kg wet	161	99	51-179			QSU
<i>Surrogate:</i>					<i>ug/kg wet</i>		99	34-148			<i>QSU</i>
<i>Decachlorobiphenyl</i>											
<i>Surrogate:</i>					<i>ug/kg wet</i>		99	34-148			<i>QSU</i>
<i>Decachlorobiphenyl [2C]</i>											
<i>Surrogate:</i>					<i>ug/kg wet</i>		85	35-134			<i>QSU</i>
<i>Tetrachloro-m-xylene</i>											
<i>Surrogate:</i>					<i>ug/kg wet</i>		84	35-134			<i>QSU</i>
<i>Tetrachloro-m-xylene</i>											

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2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

SDG Number: RT10959

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/14/10-09/15/10

Reported: 09/30/10 11:33

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
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Total Metals by SW 846 Series Methods

Blank Analyzed: 09/20/10 (Lab Number:1011343-BLK1, Batch: 1011343)

Mercury			0.0205	NR	mg/kg wet	ND					
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Reference Analyzed: 09/20/10 (Lab Number:1011343-SRM1, Batch: 1011343)

Mercury		2.97	0.178	NR	mg/kg wet	2.63	88	67.6-132.8			
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Total Metals by SW 846 Series Methods

Blank Analyzed: 09/22/10 (Lab Number:1011415-BLK1, Batch: 1011415)

Aluminum			10.4	NR	mg/kg wet	ND					
Antimony			15.6	NR	mg/kg wet	ND					
Arsenic			2.1	NR	mg/kg wet	ND					
Barium			0.521	NR	mg/kg wet	ND					
Beryllium			0.208	NR	mg/kg wet	ND					
Cadmium			0.208	NR	mg/kg wet	ND					
Calcium			52.1	NR	mg/kg wet	ND					
Chromium			0.521	NR	mg/kg wet	ND					
Cobalt			0.521	NR	mg/kg wet	ND					
Copper			1.0	NR	mg/kg wet	ND					
Iron			10.4	NR	mg/kg wet	ND					
Lead			1.0	NR	mg/kg wet	ND					
Magnesium			20.8	NR	mg/kg wet	ND					
Manganese			0.2	NR	mg/kg wet	0.2					B
Nickel			5.21	NR	mg/kg wet	ND					
Potassium			31.3	NR	mg/kg wet	ND					
Selenium			4.2	NR	mg/kg wet	ND					
Silver			0.521	NR	mg/kg wet	ND					
Sodium			146	NR	mg/kg wet	ND					
Thallium			6.3	NR	mg/kg wet	ND					
Vanadium			0.521	NR	mg/kg wet	ND					
Zinc			2.1	NR	mg/kg wet	ND					

Reference Analyzed: 09/22/10 (Lab Number:1011415-SRM1, Batch: 1011415)

Aluminum		10700	10.0	NR	mg/kg wet	8970	84	46.3-153.3			
Antimony		117	15.0	NR	mg/kg wet	49.3	42	22.6-253			
Arsenic		138	2.0	NR	mg/kg wet	135	98	70.4-129.7			
Barium		269	0.499	NR	mg/kg wet	272	101	74-126.4			
Beryllium		157	0.200	NR	mg/kg wet	150	96	75.2-124.8			

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

SDG Number: RTI0959

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/14/10-09/15/10

Reported: 09/30/10 11:33

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD Limit	Data Qualifiers
<u>Total Metals by SW 846 Series Methods</u>										
Reference Analyzed: 09/22/10 (Lab Number:10I1415-SRM1, Batch: 10I1415)										
Cadmium		70.9	0.200	NR	mg/kg wet	67.1	95	73.2-126.8		
Calcium		9650	49.9	NR	mg/kg wet	8850	92	75.4-124.2		
Chromium		105	0.499	NR	mg/kg wet	97.3	93	69.3-130.5		
Cobalt		142	0.499	NR	mg/kg wet	137	97	73.9-125.4		
Copper		110	1.0	NR	mg/kg wet	105	95	74.4-125.5		
Iron		19100	10.0	NR	mg/kg wet	14700	77	43-156		
Lead		144	1.0	NR	mg/kg wet	143	99	72.9-126.4		
Magnesium		4400	20.0	NR	mg/kg wet	3960	90	70.3-129.7		
Manganese		538	0.2	NR	mg/kg wet	513	95	77.2-122.6		B1,B
Nickel		130	4.99	NR	mg/kg wet	128	99	72.8-126.9		
Potassium		4990	30.0	NR	mg/kg wet	4640	93	66.4-133.8		
Selenium		200	4.0	NR	mg/kg wet	201	101	68.5-131.5		
Silver		45.0	0.499	NR	mg/kg wet	43.5	97	66.3-133.7		
Sodium		652	140	NR	mg/kg wet	566	87	55.1-144.9		
Thallium		161	6.0	NR	mg/kg wet	165	103	68.3-131.7		
Vanadium		66.9	0.499	NR	mg/kg wet	58.7	88	57.8-142.1		
Zinc		223	2.0	NR	mg/kg wet	230	103	70.4-129.6		

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SDG Number: RTI0959

Project: Benchmark - 295 Maryland St. site
 Project Number: TURN-0066

Received: 09/14/10-09/15/10

Reported: 09/30/10 11:33

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>General Chemistry Parameters</u>											
Blank Analyzed: 09/18/10 (Lab Number:10I1023-BLK1, Batch: 10I1023)											
Total Cyanide			1.0	0.5	mg/kg wet	ND					
LCS Analyzed: 09/18/10 (Lab Number:10I1023-BS1, Batch: 10I1023)											
Total Cyanide		31.5	0.9	0.5	mg/kg wet	28.5	90	40-160			
<u>General Chemistry Parameters</u>											
Blank Analyzed: 09/21/10 (Lab Number:10I1387-BLK1, Batch: 10I1387)											
Total Cyanide			1.0	0.5	mg/kg wet	ND					
LCS Analyzed: 09/21/10 (Lab Number:10I1387-BS1, Batch: 10I1387)											
Total Cyanide		31.5	1.0	0.5	mg/kg wet	21.2	67	40-160			

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt Yes No
 Drinking Water? Yes No

Chain of Custody Record

TAL-0124 (1/07)

Client: **Beaumont Eng. Assoc.** Address: **2558 Humberg Park, Lakewood, CO 80121**

Project Manager: **Tom Farnes** Date: **9/14/10** Chain of Custody Number: **149920**

Site Contact: **J. DeLuca** Lab Contact: **B. Fiszal** Lab Number: **1** of **1**

Phone Number (Area Code) Fax Number: **(716) 858-0635**

Contract/Purchase Order/Quote No.: **295 Maryland St.**

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives				Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt		
			Water	Soil	Sludge	Other	UR	PCOH	CH	MON			ZINC	MON
MMW-3 (4-6)	9/14/10	1040			X								TLC CHLO - TLC PCB, PEST - TLC METALS+TLC - TLC STTB -	

Possible Hazard Identification: Non-Hazard Flammable Skin Irritant Poison B Unknown Return to Client Archive For _____ Months _____ (A fee may be assessed if samples are retained longer than 1 month)

Sample Disposal: Return to Client Unknown Other: **STD**

Time Around Time Required: 24 Hours 48 Hours 7 Days 14 Days 21 Days

1. Relinquished By: **[Signature]** Date: **9/14/10** Time: **17:00**

2. Relinquished By: **[Signature]** Date: **09-15-10** Time: **14:45**

3. Relinquished By: **[Signature]** Date: **09-15-10** Time: **14:00**

DC Requirements (Specify): **CAT 3, MTL 9**

1. Received By: **[Signature]** Date: **09-15-10** Time: **14:00**

2. Received By: **[Signature]** Date: **09-15-10** Time: **14:45**

3. Received By: **[Signature]** Date: **09-15-10** Time: **14:45**

Comments: **3.800**

Analytical Report

Work Order: RTI1555

Project Description

Benchmark - 295 Maryland St. site

For:

Tom Forbes

Benchmark Environmental & Engineering Science

2558 Hamburg Turnpike, Suite 300

Lackawanna, NY 14218



Brian Fischer

Project Manager

Brian.Fischer@testamericainc.com

Friday, October 15, 2010

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exception to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project manager who has signed this report.

TestAmerica Buffalo Current Certifications

As of 08/16/2010

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA, NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA, CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP, SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA	10026
North Dakota	CWA, RCRA	R-176
Oklahoma	CWA, RCRA	9421
Oregon*	CWA, RCRA	NY200003
Pennsylvania*	NELAP CWA, RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
Virginia	SDWA	278
Washington*	NELAP CWA, RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA, RCRA	252

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RT11555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

CASE NARRATIVE

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverables has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Brian Fischer
Project Manager

Friday, October 15, 2010

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RT11555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

<u>SpecificMethod</u>	<u>Analyte</u>	<u>Units</u>	<u>Client RL</u>	<u>Lab PQL</u>
8270C	4-Methylphenol	ug/L	5.0	10

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RT11555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

DATA QUALIFIERS AND DEFINITIONS

- D03** Dilution required due to excessive foaming
- J** Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
- L** Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.
- L1** Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above acceptance limits.
- QSU** Sulfur (EPA 3660) clean-up performed on extract.
- Z** Due to sample matrix effects, the surrogate recovery was below the acceptance limits.
- Z1** Surrogate recovery was above acceptance limits.
- NR** Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-01 (MW-1 - Water)			Sampled: 09/23/10 10:20				Recvd: 09/24/10 09:00			
<u>Volatile Organic Compounds by EPA 8260B</u>										
Acetone	5.0	J	10	3.0	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Chloroform	2.0		1.0	0.34	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
<u>Semivolatile Organics by GC/MS</u>										
Butyl benzyl phthalate	0.51	J	9.6	0.40	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Di-n-butyl phthalate	0.51	J	9.6	0.30	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
<u>Organochlorine Pesticides by EPA Method 8081A</u>										
4,4'-DDT	0.082		0.047	0.010	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Endosulfan II	0.069		0.047	0.011	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
gamma-Chlordane	0.036	J	0.047	0.010	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Heptachlor epoxide	0.018	J	0.047	0.0050	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Methoxychlor	0.059		0.047	0.013	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
<u>Total Metals by SW 846 Series Methods</u>										
Barium	0.0542		0.0020	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Calcium	75.6		0.5	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Magnesium	45.3		0.200	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Manganese	0.0739		0.0030	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Potassium	4.50		0.500	NR	mg/L	1.00	09/29/10 12:30	DAN	10I1960	6010B
Sodium	25.1		1.0	NR	mg/L	1.00	09/29/10 12:30	DAN	10I1960	6010B
Sample ID: RTI1555-02 (MW-2 - Water)			Sampled: 09/23/10 13:35				Recvd: 09/24/10 09:00			
<u>Volatile Organic Compounds by EPA 8260B</u>										
Benzene	38	D03	5.0	2.0	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Chloroform	4.2	D03,J	5.0	1.7	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Ethylbenzene	39	D03	5.0	3.7	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Toluene	18	D03	5.0	2.6	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Xylenes, total	97	D03	10	3.3	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
<u>Semivolatile Organics by GC/MS</u>										
2-Methylphenol	1.3	J	9.4	0.38	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Acetophenone	2.8	J	9.4	0.51	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Benzo(a)anthracene	0.35	J	9.4	0.34	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Butyl benzyl phthalate	0.71	J	9.4	0.40	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Di-n-butyl phthalate	0.65	J	9.4	0.29	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Fluoranthene	0.47	J	9.4	0.38	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Naphthalene	21		9.4	0.72	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Phenanthrene	0.58	J	9.4	0.42	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Pyrene	0.42	J	9.4	0.32	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
<u>Organochlorine Pesticides by EPA Method 8081A</u>										
beta-BHC	0.060		0.047	0.023	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Endosulfan II	0.11		0.047	0.011	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
gamma-Chlordane	0.041	J	0.047	0.010	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Methoxychlor	0.098		0.047	0.013	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
<u>Total Metals by SW 846 Series Methods</u>										

Benchmark Environmental & Engineering Science
 2558 Hamburg Turnpike, Suite 300
 Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
 Project Number: TURN-0066

Received: 09/24/10
 Reported: 10/15/10 09:06

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-02 (MW-2 - Water) - cont.						Sampled: 09/23/10 13:35		Recvd: 09/24/10 09:00		
Total Metals by SW 846 Series Methods - cont.										
Barium	0.332		0.0020	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Calcium	119		0.5	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Magnesium	107		0.200	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Manganese	0.204		0.0030	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Potassium	6.41		0.500	NR	mg/L	1.00	09/29/10 12:36	DAN	10I1960	6010B
Sodium	59.2		1.0	NR	mg/L	1.00	09/29/10 12:36	DAN	10I1960	6010B
Sample ID: RTI1555-03 (MW-3 - Water)						Sampled: 09/23/10 12:25		Recvd: 09/24/10 09:00		
Volatile Organic Compounds by EPA 8260B										
Chloroform	5.4	D03	4.0	1.3	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Semivolatile Organics by GC/MS										
Acetophenone	1.1	J	9.4	0.51	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Butyl benzyl phthalate	0.58	J	9.4	0.40	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Di-n-butyl phthalate	0.55	J	9.4	0.29	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Phenanthrene	0.46	J	9.4	0.42	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Organochlorine Pesticides by EPA Method 8081A										
4,4'-DDD	0.23	J	0.24	0.043	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
alpha-BHC	0.18	J	0.24	0.031	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
beta-BHC	0.13	J	0.24	0.12	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
Endosulfan II	0.14	J	0.24	0.057	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
gamma-Chlordane	0.13	J	0.24	0.052	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
Heptachlor	0.11	J	0.24	0.040	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
Methoxychlor	0.20	J	0.24	0.067	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
Total Metals by SW 846 Series Methods										
Barium	0.0985		0.0020	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Calcium	123		0.5	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Magnesium	98.3		0.200	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Manganese	0.195		0.0030	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Nickel	0.0159		0.0100	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Potassium	10.0		0.500	NR	mg/L	1.00	09/29/10 12:41	DAN	10I1960	6010B
Sodium	88.8		1.0	NR	mg/L	1.00	09/29/10 12:41	DAN	10I1960	6010B

Benchmark Environmental & Engineering Science
 2558 Hamburg Turnpike, Suite 300
 Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
 Project Number: TURN-0066

Received: 09/24/10
 Reported: 10/15/10 09:06

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-04 (MW-4 - Water)						Sampled: 09/23/10 11:20		Recvd: 09/24/10 09:00		
<u>Volatile Organic Compounds by EPA 8260B</u>										
Chloroform	2.8	D03,J	4.0	1.3	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
<u>Semivolatile Organics by GC/MS</u>										
Butyl benzyl phthalate	0.72	J	9.5	0.40	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Diethyl phthalate	1.5	J	9.5	0.21	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Di-n-butyl phthalate	1.1	J	9.5	0.30	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
<u>Organochlorine Pesticides by EPA Method 8081A</u>										
4,4'-DDD	0.25		0.24	0.043	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
4,4'-DDT	0.20	J	0.24	0.052	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
beta-BHC	0.21	J	0.24	0.12	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
Dieldrin	0.14	J	0.24	0.046	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
Endosulfan I	0.070	J	0.24	0.052	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
Endosulfan II	0.14	J	0.24	0.057	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
Endosulfan sulfate	0.092	J	0.24	0.074	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
gamma-Chlordane	0.15	J	0.24	0.052	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
Heptachlor	0.14	J	0.24	0.040	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
Methoxychlor	0.16	J	0.24	0.067	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
<u>Total Metals by SW 846 Series Methods</u>										
Barium	0.0687		0.0020	NR	mg/L	1.00	09/28/10 23:21	MxM	10I1960	6010B
Calcium	150		0.5	NR	mg/L	1.00	09/28/10 23:21	MxM	10I1960	6010B
Magnesium	151		0.200	NR	mg/L	1.00	09/28/10 23:21	MxM	10I1960	6010B
Manganese	0.315		0.0030	NR	mg/L	1.00	09/28/10 23:21	MxM	10I1960	6010B
Potassium	12.2		0.500	NR	mg/L	1.00	09/29/10 12:47	DAN	10I1960	6010B
Sodium	34.4		1.0	NR	mg/L	1.00	09/29/10 12:47	DAN	10I1960	6010B

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
MW-1	RTI1555-01	Water	09/23/10 10:20	09/24/10 15:10	
MW-2	RTI1555-02	Water	09/23/10 13:35	09/24/10 15:10	
MW-3	RTI1555-03	Water	09/23/10 12:25	09/24/10 15:10	
MW-4	RTI1555-04	Water	09/23/10 11:20	09/24/10 15:10	
TRIP BLANK	RTI1555-05	Water	09/24/10	09/24/10 15:10	

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-01 (MW-1 - Water)						Sampled: 09/23/10 10:20		Recvd: 09/24/10 09:00		
<u>Volatile Organic Compounds by EPA 8260B</u>										
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,2-Dibromoethane	ND		1.0	0.73	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,2-Dichloropropane	ND		1.0	0.72	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
2-Butanone	ND		10	1.3	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
4-Methyl-2-pentanone	ND		5.0	2.1	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Acetone	5.0	J	10	3.0	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Bromomethane	ND		1.0	0.69	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Chlorobenzene	ND		1.0	0.75	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Chloroform	2.0		1.0	0.34	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Cyclohexane	ND		1.0	0.18	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Dichlorodifluoromethane	ND		1.0	0.68	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Ethylbenzene	ND		1.0	0.74	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Isopropylbenzene	ND		1.0	0.79	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Methylcyclohexane	ND		1.0	0.16	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Styrene	ND		1.0	0.73	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Tetrachloroethene	ND		1.0	0.36	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Trichlorofluoromethane	ND		1.0	0.88	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
Vinyl chloride	ND		1.0	0.90	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-01 (MW-1 - Water) - cont.						Sampled: 09/23/10 10:20		Recvd: 09/24/10 09:00		

Volatile Organic Compounds by EPA 8260B - cont.

Xylenes, total	ND		2.0	0.66	ug/L	1.00	09/29/10 23:40	NMD	10I2169	8260B
1,2-Dichloroethane-d4	96 %		Surr Limits: (66-137%)				09/29/10 23:40	NMD	10I2169	8260B
4-Bromofluorobenzene	106 %		Surr Limits: (73-120%)				09/29/10 23:40	NMD	10I2169	8260B
Toluene-d8	104 %		Surr Limits: (71-126%)				09/29/10 23:40	NMD	10I2169	8260B

Semivolatile Organics by GC/MS

2,4,5-Trichlorophenol	ND		24	0.46	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
2,4,6-Trichlorophenol	ND		9.6	0.59	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
2,4-Dichlorophenol	ND		9.6	0.49	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
2,4-Dimethylphenol	ND		9.6	0.48	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
2,4-Dinitrophenol	ND		48	2.1	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
2,4-Dinitrotoluene	ND		9.6	0.43	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
2,6-Dinitrotoluene	ND		9.6	0.38	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
2-Chloronaphthalene	ND		9.6	0.44	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
2-Chlorophenol	ND		9.6	0.51	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
2-Methylnaphthalene	ND		9.6	0.58	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
2-Methylphenol	ND		9.6	0.38	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
2-Nitroaniline	ND		48	0.40	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
2-Nitrophenol	ND		9.6	0.46	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
3,3'-Dichlorobenzidine	ND		19	0.38	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
3-Nitroaniline	ND		48	0.46	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
4,6-Dinitro-2-methylphenol	ND		48	2.1	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
4-Bromophenyl phenyl ether	ND		9.6	0.43	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
4-Chloro-3-methylphenol	ND		9.6	0.43	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
4-Chloroaniline	ND		9.6	0.57	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
4-Chlorophenyl phenyl ether	ND		9.6	0.34	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
4-Methylphenol	ND		4.8	0.35	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
4-Nitroaniline	ND		48	0.24	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
4-Nitrophenol	ND		48	1.5	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Acenaphthene	ND		9.6	0.39	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Acenaphthylene	ND		9.6	0.37	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Acetophenone	ND		9.6	0.52	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Anthracene	ND		9.6	0.27	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Atrazine	ND		9.6	0.44	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Benzaldehyde	ND		48	0.26	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Benzo(a)anthracene	ND		9.6	0.35	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Benzo(a)pyrene	ND		9.6	0.45	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Benzo(b)fluoranthene	ND		9.6	0.33	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Benzo(ghi)perylene	ND		9.6	0.34	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Benzo(k)fluoranthene	ND		9.6	0.70	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Biphenyl	ND		9.6	0.63	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Bis(2-chloroethoxy)methane	ND		9.6	0.34	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Bis(2-chloroethyl)ether	ND		9.6	0.38	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
2,2'-Oxybis(1-Chloropropane)	ND		9.6	0.50	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Bis(2-ethylhexyl)phthalate	ND		9.6	1.7	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Received: 09/24/10
Reported: 10/15/10 09:06

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-01 (MW-1 - Water) - cont.						Sampled: 09/23/10 10:20		Recvd: 09/24/10 09:00		

Semivolatile Organics by GC/MS - cont.

Butyl benzyl phthalate	0.51	J	9.6	0.40	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Caprolactam	ND		9.6	2.1	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Carbazole	ND		4.8	0.29	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Chrysene	ND		9.6	0.32	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Dibenzo(a,h)anthracene	ND		9.6	0.40	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Dibenzofuran	ND		9.6	0.49	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Diethyl phthalate	ND		9.6	0.21	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Dimethyl phthalate	ND		9.6	0.35	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Di-n-butyl phthalate	0.51	J	9.6	0.30	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Di-n-octyl phthalate	ND		9.6	0.45	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Fluoranthene	ND		9.6	0.38	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Fluorene	ND		9.6	0.35	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Hexachlorobenzene	ND		9.6	0.49	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Hexachlorobutadiene	ND		9.6	0.65	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Hexachlorocyclopentadiene	ND		9.6	0.57	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Hexachloroethane	ND		9.6	0.57	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Indeno(1,2,3-cd)pyrene	ND		9.6	0.45	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Isophorone	ND		9.6	0.41	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Naphthalene	ND		9.6	0.73	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Nitrobenzene	ND		9.6	0.28	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
N-Nitrosodi-n-propylamine	ND		9.6	0.52	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
N-Nitrosodiphenylamine	ND		9.6	0.49	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Pentachlorophenol	ND		48	2.1	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Phenanthrene	ND		9.6	0.42	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Phenol	ND		9.6	0.38	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
Pyrene	ND		9.6	0.33	ug/L	1.00	10/09/10 17:00	MKP	10I1861	8270C
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2,4,6-Tribromophenol	121 %		Surr Limits: (52-132%)				10/09/10 17:00	MKP	10I1861	8270C
2-Fluorobiphenyl	89 %		Surr Limits: (48-120%)				10/09/10 17:00	MKP	10I1861	8270C
2-Fluorophenol	46 %		Surr Limits: (20-120%)				10/09/10 17:00	MKP	10I1861	8270C
Nitrobenzene-d5	88 %		Surr Limits: (46-120%)				10/09/10 17:00	MKP	10I1861	8270C
Phenol-d5	33 %		Surr Limits: (16-120%)				10/09/10 17:00	MKP	10I1861	8270C
p-Terphenyl-d14	63 %		Surr Limits: (24-136%)				10/09/10 17:00	MKP	10I1861	8270C

Organochlorine Pesticides by EPA Method 8081A

4,4'-DDD	ND		0.047	0.0087	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
4,4'-DDE	ND		0.047	0.011	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
4,4'-DDT	0.082		0.047	0.010	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Aldrin	ND		0.047	0.0062	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
alpha-BHC	ND		0.047	0.0062	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
alpha-Chlordane	ND		0.047	0.014	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
beta-BHC	ND		0.047	0.023	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Chlordane	ND		0.47	0.027	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
delta-BHC	ND		0.047	0.0095	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Dieldrin	ND		0.047	0.0092	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Endosulfan I	ND		0.047	0.010	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Endosulfan II	0.069		0.047	0.011	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Endosulfan sulfate	ND		0.047	0.015	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Endrin	ND		0.047	0.013	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Endrin aldehyde	ND		0.047	0.015	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
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Sample ID: RTI1555-01 (MW-1 - Water) - cont.

Sampled: 09/23/10 10:20

Recvd: 09/24/10 09:00

Organochlorine Pesticides by EPA Method 8081A - cont.

Endrin ketone	ND		0.047	0.011	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
gamma-BHC (Lindane)	ND		0.047	0.0057	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
gamma-Chlordane	0.036	J	0.047	0.010	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Heptachlor	ND		0.047	0.0080	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Heptachlor epoxide	0.018	J	0.047	0.0050	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Methoxychlor	0.059		0.047	0.013	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A
Toxaphene	ND		0.47	0.11	ug/L	1.00	09/28/10 20:45	LMW	10I1862	8081A

Decachlorobiphenyl	52 %		Surr Limits: (15-139%)				09/28/10 20:45	LMW	10I1862	8081A
Tetrachloro-m-xylene	97 %		Surr Limits: (30-139%)				09/28/10 20:45	LMW	10I1862	8081A

Polychlorinated Biphenyls by EPA Method 8082

Aroclor 1016	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:19	JxM	10I1863	8082
Aroclor 1221	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:19	JxM	10I1863	8082
Aroclor 1232	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:19	JxM	10I1863	8082
Aroclor 1242	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:19	JxM	10I1863	8082
Aroclor 1248	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:19	JxM	10I1863	8082
Aroclor 1254	ND	QSU	0.47	0.24	ug/L	1.00	09/28/10 23:19	JxM	10I1863	8082
Aroclor 1260	ND	QSU	0.47	0.24	ug/L	1.00	09/28/10 23:19	JxM	10I1863	8082

Decachlorobiphenyl	45 %	QSU	Surr Limits: (12-137%)				09/28/10 23:19	JxM	10I1863	8082
Tetrachloro-m-xylene	72 %	QSU	Surr Limits: (35-121%)				09/28/10 23:19	JxM	10I1863	8082

Total Metals by SW 846 Series Methods

Aluminum	ND		0.200	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Antimony	ND		0.0200	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Arsenic	ND		0.0100	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Barium	0.0542		0.0020	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Beryllium	ND		0.0020	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Cadmium	ND		0.0010	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Calcium	75.6		0.5	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Chromium	ND		0.0040	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Cobalt	ND		0.0040	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Copper	ND		0.0100	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Iron	ND		0.050	NR	mg/L	1.00	09/29/10 12:30	DAN	10I1960	6010B
Lead	ND		0.0050	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Magnesium	45.3		0.200	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Manganese	0.0739		0.0030	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Nickel	ND		0.0100	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Potassium	4.50		0.500	NR	mg/L	1.00	09/29/10 12:30	DAN	10I1960	6010B
Selenium	ND		0.0150	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Silver	ND		0.0030	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Sodium	25.1		1.0	NR	mg/L	1.00	09/29/10 12:30	DAN	10I1960	6010B
Thallium	ND		0.0200	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Vanadium	ND		0.0050	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Zinc	ND		0.0100	NR	mg/L	1.00	09/28/10 23:15	MxM	10I1960	6010B
Mercury	ND		0.0002	NR	mg/L	1.00	09/30/10 12:25	JRK	10I2202	7470A

General Chemistry Parameters

Total Cyanide	ND	L	0.0100	NR	mg/L	1.00	10/01/10 15:04	RJF	10I2226	9012A
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Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-02 (MW-2 - Water)						Sampled: 09/23/10 13:35		Recvd: 09/24/10 09:00		
<u>Volatile Organic Compounds by EPA 8260B</u>										
1,1,1-Trichloroethane	ND	D03	5.0	4.1	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,1,2,2-Tetrachloroethane	ND	D03	5.0	1.1	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,1,2-Trichloroethane	ND	D03	5.0	1.2	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	D03	5.0	1.5	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,1-Dichloroethane	ND	D03	5.0	1.9	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,1-Dichloroethene	ND	D03	5.0	1.5	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,2,4-Trichlorobenzene	ND	D03	5.0	2.0	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,2-Dibromo-3-chloropropane	ND	D03	5.0	2.0	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,2-Dibromoethane	ND	D03	5.0	3.6	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,2-Dichlorobenzene	ND	D03	5.0	4.0	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,2-Dichloroethane	ND	D03	5.0	1.1	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,2-Dichloropropane	ND	D03	5.0	3.6	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,3-Dichlorobenzene	ND	D03	5.0	3.9	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,4-Dichlorobenzene	ND	D03	5.0	4.2	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
2-Butanone	ND	D03	50	6.6	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
2-Hexanone	ND	D03	25	6.2	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
4-Methyl-2-pentanone	ND	D03	25	10	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Acetone	ND	D03	50	15	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Benzene	38	D03	5.0	2.0	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Bromodichloromethane	ND	D03	5.0	1.9	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Bromoform	ND	D03	5.0	1.3	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Bromomethane	ND	D03	5.0	3.4	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Carbon disulfide	ND	D03	5.0	0.97	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Carbon Tetrachloride	ND	D03	5.0	1.3	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Chlorobenzene	ND	D03	5.0	3.8	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Dibromochloromethane	ND	D03	5.0	1.6	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Chloroethane	ND	D03	5.0	1.6	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Chloroform	4.2	D03,J	5.0	1.7	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Chloromethane	ND	D03	5.0	1.7	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
cis-1,2-Dichloroethene	ND	D03	5.0	4.0	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
cis-1,3-Dichloropropene	ND	D03	5.0	1.8	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Cyclohexane	ND	D03	5.0	0.90	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Dichlorodifluoromethane	ND	D03	5.0	3.4	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Ethylbenzene	39	D03	5.0	3.7	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Isopropylbenzene	ND	D03	5.0	4.0	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Methyl Acetate	ND	D03	5.0	2.5	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Methyl-t-Butyl Ether (MTBE)	ND	D03	5.0	0.80	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Methylcyclohexane	ND	D03	5.0	0.80	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Methylene Chloride	ND	D03	5.0	2.2	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Styrene	ND	D03	5.0	3.6	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Tetrachloroethene	ND	D03	5.0	1.8	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Toluene	18	D03	5.0	2.6	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
trans-1,2-Dichloroethene	ND	D03	5.0	4.5	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
trans-1,3-Dichloropropene	ND	D03	5.0	1.8	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Trichloroethene	ND	D03	5.0	2.3	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Trichlorofluoromethane	ND	D03	5.0	4.4	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
Vinyl chloride	ND	D03	5.0	4.5	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-02 (MW-2 - Water) - cont.							Sampled: 09/23/10 13:35	Recvd: 09/24/10 09:00		

Volatile Organic Compounds by EPA 8260B - cont.

Xylenes, total	97	D03	10	3.3	ug/L	5.00	09/30/10 00:03	NMD	10I2169	8260B
1,2-Dichloroethane-d4	96 %	D03	Surr Limits: (66-137%)				09/30/10 00:03	NMD	10I2169	8260B
4-Bromofluorobenzene	106 %	D03	Surr Limits: (73-120%)				09/30/10 00:03	NMD	10I2169	8260B
Toluene-d8	104 %	D03	Surr Limits: (71-126%)				09/30/10 00:03	NMD	10I2169	8260B

Semivolatile Organics by GC/MS

2,4,5-Trichlorophenol	ND		24	0.45	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2,4,6-Trichlorophenol	ND		9.4	0.58	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2,4-Dichlorophenol	ND		9.4	0.48	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2,4-Dimethylphenol	ND		9.4	0.47	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2,4-Dinitrophenol	ND		47	2.1	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2,4-Dinitrotoluene	ND		9.4	0.42	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2,6-Dinitrotoluene	ND		9.4	0.38	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2-Chloronaphthalene	ND		9.4	0.43	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2-Chlorophenol	ND		9.4	0.50	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2-Methylnaphthalene	ND		9.4	0.57	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2-Methylphenol	1.3	J	9.4	0.38	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2-Nitroaniline	ND		47	0.40	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2-Nitrophenol	ND		9.4	0.45	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
3,3'-Dichlorobenzidine	ND		19	0.38	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
3-Nitroaniline	ND		47	0.45	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
4,6-Dinitro-2-methylphenol	ND		47	2.1	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
4-Bromophenyl phenyl ether	ND		9.4	0.42	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
4-Chloro-3-methylphenol	ND		9.4	0.42	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
4-Chloroaniline	ND		9.4	0.56	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
4-Chlorophenyl phenyl ether	ND		9.4	0.33	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
4-Methylphenol	ND		4.7	0.34	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
4-Nitroaniline	ND		47	0.24	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
4-Nitrophenol	ND		47	1.4	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Acenaphthene	ND		9.4	0.39	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Acenaphthylene	ND		9.4	0.36	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Acetophenone	2.8	J	9.4	0.51	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Anthracene	ND		9.4	0.26	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Atrazine	ND		9.4	0.43	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Benzaldehyde	ND		47	0.25	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Benzo(a)anthracene	0.35	J	9.4	0.34	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Benzo(a)pyrene	ND		9.4	0.44	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Benzo(b)fluoranthene	ND		9.4	0.32	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Benzo(ghi)perylene	ND		9.4	0.33	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Benzo(k)fluoranthene	ND		9.4	0.69	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Biphenyl	ND		9.4	0.62	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Bis(2-chloroethoxy)methane	ND		9.4	0.33	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Bis(2-chloroethyl)ether	ND		9.4	0.38	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2,2'-Oxybis(1-Chloropropane)	ND		9.4	0.49	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Bis(2-ethylhexyl)phthalate	ND		9.4	1.7	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-02 (MW-2 - Water) - cont.						Sampled: 09/23/10 13:35		Recvd: 09/24/10 09:00		

Semivolatile Organics by GC/MS - cont.

Butyl benzyl phthalate	0.71	J	9.4	0.40	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Caprolactam	ND		9.4	2.1	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Carbazole	ND		4.7	0.28	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Chrysene	ND		9.4	0.31	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Dibenzo(a,h)anthracene	ND		9.4	0.40	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Dibenzofuran	ND		9.4	0.48	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Diethyl phthalate	ND		9.4	0.21	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Dimethyl phthalate	ND		9.4	0.34	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Di-n-butyl phthalate	0.65	J	9.4	0.29	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Di-n-octyl phthalate	ND		9.4	0.44	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Fluoranthene	0.47	J	9.4	0.38	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Fluorene	ND		9.4	0.34	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Hexachlorobenzene	ND		9.4	0.48	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Hexachlorobutadiene	ND		9.4	0.64	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Hexachlorocyclopentadiene	ND		9.4	0.56	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Hexachloroethane	ND		9.4	0.56	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Indeno(1,2,3-cd)pyrene	ND		9.4	0.44	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Isophorone	ND		9.4	0.41	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Naphthalene	21		9.4	0.72	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Nitrobenzene	ND		9.4	0.27	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
N-Nitrosodi-n-propylamine	ND		9.4	0.51	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
N-Nitrosodiphenylamine	ND		9.4	0.48	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Pentachlorophenol	ND		47	2.1	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Phenanthrene	0.58	J	9.4	0.42	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Phenol	ND		9.4	0.37	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
Pyrene	0.42	J	9.4	0.32	ug/L	1.00	10/09/10 17:24	MKP	10I1861	8270C
2,4,6-Tribromophenol	121 %		Surr Limits: (52-132%)				10/09/10 17:24	MKP	10I1861	8270C
2-Fluorobiphenyl	82 %		Surr Limits: (48-120%)				10/09/10 17:24	MKP	10I1861	8270C
2-Fluorophenol	42 %		Surr Limits: (20-120%)				10/09/10 17:24	MKP	10I1861	8270C
Nitrobenzene-d5	82 %		Surr Limits: (46-120%)				10/09/10 17:24	MKP	10I1861	8270C
Phenol-d5	30 %		Surr Limits: (16-120%)				10/09/10 17:24	MKP	10I1861	8270C
p-Terphenyl-d14	50 %		Surr Limits: (24-136%)				10/09/10 17:24	MKP	10I1861	8270C

Organochlorine Pesticides by EPA Method 8081A

4,4'-DDD	ND		0.047	0.0087	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
4,4'-DDE	ND		0.047	0.011	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
4,4'-DDT	ND		0.047	0.010	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Aldrin	ND		0.047	0.0062	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
alpha-BHC	ND		0.047	0.0062	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
alpha-Chlordane	ND		0.047	0.014	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
beta-BHC	0.060		0.047	0.023	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Chlordane	ND		0.47	0.027	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
delta-BHC	ND		0.047	0.0095	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Dieldrin	ND		0.047	0.0092	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Endosulfan I	ND		0.047	0.010	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Endosulfan II	0.11		0.047	0.011	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Endosulfan sulfate	ND		0.047	0.015	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Endrin	ND		0.047	0.013	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Endrin aldehyde	ND		0.047	0.015	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A

TestAmerica Buffalo - 10 Hazelwood Drive Amherst, NY 14228 tel 716-691-2600 fax 716-691-7991

www.testamericainc.com

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-02 (MW-2 - Water) - cont.						Sampled: 09/23/10 13:35		Recvd: 09/24/10 09:00		

Organochlorine Pesticides by EPA Method 8081A - cont.

Endrin ketone	ND		0.047	0.011	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
gamma-BHC (Lindane)	ND		0.047	0.0057	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
gamma-Chlordane	0.041	J	0.047	0.010	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Heptachlor	ND		0.047	0.0080	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Heptachlor epoxide	ND		0.047	0.0050	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Methoxychlor	0.098		0.047	0.013	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
Toxaphene	ND		0.47	0.11	ug/L	1.00	09/28/10 21:21	LMW	10I1862	8081A
<i>Decachlorobiphenyl</i>	30 %		<i>Surr Limits: (15-139%)</i>				09/28/10 21:21	LMW	10I1862	8081A
<i>Tetrachloro-m-xylene</i>	134 %		<i>Surr Limits: (30-139%)</i>				09/28/10 21:21	LMW	10I1862	8081A

Polychlorinated Biphenyls by EPA Method 8082

Aroclor 1016	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:37	JxM	10I1863	8082
Aroclor 1221	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:37	JxM	10I1863	8082
Aroclor 1232	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:37	JxM	10I1863	8082
Aroclor 1242	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:37	JxM	10I1863	8082
Aroclor 1248	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:37	JxM	10I1863	8082
Aroclor 1254	ND	QSU	0.47	0.24	ug/L	1.00	09/28/10 23:37	JxM	10I1863	8082
Aroclor 1260	ND	QSU	0.47	0.24	ug/L	1.00	09/28/10 23:37	JxM	10I1863	8082
<i>Decachlorobiphenyl</i>	31 %	QSU	<i>Surr Limits: (12-137%)</i>				09/28/10 23:37	JxM	10I1863	8082
<i>Tetrachloro-m-xylene</i>	62 %	QSU	<i>Surr Limits: (35-121%)</i>				09/28/10 23:37	JxM	10I1863	8082

Total Metals by SW 846 Series Methods

Aluminum	ND		0.200	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Antimony	ND		0.0200	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Arsenic	ND		0.0100	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Barium	0.332		0.0020	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Beryllium	ND		0.0020	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Cadmium	ND		0.0010	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Calcium	119		0.5	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Chromium	ND		0.0040	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Cobalt	ND		0.0040	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Copper	ND		0.0100	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Iron	ND		0.050	NR	mg/L	1.00	09/29/10 12:36	DAN	10I1960	6010B
Lead	ND		0.0050	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Magnesium	107		0.200	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Manganese	0.204		0.0030	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Nickel	ND		0.0100	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Potassium	6.41		0.500	NR	mg/L	1.00	09/29/10 12:36	DAN	10I1960	6010B
Selenium	ND		0.0150	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Silver	ND		0.0030	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Sodium	59.2		1.0	NR	mg/L	1.00	09/29/10 12:36	DAN	10I1960	6010B
Thallium	ND		0.0200	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Vanadium	ND		0.0050	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Zinc	ND		0.0100	NR	mg/L	1.00	09/28/10 23:17	MxM	10I1960	6010B
Mercury	ND		0.0002	NR	mg/L	1.00	09/30/10 12:26	JRK	10I2202	7470A

General Chemistry Parameters

Total Cyanide	ND	L	0.0100	NR	mg/L	1.00	10/01/10 15:05	RJF	10I2226	9012A
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Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-03 (MW-3 - Water)						Sampled: 09/23/10 12:25		Recvd: 09/24/10 09:00		
<u>Volatile Organic Compounds by EPA 8260B</u>										
1,1,1-Trichloroethane	ND	D03	4.0	3.3	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,1,2,2-Tetrachloroethane	ND	D03	4.0	0.85	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,1,2-Trichloroethane	ND	D03	4.0	0.92	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	D03	4.0	1.2	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,1-Dichloroethane	ND	D03	4.0	1.5	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,1-Dichloroethene	ND	D03	4.0	1.2	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,2,4-Trichlorobenzene	ND	D03	4.0	1.6	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,2-Dibromo-3-chloropropane	ND	D03	4.0	1.6	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,2-Dibromoethane	ND	D03	4.0	2.9	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,2-Dichlorobenzene	ND	D03	4.0	3.2	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,2-Dichloroethane	ND	D03	4.0	0.86	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,2-Dichloropropane	ND	D03	4.0	2.9	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,3-Dichlorobenzene	ND	D03	4.0	3.1	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,4-Dichlorobenzene	ND	D03	4.0	3.4	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
2-Butanone	ND	D03	40	5.3	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
2-Hexanone	ND	D03	20	5.0	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
4-Methyl-2-pentanone	ND	D03	20	8.4	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Acetone	ND	D03	40	12	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Benzene	ND	D03	4.0	1.6	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Bromodichloromethane	ND	D03	4.0	1.5	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Bromoform	ND	D03	4.0	1.0	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Bromomethane	ND	D03	4.0	2.8	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Carbon disulfide	ND	D03	4.0	0.78	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Carbon Tetrachloride	ND	D03	4.0	1.1	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Chlorobenzene	ND	D03	4.0	3.0	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Dibromochloromethane	ND	D03	4.0	1.3	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Chloroethane	ND	D03	4.0	1.3	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Chloroform	5.4	D03	4.0	1.3	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Chloromethane	ND	D03	4.0	1.4	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
cis-1,2-Dichloroethene	ND	D03	4.0	3.2	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
cis-1,3-Dichloropropene	ND	D03	4.0	1.4	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Cyclohexane	ND	D03	4.0	0.72	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Dichlorodifluoromethane	ND	D03	4.0	2.7	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Ethylbenzene	ND	D03	4.0	3.0	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Isopropylbenzene	ND	D03	4.0	3.2	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Methyl Acetate	ND	D03	4.0	2.0	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Methyl-t-Butyl Ether (MTBE)	ND	D03	4.0	0.64	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Methylcyclohexane	ND	D03	4.0	0.64	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Methylene Chloride	ND	D03	4.0	1.8	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Styrene	ND	D03	4.0	2.9	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Tetrachloroethene	ND	D03	4.0	1.5	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Toluene	ND	D03	4.0	2.0	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
trans-1,2-Dichloroethene	ND	D03	4.0	3.6	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
trans-1,3-Dichloropropene	ND	D03	4.0	1.5	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Trichloroethene	ND	D03	4.0	1.8	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Trichlorofluoromethane	ND	D03	4.0	3.5	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
Vinyl chloride	ND	D03	4.0	3.6	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
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Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-03 (MW-3 - Water) - cont.							Sampled: 09/23/10 12:25	Recvd: 09/24/10 09:00		

Volatile Organic Compounds by EPA 8260B - cont.

Xylenes, total	ND	D03	8.0	2.6	ug/L	4.00	09/30/10 14:02	DHC	10I2207	8260B
1,2-Dichloroethane-d4	98 %	D03	Surr Limits: (66-137%)				09/30/10 14:02	DHC	10I2207	8260B
4-Bromofluorobenzene	107 %	D03	Surr Limits: (73-120%)				09/30/10 14:02	DHC	10I2207	8260B
Toluene-d8	107 %	D03	Surr Limits: (71-126%)				09/30/10 14:02	DHC	10I2207	8260B

Semivolatile Organics by GC/MS

2,4,5-Trichlorophenol	ND		24	0.45	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
2,4,6-Trichlorophenol	ND		9.4	0.58	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
2,4-Dichlorophenol	ND		9.4	0.48	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
2,4-Dimethylphenol	ND		9.4	0.47	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
2,4-Dinitrophenol	ND		47	2.1	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
2,4-Dinitrotoluene	ND		9.4	0.42	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
2,6-Dinitrotoluene	ND		9.4	0.38	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
2-Chloronaphthalene	ND		9.4	0.43	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
2-Chlorophenol	ND		9.4	0.50	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
2-Methylnaphthalene	ND		9.4	0.57	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
2-Methylphenol	ND		9.4	0.38	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
2-Nitroaniline	ND		47	0.40	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
2-Nitrophenol	ND		9.4	0.45	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
3,3'-Dichlorobenzidine	ND		19	0.38	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
3-Nitroaniline	ND		47	0.45	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
4,6-Dinitro-2-methylphenol	ND		47	2.1	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
4-Bromophenyl phenyl ether	ND		9.4	0.42	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
4-Chloro-3-methylphenol	ND		9.4	0.42	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
4-Chloroaniline	ND		9.4	0.56	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
4-Chlorophenyl phenyl ether	ND		9.4	0.33	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
4-Methylphenol	ND		4.7	0.34	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
4-Nitroaniline	ND		47	0.24	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
4-Nitrophenol	ND		47	1.4	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Acenaphthene	ND		9.4	0.39	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Acenaphthylene	ND		9.4	0.36	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Acetophenone	1.1	J	9.4	0.51	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Anthracene	ND		9.4	0.26	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Atrazine	ND		9.4	0.43	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Benzaldehyde	ND		47	0.25	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Benzo(a)anthracene	ND		9.4	0.34	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Benzo(a)pyrene	ND		9.4	0.44	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Benzo(b)fluoranthene	ND		9.4	0.32	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Benzo(ghi)perylene	ND		9.4	0.33	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Benzo(k)fluoranthene	ND		9.4	0.69	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Biphenyl	ND		9.4	0.62	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Bis(2-chloroethoxy)methane	ND		9.4	0.33	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Bis(2-chloroethyl)ether	ND		9.4	0.38	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
2,2'-Oxybis(1-Chloropropane)	ND		9.4	0.49	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C
Bis(2-ethylhexyl)phthalate	ND		9.4	1.7	ug/L	1.00	10/09/10 17:47	MKP	10I1861	8270C

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RT11555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RT11555-03 (MW-3 - Water) - cont.						Sampled: 09/23/10 12:25		Recvd: 09/24/10 09:00		

Semivolatile Organics by GC/MS - cont.

Butyl benzyl phthalate	0.58	J	9.4	0.40	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Caprolactam	ND		9.4	2.1	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Carbazole	ND		4.7	0.28	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Chrysene	ND		9.4	0.31	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Dibenzo(a,h)anthracene	ND		9.4	0.40	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Dibenzofuran	ND		9.4	0.48	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Diethyl phthalate	ND		9.4	0.21	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Dimethyl phthalate	ND		9.4	0.34	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Di-n-butyl phthalate	0.55	J	9.4	0.29	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Di-n-octyl phthalate	ND		9.4	0.44	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Fluoranthene	ND		9.4	0.38	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Fluorene	ND		9.4	0.34	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Hexachlorobenzene	ND		9.4	0.48	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Hexachlorobutadiene	ND		9.4	0.64	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Hexachlorocyclopentadiene	ND		9.4	0.56	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Hexachloroethane	ND		9.4	0.56	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Indeno(1,2,3-cd)pyrene	ND		9.4	0.44	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Isophorone	ND		9.4	0.41	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Naphthalene	ND		9.4	0.72	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Nitrobenzene	ND		9.4	0.27	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
N-Nitrosodi-n-propylamine	ND		9.4	0.51	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
N-Nitrosodiphenylamine	ND		9.4	0.48	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Pentachlorophenol	ND		47	2.1	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Phenanthrene	0.46	J	9.4	0.42	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Phenol	ND		9.4	0.37	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
Pyrene	ND		9.4	0.32	ug/L	1.00	10/09/10 17:47	MKP	1011861	8270C
<hr/>										
2,4,6-Tribromophenol	112 %		Surr Limits: (52-132%)				10/09/10 17:47	MKP	1011861	8270C
2-Fluorobiphenyl	74 %		Surr Limits: (48-120%)				10/09/10 17:47	MKP	1011861	8270C
2-Fluorophenol	40 %		Surr Limits: (20-120%)				10/09/10 17:47	MKP	1011861	8270C
Nitrobenzene-d5	73 %		Surr Limits: (46-120%)				10/09/10 17:47	MKP	1011861	8270C
Phenol-d5	29 %		Surr Limits: (16-120%)				10/09/10 17:47	MKP	1011861	8270C
p-Terphenyl-d14	49 %		Surr Limits: (24-136%)				10/09/10 17:47	MKP	1011861	8270C

Organochlorine Pesticides by EPA Method 8081A

4,4'-DDD	0.23	J	0.24	0.043	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
4,4'-DDE	ND		0.24	0.055	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
4,4'-DDT	ND		0.24	0.052	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
Aldrin	ND		0.24	0.031	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
alpha-BHC	0.18	J	0.24	0.031	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
alpha-Chlordane	ND		0.24	0.070	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
beta-BHC	0.13	J	0.24	0.12	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
Chlordane	ND		2.4	0.14	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
delta-BHC	ND		0.24	0.048	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
Dieldrin	ND		0.24	0.046	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
Endosulfan I	ND		0.24	0.052	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
Endosulfan II	0.14	J	0.24	0.057	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
Endosulfan sulfate	ND		0.24	0.074	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
Endrin	ND		0.24	0.065	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A
Endrin aldehyde	ND		0.24	0.077	ug/L	5.00	09/28/10 22:33	LMW	1011862	8081A

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-03 (MW-3 - Water) - cont.						Sampled: 09/23/10 12:25		Recvd: 09/24/10 09:00		
<u>Organochlorine Pesticides by EPA Method 8081A - cont.</u>										
Endrin ketone	ND		0.24	0.057	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
gamma-BHC (Lindane)	ND		0.24	0.028	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
gamma-Chlordane	0.13	J	0.24	0.052	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
Heptachlor	0.11	J	0.24	0.040	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
Heptachlor epoxide	ND		0.24	0.025	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
Methoxychlor	0.20	J	0.24	0.067	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
Toxaphene	ND		2.4	0.57	ug/L	5.00	09/28/10 22:33	LMW	10I1862	8081A
<i>Decachlorobiphenyl</i>	*	Z	<i>Surr Limits: (15-139%)</i>				09/28/10 22:33	LMW	10I1862	8081A
<i>Tetrachloro-m-xylene</i>	196 %	Z1	<i>Surr Limits: (30-139%)</i>				09/28/10 22:33	LMW	10I1862	8081A
<u>Polychlorinated Biphenyls by EPA Method 8082</u>										
Aroclor 1016	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:56	JxM	10I1863	8082
Aroclor 1221	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:56	JxM	10I1863	8082
Aroclor 1232	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:56	JxM	10I1863	8082
Aroclor 1242	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:56	JxM	10I1863	8082
Aroclor 1248	ND	QSU	0.47	0.17	ug/L	1.00	09/28/10 23:56	JxM	10I1863	8082
Aroclor 1254	ND	QSU	0.47	0.24	ug/L	1.00	09/28/10 23:56	JxM	10I1863	8082
Aroclor 1260	ND	QSU	0.47	0.24	ug/L	1.00	09/28/10 23:56	JxM	10I1863	8082
<i>Decachlorobiphenyl</i>	27 %	QSU	<i>Surr Limits: (12-137%)</i>				09/28/10 23:56	JxM	10I1863	8082
<i>Tetrachloro-m-xylene</i>	61 %	QSU	<i>Surr Limits: (35-121%)</i>				09/28/10 23:56	JxM	10I1863	8082
<u>Total Metals by SW 846 Series Methods</u>										
Aluminum	ND		0.200	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Antimony	ND		0.0200	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Arsenic	ND		0.0100	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Barium	0.0985		0.0020	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Beryllium	ND		0.0020	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Cadmium	ND		0.0010	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Calcium	123		0.5	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Chromium	ND		0.0040	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Cobalt	ND		0.0040	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Copper	ND		0.0100	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Iron	ND		0.050	NR	mg/L	1.00	09/29/10 12:41	DAN	10I1960	6010B
Lead	ND		0.0050	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Magnesium	98.3		0.200	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Manganese	0.195		0.0030	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Nickel	0.0159		0.0100	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Potassium	10.0		0.500	NR	mg/L	1.00	09/29/10 12:41	DAN	10I1960	6010B
Selenium	ND		0.0150	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Silver	ND		0.0030	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Sodium	88.8		1.0	NR	mg/L	1.00	09/29/10 12:41	DAN	10I1960	6010B
Thallium	ND		0.0200	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Vanadium	ND		0.0050	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Zinc	ND		0.0100	NR	mg/L	1.00	09/28/10 23:19	MxM	10I1960	6010B
Mercury	ND		0.0002	NR	mg/L	1.00	09/30/10 12:32	JRK	10I2202	7470A
<u>General Chemistry Parameters</u>										
Total Cyanide	ND	L	0.0100	NR	mg/L	1.00	10/01/10 15:06	RJF	10I2226	9012A

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-04 (MW-4 - Water)						Sampled: 09/23/10 11:20		Recvd: 09/24/10 09:00		
<u>Volatile Organic Compounds by EPA 8260B</u>										
1,1,1-Trichloroethane	ND	D03	4.0	3.3	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,1,2,2-Tetrachloroethane	ND	D03	4.0	0.85	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,1,2-Trichloroethane	ND	D03	4.0	0.92	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	D03	4.0	1.2	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,1-Dichloroethane	ND	D03	4.0	1.5	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,1-Dichloroethene	ND	D03	4.0	1.2	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,2,4-Trichlorobenzene	ND	D03	4.0	1.6	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,2-Dibromo-3-chloropropane	ND	D03	4.0	1.6	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,2-Dibromoethane	ND	D03	4.0	2.9	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,2-Dichlorobenzene	ND	D03	4.0	3.2	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,2-Dichloroethane	ND	D03	4.0	0.86	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,2-Dichloropropane	ND	D03	4.0	2.9	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,3-Dichlorobenzene	ND	D03	4.0	3.1	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,4-Dichlorobenzene	ND	D03	4.0	3.4	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
2-Butanone	ND	D03	40	5.3	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
2-Hexanone	ND	D03	20	5.0	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
4-Methyl-2-pentanone	ND	D03	20	8.4	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Acetone	ND	D03	40	12	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Benzene	ND	D03	4.0	1.6	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Bromodichloromethane	ND	D03	4.0	1.5	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Bromoform	ND	D03	4.0	1.0	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Bromomethane	ND	D03	4.0	2.8	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Carbon disulfide	ND	D03	4.0	0.78	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Carbon Tetrachloride	ND	D03	4.0	1.1	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Chlorobenzene	ND	D03	4.0	3.0	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Dibromochloromethane	ND	D03	4.0	1.3	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Chloroethane	ND	D03	4.0	1.3	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Chloroform	2.8	D03,J	4.0	1.3	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Chloromethane	ND	D03	4.0	1.4	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
cis-1,2-Dichloroethene	ND	D03	4.0	3.2	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
cis-1,3-Dichloropropene	ND	D03	4.0	1.4	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Cyclohexane	ND	D03	4.0	0.72	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Dichlorodifluoromethane	ND	D03	4.0	2.7	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Ethylbenzene	ND	D03	4.0	3.0	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Isopropylbenzene	ND	D03	4.0	3.2	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Methyl Acetate	ND	D03	4.0	2.0	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Methyl-t-Butyl Ether (MTBE)	ND	D03	4.0	0.64	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Methylcyclohexane	ND	D03	4.0	0.64	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Methylene Chloride	ND	D03	4.0	1.8	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Styrene	ND	D03	4.0	2.9	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Tetrachloroethene	ND	D03	4.0	1.5	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Toluene	ND	D03	4.0	2.0	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
trans-1,2-Dichloroethene	ND	D03	4.0	3.6	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
trans-1,3-Dichloropropene	ND	D03	4.0	1.5	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Trichloroethene	ND	D03	4.0	1.8	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Trichlorofluoromethane	ND	D03	4.0	3.5	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
Vinyl chloride	ND	D03	4.0	3.6	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-04 (MW-4 - Water) - cont.							Sampled: 09/23/10 11:20	Recvd: 09/24/10 09:00		

Volatile Organic Compounds by EPA 8260B - cont.

Xylenes, total	ND	D03	8.0	2.6	ug/L	4.00	09/30/10 14:25	DHC	10I2207	8260B
1,2-Dichloroethane-d4	97 %	D03	Surr Limits: (66-137%)				09/30/10 14:25	DHC	10I2207	8260B
4-Bromofluorobenzene	106 %	D03	Surr Limits: (73-120%)				09/30/10 14:25	DHC	10I2207	8260B
Toluene-d8	108 %	D03	Surr Limits: (71-126%)				09/30/10 14:25	DHC	10I2207	8260B

Semivolatile Organics by GC/MS

2,4,5-Trichlorophenol	ND		24	0.46	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
2,4,6-Trichlorophenol	ND		9.5	0.58	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
2,4-Dichlorophenol	ND		9.5	0.49	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
2,4-Dimethylphenol	ND		9.5	0.48	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
2,4-Dinitrophenol	ND		48	2.1	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
2,4-Dinitrotoluene	ND		9.5	0.43	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
2,6-Dinitrotoluene	ND		9.5	0.38	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
2-Chloronaphthalene	ND		9.5	0.44	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
2-Chlorophenol	ND		9.5	0.50	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
2-Methylnaphthalene	ND		9.5	0.57	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
2-Methylphenol	ND		9.5	0.38	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
2-Nitroaniline	ND		48	0.40	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
2-Nitrophenol	ND		9.5	0.46	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
3,3'-Dichlorobenzidine	ND		19	0.38	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
3-Nitroaniline	ND		48	0.46	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
4,6-Dinitro-2-methylphenol	ND		48	2.1	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
4-Bromophenyl phenyl ether	ND		9.5	0.43	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
4-Chloro-3-methylphenol	ND		9.5	0.43	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
4-Chloroaniline	ND		9.5	0.56	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
4-Chlorophenyl phenyl ether	ND		9.5	0.33	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
4-Methylphenol	ND		4.8	0.34	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
4-Nitroaniline	ND		48	0.24	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
4-Nitrophenol	ND		48	1.4	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Acenaphthene	ND		9.5	0.39	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Acenaphthylene	ND		9.5	0.36	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Acetophenone	ND		9.5	0.51	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Anthracene	ND		9.5	0.27	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Atrazine	ND		9.5	0.44	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Benzaldehyde	ND		48	0.25	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Benzo(a)anthracene	ND		9.5	0.34	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Benzo(a)pyrene	ND		9.5	0.45	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Benzo(b)fluoranthene	ND		9.5	0.32	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Benzo(ghi)perylene	ND		9.5	0.33	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Benzo(k)fluoranthene	ND		9.5	0.70	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Biphenyl	ND		9.5	0.62	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Bis(2-chloroethoxy)methane	ND		9.5	0.33	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Bis(2-chloroethyl)ether	ND		9.5	0.38	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
2,2'-Oxybis(1-Chloropropane)	ND		9.5	0.50	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Bis(2-ethylhexyl)phthalate	ND		9.5	1.7	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Received: 09/24/10
Reported: 10/15/10 09:06

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-04 (MW-4 - Water) - cont.						Sampled: 09/23/10 11:20		Recvd: 09/24/10 09:00		

Semivolatile Organics by GC/MS - cont.

Butyl benzyl phthalate	0.72	J	9.5	0.40	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Caprolactam	ND		9.5	2.1	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Carbazole	ND		4.8	0.29	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Chrysene	ND		9.5	0.31	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Dibenzo(a,h)anthracene	ND		9.5	0.40	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Dibenzofuran	ND		9.5	0.49	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Diethyl phthalate	1.5	J	9.5	0.21	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Dimethyl phthalate	ND		9.5	0.34	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Di-n-butyl phthalate	1.1	J	9.5	0.30	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Di-n-octyl phthalate	ND		9.5	0.45	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Fluoranthene	ND		9.5	0.38	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Fluorene	ND		9.5	0.34	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Hexachlorobenzene	ND		9.5	0.49	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Hexachlorobutadiene	ND		9.5	0.65	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Hexachlorocyclopentadiene	ND		9.5	0.56	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Hexachloroethane	ND		9.5	0.56	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Indeno(1,2,3-cd)pyrene	ND		9.5	0.45	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Isophorone	ND		9.5	0.41	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Naphthalene	ND		9.5	0.72	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Nitrobenzene	ND		9.5	0.28	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
N-Nitrosodi-n-propylamine	ND		9.5	0.51	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
N-Nitrosodiphenylamine	ND		9.5	0.49	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Pentachlorophenol	ND		48	2.1	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Phenanthrene	ND		9.5	0.42	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Phenol	ND		9.5	0.37	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
Pyrene	ND		9.5	0.32	ug/L	1.00	10/09/10 18:11	MKP	10I1861	8270C
<hr/>										
2,4,6-Tribromophenol	115 %		Surr Limits: (52-132%)				10/09/10 18:11	MKP	10I1861	8270C
2-Fluorobiphenyl	84 %		Surr Limits: (48-120%)				10/09/10 18:11	MKP	10I1861	8270C
2-Fluorophenol	48 %		Surr Limits: (20-120%)				10/09/10 18:11	MKP	10I1861	8270C
Nitrobenzene-d5	88 %		Surr Limits: (46-120%)				10/09/10 18:11	MKP	10I1861	8270C
Phenol-d5	33 %		Surr Limits: (16-120%)				10/09/10 18:11	MKP	10I1861	8270C
p-Terphenyl-d14	54 %		Surr Limits: (24-136%)				10/09/10 18:11	MKP	10I1861	8270C

Organochlorine Pesticides by EPA Method 8081A

4,4'-DDD	0.25		0.24	0.043	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
4,4'-DDE	ND		0.24	0.055	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
4,4'-DDT	0.20	J	0.24	0.052	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
Aldrin	ND		0.24	0.031	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
alpha-BHC	ND		0.24	0.031	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
alpha-Chlordane	ND		0.24	0.070	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
beta-BHC	0.21	J	0.24	0.12	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
Chlordane	ND		2.4	0.14	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
delta-BHC	ND		0.24	0.048	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
Dieldrin	0.14	J	0.24	0.046	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
Endosulfan I	0.070	J	0.24	0.052	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
Endosulfan II	0.14	J	0.24	0.057	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
Endosulfan sulfate	0.092	J	0.24	0.074	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A
Endrin	ND		0.24	0.065	ug/L	5.00	09/28/10 23:09	LMW	10I1862	8081A

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-04 (MW-4 - Water) - cont.						Sampled: 09/23/10 11:20		Recvd: 09/24/10 09:00		
<u>Organochlorine Pesticides by EPA Method 8081A - cont.</u>										
Endrin aldehyde	ND		0.24	0.077	ug/L	5.00	09/28/10 23:09	LMW	101862	8081A
Endrin ketone	ND		0.24	0.057	ug/L	5.00	09/28/10 23:09	LMW	101862	8081A
gamma-BHC (Lindane)	ND		0.24	0.028	ug/L	5.00	09/28/10 23:09	LMW	101862	8081A
gamma-Chlordane	0.15	J	0.24	0.052	ug/L	5.00	09/28/10 23:09	LMW	101862	8081A
Heptachlor	0.14	J	0.24	0.040	ug/L	5.00	09/28/10 23:09	LMW	101862	8081A
Heptachlor epoxide	ND		0.24	0.025	ug/L	5.00	09/28/10 23:09	LMW	101862	8081A
Methoxychlor	0.16	J	0.24	0.067	ug/L	5.00	09/28/10 23:09	LMW	101862	8081A
Toxaphene	ND		2.4	0.57	ug/L	5.00	09/28/10 23:09	LMW	101862	8081A
<i>Decachlorobiphenyl</i>	14 %	Z	<i>Surr Limits: (15-139%)</i>				09/28/10 23:09	LMW	101862	8081A
<i>Tetrachloro-m-xylene</i>	188 %	Z1	<i>Surr Limits: (30-139%)</i>				09/28/10 23:09	LMW	101862	8081A
<u>Polychlorinated Biphenyls by EPA Method 8082</u>										
Aroclor 1016	ND	QSU	0.47	0.17	ug/L	1.00	09/29/10 00:14	JxM	101863	8082
Aroclor 1221	ND	QSU	0.47	0.17	ug/L	1.00	09/29/10 00:14	JxM	101863	8082
Aroclor 1232	ND	QSU	0.47	0.17	ug/L	1.00	09/29/10 00:14	JxM	101863	8082
Aroclor 1242	ND	QSU	0.47	0.17	ug/L	1.00	09/29/10 00:14	JxM	101863	8082
Aroclor 1248	ND	QSU	0.47	0.17	ug/L	1.00	09/29/10 00:14	JxM	101863	8082
Aroclor 1254	ND	QSU	0.47	0.24	ug/L	1.00	09/29/10 00:14	JxM	101863	8082
Aroclor 1260	ND	QSU	0.47	0.24	ug/L	1.00	09/29/10 00:14	JxM	101863	8082
<i>Decachlorobiphenyl</i>	46 %	QSU	<i>Surr Limits: (12-137%)</i>				09/29/10 00:14	JxM	101863	8082
<i>Tetrachloro-m-xylene</i>	73 %	QSU	<i>Surr Limits: (35-121%)</i>				09/29/10 00:14	JxM	101863	8082
<u>Total Metals by SW 846 Series Methods</u>										
Aluminum	ND		0.200	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Antimony	ND		0.0200	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Arsenic	ND		0.0100	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Barium	0.0687		0.0020	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Beryllium	ND		0.0020	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Cadmium	ND		0.0010	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Calcium	150		0.5	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Chromium	ND		0.0040	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Cobalt	ND		0.0040	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Copper	ND		0.0100	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Iron	ND		0.050	NR	mg/L	1.00	09/29/10 12:47	DAN	101960	6010B
Lead	ND		0.0050	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Magnesium	151		0.200	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Manganese	0.315		0.0030	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Nickel	ND		0.0100	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Potassium	12.2		0.500	NR	mg/L	1.00	09/29/10 12:47	DAN	101960	6010B
Selenium	ND		0.0150	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Silver	ND		0.0030	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Sodium	34.4		1.0	NR	mg/L	1.00	09/29/10 12:47	DAN	101960	6010B
Thallium	ND		0.0200	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Vanadium	ND		0.0050	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Zinc	ND		0.0100	NR	mg/L	1.00	09/28/10 23:21	MxM	101960	6010B
Mercury	ND		0.0002	NR	mg/L	1.00	09/30/10 12:33	JRK	1012202	7470A

General Chemistry Parameters

TestAmerica Buffalo - 10 Hazelwood Drive Amherst, NY 14228 tel 716-691-2600 fax 716-691-7991

www.testamericainc.com

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RT11555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RT11555-04 (MW-4 - Water) - cont.					Sampled: 09/23/10 11:20			Recvd: 09/24/10 09:00		
<u>General Chemistry Parameters - cont.</u>										
Total Cyanide	ND	L	0.0100	NR	mg/L	1.00	10/01/10 15:07	RJF	10I2226	9012A

Benchmark Environmental & Engineering Science
 2558 Hamburg Turnpike, Suite 300
 Lackawanna, NY 14218

Work Order: RTI1555

Project: Benchmark - 295 Maryland St. site
 Project Number: TURN-0066

Received: 09/24/10
 Reported: 10/15/10 09:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTI1555-05 (TRIP BLANK - Water)			Sampled: 09/24/10				Recvd: 09/24/10 15:10			
<u>Volatile Organic Compounds by EPA 8260B</u>										
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,2-Dibromoethane	ND		1.0	0.73	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,2-Dichloropropane	ND		1.0	0.72	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
2-Butanone	ND		10	1.3	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
4-Methyl-2-pentanone	ND		5.0	2.1	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Acetone	ND		10	3.0	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Bromomethane	ND		1.0	0.69	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Chlorobenzene	ND		1.0	0.75	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Cyclohexane	ND		1.0	0.18	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Dichlorodifluoromethane	ND		1.0	0.68	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Ethylbenzene	ND		1.0	0.74	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Isopropylbenzene	ND		1.0	0.79	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Methylcyclohexane	ND		1.0	0.16	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Styrene	ND		1.0	0.73	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Tetrachloroethene	ND		1.0	0.36	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Trichlorofluoromethane	ND		1.0	0.88	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
Vinyl chloride	ND		1.0	0.90	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B

Benchmark Environmental & Engineering Science
 2558 Hamburg Turnpike, Suite 300
 Lackawanna, NY 14218

Work Order: RT11555

Received: 09/24/10
 Reported: 10/15/10 09:06

Project: Benchmark - 295 Maryland St. site
 Project Number: TURN-0066

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RT11555-05 (TRIP BLANK - Water) - cont.					Sampled: 09/24/10			Recvd: 09/24/10 15:10		
<u>Volatile Organic Compounds by EPA 8260B - cont.</u>										
Xylenes, total	ND		2.0	0.66	ug/L	1.00	09/30/10 01:13	NMD	10I2169	8260B
1,2-Dichloroethane-d4	95 %		<i>Surr Limits: (66-137%)</i>				09/30/10 01:13	NMD	10I2169	8260B
4-Bromofluorobenzene	105 %		<i>Surr Limits: (73-120%)</i>				09/30/10 01:13	NMD	10I2169	8260B
Toluene-d8	104 %		<i>Surr Limits: (71-126%)</i>				09/30/10 01:13	NMD	10I2169	8260B

Benchmark Environmental & Engineering Science
 2558 Hamburg Turnpike, Suite 300
 Lackawanna, NY 14218

Work Order: RT11555

Project: Benchmark - 295 Maryland St. site
 Project Number: TURN-0066

Received: 09/24/10
 Reported: 10/15/10 09:06

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
General Chemistry Parameters									
9012A	10I2226	RT11555-01	50.00	mL	50.00	mL	09/30/10 14:09	JME	Cn Digestion
9012A	10I2226	RT11555-02	50.00	mL	50.00	mL	09/30/10 14:09	JME	Cn Digestion
9012A	10I2226	RT11555-03	50.00	mL	50.00	mL	09/30/10 14:09	JME	Cn Digestion
9012A	10I2226	RT11555-04	50.00	mL	50.00	mL	09/30/10 14:09	JME	Cn Digestion
Organochlorine Pesticides by EPA Method 8081A									
8081A	10I1862	RT11555-01	1,060.00	mL	10.00	mL	09/25/10 09:00	BWM	3510C GC
8081A	10I1862	RT11555-02	1,060.00	mL	10.00	mL	09/25/10 09:00	BWM	3510C GC
8081A	10I1862	RT11555-03	1,060.00	mL	10.00	mL	09/25/10 09:00	BWM	3510C GC
8081A	10I1862	RT11555-04	1,060.00	mL	10.00	mL	09/25/10 09:00	BWM	3510C GC
Polychlorinated Biphenyls by EPA Method 8082									
8082	10I1863	RT11555-01	1,060.00	mL	10.00	mL	09/25/10 09:00	BWM	3510C GC
8082	10I1863	RT11555-02	1,060.00	mL	10.00	mL	09/25/10 09:00	BWM	3510C GC
8082	10I1863	RT11555-03	1,060.00	mL	10.00	mL	09/25/10 09:00	BWM	3510C GC
8082	10I1863	RT11555-04	1,060.00	mL	10.00	mL	09/25/10 09:00	BWM	3510C GC
Semivolatile Organics by GC/MS									
8270C	10I1861	RT11555-01	1,040.00	mL	1.00	mL	09/25/10 09:00	BWM	3510C MB
8270C	10I1861	RT11555-04	1,050.00	mL	1.00	mL	09/25/10 09:00	BWM	3510C MB
8270C	10I1861	RT11555-02	1,060.00	mL	1.00	mL	09/25/10 09:00	BWM	3510C MB
8270C	10I1861	RT11555-03	1,060.00	mL	1.00	mL	09/25/10 09:00	BWM	3510C MB
Total Metals by SW 846 Series Methods									
6010B	10I1960	RT11555-01	50.00	mL	50.00	mL	09/28/10 10:30	MDM	3005A
6010B	10I1960	RT11555-02	50.00	mL	50.00	mL	09/28/10 10:30	MDM	3005A
6010B	10I1960	RT11555-03	50.00	mL	50.00	mL	09/28/10 10:30	MDM	3005A
6010B	10I1960	RT11555-04	50.00	mL	50.00	mL	09/28/10 10:30	MDM	3005A
7470A	10I2202	RT11555-01	30.00	mL	50.00	mL	09/30/10 11:15	JRK	7470A
7470A	10I2202	RT11555-02	30.00	mL	50.00	mL	09/30/10 11:15	JRK	7470A
7470A	10I2202	RT11555-03	30.00	mL	50.00	mL	09/30/10 11:15	JRK	7470A
7470A	10I2202	RT11555-04	30.00	mL	50.00	mL	09/30/10 11:15	JRK	7470A
Volatile Organic Compounds by EPA 8260B									
8260B	10I2207	RT11555-03	5.00	mL	5.00	mL	09/30/10 10:27	DHC	5030B MS
8260B	10I2207	RT11555-04	5.00	mL	5.00	mL	09/30/10 10:27	DHC	5030B MS
8260B	10I2169	RT11555-01	5.00	mL	5.00	mL	09/29/10 17:31	NMD	5030B MS
8260B	10I2169	RT11555-02	5.00	mL	5.00	mL	09/29/10 17:31	NMD	5030B MS
8260B	10I2169	RT11555-05	5.00	mL	5.00	mL	09/29/10 17:31	NMD	5030B MS

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RT11555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Blank Analyzed: 09/29/10 (Lab Number:10I2169-BLK1, Batch: 10I2169)											
1,1,1-Trichloroethane			1.0	0.82	ug/L	ND					
1,1,2,2-Tetrachloroethane			1.0	0.21	ug/L	ND					
1,1,2-Trichloroethane			1.0	0.23	ug/L	ND					
1,1,2-Trichloro-1,2,2-trifluoroethane			1.0	0.31	ug/L	ND					
1,1-Dichloroethane			1.0	0.38	ug/L	ND					
1,1-Dichloroethene			1.0	0.29	ug/L	ND					
1,2,4-Trichlorobenzene			1.0	0.41	ug/L	ND					
1,2-Dibromo-3-chloropropane			1.0	0.39	ug/L	ND					
1,2-Dibromoethane			1.0	0.73	ug/L	ND					
1,2-Dichlorobenzene			1.0	0.79	ug/L	ND					
1,2-Dichloroethane			1.0	0.21	ug/L	ND					
1,2-Dichloropropane			1.0	0.72	ug/L	ND					
1,3-Dichlorobenzene			1.0	0.78	ug/L	ND					
1,4-Dichlorobenzene			1.0	0.84	ug/L	ND					
2-Butanone			10	1.3	ug/L	ND					
2-Hexanone			5.0	1.2	ug/L	ND					
4-Methyl-2-pentanone			5.0	2.1	ug/L	ND					
Acetone			10	3.0	ug/L	ND					
Benzene			1.0	0.41	ug/L	ND					
Bromodichloromethane			1.0	0.39	ug/L	ND					
Bromoform			1.0	0.26	ug/L	ND					
Bromomethane			1.0	0.69	ug/L	ND					
Carbon disulfide			1.0	0.19	ug/L	ND					
Carbon Tetrachloride			1.0	0.27	ug/L	ND					
Chlorobenzene			1.0	0.75	ug/L	ND					
Dibromochloromethane			1.0	0.32	ug/L	ND					
Chloroethane			1.0	0.32	ug/L	ND					
Chloroform			1.0	0.34	ug/L	ND					
Chloromethane			1.0	0.35	ug/L	ND					
cis-1,2-Dichloroethene			1.0	0.81	ug/L	ND					
cis-1,3-Dichloropropene			1.0	0.36	ug/L	ND					
Cyclohexane			1.0	0.18	ug/L	ND					
Dichlorodifluoromethane			1.0	0.68	ug/L	ND					
Ethylbenzene			1.0	0.74	ug/L	ND					
Isopropylbenzene			1.0	0.79	ug/L	ND					
Methyl Acetate			1.0	0.50	ug/L	ND					

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RT11555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Blank Analyzed: 09/29/10 (Lab Number:10I2169-BLK1, Batch: 10I2169)											
Methyl-t-Butyl Ether (MTBE)			1.0	0.16	ug/L	ND					
Methylcyclohexane			1.0	0.16	ug/L	ND					
Methylene Chloride			1.0	0.44	ug/L	ND					
Styrene			1.0	0.73	ug/L	ND					
Tetrachloroethene			1.0	0.36	ug/L	ND					
Toluene			1.0	0.51	ug/L	ND					
trans-1,2-Dichloroethene			1.0	0.90	ug/L	ND					
trans-1,3-Dichloropropene			1.0	0.37	ug/L	ND					
Trichloroethene			1.0	0.46	ug/L	ND					
Trichlorofluoromethane			1.0	0.88	ug/L	ND					
Vinyl chloride			1.0	0.90	ug/L	ND					
Xylenes, total			2.0	0.66	ug/L	ND					
<i>Surrogate:</i>					ug/L		95	66-137			
<i>1,2-Dichloroethane-d4</i>											
<i>Surrogate:</i>					ug/L		106	73-120			
<i>4-Bromofluorobenzene</i>											
<i>Surrogate: Toluene-d8</i>					ug/L		105	71-126			
LCS Analyzed: 09/29/10 (Lab Number:10I2169-BS1, Batch: 10I2169)											
1,1,1-Trichloroethane			1.0	0.82	ug/L	ND		73-126			
1,1,1,2-Tetrachloroethane			1.0	0.21	ug/L	ND		70-126			
1,1,2-Trichloroethane			1.0	0.23	ug/L	ND		76-122			
1,1,2-Trichloro-1,2,2-trifluoroethane			1.0	0.31	ug/L	ND		60-140			
1,1-Dichloroethane		25.0	1.0	0.38	ug/L	23.0	92	71-129			
1,1-Dichloroethene		25.0	1.0	0.29	ug/L	22.7	91	65-138			
1,2,4-Trichlorobenzene			1.0	0.41	ug/L	ND		70-122			
1,2-Dibromo-3-chloropropane			1.0	0.39	ug/L	ND		56-134			
1,2-Dibromoethane			1.0	0.73	ug/L	ND		77-120			
1,2-Dichlorobenzene		25.0	1.0	0.79	ug/L	24.5	98	77-120			
1,2-Dichloroethane		25.0	1.0	0.21	ug/L	22.3	89	75-127			
1,2-Dichloropropane			1.0	0.72	ug/L	ND		76-120			
1,3-Dichlorobenzene			1.0	0.78	ug/L	ND		77-120			
1,4-Dichlorobenzene			1.0	0.84	ug/L	ND		75-120			
2-Butanone			10	1.3	ug/L	ND		57-140			
2-Hexanone			5.0	1.2	ug/L	ND		65-127			
4-Methyl-2-pentanone			5.0	2.1	ug/L	ND		71-125			
Acetone			10	3.0	ug/L	ND		56-142			

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RT11555
Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
LCS Analyzed: 09/29/10 (Lab Number:10I2169-BS1, Batch: 10I2169)											
Benzene		25.0	1.0	0.41	ug/L	23.3	93	71-124			
Bromodichloromethane			1.0	0.39	ug/L	ND		80-122			
Bromoform			1.0	0.26	ug/L	ND		66-128			
Bromomethane			1.0	0.69	ug/L	ND		36-150			
Carbon disulfide			1.0	0.19	ug/L	ND		59-134			
Carbon Tetrachloride			1.0	0.27	ug/L	ND		72-134			
Chlorobenzene		25.0	1.0	0.75	ug/L	24.7	99	72-120			
Dibromochloromethane			1.0	0.32	ug/L	ND		75-125			
Chloroethane			1.0	0.32	ug/L	ND		69-136			
Chloroform			1.0	0.34	ug/L	ND		73-127			
Chloromethane			1.0	0.35	ug/L	ND		49-142			
cis-1,2-Dichloroethene		25.0	1.0	0.81	ug/L	23.1	92	74-124			
cis-1,3-Dichloropropene			1.0	0.36	ug/L	ND		74-124			
Cyclohexane			1.0	0.18	ug/L	ND		70-130			
Dichlorodifluoromethane			1.0	0.68	ug/L	ND		33-157			
Ethylbenzene		25.0	1.0	0.74	ug/L	24.2	97	77-123			
Isopropylbenzene			1.0	0.79	ug/L	ND		77-122			
Methyl Acetate			1.0	0.50	ug/L	ND		60-140			
Methyl-t-Butyl Ether (MTBE)		25.0	1.0	0.16	ug/L	19.4	78	64-127			
Methylcyclohexane			1.0	0.16	ug/L	ND		60-140			
Methylene Chloride			1.0	0.44	ug/L	ND		57-132			
Styrene			1.0	0.73	ug/L	ND		70-130			
Tetrachloroethene		25.0	1.0	0.36	ug/L	25.6	102	74-122			
Toluene		25.0	1.0	0.51	ug/L	23.0	92	70-122			
trans-1,2-Dichloroethene		25.0	1.0	0.90	ug/L	23.7	95	73-127			
trans-1,3-Dichloropropene			1.0	0.37	ug/L	ND		72-123			
Trichloroethene		25.0	1.0	0.46	ug/L	24.0	96	74-123			
Trichlorofluoromethane			1.0	0.88	ug/L	ND		62-152			
Vinyl chloride			1.0	0.90	ug/L	ND		65-133			
Xylenes, total		75.0	2.0	0.66	ug/L	72.7	97	76-122			
Surrogate:					ug/L		96	66-137			
<i>1,2-Dichloroethane-d4</i>											
Surrogate:					ug/L		108	73-120			
<i>4-Bromofluorobenzene</i>											
Surrogate: Toluene-d8					ug/L		104	71-126			

Matrix Spike Analyzed: 09/30/10 (Lab Number:10I2169-MS1, Batch: 10I2169)

QC Source Sample: RT11555-02

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RT11555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Matrix Spike Analyzed: 09/30/10 (Lab Number:10I2169-MS1, Batch: 10I2169)											
QC Source Sample: RT11555-02											
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L	ND		73-126			D03
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L	ND		70-126			D03
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L	ND		76-122			D03
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.5	ug/L	ND		60-140			D03
1,1-Dichloroethane	ND	125	5.0	1.9	ug/L	117	94	71-129			D03
1,1-Dichloroethene	ND	125	5.0	1.5	ug/L	118	94	65-138			D03
1,2,4-Trichlorobenzene	ND		5.0	2.0	ug/L	ND		70-122			D03
1,2-Dibromo-3-chloropropane	ND		5.0	2.0	ug/L	ND		56-134			D03
1,2-Dibromoethane	ND		5.0	3.6	ug/L	ND		77-120			D03
1,2-Dichlorobenzene	ND	125	5.0	4.0	ug/L	123	98	77-120			D03
1,2-Dichloroethane	ND	125	5.0	1.1	ug/L	116	93	75-127			D03
1,2-Dichloropropane	ND		5.0	3.6	ug/L	ND		76-120			D03
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L	ND		77-120			D03
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L	ND		75-120			D03
2-Butanone	ND		50	6.6	ug/L	ND		57-140			D03
2-Hexanone	ND		25	6.2	ug/L	ND		65-127			D03
4-Methyl-2-pentanone	ND		25	10	ug/L	ND		71-125			D03
Acetone	ND		50	15	ug/L	ND		56-142			D03
Benzene	37.8	125	5.0	2.0	ug/L	153	92	71-124			D03
Bromodichloromethane	ND		5.0	1.9	ug/L	ND		80-122			D03
Bromoform	ND		5.0	1.3	ug/L	ND		66-128			D03
Bromomethane	ND		5.0	3.4	ug/L	ND		36-150			D03
Carbon disulfide	ND		5.0	0.97	ug/L	ND		59-134			D03
Carbon Tetrachloride	ND		5.0	1.3	ug/L	ND		72-134			D03
Chlorobenzene	ND	125	5.0	3.8	ug/L	125	100	72-120			D03
Dibromochloromethane	ND		5.0	1.6	ug/L	ND		75-125			D03
Chloroethane	ND		5.0	1.6	ug/L	ND		69-136			D03
Chloroform	4.20		5.0	1.7	ug/L	4.15		73-127			D03,J
Chloromethane	ND		5.0	1.7	ug/L	ND		49-142			D03
cis-1,2-Dichloroethene	ND	125	5.0	4.0	ug/L	116	93	74-124			D03
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L	ND		74-124			D03
Cyclohexane	ND		5.0	0.90	ug/L	ND		70-130			D03
Dichlorodifluoromethane	ND		5.0	3.4	ug/L	ND		33-157			D03
Ethylbenzene	39.2	125	5.0	3.7	ug/L	156	94	77-123			D03
Isopropylbenzene	ND		5.0	4.0	ug/L	ND		77-122			D03
Methyl Acetate	ND		5.0	2.5	ug/L	ND		60-140			D03

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RT11555
Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Matrix Spike Analyzed: 09/30/10 (Lab Number:10I2169-MS1, Batch: 10I2169)											
QC Source Sample: RT11555-02											
Methyl-t-Butyl Ether (MTBE)	ND	125	5.0	0.80	ug/L	103	83	64-127			D03
Methylcyclohexane	ND		5.0	0.80	ug/L	ND		60-140			D03
Methylene Chloride	ND		5.0	2.2	ug/L	ND		57-132			D03
Styrene	ND		5.0	3.6	ug/L	ND		70-130			D03
Tetrachloroethene	ND	125	5.0	1.8	ug/L	124	99	74-122			D03
Toluene	18.0	125	5.0	2.6	ug/L	133	92	70-122			D03
trans-1,2-Dichloroethene	ND	125	5.0	4.5	ug/L	120	96	73-127			D03
trans-1,3-Dichloropropene	ND		5.0	1.8	ug/L	ND		72-123			D03
Trichloroethene	ND	125	5.0	2.3	ug/L	120	96	74-123			D03
Trichlorofluoromethane	ND		5.0	4.4	ug/L	ND		62-152			D03
Vinyl chloride	ND		5.0	4.5	ug/L	ND		65-133			D03
Xylenes, total	96.6	375	10	3.3	ug/L	454	95	76-122			D03
<i>Surrogate:</i>					ug/L		96	66-137			D03
<i>1,2-Dichloroethane-d4</i>					ug/L		106	73-120			D03
<i>Surrogate:</i>					ug/L		103	71-126			D03
<i>4-Bromofluorobenzene</i>					ug/L						D03
<i>Surrogate: Toluene-d8</i>					ug/L						D03
Matrix Spike Dup Analyzed: 09/30/10 (Lab Number:10I2169-MSD1, Batch: 10I2169)											
QC Source Sample: RT11555-02											
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L	ND		73-126		15	D03
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L	ND		70-126		15	D03
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L	ND		76-122		15	D03
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.5	ug/L	ND		60-140		20	D03
1,1-Dichloroethane	ND	125	5.0	1.9	ug/L	119	95	71-129	1	20	D03
1,1-Dichloroethene	ND	125	5.0	1.5	ug/L	121	97	65-138	3	16	D03
1,2,4-Trichlorobenzene	ND		5.0	2.0	ug/L	ND		70-122		20	D03
1,2-Dibromo-3-chloropropane	ND		5.0	2.0	ug/L	ND		56-134		15	D03
1,2-Dibromoethane	ND		5.0	3.6	ug/L	ND		77-120		15	D03
1,2-Dichlorobenzene	ND	125	5.0	4.0	ug/L	126	101	77-120	3	20	D03
1,2-Dichloroethane	ND	125	5.0	1.1	ug/L	118	94	75-127	2	20	D03
1,2-Dichloropropane	ND		5.0	3.6	ug/L	ND		76-120		20	D03
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L	ND		77-120		20	D03
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L	ND		75-120		20	D03
2-Butanone	ND		50	6.6	ug/L	ND		57-140		20	D03
2-Hexanone	ND		25	6.2	ug/L	ND		65-127		15	D03

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RT11555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Matrix Spike Dup Analyzed: 09/30/10 (Lab Number:10I2169-MSD1, Batch: 10I2169)											
QC Source Sample: RT11555-02											
4-Methyl-2-pentanone	ND		25	10	ug/L	ND		71-125		35	D03
Acetone	ND		50	15	ug/L	ND		56-142		15	D03
Benzene	37.8	125	5.0	2.0	ug/L	155	94	71-124	1	13	D03
Bromodichloromethane	ND		5.0	1.9	ug/L	ND		80-122		15	D03
Bromoform	ND		5.0	1.3	ug/L	ND		66-128		15	D03
Bromomethane	ND		5.0	3.4	ug/L	ND		36-150		15	D03
Carbon disulfide	ND		5.0	0.97	ug/L	ND		59-134		15	D03
Carbon Tetrachloride	ND		5.0	1.3	ug/L	ND		72-134		15	D03
Chlorobenzene	ND	125	5.0	3.8	ug/L	127	102	72-120	1	25	D03
Dibromochloromethane	ND		5.0	1.6	ug/L	ND		75-125		15	D03
Chloroethane	ND		5.0	1.6	ug/L	ND		69-136		15	D03
Chloroform	4.20		5.0	1.7	ug/L	4.15		73-127	0	20	D03,J
Chloromethane	ND		5.0	1.7	ug/L	ND		49-142		15	D03
cis-1,2-Dichloroethene	ND	125	5.0	4.0	ug/L	121	97	74-124	4	15	D03
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L	ND		74-124		15	D03
Cyclohexane	ND		5.0	0.90	ug/L	ND		70-130		20	D03
Dichlorodifluoromethane	ND		5.0	3.4	ug/L	ND		33-157		20	D03
Ethylbenzene	39.2	125	5.0	3.7	ug/L	160	96	77-123	2	15	D03
Isopropylbenzene	ND		5.0	4.0	ug/L	ND		77-122		20	D03
Methyl Acetate	ND		5.0	2.5	ug/L	ND		60-140		20	D03
Methyl-t-Butyl Ether (MTBE)	ND	125	5.0	0.80	ug/L	103	82	64-127	0.4	37	D03
Methylcyclohexane	ND		5.0	0.80	ug/L	ND		60-140		20	D03
Methylene Chloride	ND		5.0	2.2	ug/L	ND		57-132		15	D03
Styrene	ND		5.0	3.6	ug/L	ND		70-130		20	D03
Tetrachloroethene	ND	125	5.0	1.8	ug/L	128	102	74-122	3	20	D03
Toluene	18.0	125	5.0	2.6	ug/L	137	95	70-122	2	15	D03
trans-1,2-Dichloroethene	ND	125	5.0	4.5	ug/L	122	98	73-127	1	20	D03
trans-1,3-Dichloropropene	ND		5.0	1.8	ug/L	ND		72-123		15	D03
Trichloroethene	ND	125	5.0	2.3	ug/L	122	98	74-123	2	16	D03
Trichlorofluoromethane	ND		5.0	4.4	ug/L	ND		62-152		20	D03
Vinyl chloride	ND		5.0	4.5	ug/L	ND		65-133		15	D03
Xylenes, total	96.6	375	10	3.3	ug/L	462	97	76-122	2	16	D03

Surrogate:					ug/L		97	66-137			D03
1,2-Dichloroethane-d4					ug/L		106	73-120			D03
Surrogate:					ug/L		102	71-126			D03
4-Bromofluorobenzene					ug/L						D03
Surrogate: Toluene-d8					ug/L						D03

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RT11555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

Volatile Organic Compounds by EPA 8260B

Blank Analyzed: 09/30/10 (Lab Number:10I2207-BLK1, Batch: 10I2207)

1,1,1-Trichloroethane	1.0	0.82	ug/L	ND
1,1,1,2-Tetrachloroethane	1.0	0.21	ug/L	ND
1,1,1,2-Trichloroethane	1.0	0.23	ug/L	ND
1,1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	0.31	ug/L	ND
1,1-Dichloroethane	1.0	0.38	ug/L	ND
1,1-Dichloroethene	1.0	0.29	ug/L	ND
1,2,4-Trichlorobenzene	1.0	0.41	ug/L	ND
1,2-Dibromo-3-chloropropane	1.0	0.39	ug/L	ND
1,2-Dibromoethane	1.0	0.73	ug/L	ND
1,2-Dichlorobenzene	1.0	0.79	ug/L	ND
1,2-Dichloroethane	1.0	0.21	ug/L	ND
1,2-Dichloropropane	1.0	0.72	ug/L	ND
1,3-Dichlorobenzene	1.0	0.78	ug/L	ND
1,4-Dichlorobenzene	1.0	0.84	ug/L	ND
2-Butanone	10	1.3	ug/L	ND
2-Hexanone	5.0	1.2	ug/L	ND
4-Methyl-2-pentanone	5.0	2.1	ug/L	ND
Acetone	10	3.0	ug/L	ND
Benzene	1.0	0.41	ug/L	ND
Bromodichloromethane	1.0	0.39	ug/L	ND
Bromoform	1.0	0.26	ug/L	ND
Bromomethane	1.0	0.69	ug/L	ND
Carbon disulfide	1.0	0.19	ug/L	ND
Carbon Tetrachloride	1.0	0.27	ug/L	ND
Chlorobenzene	1.0	0.75	ug/L	ND
Dibromochloromethane	1.0	0.32	ug/L	ND
Chloroethane	1.0	0.32	ug/L	ND
Chloroform	1.0	0.34	ug/L	ND
Chloromethane	1.0	0.35	ug/L	ND
cis-1,2-Dichloroethene	1.0	0.81	ug/L	ND
cis-1,3-Dichloropropene	1.0	0.36	ug/L	ND
Cyclohexane	1.0	0.18	ug/L	ND
Dichlorodifluoromethane	1.0	0.68	ug/L	ND
Ethylbenzene	1.0	0.74	ug/L	ND
Isopropylbenzene	1.0	0.79	ug/L	ND
Methyl Acetate	1.0	0.50	ug/L	ND
Methyl-t-Butyl Ether (MTBE)	1.0	0.16	ug/L	ND
Methylcyclohexane	1.0	0.16	ug/L	ND

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Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

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Reported: 10/15/10 09:06

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Blank Analyzed: 09/30/10 (Lab Number:10I2207-BLK1, Batch: 10I2207)											
Methylene Chloride			1.0	0.44	ug/L	ND					
Styrene			1.0	0.73	ug/L	ND					
Tetrachloroethene			1.0	0.36	ug/L	ND					
Toluene			1.0	0.51	ug/L	ND					
trans-1,2-Dichloroethene			1.0	0.90	ug/L	ND					
trans-1,3-Dichloropropene			1.0	0.37	ug/L	ND					
Trichloroethene			1.0	0.46	ug/L	ND					
Trichlorofluoromethane			1.0	0.88	ug/L	ND					
Vinyl chloride			1.0	0.90	ug/L	ND					
Xylenes, total			2.0	0.66	ug/L	ND					
<i>Surrogate:</i>					<i>ug/L</i>		<i>95</i>	<i>66-137</i>			
<i>1,2-Dichloroethane-d4</i>											
<i>Surrogate:</i>					<i>ug/L</i>		<i>106</i>	<i>73-120</i>			
<i>4-Bromofluorobenzene</i>											
<i>Surrogate: Toluene-d8</i>					<i>ug/L</i>		<i>107</i>	<i>71-126</i>			
LCS Analyzed: 09/30/10 (Lab Number:10I2207-BS1, Batch: 10I2207)											
1,1,1-Trichloroethane			1.0	0.82	ug/L	ND		73-126			
1,1,2,2-Tetrachloroethane			1.0	0.21	ug/L	ND		70-126			
1,1,2-Trichloroethane			1.0	0.23	ug/L	ND		76-122			
1,1,2-Trichloro-1,2,2-trifluoroethane			1.0	0.31	ug/L	ND		60-140			
1,1-Dichloroethane		25.0	1.0	0.38	ug/L	22.1	88	71-129			
1,1-Dichloroethene		25.0	1.0	0.29	ug/L	22.6	90	65-138			
1,2,4-Trichlorobenzene			1.0	0.41	ug/L	ND		70-122			
1,2-Dibromo-3-chloropropane			1.0	0.39	ug/L	ND		56-134			
1,2-Dibromoethane			1.0	0.73	ug/L	ND		77-120			
1,2-Dichlorobenzene		25.0	1.0	0.79	ug/L	24.1	96	77-120			
1,2-Dichloroethane		25.0	1.0	0.21	ug/L	22.1	88	75-127			
1,2-Dichloropropane			1.0	0.72	ug/L	ND		76-120			
1,3-Dichlorobenzene			1.0	0.78	ug/L	ND		77-120			
1,4-Dichlorobenzene			1.0	0.84	ug/L	ND		75-120			
2-Butanone			10	1.3	ug/L	ND		57-140			
2-Hexanone			5.0	1.2	ug/L	ND		65-127			
4-Methyl-2-pentanone			5.0	2.1	ug/L	ND		71-125			
Acetone			10	3.0	ug/L	ND		56-142			
Benzene		25.0	1.0	0.41	ug/L	22.1	88	71-124			
Bromodichloromethane			1.0	0.39	ug/L	ND		80-122			

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
LCS Analyzed: 09/30/10 (Lab Number:10I2207-BS1, Batch: 10I2207)											
Bromoform			1.0	0.26	ug/L	ND		66-128			
Bromomethane			1.0	0.69	ug/L	ND		36-150			
Carbon disulfide			1.0	0.19	ug/L	ND		59-134			
Carbon Tetrachloride			1.0	0.27	ug/L	ND		72-134			
Chlorobenzene		25.0	1.0	0.75	ug/L	24.1	96	72-120			
Dibromochloromethane			1.0	0.32	ug/L	ND		75-125			
Chloroethane			1.0	0.32	ug/L	ND		69-136			
Chloroform			1.0	0.34	ug/L	ND		73-127			
Chloromethane			1.0	0.35	ug/L	ND		49-142			
cis-1,2-Dichloroethene		25.0	1.0	0.81	ug/L	22.2	89	74-124			
cis-1,3-Dichloropropene			1.0	0.36	ug/L	ND		74-124			
Cyclohexane			1.0	0.18	ug/L	ND		70-130			
Dichlorodifluoromethane			1.0	0.68	ug/L	ND		33-157			
Ethylbenzene		25.0	1.0	0.74	ug/L	23.2	93	77-123			
Isopropylbenzene			1.0	0.79	ug/L	ND		77-122			
Methyl Acetate			1.0	0.50	ug/L	ND		60-140			
Methyl-t-Butyl Ether (MTBE)		25.0	1.0	0.16	ug/L	19.0	76	64-127			
Methylcyclohexane			1.0	0.16	ug/L	ND		60-140			
Methylene Chloride			1.0	0.44	ug/L	ND		57-132			
Styrene			1.0	0.73	ug/L	ND		70-130			
Tetrachloroethene		25.0	1.0	0.36	ug/L	24.6	99	74-122			
Toluene		25.0	1.0	0.51	ug/L	22.2	89	70-122			
trans-1,2-Dichloroethene		25.0	1.0	0.90	ug/L	22.5	90	73-127			
trans-1,3-Dichloropropene			1.0	0.37	ug/L	ND		72-123			
Trichloroethene		25.0	1.0	0.46	ug/L	22.5	90	74-123			
Trichlorofluoromethane			1.0	0.88	ug/L	ND		62-152			
Vinyl chloride			1.0	0.90	ug/L	ND		65-133			
Xylenes, total		75.0	2.0	0.66	ug/L	69.5	93	76-122			
Surrogate:					ug/L		97	66-137			
1,2-Dichloroethane-d4					ug/L		106	73-120			
Surrogate:					ug/L						
4-Bromofluorobenzene					ug/L		106	71-126			
Surrogate: Toluene-d8					ug/L						

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Semivolatile Organics by GC/MS											
Blank Analyzed: 10/09/10 (Lab Number:1011861-BLK1, Batch: 1011861)											
2,4,5-Trichlorophenol			25	0.48	ug/L	ND					
2,4,6-Trichlorophenol			10	0.61	ug/L	ND					
2,4-Dichlorophenol			10	0.51	ug/L	ND					
2,4-Dimethylphenol			10	0.50	ug/L	ND					
2,4-Dinitrophenol			50	2.2	ug/L	ND					
2,4-Dinitrotoluene			10	0.45	ug/L	ND					
2,6-Dinitrotoluene			10	0.40	ug/L	ND					
2-Chloronaphthalene			10	0.46	ug/L	ND					
2-Chlorophenol			10	0.53	ug/L	ND					
2-Methylnaphthalene			10	0.60	ug/L	ND					
2-Methylphenol			10	0.40	ug/L	ND					
2-Nitroaniline			50	0.42	ug/L	ND					
2-Nitrophenol			10	0.48	ug/L	ND					
3,3'-Dichlorobenzidine			20	0.40	ug/L	ND					
3-Nitroaniline			50	0.48	ug/L	ND					
4,6-Dinitro-2-methylphenol			50	2.2	ug/L	ND					
4-Bromophenyl phenyl ether			10	0.45	ug/L	ND					
4-Chloro-3-methylphenol			10	0.45	ug/L	ND					
4-Chloroaniline			10	0.59	ug/L	ND					
4-Chlorophenyl phenyl ether			10	0.35	ug/L	ND					
4-Methylphenol			5.0	0.36	ug/L	ND					
4-Nitroaniline			50	0.25	ug/L	ND					
4-Nitrophenol			50	1.5	ug/L	ND					
Acenaphthene			10	0.41	ug/L	ND					
Acenaphthylene			10	0.38	ug/L	ND					
Acetophenone			10	0.54	ug/L	ND					
Anthracene			10	0.28	ug/L	ND					
Atrazine			10	0.46	ug/L	ND					
Benzaldehyde			50	0.27	ug/L	ND					
Benzo(a)anthracene			10	0.36	ug/L	ND					
Benzo(a)pyrene			10	0.47	ug/L	ND					
Benzo(b)fluoranthene			10	0.34	ug/L	ND					
Benzo(ghi)perylene			10	0.35	ug/L	ND					
Benzo(k)fluoranthene			10	0.73	ug/L	ND					
Biphenyl			10	0.65	ug/L	ND					

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Work Order: RT11555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Semivolatile Organics by GC/MS											
Blank Analyzed: 10/09/10 (Lab Number:1011861-BLK1, Batch: 1011861)											
Bis(2-chloroethoxy)methane			10	0.35	ug/L	ND					
Bis(2-chloroethyl)ether			10	0.40	ug/L	ND					
2,2'-Oxybis(1-Chloropropane)			10	0.52	ug/L	ND					
Bis(2-ethylhexyl)phthalate			10	1.8	ug/L	ND					
Butyl benzyl phthalate			10	0.42	ug/L	ND					
Caprolactam			10	2.2	ug/L	ND					
Carbazole			5.0	0.30	ug/L	ND					
Chrysene			10	0.33	ug/L	ND					
Dibenzo(a,h)anthracene			10	0.42	ug/L	ND					
Dibenzofuran			10	0.51	ug/L	ND					
Diethyl phthalate			10	0.22	ug/L	ND					
Dimethyl phthalate			10	0.36	ug/L	ND					
Di-n-butyl phthalate			10	0.31	ug/L	ND					
Di-n-octyl phthalate			10	0.47	ug/L	ND					
Fluoranthene			10	0.40	ug/L	ND					
Fluorene			10	0.36	ug/L	ND					
Hexachlorobenzene			10	0.51	ug/L	ND					
Hexachlorobutadiene			10	0.68	ug/L	ND					
Hexachlorocyclopentadiene			10	0.59	ug/L	ND					
Hexachloroethane			10	0.59	ug/L	ND					
Indeno(1,2,3-cd)pyrene			10	0.47	ug/L	ND					
Isophorone			10	0.43	ug/L	ND					
Naphthalene			10	0.76	ug/L	ND					
Nitrobenzene			10	0.29	ug/L	ND					
N-Nitrosodi-n-propylamine			10	0.54	ug/L	ND					
N-Nitrosodiphenylamine			10	0.51	ug/L	ND					
Pentachlorophenol			50	2.2	ug/L	ND					
Phenanthrene			10	0.44	ug/L	ND					
Phenol			10	0.39	ug/L	ND					
Pyrene			10	0.34	ug/L	ND					
<i>Surrogate:</i>					<i>ug/L</i>		94	52-132			
<i>2,4,6-Tribromophenol</i>											
<i>Surrogate:</i>					<i>ug/L</i>		69	48-120			
<i>2-Fluorobiphenyl</i>											
<i>Surrogate:</i>					<i>ug/L</i>		37	20-120			
<i>2-Fluorophenol</i>											

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Reported: 10/15/10 09:06

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Semivolatiles by GC/MS</u>											
Blank Analyzed: 10/09/10 (Lab Number:1011861-BLK1, Batch: 1011861)											
Surrogate:					ug/L		67	46-120			
Nitrobenzene-d5											
Surrogate: Phenol-d5					ug/L		28	16-120			
Surrogate:					ug/L		77	24-136			
p-Terphenyl-d14											
LCS Analyzed: 10/09/10 (Lab Number:1011861-BS1, Batch: 1011861)											
1,2,4-Trichlorobenzene		100	10	0.44	ug/L	65.6	66	40-120			
1,2-Dichlorobenzene			10	0.40	ug/L	ND		33-120			
1,3-Dichlorobenzene			10	0.48	ug/L	ND		28-120			
2,4,5-Trichlorophenol			50	0.48	ug/L	ND		65-126			
2,4,6-Trichlorophenol			10	0.61	ug/L	ND		64-120			
2,4-Dichlorophenol			10	0.51	ug/L	ND		64-120			
2,4-Dimethylphenol			10	0.50	ug/L	ND		57-120			
2,4-Dinitrophenol			50	2.2	ug/L	ND		42-153			
2,4-Dinitrotoluene		100	10	0.45	ug/L	93.7	94	59-125			
2,6-Dinitrotoluene			10	0.40	ug/L	ND		74-134			
2-Chloronaphthalene			10	0.46	ug/L	ND		52-120			
2-Chlorophenol		100	10	0.53	ug/L	62.9	63	48-120			
2-Methylnaphthalene			10	0.60	ug/L	ND		48-120			
2-Methylphenol			10	0.40	ug/L	ND		39-120			
2-Nitroaniline			50	0.42	ug/L	ND		67-136			
2-Nitrophenol			10	0.48	ug/L	ND		59-120			
3,3'-Dichlorobenzidine			20	0.40	ug/L	ND		33-140			
3-Nitroaniline			50	0.48	ug/L	ND		69-129			
4,6-Dinitro-2-methylphenol			50	2.2	ug/L	ND		64-159			
4-Bromophenyl phenyl ether			10	0.45	ug/L	ND		71-126			
4-Chloro-3-methylphenol		100	10	0.45	ug/L	85.5	86	64-120			
4-Chloroaniline			10	0.59	ug/L	ND		60-124			
4-Chlorophenyl phenyl ether			10	0.35	ug/L	ND		71-122			
4-Methylphenol			5.0	0.36	ug/L	ND		36-120			
4-Nitroaniline			50	0.25	ug/L	ND		64-135			
4-Nitrophenol		100	50	1.5	ug/L	29.4	29	16-120			J
Acenaphthene		100	10	0.41	ug/L	81.4	81	60-120			
Acenaphthylene			10	0.38	ug/L	ND		63-120			
Acetophenone			10	0.54	ug/L	ND		45-120			
Anthracene			10	0.28	ug/L	ND		69-131			
Atrazine			10	0.46	ug/L	ND		70-129			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Semivolatile Organics by GC/MS</u>											
LCS Analyzed: 10/09/10 (Lab Number:1011861-BS1, Batch: 1011861)											
Benzaldehyde			50	0.27	ug/L	ND		30-140			
Benzo(a)anthracene			10	0.36	ug/L	ND		73-138			
Benzo(a)pyrene			10	0.47	ug/L	ND		74-126			
Benzo(b)fluoranthene			10	0.34	ug/L	ND		75-133			
Benzo(ghi)perylene			10	0.35	ug/L	ND		66-152			
Benzo(k)fluoranthene			10	0.73	ug/L	ND		75-133			
Biphenyl			10	0.65	ug/L	ND		30-140			
Bis(2-chloroethoxy)methane			10	0.35	ug/L	ND		62-120			
Bis(2-chloroethyl)ether			10	0.40	ug/L	ND		51-120			
2,2'-Oxybis(1-Chloropropane)			10	0.52	ug/L	ND		47-120			
Bis(2-ethylhexyl)phthalate		100	10	1.8	ug/L	88.3	88	69-136			
Butyl benzyl phthalate			10	0.42	ug/L	0.690		62-149			J
Caprolactam			10	2.2	ug/L	ND		30-140			
Carbazole			5.0	0.30	ug/L	ND		68-133			
Chrysene			10	0.33	ug/L	ND		69-140			
Dibenzo(a,h)anthracene			10	0.42	ug/L	ND		67-144			
Dibenzofuran			10	0.51	ug/L	ND		66-120			
Diethyl phthalate			10	0.22	ug/L	ND		78-128			
Dimethyl phthalate			10	0.36	ug/L	ND		73-127			
Di-n-butyl phthalate			10	0.31	ug/L	0.360		67-132			J
Di-n-octyl phthalate			10	0.47	ug/L	ND		72-145			
Fluoranthene			10	0.40	ug/L	1.13		67-133			J
Fluorene		100	10	0.36	ug/L	89.4	89	66-129			
Hexachlorobenzene			10	0.51	ug/L	ND		38-131			
Hexachlorobutadiene			10	0.68	ug/L	ND		30-120			
Hexachlorocyclopentadiene			10	0.59	ug/L	ND		23-120			
Hexachloroethane		100	10	0.59	ug/L	56.4	56	25-120			
Indeno(1,2,3-cd)pyrene			10	0.47	ug/L	ND		69-146			
Isophorone			10	0.43	ug/L	ND		64-120			
Naphthalene			10	0.76	ug/L	ND		48-120			
Nitrobenzene			10	0.29	ug/L	ND		52-120			
N-Nitrosodi-n-propylamine		100	10	0.54	ug/L	73.3	73	56-120			
N-Nitrosodiphenylamine			10	0.51	ug/L	ND		25-125			
Pentachlorophenol		100	50	2.2	ug/L	92.7	93	39-136			
Phenanthrene			10	0.44	ug/L	ND		67-130			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Semivolatiles Organics by GC/MS</u>											
LCS Analyzed: 10/09/10 (Lab Number:10I1861-BS1, Batch: 10I1861)											
Phenol		100	10	0.39	ug/L	29.9	30	17-120			
Pyrene		100	10	0.34	ug/L	91.2	91	58-136			
<i>Surrogate:</i>					ug/L		109	52-132			
<i>2,4,6-Tribromophenol</i>											
<i>Surrogate:</i>					ug/L		82	48-120			
<i>2-Fluorobiphenyl</i>											
<i>Surrogate:</i>					ug/L		40	20-120			
<i>2-Fluorophenol</i>											
<i>Surrogate:</i>					ug/L		76	46-120			
<i>Nitrobenzene-d5</i>											
<i>Surrogate: Phenol-d5</i>					ug/L		30	16-120			
<i>Surrogate:</i>					ug/L		86	24-136			
<i>p-Terphenyl-d14</i>											
LCS Dup Analyzed: 10/09/10 (Lab Number:10I1861-BS1, Batch: 10I1861)											
1,2,4-Trichlorobenzene		100	10	0.44	ug/L	68.3	68	40-120	4	30	
1,2-Dichlorobenzene			10	0.40	ug/L	ND		33-120		29	
1,3-Dichlorobenzene			10	0.48	ug/L	ND		28-120		37	
2,4,5-Trichlorophenol			50	0.48	ug/L	ND		65-126		18	
2,4,6-Trichlorophenol			10	0.61	ug/L	ND		64-120		19	
2,4-Dichlorophenol			10	0.51	ug/L	ND		64-120		19	
2,4-Dimethylphenol			10	0.50	ug/L	ND		57-120		42	
2,4-Dinitrophenol			50	2.2	ug/L	ND		42-153		22	
2,4-Dinitrotoluene		100	10	0.45	ug/L	97.8	98	59-125	4	20	
2,6-Dinitrotoluene			10	0.40	ug/L	ND		74-134		15	
2-Chloronaphthalene			10	0.46	ug/L	ND		52-120		21	
2-Chlorophenol		100	10	0.53	ug/L	65.1	65	48-120	3	25	
2-Methylnaphthalene			10	0.60	ug/L	ND		48-120		21	
2-Methylphenol			10	0.40	ug/L	ND		39-120		27	
2-Nitroaniline			50	0.42	ug/L	ND		67-136		15	
2-Nitrophenol			10	0.48	ug/L	ND		59-120		18	
3,3'-Dichlorobenzidine			20	0.40	ug/L	ND		33-140		25	
3-Nitroaniline			50	0.48	ug/L	ND		69-129		19	
4,6-Dinitro-2-methylphenol			50	2.2	ug/L	ND		64-159		15	
4-Bromophenyl phenyl ether			10	0.45	ug/L	ND		71-126		15	
4-Chloro-3-methylphenol		100	10	0.45	ug/L	86.8	87	64-120	2	27	
4-Chloroaniline			10	0.59	ug/L	ND		60-124		22	
4-Chlorophenyl phenyl ether			10	0.35	ug/L	ND		71-122		16	
4-Methylphenol			5.0	0.36	ug/L	ND		36-120		24	

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Semivolatile Organics by GC/MS</u>											
LCS Dup Analyzed: 10/09/10 (Lab Number:1011861-BSD1, Batch: 1011861)											
4-Nitroaniline			50	0.25	ug/L	ND		64-135		24	
4-Nitrophenol		100	50	1.5	ug/L	32.4	32	16-120	9	48	J
Acenaphthene		100	10	0.41	ug/L	81.7	82	60-120	0.4	24	
Acenaphthylene			10	0.38	ug/L	ND		63-120		18	
Acetophenone			10	0.54	ug/L	ND		45-120		20	
Anthracene			10	0.28	ug/L	ND		69-131		15	
Atrazine			10	0.46	ug/L	ND		70-129		20	
Benzaldehyde			50	0.27	ug/L	ND		30-140		20	
Benzo(a)anthracene			10	0.36	ug/L	ND		73-138		15	
Benzo(a)pyrene			10	0.47	ug/L	ND		74-126		15	
Benzo(b)fluoranthene			10	0.34	ug/L	ND		75-133		15	
Benzo(ghi)perylene			10	0.35	ug/L	ND		66-152		15	
Benzo(k)fluoranthene			10	0.73	ug/L	ND		75-133		22	
Biphenyl			10	0.65	ug/L	ND		30-140		20	
Bis(2-chloroethoxy)methane			10	0.35	ug/L	ND		62-120		17	
Bis(2-chloroethyl)ether			10	0.40	ug/L	ND		51-120		21	
2,2'-Oxybis(1-Chloropropane)			10	0.52	ug/L	ND		47-120		24	
Bis(2-ethylhexyl)phthalate		100	10	1.8	ug/L	94.2	94	69-136	6	15	
Butyl benzyl phthalate			10	0.42	ug/L	0.730		62-149	6	16	J
Caprolactam			10	2.2	ug/L	ND		30-140		20	
Carbazole			5.0	0.30	ug/L	ND		68-133		20	
Chrysene			10	0.33	ug/L	ND		69-140		15	
Dibenzo(a,h)anthracene			10	0.42	ug/L	ND		67-144		15	
Dibenzofuran			10	0.51	ug/L	ND		66-120		15	
Diethyl phthalate			10	0.22	ug/L	ND		78-128		15	
Dimethyl phthalate			10	0.36	ug/L	ND		73-127		15	
Di-n-butyl phthalate			10	0.31	ug/L	0.540		67-132	40	15	J
Di-n-octyl phthalate			10	0.47	ug/L	ND		72-145		16	
Fluoranthene			10	0.40	ug/L	1.18		67-133	4	15	J
Fluorene		100	10	0.36	ug/L	90.9	91	66-129	2	15	
Hexachlorobenzene			10	0.51	ug/L	ND		38-131		15	
Hexachlorobutadiene			10	0.68	ug/L	ND		30-120		44	
Hexachlorocyclopentadiene			10	0.59	ug/L	ND		23-120		49	
Hexachloroethane		100	10	0.59	ug/L	61.4	61	25-120	8	46	
Indeno(1,2,3-cd)pyrene			10	0.47	ug/L	ND		69-146		15	

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Semivolatiles by GC/MS</u>											
LCS Dup Analyzed: 10/09/10 (Lab Number:1011861-BSD1, Batch: 1011861)											
Isophorone			10	0.43	ug/L	ND		64-120		17	
Naphthalene			10	0.76	ug/L	ND		48-120		29	
Nitrobenzene			10	0.29	ug/L	ND		52-120		24	
N-Nitrosodi-n-propylamine		100	10	0.54	ug/L	74.8	75	56-120	2	31	
N-Nitrosodiphenylamine			10	0.51	ug/L	ND		25-125		15	
Pentachlorophenol		100	50	2.2	ug/L	98.7	99	39-136	6	37	
Phenanthrene			10	0.44	ug/L	ND		67-130		15	
Phenol		100	10	0.39	ug/L	30.0	30	17-120	0.3	34	
Pyrene		100	10	0.34	ug/L	94.5	95	58-136	4	19	

Surrogate: 2,4,6-Tribromophenol					ug/L		115	52-132			
Surrogate: 2-Fluorobiphenyl					ug/L		82	48-120			
Surrogate: 2-Fluorophenol					ug/L		42	20-120			
Surrogate: Nitrobenzene-d5					ug/L		79	46-120			
Surrogate: Phenol-d5					ug/L		30	16-120			
Surrogate: p-Terphenyl-d14					ug/L		92	24-136			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Organochlorine Pesticides by EPA Method 8081A											
Blank Analyzed: 09/28/10 (Lab Number:1011862-BLK1, Batch: 1011862)											
4,4'-DDD			0.050	0.0092	ug/L	ND					
4,4'-DDD [2C]			0.050	0.0092	ug/L	ND					
4,4'-DDE			0.050	0.012	ug/L	ND					
4,4'-DDE [2C]			0.050	0.012	ug/L	ND					
4,4'-DDT			0.050	0.011	ug/L	ND					
4,4'-DDT [2C]			0.050	0.011	ug/L	ND					
Aldrin			0.050	0.0066	ug/L	ND					
Aldrin [2C]			0.050	0.0066	ug/L	ND					
alpha-BHC			0.050	0.0066	ug/L	ND					
alpha-BHC [2C]			0.050	0.0066	ug/L	ND					
alpha-Chlordane			0.050	0.015	ug/L	ND					
alpha-Chlordane [2C]			0.050	0.015	ug/L	ND					
beta-BHC			0.050	0.025	ug/L	ND					
beta-BHC [2C]			0.050	0.025	ug/L	ND					
Chlordane			0.50	0.029	ug/L	ND					
Chlordane [2C]			0.50	0.029	ug/L	ND					
delta-BHC			0.050	0.010	ug/L	ND					
delta-BHC [2C]			0.050	0.010	ug/L	ND					
Dieldrin			0.050	0.0098	ug/L	ND					
Dieldrin [2C]			0.050	0.0098	ug/L	ND					
Endosulfan I			0.050	0.011	ug/L	ND					
Endosulfan I [2C]			0.050	0.011	ug/L	ND					
Endosulfan II			0.050	0.012	ug/L	ND					
Endosulfan II [2C]			0.050	0.012	ug/L	ND					
Endosulfan sulfate			0.050	0.016	ug/L	ND					
Endosulfan sulfate [2C]			0.050	0.016	ug/L	ND					
Endrin			0.050	0.014	ug/L	ND					
Endrin [2C]			0.050	0.014	ug/L	ND					
Endrin aldehyde			0.050	0.016	ug/L	ND					
Endrin aldehyde [2C]			0.050	0.016	ug/L	ND					
Endrin ketone			0.050	0.012	ug/L	ND					
Endrin ketone [2C]			0.050	0.012	ug/L	ND					
gamma-BHC (Lindane)			0.050	0.0060	ug/L	ND					
gamma-BHC (Lindane) [2C]			0.050	0.0060	ug/L	ND					
gamma-Chlordane			0.050	0.011	ug/L	ND					
gamma-Chlordane [2C]			0.050	0.011	ug/L	ND					
Heptachlor			0.050	0.0085	ug/L	ND					

Benchmark Environmental & Engineering Science
2558 Hamburg Turnpike, Suite 300
Lackawanna, NY 14218

Work Order: RT11555

Project: Benchmark - 295 Maryland St. site
Project Number: TURN-0066

Received: 09/24/10
Reported: 10/15/10 09:06

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Organochlorine Pesticides by EPA Method 8081A											
Blank Analyzed: 09/28/10 (Lab Number:1011862-BLK1, Batch: 1011862)											
Heptachlor [2C]			0.050	0.0085	ug/L	ND					
Heptachlor epoxide			0.050	0.0053	ug/L	ND					
Heptachlor epoxide [2C]			0.050	0.0053	ug/L	ND					
Methoxychlor			0.050	0.014	ug/L	ND					
Methoxychlor [2C]			0.050	0.014	ug/L	ND					
Toxaphene			0.50	0.12	ug/L	ND					
Toxaphene [2C]			0.50	0.12	ug/L	ND					
<i>Surrogate:</i>					ug/L		72	15-139			
<i>Decachlorobiphenyl</i>											
<i>Surrogate:</i>					ug/L		70	15-139			
<i>Decachlorobiphenyl [2C]</i>											
<i>Surrogate:</i>					ug/L		75	30-139			
<i>Tetrachloro-m-xylene</i>											
<i>Surrogate:</i>					ug/L		82	30-139			
<i>Tetrachloro-m-xylene</i>											
LCS Analyzed: 09/28/10 (Lab Number:1011862-BS1, Batch: 1011862)											
4,4'-DDD		0.500	0.050	0.0092	ug/L	0.488	98	25-139			
4,4'-DDD [2C]		0.500	0.050	0.0092	ug/L	0.605	121	25-139			
4,4'-DDE		0.500	0.050	0.012	ug/L	0.439	88	49-127			
4,4'-DDE [2C]		0.500	0.050	0.012	ug/L	0.524	105	49-127			
4,4'-DDT		0.500	0.050	0.011	ug/L	0.501	100	47-130			
4,4'-DDT [2C]		0.500	0.050	0.011	ug/L	0.559	112	47-130			
Aldrin		0.500	0.050	0.0066	ug/L	0.366	73	35-120			
Aldrin [2C]		0.500	0.050	0.0066	ug/L	0.438	88	35-120			
alpha-BHC		0.500	0.050	0.0066	ug/L	0.514	103	39-121			
alpha-BHC [2C]		0.500	0.050	0.0066	ug/L	0.540	108	39-121			
alpha-Chlordane		0.500	0.050	0.015	ug/L	0.434	87	40-160			
alpha-Chlordane [2C]		0.500	0.050	0.015	ug/L	0.528	106	40-160			
beta-BHC		0.500	0.050	0.025	ug/L	0.527	105	39-138			
beta-BHC [2C]		0.500	0.050	0.025	ug/L	0.591	118	39-138			
delta-BHC		0.500	0.050	0.010	ug/L	0.518	104	40-121			
delta-BHC [2C]		0.500	0.050	0.010	ug/L	0.588	118	40-121			
Dieldrin		0.500	0.050	0.0098	ug/L	0.486	97	41-131			
Dieldrin [2C]		0.500	0.050	0.0098	ug/L	0.565	113	41-131			
Endosulfan I		0.500	0.050	0.011	ug/L	0.391	78	41-126			
Endosulfan I [2C]		0.500	0.050	0.011	ug/L	0.462	92	41-126			
Endosulfan II		0.500	0.050	0.012	ug/L	0.432	86	32-134			
Endosulfan II [2C]		0.500	0.050	0.012	ug/L	0.513	103	32-134			
Endosulfan sulfate		0.500	0.050	0.016	ug/L	0.623	125	46-131			

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Project: Benchmark - 295 Maryland St. site
 Project Number: TURN-0066

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Organochlorine Pesticides by EPA Method 8081A											
LCS Analyzed: 09/28/10 (Lab Number:10I1862-BS1, Batch: 10I1862)											
Endosulfan sulfate [2C]		0.500	0.050	0.016	ug/L	0.588	118	46-131			
Endrin		0.500	0.050	0.014	ug/L	0.498	100	43-134			
Endrin [2C]		0.500	0.050	0.014	ug/L	0.565	113	43-134			
Endrin aldehyde		0.500	0.050	0.016	ug/L	0.527	105	39-128			
Endrin aldehyde [2C]		0.500	0.050	0.016	ug/L	0.625	125	39-128			
Endrin ketone		0.500	0.050	0.012	ug/L	0.538	108	50-150			
Endrin ketone [2C]		0.500	0.050	0.012	ug/L	0.601	120	50-150			
gamma-BHC (Lindane)		0.500	0.050	0.0060	ug/L	0.521	104	68-120			
gamma-BHC (Lindane) [2C]		0.500	0.050	0.0060	ug/L	0.588	118	68-120			
gamma-Chlordane		0.500	0.050	0.011	ug/L	0.437	87	40-160			
gamma-Chlordane [2C]		0.500	0.050	0.011	ug/L	0.509	102	40-160			
Heptachlor		0.500	0.050	0.0085	ug/L	0.423	85	52-120			
Heptachlor [2C]		0.500	0.050	0.0085	ug/L	0.496	99	52-120			
Heptachlor epoxide		0.500	0.050	0.0053	ug/L	0.479	96	65-120			
Heptachlor epoxide [2C]		0.500	0.050	0.0053	ug/L	0.577	115	65-120			
Methoxychlor		0.500	0.050	0.014	ug/L	0.525	105	52-142			
Methoxychlor [2C]		0.500	0.050	0.014	ug/L	0.836	167	52-142			L1
Surrogate:					ug/L		47	15-139			
Decachlorobiphenyl					ug/L		56	15-139			
Surrogate:					ug/L		73	30-139			
Decachlorobiphenyl [2C]					ug/L		76	30-139			
Surrogate:					ug/L						
Tetrachloro-m-xylene					ug/L						
Surrogate:					ug/L						
Tetrachloro-m-xylene					ug/L						

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Work Order: RTI1555

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Polychlorinated Biphenyls by EPA Method 8082</u>											
Blank Analyzed: 09/28/10 (Lab Number:10I1863-BLK1, Batch: 10I1863)											
Aroclor 1016			0.50	0.18	ug/L	ND					QSU
Aroclor 1016 [2C]			0.50	0.18	ug/L	ND					QSU
Aroclor 1221			0.50	0.18	ug/L	ND					QSU
Aroclor 1221 [2C]			0.50	0.18	ug/L	ND					QSU
Aroclor 1232			0.50	0.18	ug/L	ND					QSU
Aroclor 1232 [2C]			0.50	0.18	ug/L	ND					QSU
Aroclor 1242			0.50	0.18	ug/L	ND					QSU
Aroclor 1242 [2C]			0.50	0.18	ug/L	ND					QSU
Aroclor 1248			0.50	0.18	ug/L	ND					QSU
Aroclor 1248 [2C]			0.50	0.18	ug/L	ND					QSU
Aroclor 1254			0.50	0.25	ug/L	ND					QSU
Aroclor 1254 [2C]			0.50	0.25	ug/L	ND					QSU
Aroclor 1260			0.50	0.25	ug/L	ND					QSU
Aroclor 1260 [2C]			0.50	0.25	ug/L	ND					QSU
<i>Surrogate:</i>					ug/L		60	12-137			QSU
<i>Decachlorobiphenyl</i>											
<i>Surrogate:</i>					ug/L		54	12-137			QSU
<i>Decachlorobiphenyl [2C]</i>											
<i>Surrogate:</i>					ug/L		62	35-121			QSU
<i>Tetrachloro-m-xylene</i>											
<i>Surrogate:</i>					ug/L		62	35-121			QSU
<i>Tetrachloro-m-xylene</i>											
LCS Analyzed: 09/28/10 (Lab Number:10I1863-BS1, Batch: 10I1863)											
Aroclor 1016		5.00	0.50	0.18	ug/L	3.26	65	61-123			QSU
Aroclor 1016 [2C]		5.00	0.50	0.18	ug/L	3.00	60	61-123			QSU
Aroclor 1221			0.50	0.18	ug/L	ND					QSU
Aroclor 1221 [2C]			0.50	0.18	ug/L	ND					QSU
Aroclor 1232			0.50	0.18	ug/L	ND					QSU
Aroclor 1232 [2C]			0.50	0.18	ug/L	ND					QSU
Aroclor 1242			0.50	0.18	ug/L	ND					QSU
Aroclor 1242 [2C]			0.50	0.18	ug/L	ND					QSU
Aroclor 1248			0.50	0.18	ug/L	ND					QSU
Aroclor 1248 [2C]			0.50	0.18	ug/L	ND					QSU
Aroclor 1254			0.50	0.25	ug/L	ND					QSU
Aroclor 1254 [2C]			0.50	0.25	ug/L	ND					QSU
Aroclor 1260		5.00	0.50	0.25	ug/L	4.31	86	52-128			QSU
Aroclor 1260 [2C]		5.00	0.50	0.25	ug/L	4.03	81	52-128			QSU
<i>Surrogate:</i>					ug/L		64	12-137			QSU
<i>Decachlorobiphenyl</i>											

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Project: Benchmark - 295 Maryland St. site
 Project Number: TURN-0066

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Polychlorinated Biphenyls by EPA Method 8082</u>											
LCS Analyzed: 09/28/10 (Lab Number:10I1863-BS1, Batch: 10I1863)											
Surrogate:					ug/L		58	12-137			QSU
Decachlorobiphenyl [2C]											
Surrogate:					ug/L		53	35-121			QSU
Tetrachloro-m-xylene											
Surrogate:					ug/L		51	35-121			QSU
Tetrachloro-m-xylene											

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Total Metals by SW 846 Series Methods</u>											
Blank Analyzed: 09/28/10 (Lab Number:10I1960-BLK1, Batch: 10I1960)											
Aluminum			0.200	NR	mg/L	ND					
Antimony			0.0200	NR	mg/L	ND					
Arsenic			0.0100	NR	mg/L	ND					
Barium			0.0020	NR	mg/L	ND					
Beryllium			0.0020	NR	mg/L	ND					
Cadmium			0.0010	NR	mg/L	ND					
Calcium			0.5	NR	mg/L	ND					
Chromium			0.0040	NR	mg/L	ND					
Cobalt			0.0040	NR	mg/L	ND					
Copper			0.0100	NR	mg/L	ND					
Lead			0.0050	NR	mg/L	ND					
Magnesium			0.200	NR	mg/L	ND					
Manganese			0.0030	NR	mg/L	ND					
Nickel			0.0100	NR	mg/L	ND					
Selenium			0.0150	NR	mg/L	ND					
Silver			0.0030	NR	mg/L	ND					
Thallium			0.0200	NR	mg/L	ND					
Vanadium			0.0050	NR	mg/L	ND					
Zinc			0.0100	NR	mg/L	ND					
Blank Analyzed: 09/29/10 (Lab Number:10I1960-BLK2, Batch: 10I1960)											
Iron			0.050	NR	mg/L	ND					
Potassium			0.500	NR	mg/L	ND					
Sodium			1.0	NR	mg/L	ND					
LCS Analyzed: 09/28/10 (Lab Number:10I1960-BS1, Batch: 10I1960)											
Aluminum		10.0	0.200	NR	mg/L	8.81	88	80-120			
Antimony		0.200	0.0200	NR	mg/L	0.210	105	80-120			
Arsenic		0.200	0.0100	NR	mg/L	0.204	102	80-120			
Barium		0.200	0.0020	NR	mg/L	0.198	99	80-120			
Beryllium		0.200	0.0020	NR	mg/L	0.185	93	80-120			
Cadmium		0.200	0.0010	NR	mg/L	0.199	99	80-120			
Calcium		10.0	0.5	NR	mg/L	9.48	95	80-120			
Chromium		0.200	0.0040	NR	mg/L	0.206	103	80-120			
Cobalt		0.200	0.0040	NR	mg/L	0.202	101	80-120			
Copper		0.200	0.0100	NR	mg/L	0.200	100	80-120			
Lead		0.200	0.0050	NR	mg/L	0.202	101	80-120			
Magnesium		10.0	0.200	NR	mg/L	10.4	104	80-120			
Manganese		0.200	0.0030	NR	mg/L	0.197	99	80-120			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Total Metals by SW 846 Series Methods</u>											
LCS Analyzed: 09/28/10 (Lab Number:10I1960-BS1, Batch: 10I1960)											
Nickel		0.200	0.0100	NR	mg/L	0.197	99	80-120			
Selenium		0.200	0.0150	NR	mg/L	0.205	103	80-120			
Silver		0.0500	0.0030	NR	mg/L	0.0515	103	80-120			
Thallium		0.200	0.0200	NR	mg/L	0.207	104	80-120			
Vanadium		0.200	0.0050	NR	mg/L	0.200	100	80-120			
Zinc		0.200	0.0100	NR	mg/L	0.200	100	80-120			
LCS Analyzed: 09/29/10 (Lab Number:10I1960-BS2, Batch: 10I1960)											
Iron		10.0	0.050	NR	mg/L	9.97	100	80-120			
Potassium		10.0	0.500	NR	mg/L	10.1	101	80-120			
Sodium		10.0	1.0	NR	mg/L	10.1	101	80-120			
<u>Total Metals by SW 846 Series Methods</u>											
Blank Analyzed: 09/30/10 (Lab Number:10I2202-BLK1, Batch: 10I2202)											
Mercury			0.0002	NR	mg/L	ND					
LCS Analyzed: 09/30/10 (Lab Number:10I2202-BS1, Batch: 10I2202)											
Mercury		0.00667	0.0004	NR	mg/L	0.00673	101	80-120			

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 Project Number: TURN-0066

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>General Chemistry Parameters</u>											
Blank Analyzed: 10/01/10 (Lab Number:10I2226-BLK1, Batch: 10I2226)											
Total Cyanide			0.0100	NR	mg/L	ND					
LCS Analyzed: 10/01/10 (Lab Number:10I2226-BS1, Batch: 10I2226)											
Total Cyanide		0.250	0.0100	NR	mg/L	0.279	112	90-110			L

APPENDIX E

SITE HEALTH AND SAFETY PLAN AND COMMUNITY AIR MONITORING PLAN

IRM WORK PLAN – APPENDIX E

SITE HEALTH & SAFETY PLAN

FOR

BROWNFIELD CLEANUP PROGRAM

295 Maryland Street Site
Buffalo, New York

July 2011

0222-001-100

Prepared for:

295 MARYLAND, LLC

Prepared By:



Benchmark Environmental Engineering & Science, PLLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0599

**SITE HEALTH & SAFETY PLAN
295 MARYLAND STREET SITE**

TABLE OF CONTENTS

ACKNOWLEDGEMENT

Plan Reviewed by (initial):

Corporate Health and Safety Director: _____

Project Manager: _____

Designated Site Safety and Health Officer: _____

Acknowledgement:

I acknowledge that I have reviewed the information contained in this site-specific Health and Safety Plan, and understand the hazards associated with performance of the field activities described herein. I agree to comply with the requirements of this plan.

NAME (PRINT)	SIGNATURE	DATE
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**SITE HEALTH & SAFETY PLAN
295 MARYLAND STREET SITE**

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SITE HEALTH & SAFETY PLAN

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**SITE HEALTH & SAFETY PLAN
295 MARYLAND STREET SITE**

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1.0 INTRODUCTION

1.1 General

In accordance with OSHA requirements contained in 29 CFR 1910.120, this Health and Safety Plan (HASP) describes the specific health and safety practices and procedures to be employed by Benchmark Environmental Engineering & Science, PLLC (Benchmark) employees during Brownfield Cleanup Program (BCP) activities on the 295 Maryland Street Site (Site) located in the City of Buffalo, New York. This HASP presents procedures for Benchmark employees who will be involved with remedial field activities; it does not cover the activities of other contractors, subcontractors, or other individuals on the Site. Non-Benchmark site personnel will be required to develop and enforce their own HASPs as discussed in Section 2.0. Benchmark accepts no responsibility for the health and safety of contractor, subcontractor, or other personnel.

This HASP presents information on known Site health and safety hazards using available historical information, and identifies the equipment, materials and procedures that will be used to eliminate or control these hazards. Environmental monitoring will be performed during the course of field activities to provide real-time data for on-going assessment of potential hazards.

1.2 Background

The Site was historically used in a residential and commercial capacity, with the property at 295 Maryland Street most recently occupied by Lamar Advertising, Inc., a firm specializing in the sale of billboard advertising space and erection of billboard signs. Lamar relocated within the City of Buffalo in December 2000; the associated commercial buildings and facilities on 295 Maryland Street as well as the residences at 121-129 West Avenue have been demolished. Currently, the Site is vacant and undeveloped.

A Phase I Environmental Site Assessment (ESA) was performed for the former Lamar Advertising property in January 2000 prior to facility demolition. A separate Phase I ESA was prepared in 2001 for 121-129 West Avenue on behalf of the Buffalo Niagara Renaissance Corporation. The ESA reports indicated that 121-129 West Avenue was historically used for residential purposes, with 295 Maryland Street historically improved

with an office, commercial building, two multiple bay garages, and a parking area. Several identified prior use activities on 295 Maryland, including vehicle maintenance and the use and storage of paints, adhesives, and other flammables, were cited in the Phase I ESA's as indicators of potential environmental conditions on the property. The Phase I also identified a 550-gallon underground gasoline storage tank (UST) and a 4,000-gallon gasoline UST that were reportedly removed from the Site in 1974 and 1997, respectively. A small UST containing benzene was also reportedly discovered and removed during facility decommissioning.

A Phase II Site Investigation was completed at 295 Maryland Street by Benchmark in November 2001 based on Phase I ESA findings. The Phase II identified surface and subsurface soil/fill materials exceeding NY State soil cleanup guidance values (i.e., as compared to TAGM 4046, the applicable NYSDEC guidance in place at that time) for certain parameters, including arsenic, lead, mercury and several polycyclic aromatic hydrocarbons (PAHs). These same parameters are elevated with respect to more recent Soil Cleanup Objectives (SCOs) for restricted residential use as published in 6NYCRR Part 375.

1.3 Known and Suspected Environmental Conditions

Portions of the 295 Maryland Street Site were formerly used to house automotive repair facilities containing USTs and hydraulic lifts. Surficial and subsurface soil testing identified seven polycyclic aromatic hydrocarbons (PAHs) at levels in excess of the NYSDEC soil cleanup objectives (SCOs) for restricted residential use. The compounds detected in at least one of the samples include: benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3)pyrene, and dibenz(a,h)anthracene. In addition, the inorganic compounds detected in excess of the restricted residential SCOs include: arsenic, barium, cadmium, lead and mercury. While not exceeding restricted residential SCOs, low levels of volatile organic compounds (VOCs) and polychlorinated biphenyls (PCBs) were detected. In addition, groundwater results show that VOCs were detected in the sample from well MW-2 at concentrations exceeding NYSDEC groundwater quality standards (GWQSs). The VOCs detected include benzene, ethylbenzene, toluene, and xylenes (BTEX), which are characteristic of gasoline contamination.

1.4 Parameters of Interest

Potential parameters of interest at the Site include:

- **Volatile Organic Compounds (VOCs)** – VOCs present in groundwater may include benzene, toluene, ethylbenzene, and xylene (i.e., BTEX). These VOCs are typically associated with storage and handling of petroleum products such as gasoline.
- **Polyaromatic Hydrocarbons (PAHs)** – PAHs present at the Site include derivatives from oils, greases, and fuels associated with the operation of historic automotive repair operations; specifically, PAHs that are byproducts of incomplete combustion and impurities in petroleum products. Although PAHs are commonly found in urban soil environments, they may be present at the Site at concentrations that are elevated compared to typical “background” levels.
- **Inorganic Compounds** – Inorganic compounds potentially present at elevated concentrations in soil/fill due to accidental spillage or misguided disposal may include arsenic, cadmium, chromium, lead, and mercury.

1.5 Overview of BCP Activities

Benchmark personnel will be on-site to observe BCP remedial activities. General field activities to be completed are described below. Detailed BCP activities are more fully described in the Interim Remedial Measures (IRM) Work Plan.

1. **Soil/Fill Excavation:** Benchmark will monitor all soil/fill excavations and related activities to visually inspect soil/fill for evidence of contamination.
2. **Soil/Fill Verification Sampling:** Benchmark will collect subsurface verification samples following excavation and prior to backfilling operations.
3. **Surface Water Management:** During excavation, surface water and/or perched groundwater infiltration may occur. Benchmark will direct the contractor to collect and characterize the surface water for proper disposal.
4. **Subgrade Work:** Significant grading of the Site may be required before implementation of remedial measures.

2.0 ORGANIZATIONAL STRUCTURE

This chapter of the HASP describes the lines of authority, responsibility, and communication as they pertain to health and safety functions at the Site. The purpose of this chapter is to identify the personnel who impact the development and implementation of the HASP and to describe their roles and responsibilities. This chapter also identifies other contractors and subcontractors involved in work operations, and establishes the lines of communications among them for health and safety matters. The organizational structure described in this chapter is consistent with the requirements of 29 CFR 1910.120(b)(2). This section will be reviewed by the Project Manager and updated as necessary to reflect the current organizational structure at the Site.

2.1 Roles and Responsibilities

All Benchmark personnel on the Site must comply with the minimum requirements of this HASP. The specific responsibilities and authority of management, safety and health, and other personnel on this Site are detailed in the following paragraphs.

2.1.1 Corporate Health and Safety Director

The Benchmark Corporate Health and Safety Director is ***Mr. Thomas H. Forbes, P.E.*** The Corporate Health and Safety Director responsible for developing and implementing the Health and Safety program and policies for Benchmark Environmental Engineering & Science, PLLC and consulting with corporate management to ensure adequate resources are available to properly implement these programs and policies. The Corporate Health and Safety Director coordinates Benchmark's Health and Safety training and medical monitoring programs and assists project management and field staff in developing site-specific health and safety plans.

2.1.2 Project Manager

The Project Manager for this site is ***Thomas H. Forbes, P.E.*** The Project Manager has the responsibility and authority to direct all Benchmark work operations at the Site. The Project Manager coordinates safety and health functions with the Site Safety and Health Officer, and bears ultimate responsibility for proper implementation of this HASP. He may

delegate authority to expedite and facilitate any application of the program, including modifications to the overall project approach as necessary to circumvent unsafe work conditions. Specific duties of the Project Manager include:

- Preparing and coordinating the site work plan.
- Providing Benchmark workers with work assignments and overseeing their performance.
- Coordinating health and safety efforts with the Site Safety and Health Officer (SSHO).
- Reviewing the emergency response coordination plan to assure its effectiveness.
- Serving as the primary liaison with site contractors and the property owner.

2.1.3 Site Safety and Health Officer

The Site Safety and Health Officer (SSHO) for this site is ***Mr. Richard L. Dubisz***. The qualified alternate SSHO is ***Mr. Thomas Behrendt***. The SSHO reports to the Project Manager. The SSHO is on-site or readily accessible to the site during all work operations and has the authority to halt site work if unsafe conditions are detected. The specific responsibilities of the SSHO are:

- Managing the safety and health functions for Benchmark personnel on the Site.
- Serving as the point of contact for safety and health matters.
- Ensuring that Benchmark field personnel working on the Site have received proper training (per 29 CFR Part 1910.120(e)), that they have obtained medical clearance to wear respiratory protection (per 29 CFR Part 1910.134), and that they are properly trained in the selection, use and maintenance of personal protective equipment, including qualitative respirator fit testing.
- Performing or overseeing site monitoring as required by the HASP.
- Assisting in the preparation and review of the HASP
- Maintaining site-specific safety and health records as described in this HASP
- Coordinating with the Project Manager, Site Workers and Contractor's SSHO as necessary for safety and health efforts.

2.1.4 Site Workers

Site workers are responsible for: complying with this HASP or a more stringent

HASP, if appropriate (i.e., Contractor and Subcontractor's HASP); using proper PPE; reporting unsafe acts and conditions to the SSHO; and following the safety and health instructions of the Project Manager and SSHO.

2.1.5 Other Site Personnel

Other site personnel who will have health and safety responsibilities will include the Remedial Contractor, who will be responsible for developing, implementing, and enforcing a Health and Safety Plan equally stringent or more stringent than Benchmark's HASP. Benchmark assumes no responsibility for the health and safety of anyone outside its direct employ. Each Contractor's HASP shall cover all non-Benchmark site personnel. Each Contractor shall assign a SSHO who will coordinate with Benchmark's SSHO as necessary to ensure effective lines of communication and consistency between contingency plans.

In addition to Benchmark and Contractor personnel, other individuals who may have responsibilities in the work zone include subcontractors and governmental agencies performing site inspection work (i.e., the New York State Department of Environmental Conservation). The Contractor shall be responsible for ensuring that these individuals have received OSHA-required training (29 CFR 1910.120(e)), including initial, refresher, and site-specific training, and shall be responsible for the safety and health of these individuals while they are on-site.

3.0 HAZARD EVALUATION

Due to the presence of certain contaminants at the Site, the possibility exists that workers will be exposed to hazardous substances during field activities. The principal points of exposure would be through direct contact with and incidental ingestion of soil/fill, and through the inhalation of contaminated particles or vapors, during soil/fill excavation activities and monitoring well installation. In addition, the use of heavy construction equipment (e.g., excavator) will also present conditions for potential physical injury to workers. Further, since work will be performed outdoors, the potential exists for heat/cold stress to impact workers, especially those wearing protective equipment and clothing. Adherence to the medical evaluations, worker training relative to chemical hazards, safe work practices, proper personal protection, environmental monitoring, establishment work zones and site control, appropriate decontamination procedures and contingency planning outlined herein will reduce the potential for chemical exposures and physical injuries.

3.1 Chemical Hazards

As discussed in Section 1.3, historic activities related to the former steel-manufacturing operations and facilities have resulted in elevated concentrations of VOCs, SVOCs, PCBs, and inorganic compounds in Site soils and groundwater. Table 1 identifies maximum concentrations of COPCs detected throughout the Site. Table 2 lists exposure limits for airborne concentrations of the COPCs identified in Section 1.4 of this HASP. Brief descriptions of the toxicology of the prevalent constituents of potential concern and related health and safety guidance and criteria are provided below.

- **Arsenic (CAS #7440-38-2)** is a naturally occurring element and is usually found combined with one or more elements, such as oxygen or sulfur. Inhalation is a more important exposure route than ingestion. First phase exposure symptoms include nausea, vomiting, diarrhea and pain in the stomach. Prolonged contact is corrosive to the skin and mucus membranes. Arsenic is considered a Group A human carcinogen by the USEPA. Exposure via inhalation is associated with an increased risk of lung cancer. Exposure via the oral route is associated with an increased risk of skin cancer.
- **Barium (CAS # 7440-39-3)** is a silver white metal, produced by the reduction of barium oxide. Local effects and symptoms of exposure to barium compounds, such as the hydroxide or carbonate, may include irritation of the eyes, throat, nose and skin. Systemic effects from ingestion include increased muscle contractility,

reduction of heart rate/potential arrest, intestinal peristalsis, vascular constriction, and bladder contraction.

- **Benzene (CAS #71-43-2)** poisoning occurs most commonly through inhalation of the vapor; however, benzene can also penetrate the skin and poison in that way. Locally, benzene has a comparatively strong irritating effect, producing erythema and burning and, in more severe cases, edema and blistering. Exposure to high concentrations of the vapor (i.e., 3,000 ppm or higher) may result in acute poisoning characterized by the narcotic action of benzene on the central nervous system. In acute poisoning, symptoms include confusion, dizziness, tightening of the leg muscles, and pressure over the forehead. Chronic exposure to benzene (i.e., long-term exposure to concentrations of 100 ppm or less) may lead to damage of the blood-forming system. Benzene is very flammable when exposed to heat or flame and can react vigorously with oxidizing materials.
- **Cadmium** is a natural element and is usually combined with one or more elements, such as oxygen, chloride or sulfur. Breathing high levels of cadmium severely damages the lungs and can cause death. Ingestion of high levels of cadmium severely irritates the stomach, leading to vomiting and diarrhea. Long term exposure to lower levels of cadmium leads to a buildup of this substance in the kidneys and possible kidney disease. Other potential long term effects are lung damage and fragile bones. Cadmium is suspected to be a human carcinogen.
- **Ethylbenzene (CAS #100-41-4)** is a component of automobile gasoline. Over-exposure may cause kidney, skin liver and/or respiratory disease. Signs of exposure may include dermatitis, irritation of the eyes and mucus membranes, headache. Narcosis and coma may result in more severe cases.
- **Lead (CAS #7439-92-1)** can affect almost every organ and system in our bodies. The most sensitive is the central nervous system, particularly in children. Lead also damages kidneys and the immune system. The effects are the same whether it is breathed or swallowed. Lead may decrease reaction time, cause weakness in fingers, wrists or ankles and possibly affect memory. Lead may cause anemia.
- **Mercury (CAS #7439-97-6)** is used in industrial applications for the production of caustic and chlorine, and in electrical control equipment and apparatus. Over-exposure to mercury may cause coughing, chest pains, bronchitis, pneumonia, indecision, headaches, fatigue and salivation. Mercury is a skin and eye irritant.
- **Polycyclic Aromatic Hydrocarbons (PAHs)** are formed as a result of the pyrolysis and incomplete combustion of organic matter such as fossil fuel. PAH aerosols formed during the combustion process disperse throughout the atmosphere, resulting in the deposition of PAH condensate in soil, water and on vegetation. In addition, several products formed from petroleum processing operations (e.g., roofing materials and asphalt) also contain elevated levels of

PAHs. Hence, these compounds are widely dispersed in the environment. PAHs are characterized by a molecular structure containing three or more fused, unsaturated carbon rings. Seven of the PAHs are classified by USEPA as probable human carcinogens (USEPA Class B2). These are: benzo(a)pyrene; benzo(a)anthracene; benzo(b)fluoranthene; benzo(k)fluoranthene; chrysene; dibenz(a,h)anthracene; and indeno(1,2,3-cd)pyrene. The primary route of exposure to PAHs is through incidental ingestion and inhalation of contaminated particulates. PAHs are characterized by an organic odor, and exist as oily liquids in pure form. Acute exposure symptoms may include acne-type blemishes in areas of the skin exposed to sunlight.

- **Toluene (CAS #108-88-3)** is a common component of paint thinners and automobile fuel. Acute exposure predominantly results in central nervous system depression. Symptoms include headache, dizziness, fatigue, muscular weakness, drowsiness, and coordination loss. Repeated exposures may cause removal of lipids from the skin, resulting in dry, fissured dermatitis.
- **Xylenes (o, m, and p) (CAS #95-47-6, 108-38-3, and 106-42-3)** are colorless, flammable liquids present in paint thinners and fuels. Acute exposure may cause central nervous system depression, resulting in headache, dizziness, fatigue, muscular weakness, drowsiness, and coordination loss. Repeated exposures may also cause removal of lipids from the skin, producing dry, fissured dermatitis. Exposure of high concentrations of vapor may cause eye irritation and damage, as well as irritation of the mucus membranes.

With respect to the anticipated BCP activities discussed in Section 1.5, possible routes of exposure to the above-mentioned contaminants are presented in Table 3. The use of proper respiratory equipment, as outlined in Section 7.0 of this HASP, will minimize the potential for exposure to airborne contamination. Exposure to contaminants through dermal and other routes will also be minimized through the use of protective clothing (Section 7.0), safe work practices (Section 6.0), and proper decontamination procedures (Section 12.0).

3.2 Physical Hazards

BCP remedial activities at the Site may present the following physical hazards:

- The potential for physical injury during heavy construction equipment use, such as grading equipment, excavators, and tandem trucks.
- The potential for heat/cold stress to employees during the summer/winter months (see Section 10.0).
- The potential for slip and fall injuries due to rough, uneven terrain and/or open

excavations.

These hazards represent only some of the possible means of injury that may be present during remedial activities at the Site. Since it is impossible to list all potential sources of injury, it shall be the responsibility of each individual to exercise proper care and caution during all phases of the work.

4.0 TRAINING

4.1 Site Workers

All personnel performing remedial activities at the Site (such as, but not limited to, equipment operators, general laborers, and supervisors) and who may be exposed to hazardous substances, health hazards, or safety hazards and their supervisors/ managers responsible for the Site shall receive training in accordance with 29 CFR 1910.120(e) before they are permitted to engage in operations in the exclusion zone or contaminant reduction zone. This training includes an initial 40-hour Hazardous Waste Site Worker Protection Course, an 8-hour Annual Refresher Course subsequent to the initial 40-hour training, and 3 days of actual field experience under the direct supervision of a trained, experienced supervisor. Additional site-specific training shall also be provided by the SSHO prior to the start of field activities. A description of topics to be covered by this training is provided below.

4.1.1 Initial and Refresher Training

Initial and refresher training is conducted by a qualified instructor as specified under OSHA 29 CFR 1910.120(e)(5), and is specifically designed to meet the requirements of OSHA 29 CFR 1910.120(e)(3) and 1910.120(e)(8). The training covers, as a minimum, the following topics:

- OSHA HAZWOPER regulations.
- Site safety and hazard recognition, including chemical and physical hazards.
- Medical monitoring requirements.
- Air monitoring, permissible exposure limits, and respiratory protection level classifications.
- Appropriate use of personal protective equipment (PPE), including chemical compatibility and respiratory equipment selection and use.
- Work practices to minimize risk.
- Work zones and site control.
- Safe use of engineering controls and equipment.
- Decontamination procedures.

- Emergency response and escape.
- Confined space entry procedures.
- Heat and cold stress monitoring.
- Elements of a Health and Safety Plan.
- Spill containment.

Initial training also incorporates workshops for PPE and respiratory equipment use (Levels A, B and C), and respirator fit testing. Records and certification received from the course instructor documenting each employee's successful completion of the training identified above are maintained on file at Benchmark's Buffalo, NY office. Contractors and Subcontractors are required to provide similar documentation of training for all their personnel who will be involved in on-site work activities.

Any employee who has not been certified as having received health and safety training in conformance with 29 CFR 1910.120(e) is prohibited from working in the exclusion and contamination reduction zones, or to engage in any on-site work activities that may involve exposure to hazardous substances or wastes.

4.1.2 Site Training

Site workers are given a copy of the HASP and provided a site-specific briefing prior to the commencement of work to ensure that employees are familiar with the HASP and the information and requirements it contains. The site briefing shall be provided by the SSHO prior to initiating field activities and shall include:

- Names of personnel and alternates responsible for site safety and health.
- Safety, health and other hazards present on the Site.
- The Site lay-out including work zones and places of refuge.
- The emergency communications system and emergency evacuation procedures.
- Use of PPE.
- Work practices by which the employee can minimize risks from hazards.
- Safe use of engineering controls and equipment on the site.
- Medical surveillance, including recognition of symptoms and signs of over-exposure as described in Chapter 5 of this HASP.

- Decontamination procedures as detailed in Chapter 12 of this HASP.
- The emergency response plan as detailed in Chapter 15 of this HASP.
- Confined space entry procedures, if required, as detailed in Chapter 13 of this HASP.
- The spill containment program as detailed in Chapter 9 of this HASP.
- Site control as detailed in Chapter 11 of this HASP.

Supplemental health and safety briefings will also be conducted by the SSHO on an as-needed basis during the course of the work. Supplemental briefings are provided as necessary to notify employees of any changes to this HASP as a result of information gathered during ongoing site characterization and analysis. Conditions for which the SSHO may schedule additional briefings include, but are not limited to: a change in Site conditions (i.e., based on monitoring results); changes in the work schedule/plan; newly discovered hazards; and safety incidents occurring during Site work.

4.2 Supervisor Training

On-site safety and health personnel who are directly responsible for or who supervise the safety and health of workers engaged in hazardous waste operations (i.e., SSHO) shall receive, in addition to the appropriate level of worker training described in Section 4.1, above, 8 additional hours of specialized supervisory training, in compliance with 29 CFR 1910.120(e)(4).

4.3 Emergency Response Training

Emergency response training is addressed in Appendix A of this HASP, Emergency Response Plan.

4.4 Site Visitors

Each Contractor's SSHO will provide a site-specific briefing to all site visitors and other non-Benchmark personnel who enter the Site beyond the site entry point. The site-specific briefing will provide information about site hazards, the site layout including work

zones and places of refuge, the emergency communications system and emergency evacuation procedures, and other pertinent safety and health requirements as appropriate.

Site visitors will not be permitted to enter the exclusion zone or contaminant reduction zones unless they have received the level of training required for site workers as described in Section 4.1.

5.0 MEDICAL MONITORING

Medical monitoring examinations are provided to Benchmark employees as stipulated under 29 CFR Part 1910.120(f). These exams include initial employment, annual, and employment termination physicals for all Benchmark employees involved in hazardous waste site field operations. Post-exposure examinations are also provided for employees who may have been injured, received a health impairment, or developed signs or symptoms of over-exposure to hazardous substances or were accidentally exposed to substances at concentrations above the permissible exposure limits without necessary personal protective equipment. Such exams are performed as soon as possible following development of symptoms or the known exposure event.

Medical evaluations are performed by ADP Screening & Selection Services, an occupational health care provider under contract with Benchmark. ADP's local facility is Health Works WNY, Seneca Square Plaza, 1900 Ridge Road, West Seneca, New York 14224. The facility can be reached at (716) 823-5050 to schedule routine appointments or post-exposure examinations.

Medical evaluations are conducted according to the Benchmark Medical Monitoring Program and include an evaluation of the workers' ability to use respiratory protective equipment. The purpose of the medical evaluation is to determine an employee's fitness for duty on hazardous waste sites; and to establish baseline medical data. The examinations include:

- Occupational/medical history review.
- Physical exam, including vital sign measurement.
- Spirometry testing.
- Eyesight testing.
- Audio testing (minimum baseline and exit, annual for employees routinely exposed to greater than 85db).
- EKG (for employees >40 yrs age or as medical conditions dictate).
- Chest X-ray (baseline and exit, and every 5 years).
- Blood biochemistry (including blood count, white cell differential count, serum multiplastic screening).
- Medical certification of physical requirements (i.e., sight, musculoskeletal, cardiovascular) for safe job performance and to wear respiratory protection

equipment.

In conformance with OSHA regulations, Benchmark will maintain and preserve medical records for a period of 30 years following termination of employment. Employees are provided a copy of the physician's post-exam report, and have access to their medical records and analyses.

6.0 SAFE WORK PRACTICES

All Benchmark employees shall conform to the following safe work practices during all on-site work activities conducted within the exclusion and contamination reduction zones:

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth contact is strictly prohibited.
- The hands and face must be thoroughly washed upon leaving the work area and prior to engaging in any activity indicated above.
- Respiratory protective equipment and clothing must be worn by all personnel entering the site as required by the HASP or as modified by the site safety officer. Excessive facial hair (i.e., beards, long mustaches or sideburns) that interferes with the satisfactory respirator-to-face seal is prohibited.
- Contact with surfaces/materials either suspected or known to be contaminated will be avoided to minimize the potential for transfer to personnel, cross contamination and need for decontamination.
- Medicine and alcohol can synergize the effects of exposure to toxic chemicals. Due to possible contraindications, use of prescribed drugs should be reviewed with the Benchmark occupational physician. Alcoholic beverage and illegal drug intake are strictly forbidden during the workday.
- All personnel shall be familiar with standard operating safety procedures and additional instructions contained in this Health and Safety Plan.
- On-site personnel shall use the “buddy” system. No one may work alone (i.e., out of earshot or visual contact with other workers) in the exclusion zone.
- Personnel and equipment in the contaminated area shall be minimized, consistent with effective site operations.
- All employees have the obligation to immediately report and if possible, correct unsafe work conditions.
- Use of contact lenses on-site will not be permitted. Spectacle kits for insertion into full-face respirators will be provided for Benchmark employees, as requested and required.

The recommended specific safety practices for working around the contractor’s equipment (e.g., backhoes, bulldozers, excavators, etc.) are as follows:

- Although the Contractor and subcontractors are responsible for their equipment and safe operation of the site, Benchmark personnel are also responsible for their

own safety.

- Subsurface work will not be initiated without first clearing underground utility services.
- Heavy equipment should not be operated within 20 feet of overhead wires. This distance may be increased if windy conditions are anticipated or if lines carry high voltage. The site should also be sufficiently clear to ensure the project staff can move around the heavy machinery safely.
- Care should be taken to avoid overhead wires when moving heavy-equipment from location to location.
- Hard hats, safety boots and safety glasses should be worn at all times in the vicinity of heavy equipment. Hearing protection is also recommended.
- The work site should be kept neat. This will prevent personnel from tripping and will allow for fast emergency exit from the site.
- Proper lighting must be provided when working at night.
- Construction activities should be discontinued during an electrical storm or severe weather conditions.
- The presence of combustible gases should be checked before igniting any open flame.
- Personnel shall stand upwind of any construction operation when not immediately involved in sampling/logging/observing activities.
- Personnel will not approach the edge of an unsecured trench/excavation closer than 2 feet.

7.0 PERSONAL PROTECTIVE EQUIPMENT

7.1 Equipment Selection

Personal protective equipment (PPE) will be donned when work activities may result in exposure to physical or chemical hazards beyond acceptable limits, and when such exposure can be mitigated through appropriate PPE. The selection of PPE will be based on an evaluation of the performance characteristics of the PPE relative to the requirements and limitations of the Site, the task-specific conditions and duration, and the hazards and potential hazards identified at the site.

Equipment designed to protect the body against contact with known or suspect chemical hazards are grouped into four categories according to the degree of protection afforded. These categories designated A through D consistent with USEPA Level of Protection designation, are:

- **Level A:** Should be selected when the highest level of respiratory, skin and eye protection is needed.
- **Level B:** Should be selected when the highest level of respiratory protection is needed, but a lesser level of skin protection is required. Level B protection is the minimum level recommended on initial site entries until the hazards have been further defined by on-site studies. Level B (or Level A) is also necessary for oxygen-deficient atmospheres.
- **Level C:** Should be selected when the types of airborne substances are known, the concentrations have been measured and the criteria for using air-purifying respirators are met. In atmospheres where no airborne contaminants are present, Level C provides dermal protection only.
- **Level D:** Should not be worn on any site with elevated respiratory or skin hazards. This is generally a work uniform providing minimal protection.

OSHA requires the use of certain PPE under conditions where an immediate danger to life and health (IDLH) may be present. Specifically, OSHA 29 CFR 1910.120(g)(3)(iii) requires use of a positive pressure self-contained breathing apparatus, or positive pressure air-line respirator equipped with an escape air supply when chemical exposure levels present a substantial possibility of immediate serious injury, illness or death, or impair the ability to escape. Similarly, OSHA 29 CFR 1910.120(g)(3)(iv) requires donning totally encapsulating chemical protective suits (with a protection level equivalent to Level A protection) in

conditions where skin absorption of a hazardous substance may result in a substantial possibility of immediate serious illness, injury or death, or impair the ability to escape.

In situations where the types of chemicals, concentrations, and possibilities of contact are unknown, the appropriate level of protection must be selected based on professional experience and judgment until the hazards can be further characterized. The individual components of clothing and equipment must be assembled into a full protective ensemble to protect the worker from site-specific hazards, while at the same time minimizing hazards and drawbacks of the personal protective gear itself. Ensemble components are detailed below for levels A/B, C, and D protection.

7.2 Protection Ensembles

7.2.1 Level A/B Protection Ensemble

Level A/B ensembles include similar respiratory protection, however Level A provides a higher degree of dermal protection than Level B. Use of Level A over Level B is determined by: comparing the concentrations of identified substances in the air with skin toxicity data, and assessing the effect of the substance (by its measured air concentrations or splash potential) on the small area of the head and neck unprotected by Level B clothing. The recommended PPE for level A/B is:

- Pressure-demand, full-face piece self-contained breathing apparatus (MSHA/-NIOSH approved) or pressure-demand supplied-air respirator with escape self-contained breathing apparatus (SCBA).
- Chemical-resistant clothing. For Level A, clothing consists of totally-encapsulating chemical resistant suit. Level B incorporates hooded one-or two-piece chemical splash suit.
- Inner and outer chemical resistant gloves.
- Chemical-resistant safety boots/shoes.
- Hardhat.

7.2.2 Level C Protection Ensemble

Level C protection is distinguished from Level B by the equipment used to protect the respiratory system, assuming the same type of chemical-resistant clothing is used. The

main selection criterion for Level C is that conditions permit wearing an air-purifying device. The device (when required) must be an air-purifying respirator (MSHA/NIOSH approved) equipped with filter cartridges. Cartridges must be able to remove the substances encountered. Respiratory protection will be used only with proper fitting, training and the approval of a qualified individual. In addition, an air-purifying respirator can be used only if: oxygen content of the atmosphere is at least 19.5% in volume; substances are identified and concentrations measured; substances have adequate warning properties; the individual passes a qualitative fit-test for the mask; and an appropriate cartridge/canister is used, and its service limit concentration is not exceeded. Recommended PPE for Level C conditions includes:

- Full-face piece, air-purifying respirator equipped with MSHA and NIOSH approved organic vapor/acid gas/dust/mist combination cartridges or as designated by the SSHO.
- Chemical-resistant clothing (hooded, one or two-piece chemical splash suit or disposable chemical-resistant one-piece suit).
- Inner and outer chemical-resistant gloves.
- Chemical-resistant safety boots/shoes.
- Hardhat.

An air-monitoring program is part of all response operations when atmospheric contamination is known or suspected. It is particularly important that the air be monitored thoroughly when personnel are wearing air-purifying respirators. Continual surveillance using direct-reading instruments is needed to detect any changes in air quality necessitating a higher level of respiratory protection.

7.2.3 Level D Protection Ensemble

As indicated above, Level D protection is primarily a work uniform. It can be worn in areas where only boots can be contaminated, where there are no inhalable toxic substances and where the atmospheric contains at least 19.5% oxygen. Recommended PPE for Level D includes:

- Coveralls.
- Safety boots/shoes.

- Safety glasses or chemical splash goggles.
- Hardhat.
- Optional gloves; escape mask; face shield.

7.2.4 Recommended Level of Protection for Site Tasks

Based on current information regarding both the contaminants suspected to be present at the Site and the various tasks that are included in the remedial activities, the minimum required Levels of Protection for these tasks shall be as identified in Table 4.

8.0 EXPOSURE MONITORING

8.1 General

Based on the results of historic sample analysis and the nature of the proposed work activities at the Site, the possibility exists that organic vapors and/or particulates may be released to the air during intrusive construction activities. Ambient breathing zone concentrations may at times, exceed the permissible exposure limits (PELs) established by OSHA for the individual compounds (see Table 2), in which case respiratory protection will be required. Respiratory and dermal protection may be modified (upgraded or downgraded) by the SSHO based upon real-time field monitoring data.

8.1.1 On-Site Work Zone Monitoring

Benchmark personnel will conduct routine, real-time air monitoring during all intrusive construction phases such as excavation, backfilling, drilling, etc. The work area will be monitored at regular intervals using a photo-ionization detector (PID), combustible gas meter and a particulate meter. Observed values will be recorded and maintained as part of the permanent field record.

Additional air monitoring measurements may be made by Benchmark personnel to verify field conditions during subcontractor oversight activities. Monitoring instruments will be protected from surface contamination during use. Additional monitoring instruments may be added if the situations or conditions change. Monitoring instruments will be calibrated in accordance with manufacturer's instructions before use.

8.1.2 Off-Site Community Air Monitoring

In addition to on-site monitoring within the work zone(s), monitoring at the down-wind portion of the Site perimeter will be conducted. This will provide a real-time method for determination of substantial vapor and/or particulate releases to the surrounding community as a result of ground intrusive work.

Ground intrusive activities are defined by NYSDOH Generic Community Air Monitoring Plan (Ref. 1, Appendix 1A of DER-10) and attached as Appendix C. Ground intrusive activities include soil/waste excavation and handling, test pitting or trenching, and

the installation of soil borings or monitoring wells. Non-intrusive activities include the collection of soil and sediment samples or the collection of groundwater samples from existing wells. Continuous monitoring is required for ground intrusive activities and periodic monitoring is required for non-intrusive activities. Periodic monitoring consists of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring while bailing a well, and taking a reading prior to leaving a sampling location. This may be upgraded to continuous if the sampling location is in close proximity to individuals not involved in the site activity (i.e., on a curb of a busy street). The action levels below will be used during periodic monitoring. This will provide a real-time method for determination of substantial vapor and/or particulate releases to the surrounding community because of intrusive activities.

8.2 Monitoring Action Levels

8.2.1 On-Site Work Zone Action Levels

The PID, explosimeter, or other appropriate instrument(s), will be used by Benchmark personnel to monitor organic vapor concentrations as specified in this HASP. In addition, fugitive dust/particulate concentrations will be monitored during major soil intrusion using a real-time particulate monitor as specified in this plan. In the absence of such monitoring, appropriate respiratory protection for particulates shall be donned. Sustained readings obtained in the breathing zone may be interpreted (with regard to other site conditions) as follows for Benchmark personnel:

- Total atmospheric concentrations of unidentified vapors or gases ranging from 0 to 1 ppm above background on the PID) - Continue operations under Level D (see Appendix A).
- Total atmospheric concentrations of unidentified vapors or gases yielding sustained readings from >1 ppm to 5 ppm above background on the PID (vapors not suspected of containing high levels of chemicals toxic to the skin) - Continue operations under Level C (see Appendix A).
- Total atmospheric concentrations of unidentified vapors or gases yielding sustained readings of >5 ppm to 50 ppm above background on the PID - Continue operations under Level B (see Attachment 1), re-evaluate and alter (if possible) construction methods to achieve lower vapor concentrations.

- Total atmospheric concentrations of unidentified vapors or gases above 50 ppm on the PID - Discontinue operations and exit the work zone immediately.

The explosimeter will be used to monitor levels of both combustible gases and oxygen during RD activities involving deep excavation, if required. Action levels based on the instrument readings shall be as follows:

- Less than 10% LEL - Continue engineering operations with caution.
- 10-25% LEL - Continuous monitoring with extreme caution, determine source/cause of elevated reading.
- Greater than 25% LEL - Explosion hazard, evaluate source and leave the Work Zone.
- 19.5-21% oxygen - Proceed with extreme caution; attempt to determine potential source of oxygen displacement.
- Less than 19.5% oxygen - Leave work zone immediately.
- 21-25% oxygen - Continue engineering operations with caution.
- Greater than 25% oxygen - Fire hazard potential, leave Work Zone immediately.

The particulate monitor will be used to monitor respirable dust concentrations during all intrusive activities and during handling of site soil/fill. Action levels based on the instrument readings shall be as follows:

- Less than 50 $\mu\text{g}/\text{m}^3$ - Continue field operations.
- 50-150 $\mu\text{g}/\text{m}^3$ - Don dust/particulate mask or equivalent
- Greater than 150 $\mu\text{g}/\text{m}^3$ - Don dust/particulate mask or equivalent. Initiate engineering controls to reduce respirable dust concentration (i.e., wetting of excavated soils or tools at discretion of SSHO).

Readings with the organic vapor analyzer, combustible gas meter, and particulate monitor will be recorded and documented on the appropriate Project Field Forms. All instruments will be calibrated before use on a daily basis and the procedure will be documented on the appropriate Project Field Forms.

8.2.2 *Community Air Monitoring Action Levels*

In addition to the action levels prescribed in Section 8.2.1 for Benchmark personnel on-site, the following criteria shall also be adhered to for the protection of downwind receptors consistent with NYSDOH requirements (Appendix C):

o **ORGANIC VAPOR PERIMETER MONITORING:**

- If the sustained ambient air concentration of organic vapors at the downwind perimeter of the exclusion zone exceeds 5 ppm above background, work activities will be halted and monitoring continued. If the sustained organic vapor decreases below 5 ppm over background, work activities can resume but more frequent intervals of monitoring, as directed by the SSHO, must be conducted.
- If the sustained ambient air concentration of organic vapors at the downwind perimeter of the exclusion zone are greater than 5 ppm over background but less than 25 ppm, activities can resume provided that: the organic vapor level 200 feet downwind of the working site or half the distance to the nearest off-site residential or commercial structure, whichever is less, is below 5 ppm over background; and more frequent intervals of monitoring, as directed by the SSHO, are conducted.
- If the sustained organic vapor level is above 25 ppm at the perimeter of the exclusion zone, the SSHO must be notified and work activities shut down. The SSHO will determine when re-entry of the exclusion zone is possible and will implement downwind air monitoring to ensure vapor emissions do not impact the nearest off-site residential or commercial structure at levels exceeding those specified in the *Organic Vapor Contingency Monitoring Plan* below. All readings will be recorded and will be available for New York State Department of Environmental Conservation (NYSDEC) and Department of Health (NYSDOH) personnel to review.

o **ORGANIC VAPOR CONTINGENCY MONITORING PLAN:**

- If the sustained organic vapor level is greater than 5 ppm over background 200 feet downwind from the work area or half the distance to the nearest off-site residential or commercial property, whichever is less, all work activities must be halted.
- If, following the cessation of the work activities or as the result of an emergency, sustained organic levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest off-site residential or commercial property from the work area, then the air quality must be

monitored within 20 feet of the perimeter of the nearest off-site residential or commercial structure (20-foot zone).

- If efforts to abate the emission source are unsuccessful and if sustained organic vapor levels approach or exceed 5 ppm above background within the 20-foot zone for more than 30 minutes, or are sustained at levels greater than 10 ppm above background for longer than one minute, then the ***Major Vapor Emission Response Plan*** (see below) will automatically be placed into effect.
- o **Major Vapor Emission Response Plan:**

Upon activation, the following activities will be undertaken:

1. All Emergency Response Contacts as listed in this Health and Safety Plan and the Emergency Response Plan (Appendix A) will be advised.
2. The local police authorities will immediately be contacted by the SSHO and advised of the situation.
3. Frequent air monitoring will be conducted at 30-minute intervals within the 20-foot zone. If two sustained successive readings below action levels are measured, air monitoring may be halted or modified by the SSHO.

The following personnel are to be notified in the listed sequence in the event that a Major Vapor Emission Plan is activated:

Responsible Person	Contact	Phone Number
SSHO	Police	911
SSHO	State Emergency Response Hotline	(800) 457-7362

Additional emergency numbers are listed in the Emergency Response Plan included as Appendix A.

- o **EXPLOSIVE VAPORS:**
 - Sustained atmospheric concentrations of greater than 10% LEL in the work area - Initiate combustible gas monitoring at the downwind portion of the Site perimeter.
 - Sustained atmospheric concentrations of greater than 10% LEL at the downwind Site perimeter – Halt work and contact local Fire Department.

○ **Airborne Particulate Community Air Monitoring**

Respirable (PM-10) particulate monitoring will be performed on a continuous basis at the upwind and downwind perimeter of the exclusion zone. The monitoring will be performed using real-time monitoring equipment capable of measuring PM-10 and integrating over a period of 15-minutes for comparison to the airborne particulate action levels. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities. All readings will be recorded and will be available for NYSDEC and NYSDOH review. Readings will be interpreted as follows:

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) greater than the background (upwind perimeter) reading for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression provided that the downwind PM-10 particulate levels do not exceed 150 $\mu\text{g}/\text{m}^3$ above the upwind level and that visible dust is not migrating from the work area.
- If, after implementation of dust suppression techniques downwind PM-10 levels are greater than 150 $\mu\text{g}/\text{m}^3$ above the upwind level, work activities must be stopped and dust suppression controls re-evaluated. Work can resume provided that supplemental dust suppression measures and/or other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 $\mu\text{g}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

Pertinent emergency response information including the telephone number of the Fire Department is included in the Emergency Response Plan (Appendix A).

9.0 SPILL RELEASE/RESPONSE

This chapter of the HASP describes the potential for and procedures related to spills or releases of known or suspected petroleum and/or hazardous substances on the Site. The purpose of this Section of the HASP is to plan appropriate response, control, countermeasures and reporting, consistent with OSHA requirements in 29 CFR 1910.120(b)(4)(ii)(J) and (j)(1)(viii). The spill containment program addresses the following elements:

- Potential hazardous material spills and available controls.
- Initial notification and evaluation.
- Spill response.
- Post-spill evaluation.

9.1 Potential Spills and Available Controls

An evaluation was conducted to determine the potential for hazardous material and oil/petroleum spills at this site. For the purpose of this evaluation, hazardous materials posing a significant spill potential are considered to be:

- CERCLA Hazardous Substances as identified in 40 CFR Part 302, where such materials pose the potential for release in excess of their corresponding Reportable Quantity (RQ).
- Extremely Hazardous Substances as identified in 40 CFR Part 355, Appendix A, where such materials pose the potential for release in excess of their corresponding RQ.
- Hazardous Chemicals as defined under Section 311(e) of the Emergency Planning and Community Right-To-Know Act of 1986, where such chemicals are present or will be stored in excess of 10,000 lbs.
- Toxic Chemicals as defined in 40 CFR Part 372, where such chemicals are present or will be stored in excess of 10,000 lbs.
- Chemicals regulated under 6NYCRR Part 597, where such materials pose the potential for release in excess of their corresponding RQ.

Oil/petroleum products are considered to pose a significant spill potential whenever the following situations occur:

- The potential for a “harmful quantity” of oil (including petroleum and non-petroleum-based fuels and lubricants) to reach navigable waters of the U.S. exists (40 CFR Part 112.4). Harmful quantities are considered by USEPA to be

- volumes that could form a visible sheen on the water or violate applicable water quality standards.
- The potential for any amount of petroleum to reach any waters of NY State, including groundwater, exists. Petroleum, as defined by NY State in 6NYCRR Part 612, is a petroleum-based heat source, energy source, or engine lubricant/maintenance fluid.
 - The potential for any release, to soil or water, of petroleum from a bulk storage facility regulated under 6NYCRR Part 612. A regulated petroleum storage facility is defined by NY State as a site having stationary tank(s) and intra-facility piping, fixtures and related equipment with an aggregate storage volume of 1,100 gallons or greater.

The evaluation indicates that, based on site history and decommissioning records, a hazardous material spill and/or a petroleum product spill is not likely to occur during Remedial efforts.

9.2 Initial Spill Notification and Evaluation

Any worker who discovers a hazardous substance or oil/petroleum spill will immediately notify the Project Manager and SSO. The worker will, to the best of his/her ability, report the material involved, the location of the spill, the estimated quantity of material spilled, the direction/flow of the spill material, related fire/explosion incidents, if any, and any associated injuries. The Emergency Response Plan presented as Appendix A of this HASP will immediately be implemented if an emergency release has occurred.

Following initial report of a spill, the Project Manager will make an evaluation as to whether the release exceeds RQ levels. If an RQ level is exceeded, the Project Manager will notify the site owner and NYSDEC at 1-800-457-7362 within 2 hours of spill discovery. The Project Manager will also determine what additional agencies (e.g., USEPA) are to be contacted regarding the release, and will follow-up with written reports as required by the applicable regulations.

9.3 Spill Response

For all spill situations, the following general response guidelines will apply:

- Only those personnel involved in overseeing or performing containment operations will be allowed within the spill area. If necessary, the area will be

- roped, ribboned, or otherwise blocked off to prevent unauthorized access.
- Appropriate PPE, as specified by the SSHO, will be donned before entering the spill area.
 - Ignition points will be extinguished/removed if fire or explosion hazards exist.
 - Surrounding reactive materials will be removed.
 - Drains or drainage in the spill area will be blocked to prevent inflow of spilled materials or applied materials.

For minor spills, the Contractor will maintain a Spill Control and Containment Kit in the Field Office or other readily accessible storage location. The kit will consist of, at a minimum, a 50 lb. bag of “speedy dry” granular absorbent material, absorbent pads, shovels, empty 5-gallon pails and an empty open-top 55-gallon drum. Spilled materials will be absorbed, and shoveled into a 55-gallon drum for proper disposal (NYSDEC approval will be secured for on-site treatment of the impacted soils/absorbent materials, if applicable). Impacted soils will be hand-excavated to the point that no visible signs of contamination remains, and will be drummed with the absorbent.

In the event of a major release or a release that threatens surface water, a spill response contractor will be called to the site. The response contractor may use heavy equipment (i.e., excavator, backhoe, etc.) to berm the soils surrounding the spill site or create diversion trenching to mitigate overland migration or release to navigable waters. Where feasible, pumps will be used to transfer free liquid to storage containers. Spill control/cleanup contractors in the Western New York area that may be contacted for assistance include:

- The Environmental Service Group of NY, Inc: (716) 695-6720
- Op-Tech: (716) 525-1962

9.4 Post-Spill Evaluation

If a reportable quantity of hazardous material or oil/petroleum is spilled as determined by the Project Manager, a written report will be prepared as indicated in Section 9.2. The report will identify the root cause of the spill, type and amount of material released, date/time of release, response actions, agencies notified and/or involved in cleanup, and procedures to be implemented to avoid repeat incidents. In addition, all re-useable spill

cleanup and containment materials will be decontaminated, and spill kit supplies/disposable items will be replenished.

10.0 HEAT/COLD STRESS MONITORING

Since some of the work activities at the Site may be scheduled for both summer and winter months, measures will be taken to minimize heat/cold stress to Benchmark employees. The SSHO and/or his or her designee will be responsible for monitoring Benchmark field personnel for symptoms of heat/cold stress.

10.1 Heat Stress Monitoring

Personal protective equipment may place an employee at risk of developing heat stress, a common and potentially serious illness often encountered at construction, landfill, waste disposal, industrial or other unsheltered sites. The potential for heat stress is dependent on a number of factors, including environmental conditions, clothing, workload, physical conditioning and age. Personal protective equipment may severely reduce the body's normal ability to maintain temperature equilibrium (via evaporation and convection), and require increased energy expenditure due to its bulk and weight.

Proper training and preventive measures will mitigate the potential for serious illness. Heat stress prevention is particularly important because once a person suffers from heat stroke or heat exhaustion, that person may be predisposed to additional heat related illness. To avoid heat stress, the following steps should be taken:

- Adjust work schedules.
- Modify work/rest schedules according to monitoring requirements.
- Mandate work slowdowns as needed.
- Perform work during cooler hours of the day if possible or at night if adequate lighting can be provided.
- Provide shelter (air-conditioned, if possible) or shaded areas to protect personnel during rest periods.
- Maintain worker's body fluids at normal levels. This is necessary to ensure that the cardiovascular system functions adequately. Daily fluid intake must approximately equal the amount of water lost in sweat (i.e., eight fluid ounces must be ingested for approximately every 1 lb of weight lost). The normal thirst mechanism is not sensitive enough to ensure that enough water will be consumed to replace lost perspiration. When heavy sweating occurs, workers should be encouraged to drink more.
- Train workers to recognize the symptoms of heat related illness.

Heat-Related Illness - Symptoms:

- Heat rash may result from continuous exposure to heat or humid air.
- Heat cramps are caused by heavy sweating with inadequate electrolyte replacement. Signs and symptoms include: muscle spasms; pain in the hands, feet and abdomen.
- Heat exhaustion occurs from increased stress on various body organs including inadequate blood circulation due to cardiovascular insufficiency or dehydration. Signs and symptoms include: pale, cool, moist skin; heavy sweating; dizziness; nausea; fainting.
- Heat stroke is the most serious form of heat stress. Temperature regulation fails and the body temperature rises to critical levels. Immediate action must be taken to cool the body before serious injury and death occur. Competent medical help must be obtained. Signs and symptoms are: red, hot, usually dry skin; lack of or reduced perspiration; nausea; dizziness and confusion; strong, rapid pulse; coma.

The monitoring of personnel wearing protective clothing should commence when the ambient temperature is 70 degrees Fahrenheit or above. For monitoring the body's recuperative ability to excess heat, one or more of the following techniques should be used as a screening mechanism.

- Heart rate may be measured by the radial pulse for 30 seconds as early as possible in the resting period. The rate at the beginning of the rest period should not exceed 100 beats per minute. If the rate is higher, the next work period should be shortened by 10 minutes (or 33%), while the length of the rest periods stay the same. If the pulse rate is 100 beats per minute at the beginning of the next rest period, the following work cycle should be further shortened by 33%.
- Body temperature may be measured orally with a clinical thermometer as early as possible in the resting period. Oral temperature at the beginning of the rest period should not exceed 99.6 degrees Fahrenheit. If it does, the next work period should be shortened by 10 minutes (or 33%), while the length of the rest period remains the same. However, if the oral temperature exceeds 99.6 degrees Fahrenheit at the beginning of the next period, the work cycle may be further shortened by 33%. Oral temperature should be measured at the end of the rest period to make sure that it has dropped below 99.6 degrees Fahrenheit. No Benchmark employee will be permitted to continue wearing semi-permeable or impermeable garments when his/her oral temperature exceeds 100.6 degrees Fahrenheit.

10.2 Cold Stress Monitoring

Exposure to cold conditions may result in frostbite or hypothermia, each of which progresses in stages as shown below.

- **Frostbite** occurs when body tissue (usually on the extremities) begins to freeze. The three states of frostbite are:
 - 1) **Frost nip** - This is the first stage of the freezing process. It is characterized by a whitened area of skin, along with a slight burning or painful sensation. Treatment consists of removing the victim from the cold conditions, removal of boots and gloves, soaking the injured part in warm water (102 to 108 degrees Fahrenheit) and drinking a warm beverage. Do not rub skin to generate friction/ heat.
 - 2) **Superficial Frostbite** - This is the second stage of the freezing process. It is characterized by a whitish gray area of tissue, which will be firm to the touch but will yield little pain. The treatment is identical for Frost nip.
 - 3) **Deep Frostbite** - In this final stage of the freezing process the affected tissue will be cold, numb and hard and will yield little to no pain. Treatment is identical to that for Frost nip.
- **Hypothermia** is a serious cold stress condition occurring when the body loses heat at a rate faster than it is produced. If untreated, hypothermia may be fatal. The stages of hypothermia may not be clearly defined or visible at first, but generally include:
 - 1) Shivering
 - 2) Apathy (i.e., a change to an indifferent or uncaring mood)
 - 3) Unconsciousness
 - 4) Bodily freezing

Employees exhibiting signs of hypothermia should be treated by medical professionals. Steps that can be taken while awaiting help include:

- 1) Remove the victim from the cold environment and remove wet or frozen clothing. (Do this carefully as frostbite may have started.)
- 2) Perform active re-warming with hot liquids for drinking (Note: do not give the victim any liquid containing alcohol or caffeine) and a warm water bath (102 to 108 degrees Fahrenheit).
- 3) Perform passive re-warming with a blanket or jacket wrapped around the victim.

In any potential cold stress situation, it is the responsibility of the Site Health and Safety Officer to encourage the following:

- Education of workers to recognize the symptoms of frostbite and hypothermia.
- Workers should dress warmly, with more layers of thin clothing as opposed to one thick layer.
- Personnel should remain active and keep moving.
- Personnel should be allowed to take shelter in a heated areas, as necessary.
- Personnel should drink warm liquids (no caffeine or alcohol if hypothermia has set in).
- For monitoring the body's recuperation from excess cold, oral temperature recordings should occur:
 - At the Site Safety Technicians discretion when suspicion is based on changes in a worker's performance or mental status.
 - At a workers request.
 - As a screening measure, two times per shift, under unusually hazardous conditions (e.g., wind chill less than 20 degrees Fahrenheit or wind chill less than 30 degrees Fahrenheit with precipitation).
 - As a screening measure whenever anyone worker on site develops hypothermia.

Any person developing moderate hypothermia (a core body temperature of 92 degrees Fahrenheit) will not be allowed to return to work for 48 hours without the recommendation of a qualified medical doctor.

11.0 WORK ZONES & SITE CONTROL

Work zones around the areas designated for construction activities will be established on a daily basis and communicated to all employees and other site users by the SSHO. It shall be each Contractor's SSHO's responsibility to ensure that all site workers are aware of the work zone boundaries and to enforce proper procedures in each area. The zones will include:

- **Exclusion Zone ("Hot Zone"):** The area where contaminated materials may be exposed, excavated or handled and all areas where contaminated equipment or personnel may travel. The zone will be delineated by flagging tape. All personnel entering the Exclusion Zone must wear the prescribed level of personal protective equipment identified in Section 7.
- **Contamination Reduction Zone:** The zone where decontamination of personnel and equipment takes place. Any potentially contaminated clothing, equipment and samples must remain in the Contamination Reduction Zone until decontaminated.
- **Support Zone:** The part of the site that is considered non-contaminated or "clean." Support equipment will be located in this zone, and personnel may wear normal work clothes within this zone.

In the absence of other task-specific work zone boundaries established by the SSHO, the following boundaries will apply to all construction activities involving disruption or handling of site soils or groundwater:

- **Exclusion Zone:** 50 foot radius from the outer limit of the sampling/construction activity.
- **Contaminant Reduction Zone:** 100 foot radius from the outer limit of the sampling/construction activity.
- **Support Zone:** Areas outside the Contaminant Reduction Zone.

Access of non-essential personnel to the Exclusion and Contamination Reduction Zones will be strictly controlled by the SSHO. Only personnel who are essential to the completion of the task will be allowed access to these areas and only if they are wearing the prescribed level of protection. Entrance of all personnel must be approved by the SSHO.

The SSHO will maintain a Health and Safety Logbook containing the names of Benchmark workers and their level of protection. The zone boundaries may be changed by

the SSHO as environmental conditions warrant, and to respond to the necessary changes in work locations on-site.

12.0 DECONTAMINATION

12.1 Decontamination for Benchmark Employees

The degree of decontamination required is a function of a particular task and the environment within which it occurs. The following decontamination procedure will remain flexible, thereby allowing the decontamination crew to respond appropriately to the changing environmental conditions that may arise at the site. All Benchmark personnel on-site shall follow the procedure below, or the Contractor's procedure (if applicable), whichever is more stringent.

Station 1 - Equipment Drop: Deposit visibly contaminated (if any) re-useable equipment used in the contamination reduction and exclusion zones (tools, containers, monitoring instruments, radios, clipboards, etc.) on plastic sheeting.

Station 2 - Boots and Gloves Wash and Rinse: Scrub outer boots and outer gloves.

Station 3 - Tape, Outer Boot and Glove Removal: Remove tape, outer boots and gloves. Deposit tape and gloves in waste disposal container.

Station 4 - Canister or Mask Change: If worker leaves exclusive zone to change canister (or mask), this is the last step in the decontamination procedure. Worker's canister is exchanged, new outer gloves and boot cover donned, and worker returns to duty.

Station 5 - Outer Garment/Face Piece Removal: Protective suit removed and deposited in separate container provided by Contractor. Face piece or goggles are removed if used. Avoid touching face with fingers. Face piece and/or goggles deposited on plastic sheet. Hard hat removed and placed on plastic sheet.

Station 6 - Inner Glove Removal: Inner gloves are the last PPE to be removed. Avoid touching the outside of the gloves with bare fingers. Dispose of these gloves in waste disposal container.

Following PPE removal, personnel shall wash hands, face and forearms with absorbent wipes. If field activities proceed for a duration of 6 consecutive months or longer, shower facilities will be provided for worker use in accordance with OSHA 29 CFR 1910.120(n).

12.2 Decontamination for Medical Emergencies

In the event of a minor, non-life threatening injury, personnel should follow the decontamination procedures as defined, and then administer first-aid.

In the event of a major injury or other serious medical concern (e.g., heat stroke), immediate first-aid is to be administered and the victim transported to the hospital in lieu of further decontamination efforts unless exposure to a site contaminant would be considered “Immediately Dangerous to Life or Health.”

12.3 Decontamination of Field Equipment

Decontamination of heavy equipment will be conducted by the Contractor in accordance with his approved Health and Safety Plan in the Contamination Reduction Zone. As a minimum, this will include manually removing heavy soil contamination, followed by steam cleaning on an impermeable pad.

Decontamination of all tools used for sample collection purposes will be conducted by Benchmark personnel. It is expected that all tools will be constructed of nonporous, nonabsorbent materials (i.e., metal), which will aid in the decontamination effort. Any tool or part of a tool made of porous, absorbent material (i.e., wood) will be placed into suitable containers and prepared for disposal.

Decontamination of bailers, split-spoons, spatula knives, and other tools used for environmental sampling and examination shall be as follows:

- Disassemble the equipment.
- Water wash to remove all visible foreign matter.
- Wash with detergent.
- Rinse all parts with distilled-deionized water.
- Allow to air dry.
- Wrap all parts in aluminum foil or polyethylene.

13.0 CONFINED SPACE ENTRY

OSHA 29 CFR 1910.146 identifies a confined space as a space that is large enough and so configured that an employee can physically enter and do assigned work, has limited or restricted means for entry and exit, and is not intended for continuous employee occupancy. Confined spaces include, but are not limited to, trenches, storage tanks, process vessels, pits, sewers, tunnels, underground utility vaults, pipelines, sumps, wells, and excavations.

Confined space entry by Benchmark employees is not anticipated to be necessary to complete the remedial activities identified in Section 2.0. In the event that the scope of work changes or confined space entry appears necessary, the Project Manager will be consulted to determine if feasible engineering alternatives to confined space entry can be implemented. If confined space entry by Benchmark employees cannot be avoided through reasonable engineering measures, task-specific confined space entry procedures will be developed and a confined-space entry permit will be issued through Benchmark's corporate Health and Safety Director. Benchmark employees shall not enter a confined space without these procedures and permits in place.

14.0 FIRE PREVENTION & PROTECTION

14.1 General Approach

Recommended practices and standards of the National Fire Protection Association (NFPA) and other applicable regulations will be followed in the development and application of Project Fire Protection Programs. When required by regulatory authorities, the project management will prepare and submit a Fire Protection Plan for the approval of the contracting officers, authorized representative or other designated official. Essential considerations for the Fire Protection Plan will include:

- Proper site preparation and safe storage of combustible and flammable materials.
- Availability of coordination with private and public fire authorities.
- Adequate job-site fire protection and inspections for fire prevention.
- Adequate indoctrination and training of employees.

14.2 Equipment and Requirements

Fire extinguishers will be provided by each Contractor and are required on all heavy equipment and in each field trailer. Fire extinguishers will be inspected, serviced, and maintained in accordance with the manufacturer's instructions. As a minimum, all extinguishers shall be checked monthly and weighed semi-annually, and recharged if necessary. Recharge or replacement shall be mandatory immediately after each use.

14.3 Flammable and Combustible Substances

All storage, handling or use of flammable and combustible substances will be under the supervision of qualified persons. All tanks, containers and pumping equipment, whether portable or stationary, used for the storage and handling of flammable and combustible liquids, will meet the recommendations of the NFPA.

14.4 Hot Work

If the scope of work necessitates welding or blowtorch operation, the hot work permit presented in Appendix B will be completed by the SSHO and reviewed/issued by the Project Manager.

15.0 EMERGENCY INFORMATION

In accordance with OSHA 29 CFR Part 1910, an Emergency Response Plan is attached to this HASP as Appendix A. Figure A-1 is the hospital route map.

16.0 REFERENCES

1. New York State Department of Health. 2010. *Generic Community Air Monitoring Plan, Appendix 1A, DER-10 Technical Guidance for Site Investigation and Remediation*. May.

TABLES

TABLE 1

PARAMETERS OF INTEREST

**Site Health & Safety Plan
295 Maryland Street Site
Buffalo, New York**

Parameter ¹	CAS No.	Maximum Detected Concentration ²		
		Groundwater (µg/L)	Surface Soil/Fill (mg/kg)	Subsurface Soil/Fill (mg/kg)
<i>Volatile Organic Compounds (VOCs):</i>				
Benzene	71-43-2	38	ND	0.8
Ethylbenzene	100-41-4	39	ND	ND
Toluene	108-88-3	18	ND	ND
Xylene, Total	1330-20-7	97	ND	ND
<i>Polycyclic Aromatic Hydrocarbons (PAHs):</i>				
Benz(a)anthracene	56-55-3	0.35	17	2
Benzo(a)pyrene	50-32-8	ND	13	1.6
Benzo(b)fluoranthene	205-99-2	ND	19	2.6
Benzo(k)fluoranthene	207-08-9	ND	8.1	0.98
Chrysene	218-01-9	ND	14	1.7
Dibenz(ah)anthracene	53-70-3	ND	0.61	ND
Indeno(1,2,3-cd)pyrene	193-39-5	ND	7	0.74
<i>Inorganic Compounds:</i>				
Arsenic	7440-38-2	ND	23	7.8
Barium	7440-39-3	0.332	516	552
Cadmium	7440-43-9	ND	4.2	2.26
Lead	7439-92-1	ND	8,160	1,420
Mercury	7439-97-6	ND	1	0.92

Notes:

1. Constituents were identified as parameters of interest during the Phase II and RAWP investigation.
2. Maximum detected concentrations as presented in the RAWP.

Acronyms:

NA = Not analyzed.
ND = Parameter not detected above method detection limits.

TABLE 2

TOXICITY DATA FOR PARAMETERS OF INTEREST

Site Health & Safety Plan
295 Maryland Street Site
Buffalo, New York

Parameter	Synonyms	CAS No.	Code	Concentration Limits ¹		
				PEL	TLV	IDLH
Volatile Organic Compounds (VOCs): ppm						
Benzene	Benzol, Phenyl hydride	71-43-2	Ca	1	0.5	500
Ethylbenzene	Ethylbenzol, Phenylethane	100-41-4	none	100	100	800
Toluene	Methyl benzene, Methyl benzol	108-88-3	C-300	200	50	500
Xylene, Total	o-, m-, p-isomers	1330-20-7	none	100	100	900
Polycyclic Aromatic Hydrocarbons (PAHs) ²: ppm						
Benz(a)anthracene	none	56-55-3	none	--	--	--
Benzo(a)pyrene	none	50-32-8	none	--	--	--
Benzo(b)fluoranthene	none	205-99-2	none	--	--	--
Benzo(k)fluoranthene	none	207-08-9	none	--	--	--
Chrysene	none	218-01-9	none	--	--	--
Dibenz(ah)anthracene	none	53-70-3	none	--	--	--
Indeno(1,2,3-cd)pyrene	none	193-39-5	none	--	--	--
Inorganic Compounds: mg/m ³						
Arsenic	none	7440-38-2	Ca	0.01	0.01	5
Barium	none	7440-39-3	none	0.5	0.5	50
Cadmium	none	7440-43-9	Ca	0.005	0.01	9
Lead	none	7439-92-1	none	0.05	0.15	100
Mercury	none	7439-97-6	C-0.1	0.1	0.05	10

Notes:

1. Concentration limits as reported by NIOSH Pocket Guide to Chemical Hazards, February 2004 (NIOSH Publication No. 97-140, fourth printing with changes and updates).
2. Individual parameters listed are those most commonly detected at steel/coke manufacturing sites.
3. "--" = concentration limit not available; exposure should be minimized to the extent feasible through appropriate engineering controls & PPE.

Explanation:

Ca = NIOSH considers constituent to be a potential occupational carcinogen.

C-## = Ceiling Level equals the maximum exposure concentration allowable during the work day.

IDLH = Immediately Dangerous to Life or Health.

ND indicates that an IDLH has not as yet been determined.

TLV = Threshold Limit Value, established by American Conference of Industrial Hygienists (ACGIH), equals the maximum exposure concentration allowable for 8 hours/day @ 40 hours/week.

TLVs are the amounts of chemicals in the air that almost all healthy adult workers are predicted to be able to tolerate without adverse effects. There are three types.

TLV-TWA (TLV-Time-Weighted Average) which is averaged over the normal eight-hour day/forty-hour work week. (Most TLVs.)

TLV-STEL or Short Term Exposure Limits are 15 minute exposures that should not be exceeded for even an instant. It is not a stand alone value but is accompanied by the TLV-TWA.

It indicates a higher exposure that can be tolerated for a short time without adverse effect as long as the total time weighted average is not exceeded.

TLV-C or Ceiling limits are the concentration that should not be exceeded during any part of the working exposure.

Unless the initials "STEL" or "C" appear in the Code column, the TLV value should be considered to be the eight-hour TLV-TWA.

PEL = Permissible Exposure Limit, established by OSHA, equals the maximum exposure concentration allowable for 8 hours per day @ 40 hours per week

TABLE 3

**POTENTIAL ROUTES OF EXPOSURE TO
PARAMETERS OF INTEREST**

**Site Health and Safety Plan
295 Maryland Street Site
Buffalo, New York**

Activity ¹	Direct Contact with Soil/Fill	Inhalation of Vapors or Dust	Direct Contact with Groundwater
1. Soil/Fill Excavation	x	x	
2. Soil/Fill Verification Sampling	x	x	
3. Surface Water Management			x
4. Subgrade Work	x	x	

Notes:

1. Activity as described in Section 1.5 of the Health and Safety Plan

TABLE 4

REQUIRED LEVELS OF PROTECTION FOR REMEDIAL ACTIVITIES

**Site Health and Safety Plan
295 Maryland Street Site
Buffalo, New York**

Activity	Respiratory Protection¹	Clothing	Gloves²	Boots^{2,3}	Other Required PPE/Modifications^{2,4}
1. Soil/Fill Excavation	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L	outer: L inner: STSS	HH SGSS
2. Soil/Fill Verification Sampling	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L	outer: L inner: STSS	HH SGSS
3. Surface Water Management	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
4. Subgrade Work	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L	outer: L inner: STSS	HH SGSS

Notes:

1. Respiratory equipment shall conform to guidelines presented in Section 7.0 of this HASP. The Level C requirement is an air-purifying respirator equipped with organic compound/acid gas/dust
2. HH = hardhat; L= Latex; L/N = latex inner glove, nitrile outer glove; N = Nitrile; S = Saranex; SG = safety glasses; SGSS = safety glasses with sideshields; STSS = steel toe safety shoes.
3. Latex outer boot (or approved overboot) required whenever contact with contaminated materials may occur. SSHO may downgrade to STSS (steel-toed safety shoes) if contact will be limited to cover/replacement soils.
4. Dust masks shall be donned as directed by the SSHO (site safety and health officer) or site safety technician whenever potentially contaminated airborne particulates (i.e., dust) are present in significant

APPENDIX A

EMERGENCY RESPONSE PLAN

SITE HASP – APPENDIX A

EMERGENCY RESPONSE PLAN

FOR

BROWNFIELD CLEANUP PROGRAM

295 MARYLAND STREET SITE
BUFFALO, NEW YORK

July 2011

0222-001-100

Prepared for:

295 MARYLAND, LLC

Prepared By:



Benchmark Environmental Engineering & Science, PLLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716)856-0599

SITE HEALTH AND SAFETY PLAN
295 MARYLAND STREET SITE
APPENDIX A: EMERGENCY RESPONSE PLAN

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1.0 GENERAL

This report presents the site-specific Emergency Response Plan (ERP) referenced in the Site Health and Safety Plan (HASP) prepared for remedial activities conducted at the 295 Maryland Street Site in Buffalo, New York. This appendix of the HASP describes potential emergencies that may occur at the Site; procedures for responding to those emergencies; roles and responsibilities during emergency response; and training all workers must receive in order to follow emergency procedures. This ERP also describes the provisions this Site has made to coordinate its emergency response planning with other contractors on-site and with off-site emergency response organizations. This ERP is consistent with the requirements of 29 CFR 1910.120(l) and provides the following site-specific information:

- Pre-emergency planning.
- Personnel roles, lines of authority, and communication.
- Emergency recognition and prevention.
- Safe distances and places of refuge.
- Evacuation routes and procedures.
- Decontamination procedures.
- Emergency medical treatment and first aid.
- Emergency alerting and response procedures.
- Critique of response and follow-up.
- Emergency personal protective equipment (PPE) and equipment.

2.0 PRE-EMERGENCY PLANNING

This Site has been evaluated for potential emergency occurrences, based on site hazards, the required work tasks, the site topography, and prevailing weather conditions. The results of that evaluation indicate the potential for the following site emergencies to occur at the locations indicated.

Type of Emergency:

1. Medical, due to physical injury
2. Fire

Source of Emergency:

1. Slip/trip/fall
2. Fire

Location of Source:

Non-specific

3.0 ON-SITE EMERGENCY RESPONSE EQUIPMENT

Emergency procedures may require specialized equipment to facilitate worker rescue, contamination control and reduction, or post-emergency clean up. Emergency response equipment available on the Site is listed below. The equipment inventory and storage locations are based on the potential emergencies described above. This equipment inventory is designed to meet on-site emergency response needs and any specialized equipment needs that off-site responders might require because of the hazards at this Site but not ordinarily stocked.

Any additional personal protective equipment (PPE) required and stocked for emergency response is also listed in below. During an emergency, the Emergency Response Coordinator (ERC) is responsible for specifying the level of PPE required for emergency response. At a minimum, PPE used by emergency responders will comply with Section 7.0, Personal Protective Equipment, of this HASP. Emergency response equipment is inspected at regular intervals and maintained in good working order. The equipment inventory is replenished as necessary to maintain response capabilities.

Emergency Equipment	Quantity	Location
Spill Response Kit	1	Site Vehicle
First Aid Kit	1	Site Vehicle
Chemical Fire Extinguisher	2 (minimum)	All heavy equipment and Site Vehicle

Emergency PPE	Quantity	Location
Full-face respirator	1 for each worker	Site Vehicle
Chemical-resistant suits	4 (minimum)	Site Vehicle

4.0 EMERGENCY PLANNING MAPS

An area-specific map of the Site will be developed on a daily basis during performance of field activities. The map will be marked to identify critical on-site emergency planning information, including: emergency evacuation routes, a place of refuge, an assembly point, and the locations of key site emergency equipment. Site zone boundaries will be shown to alert responders to known areas of contamination. There are no major topographical features; however, the direction of prevailing winds/weather conditions that could affect emergency response planning are also marked on the map. The map will be posted at site-designated place of refuge and inside the Benchmark personnel field vehicle.

5.0 EMERGENCY CONTACTS

The following identifies the emergency contacts for this ERP.

Emergency Telephone Numbers:

Project Manager: *Thomas H. Forbes*

Work: (716) 856-0599

Mobile: (716) 864-1730

Corporate Health and Safety Director: *Thomas H. Forbes*

Work: (716) 856-0599

Mobile: (716) 864-1730

Site Safety and Health Officer (SSHO): *Richard L. Dubisz*

Work: (716) 856-0599

Mobile: (716) 998-4334

Alternate SSHO: *Thomas Behrendt*

Work: (716) 856-0599

Mobile: (716) 818-8358

BUFFALO GENERAL HOSPITAL:	(716)859-5600
FIRE	911
AMBULANCE:	911
BUFFALO POLICE:	911
STATE EMERGENCY RESPONSE HOTLINE:	(800) 457-7362
NATIONAL RESPONSE HOTLINE:	(800) 424-8802
NYSDOH:	(716) 847-4385
NYSDEC:	(716) 851-7220
NYSDEC 24-HOUR SPILL HOTLINE:	(800) 457-7252

The Site location is:

295 Maryland Street

Buffalo, New York 14201

Site Phone Number: (Insert Cell Phone or Field Trailer): _____

6.0 EMERGENCY ALERTING & EVACUATION

Internal emergency communication systems are used to alert workers to danger, convey safety information, and maintain site control. Any effective system can be employed. Two-way radio headsets or field telephones are often used when work teams are far from the command post. Hand signals and air-horn blasts are also commonly used. Every system must have a backup. It shall be the responsibility of each contractor's SSHO to ensure an adequate method of internal communication is understood by all personnel entering the site. Unless all personnel are otherwise informed, the following signals shall be used.

- 1) Emergency signals by portable air horn, siren, or whistle: two short blasts, personal injury; continuous blast, emergency requiring site evacuation.
- 2) Visual signals: hand gripping throat, out of air/cannot breathe; hands on top of head, need assistance; thumbs up, affirmative/ everything is OK; thumbs down, no/negative; grip partner's wrist or waist, leave area immediately.

If evacuation notice is given, site workers leave the worksite with their respective buddies, if possible, by way of the nearest exit. Emergency decontamination procedures detailed in Section 12.0 of the HASP are followed to the extent practical without compromising the safety and health of site personnel. The evacuation routes and assembly area will be determined by conditions at the time of the evacuation based on wind direction, the location of the hazard source, and other factors as determined by rehearsals and inputs from emergency response organizations. Wind direction indicators are located so that workers can determine a safe up wind or cross wind evacuation route and assembly area if not informed by the emergency response coordinator at the time the evacuation alarm sounds. Since work conditions and work zones within the site may be changing on daily basis, it shall be the responsibility of the construction Site Health and Safety Officer to review evacuation routes and procedures as necessary and to inform all Benchmark workers of any changes.

Personnel exiting the site will gather at a designated assembly point. To determine that everyone has successfully exited the site, personnel will be accounted for at the assembly site. If any worker cannot be accounted for, notification is given to the SSHO (**Thomas Behrendt** or **Richard Dubisz**) so that appropriate action can be initiated. Contractors and subcontractors on this site have coordinated their emergency response plans to ensure that

APPENDIX A: EMERGENCY RESPONSE PLAN

these plans are compatible and that source(s) of potential emergencies are recognized, alarm systems are clearly understood, and evacuation routes are accessible to all personnel relying upon them.

7.0 EXTREME WEATHER CONDITIONS

In the event of adverse weather conditions, the SSHO in conjunction with the Contractor's SSHO will determine if engineering operations can continue without sacrificing the health and safety of site personnel. Items to be considered prior to determining if work should continue include but are not limited to:

- Potential for heat/cold stress.
- Weather-related construction hazards (i.e., flooding or wet conditions producing undermining of structures or sheeting, high wind threats, etc).
- Limited visibility.
- Potential for electrical storms.
- Limited site access/egress (e.g., due to heavy snow)

8.0 EMERGENCY MEDICAL TREATMENT & FIRST AID

Personnel Exposure:

The following general guidelines will be employed in instances where health impacts threaten to occur acute exposure is realized:

- **Skin Contact:** Use copious amounts of soap and water. Wash/rinse affected area for at least 15 minutes. Decontaminate and provide medical attention. Eyewash stations will be provided on site. If necessary, transport to Mercy Hospital.
- **Inhalation:** Move to fresh air and, if necessary, transport to Mercy Hospital.
- **Ingestion:** Decontaminate and transport to Mercy Hospital.

Personal Injury:

Minor first-aid will be applied on-site as deemed necessary. In the event of a life threatening injury, the individual should be transported to Mercy Hospital via ambulance. The SSHO will supply available chemical specific information to appropriate medical personnel as requested.

First aid kits will conform to Red Cross and other applicable good health standards, and shall consist of a weatherproof container with individually sealed packages for each type of item. First aid kits will be fully equipped before being sent out on each job and will be checked weekly by the SSHO to ensure that the expended items are replaced.

Directions to Buffalo General Hospital (see Figure A-1):

The following directions describe the best route to Buffalo General Hospital:

- From the intersection of Maryland Street and West Avenue, proceed northeast (toward West Tupper Street).
- Turn right onto Cottage Street (street name changes to Virginia Street).
- Turn left onto Main Street.
- Turn right on Goodrich Street. Buffalo General Hospital will be on right hand side. Follow signs to emergency room (ER).

9.0 EMERGENCY RESPONSE CRITIQUE & RECORD KEEPING

Following an emergency, the SSHO and Project Manager shall review the effectiveness of this Emergency Response Plan (ERP) in addressing notification, control and evacuation requirements. Updates and modifications to this ERP shall be made accordingly. It shall be the responsibility of each contractor to establish and assure adequate records of the following:

- Occupational injuries and illnesses.
- Accident investigations.
- Reports to insurance carrier or State compensation agencies.
- Reports required by the client.
- Records and reports required by local, state, federal and/or international agencies.
- Property or equipment damage.
- Third party injury or damage claims.
- Environmental testing logs.
- Explosive and hazardous substances inventories and records.
- Records of inspections and citations.
- Safety training.

10.0 EMERGENCY RESPONSE TRAINING

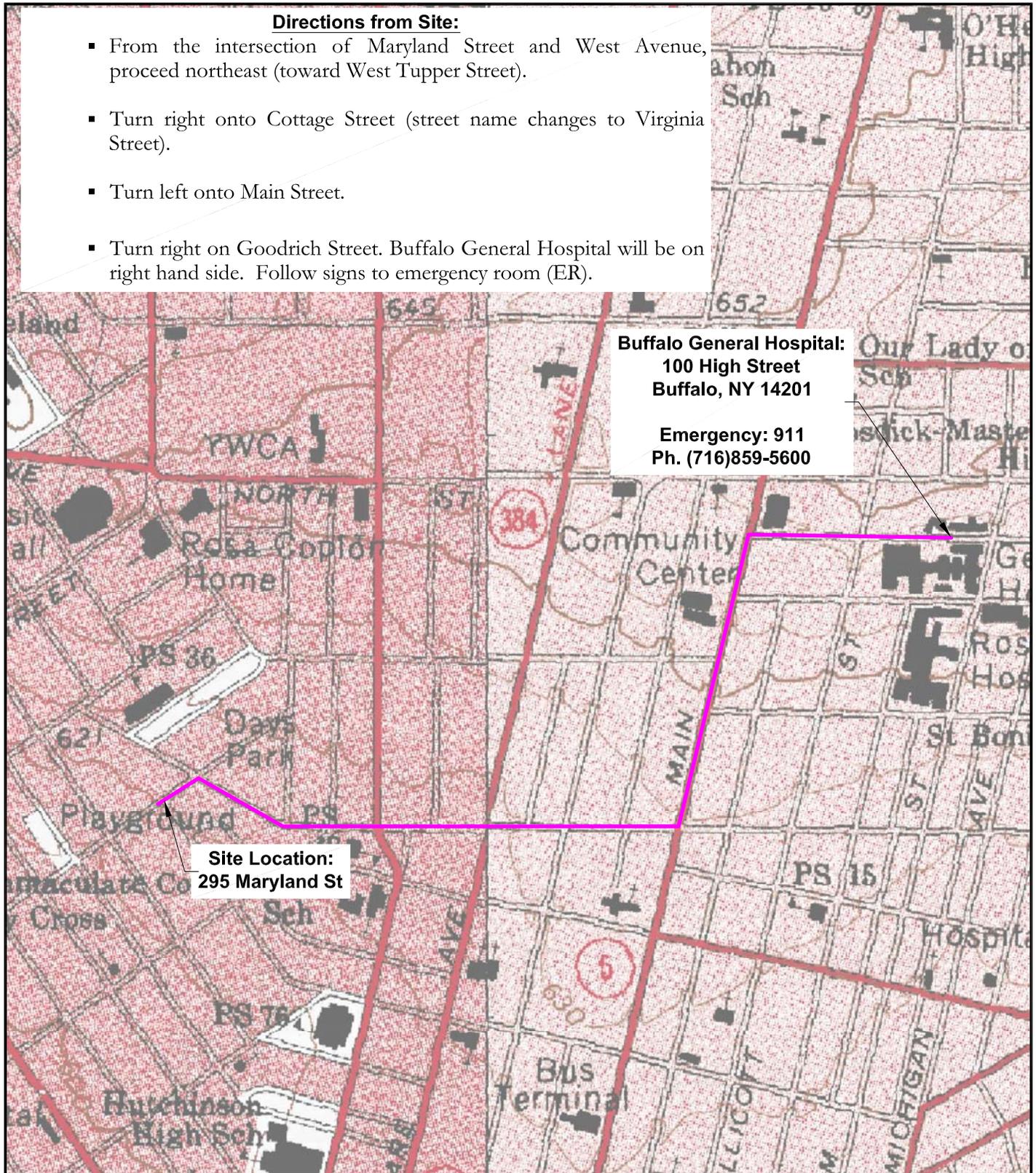
All persons who enter the worksite, including visitors, shall receive a site-specific briefing about anticipated emergency situations and the emergency procedures by the SSHO. Where this site relies on off-site organizations for emergency response, the training of personnel in those off-site organizations has been evaluated and is deemed adequate for response to this site.

FIGURES

FIGURE A-1

Directions from Site:

- From the intersection of Maryland Street and West Avenue, proceed northeast (toward West Tupper Street).
- Turn right onto Cottage Street (street name changes to Virginia Street).
- Turn left onto Main Street.
- Turn right on Goodrich Street. Buffalo General Hospital will be on right hand side. Follow signs to emergency room (ER).



Site Location:
295 Maryland St

Buffalo General Hospital:
100 High Street
Buffalo, NY 14201

Emergency: 911
Ph. (716)859-5600



2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

HOSPITAL ROUTE MAP
REMEDIAL ACTION WORK PLAN

295 MARYLAND STREET SITE
295 MARYLAND STREET
BUFFALO, NEW YORK
PREPARED FOR
295 MARYLAND, LLC

PROJECT NO.: 0222-001-100

DATE: JUNE 2011

DRAFTED BY: JCT

APPENDIX B

HOT WORK PERMIT FORM

PART 1 - INFORMATION	
Issue Date:	
Date Work to be Performed: Start:	Finish (permit terminated):
Performed By:	
Work Area:	
Object to be Worked On:	
PART 2 - APPROVAL	
(for 1, 2 or 3: mark Yes, No or NA)*	
Will working be on or in:	Finish (permit terminated):
1. Metal partition, wall, ceiling covered by combustible material?	yes no
2. Pipes, in contact with combustible material?	yes no
3. Explosive area?	yes no
* = If any of these conditions exist (marked "yes"), a permit will not be issued without being reviewed and approved by Thomas H. Forbes (Corporate Health and Safety Director). Required Signature below.	
PART 3 - REQUIRED CONDITIONS**	
(Check all conditions that must be met)	
PROTECTIVE ACTION	PROTECTIVE EQUIPMENT
Specific Risk Assessment Required	Goggles/visor/welding screen
Fire or spark barrier	Apron/fireproof clothing
Cover hot surfaces	Welding gloves/gauntlets/other:
Move movable fire hazards, specifically	Wellintons/Knee pads
Erect screen on barrier	Ear protection: Ear muffs/Ear plugs
Restrict Access	B.A.: SCBA/Long Breather
Wet the ground	Respirator: Type:
Ensure adequate ventilation	Cartridge:
Provide adequate supports	Local Exhaust Ventilation
Cover exposed drain/floor or wall cracks	Extinguisher/Fire blanket
Fire watch (must remain on duty during duration of permit)	Personal flammable gas monitor
Issue additional permit(s):	
Other precautions:	
** Permit will not be issued until these conditions are met.	
SIGNATURES	
Originating Employee:	Date:
Project Manager:	Date:
Part 2 Approval:	Date:

APPENDIX C

NYSDOH GENERIC COMMUNITY AIR MONITORING PLAN

Appendix 1A

New York State Department of Health Generic Community Air Monitoring Plan

Overview

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

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

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

Community Air Monitoring Plan

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

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

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

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

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

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

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

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

Particulate Monitoring, Response Levels, and Actions

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

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed $150 \text{ mcg}/\text{m}^3$ above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \text{ mcg}/\text{m}^3$ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within $150 \text{ mcg}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

APPENDIX F

PROJECT DOCUMENTATION FORMS

