1030 East Dominick Street
Environmental Restoration Project

City of Rome
Oneida County, New York

Remedial Investigation Report

New York State Assistance
Contract No. C303406
New York State Site No. E633064

May 2016

Barton & Loguidice

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I, the undersigned engineer, certify that I am currently a NYS registered professional engineer, This Remedial Investigation (RI) Report 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). All activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

Scott D. Nostrand, P.E.

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Executive Summary

The City of Rome conducted a remedial investigation (RI) in accordance with the New York State Department of Environmental Conservation (NYSDEC) Environmental Restoration Program (ERP) at its property located at 1030 East Dominick Street (Site) in the City of Rome, Oneida County, New York. The 0.88 acre property, which is currently owned by the City of Rome, contains an automobile maintenance and repair facility and was historically used as a gasoline station until 1999. The investigation was conducted under the oversight of Barton & Loguidice, D.P.C. (B&L), the NYSDEC, and the New York State Department of Health (NYSDOH). The results of the investigation are summarized in the Draft Remedial Investigation (RI) Report dated August 2012 and the Supplemental Site Investigation Summary prepared by B&L dated June 13, 2014.

Site investigation activities determined the on-site and off-site extent of surface soil, subsurface soil, groundwater, and soil vapor contamination originating from the site. Specifically, two of the on-site surface soil samples reported one or more semi-volatile organic compound (SVOC) parameters in exceedance of the NYDEC Part 375 Restricted-Residential Soil Cleanup Objectives (SCOs). While there were no volatile organic compound (VOC) exceedances of the applicable Part 375 Restricted-Residential SCOs in the analyzed surface soil samples, tentatively identified compounds (TICs) for VOCs were detected in one surface soil sample. Copper levels exceeded the Part 375 Restricted-Residential SCO in one of the surface soil samples, but this parameter was also detected in the method blank.

With regards to the analyzed subsurface soil samples collected at both on-site and off-site soil boring and monitoring well locations, there were no VOCs exceedances of the applicable Part 375 Restricted-Residential SCOs. However, field observations collected with a photoionization detector (PID) recorded VOC readings as high as 1,220 parts per million (ppm) in the on-site soil borings. There was one reported low level exceedance of a SVOC parameter, and both VOC and SVOC TICs were reported for various subsurface soil samples.

Two of the analyzed soil vapor samples exhibited a slight exceedance of the New York State Department of Health (NYSDOH) Air Guideline Value (AGV) for trichloroethene.

The groundwater sampling results exhibited one or more VOC parameter concentration exceedances in four of the on-site water quality samples as compared to the applicable Part 703.5 Groundwater Standards, as well as the detection of VOC TICs in two of the analyzed groundwater samples. SVOC parameter concentration exceedances of the NYSDEC Part 703.5 Groundwater Standards were reported at three monitoring well locations, in addition to the detection of SVOC TICs at all of the monitoring well locations. The groundwater sampling results exhibited metals parameter concentration exceedances in all of the on-site and off-site

monitoring wells as compared to the Part 703.5 Groundwater Standards. However, the metals parameter concentration exceedances are likely attributable to elevated sample turbidity.

As noted above, TICs are reported in several of the analyzed surface soil, subsurface soil, and groundwater samples. Further review of the reported TICs indicate that the TICs primarily consist of hydrocarbons and polycyclic hydrocarbons (PAHs), both groups of which are associated with petroleum products. Based on the site's history as an automobile maintenance facility, it is probable that the reported TICs are indicative of residual, weathered subsurface petroleum contamination. Similarly, the PID readings and visual evidence of subsurface petroleum contamination observed on-site is likely related to historic petroleum contamination, rather than recent spill events of which there have been none recorded for the site.

The results of the environmental evaluation and qualitative risk assessment suggest that the residual contamination remaining on-site does not represent a significant risk to human health receptors or to the environment (including wildlife) under current conditions. Key considerations to the risk assessment include:

- The presence of a public water supply (there are no on or off-site private supply wells);
- Remaining site contaminants are vertically and horizontally defined.

Based on the detection of SVOC parameter concentration exceedances in two surface soil samples, VOC parameter concentration exceedances in four groundwater samples, and slightly elevated concentrations of trichloroethene in two soil vapor points, the potential absorption, inhalation, and ingestion pathways at the site are complete with regards to the occurrence of possible future site development activities (e.g., site construction) that could directly expose workers to the residual contaminants.

1.0 Introduction

The City of Rome is the current owner of the 1030 East Dominick Street (Site) property which is an approximate 0.88-acre property located to the south side of East Dominick Street in the City of Rome, Oneida County, New York (Figure 1). The property is currently leased to Mr. Michael Burth, who operates an automobile maintenance and repair shop, and designated on the City of Rome tax map as parcel number 242.069-001-041. A single, one-story, concrete block building with a wood-framed mezzanine level is present at the site. The City of Rome received funding from the New York State Department of Environmental Conservation (NYSDEC), under the provisions of the Environmental Restoration Program (ERP), to conduct a remedial investigation at the property, as described herein. The City also received a Brownfields Assessment Grant from the U.S. Environmental Protection Agency (EPA) to investigate and assess the contamination at the Site.

1.1 Objectives

The overall objective of the remedial investigation is to define the nature and extent of contamination on the property related to former Site activities. The specific objectives of the remedial investigation include the following:

- Characterize the site hydrogeologic conditions, including identification of depth to groundwater and flow direction, and the possible presence of preferential groundwater flow pathways;
- Define the presence and extent of soil and groundwater contamination on-site (and off-site);
- Conduct an evaluation of off-site impacts and an evaluation of contaminant fate and transport.

1.2 Report Organization

This report summarizes the remedial investigation activities and presents the findings specific to the characterization of existing hydrogeologic and environmental conditions, including the presence and extent of contaminants at the site. The results of the field activities were used to assess the existing contamination and to evaluate potential exposure targets.

This report is organized into five major sections (including the introduction). Tables and figures are located following the text, prior to the appendices in the back of the document. Section 2.0 presents the remedial investigation tasks and summarizes the methodologies used during the data collection field activities. Section 3.0 presents the findings of the site characterization phase of the project. Within Section 3.0, information is presented regarding the

site's physical setting, the nature and extent of contamination, contaminant fate and transport, public health and wildlife risk evaluation, and the wetlands, floodplains, and sensitive environment survey. Section 4.0 summarizes the remedial investigation and presents the recommended action. Section 5.0 presents the references used for the Remedial Investigation Report.

1.3 Special Terms and Conditions

The initial remedial investigation was conducted in accordance with the Site Investigation Work Plan prepared by Barton & Loguidice, P.C. (B&L) dated May 2008. The Work Plan included a Sampling and Analysis Plan (SAP), a Health and Safety Plan (HASP), and a Citizen Participation Plan (CPP). Prior to approving the Site Investigation Work Plan, both the NYSDEC and the EPA issued comment letters that resulted in B&L making several modifications to the Work Plan document. Specifically, B&L prepared separate letter responses, dated May 30th, August 20th, and October 20, 2008 respectively, which acknowledged several changes in sampling methods and procedures, which were then incorporated into the remedial investigation tasks (refer to Appendix A).

A supplemental remedial investigation was conducted in accordance with the Phase 2 Subsurface Investigation Work Plan date January 2012 and approved by the NYSDEC letter dated January 26, 2012. Prior to approving the Site Investigation Work Plan, the NYSDEC issued comment letters that resulted in B&L making several modifications to the Work Plan document.

In addition to the specific provisions of the NYSDEC and EPA-approved Work Plan, the remedial investigation was conducted in accordance with the 1997 NYSDEC Guidance Document for the "Brownfield Program" (DER 97-4058) and NYSDEC Draft DER-10 "Technical Guidance for Site Investigation and Remediation," December 2002 (DER-10). It should be noted that since the completion of the remedial investigation field work, a final version of the aforementioned DER-10 guidance was issued by the Department on May 3, 2010. The Standards, Criteria, and Guidance (SCGs) utilized for this project included, but were not limited to, the following publications: NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation, (Draft version dated December 2002 and Final version dated May 3, 2010), 6 NYCRR Part 375 Environmental Remediation Programs, December 2006, NYSDEC T.O.G.S. 1.1.1 – Ambient Water Quality Standards & Guidance Values and Groundwater Effluent Limitations, 6 NYCRR Parts 700-706 – Water Quality Standards, 10 NYCRR Part 5 of the State Sanitary Code – Drinking Water Supplies, and NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

1.4 Background

1.4.1 Physical Setting

1030 East Dominick Street (the site) is located in the City of Rome, Oneida County, New York (see Figure 1), and is designated on the City of Rome tax parcel map as parcel number 242.069-001-041. The approximate 0.88-acre site is located on the south side of East Dominick Street, opposite Carey Street.

1.4.2 Site Description

According to the information presented in the Limited Phase I ESA, the on-site structure is 2,200 square feet in size and contains a slab-on-grade foundation. The walls on the first floor are comprised of concrete blocks, while the mezzanine level consists of wood framing and wood siding. The Buck Engineering report states that the western half of the building was constructed in 1953, and the eastern half was subsequently added in the early 1990s. The west side of the building is heated with a natural-gas-fired, forced air furnace, while a kerosene furnace is used to heat the eastern portion of the building. The inside of the building contains four auto service bays along with two floor drains. The Limited Phase I ESA report indicates that the floor drains are not equipped with an oil water separator and reportedly discharge to the municipal sewer system.

1.4.3 Adjacent Property Land Use

East Dominick Street constitutes the immediate northern site boundary of the property, with residences located on the opposite (north) side of East Dominick Street, as well as both sides of Carey Street. Located still farther to the north is the East Rome Business Park, an industrial area that has been the subject of significant remedial efforts. The property is bordered to the south by active railroad tracks, and to the west by Tehan's Furniture Warehouse. Bordering the site immediately to the east is single family residence, with a Firestone Auto Center located just to the east of the residence.

1.4.4 Site History

Historical information presented in the limited Phase I ESA indicates that the subject site was previously used as a Mobil gasoline station dating back to the 1950's, and that the Mobil station initially included four 1,000-gallon capacity USTs. In 1977, three USTs consisting of 3,000-gallon, 4,000-gallon, and 6,000-gallon capacities were installed at the site. It is believed that the four original 1,000-gallon capacity USTs were removed at this time (although no documentation exists to confirm this premise). The three above referenced USTs were subsequently removed in 1999, and since that time the site has been operated by Mr. Burth as an automobile maintenance and repair facility without the sale of motor fuels.

According to information provided by the former owner, Mr. Bruce Odrzykoski, as presented in the limited Phase I ESA, approximately two cubic yards of petroleum-contaminated soil was excavated and removed from the site at the time of UST removal activities in 1999. Due to the discovery of petroleum contaminated soil, the NYSDEC assigned Spill No. 9908870 to the site. The limited Phase I ESA reports that there is no documentation available regarding the removal of the USTs in 1999, and Department records indicated the NYSDEC cleanup standards have not been met.

1.4.5 Summary of Previous Assessments

A limited Phase I Environmental Site Assessment (ESA) of the subject property performed by Buck Engineering in September 2002 identified the following recognized environmental conditions:

- Historic use of petroleum products associated with automotive maintenance and repair.
- The historic presence of multiple USTs formerly used for fuel storage.
- The presence of documented subsurface petroleum contamination based on observations made during UST removal activities in 1999.
- The presence of two floor drains with an unknown discharge point.
- The presence of an unidentified fill pipe.
- The presence of subsurface contamination on an adjacent property.

B&L identified the 2002 Phase I ESA (Buck Engineering) as the single prior site investigation conducted at the site. The report recommended a Phase II investigation to characterize soil and groundwater contamination at the site.

2.0 Site Investigation Tasks

The following section discusses the methodologies used during the field activities to collect the data necessary to characterize the physical and environmental conditions at the site, and to determine the appropriate level of remedial work required to bring the site into compliance with the guidelines of the NYSDEC ERP.

The Site Investigation took place from August 2007 until May 2014. The general order of events is presented below:

- Site inspection with NYSDEC and NYSDOH: August 17, 2007
- Topographic site survey: August, 2008
- Geophysical survey: December, 2008 – February, 2009
- Test pit installation: May 14, 2009
- Surface soil investigation: November 11, 2009
- Subsurface soil boring investigation: November 11-19, 2009
- Permanent monitoring well installation: November 11-23, 2009
- Permanent monitoring well sampling: February 23, 2010
- Subsurface soil boring investigation: May 14, 2009
- Installation of two additional monitoring wells: May 14-15, 2014
- Surface soil investigation: May 15, 2014
- Collection of additional representative surface and subsurface soil samples and submittal of the samples to TestAmerica Laboratories for analysis – May 14-15, 2014;
- Collection of representative soil vapor and groundwater samples and submittal of the samples to TestAmerica Laboratories for analysis – May 22, 2014.

2.1 Review of Available Data and Literature

Available site information was acquired through the City of Rome. The data was reviewed to determine localized site conditions, and the results of the review are presented below.

The City informed B&L that the properties in the vicinity of the site are serviced by public water supply and a sanitary sewer system. They indicated that a large water main passes under the site, oriented generally north-south, and believed to be passing under the mezzanine.

The City also confirmed that the site was historically serviced by electric and gas utilities. With regard to environmental conditions at the site, the City provided B&L with a copy of the previously referenced Limited Phase I ESA Report (Buck Engineering, 2002).

2.2 Site Survey and Preparation of Site Map

A planimetric site base map was prepared in August 2008 from a topographic survey completed by Cornerstone Land Surveying. An on-site benchmark reference point was established and the Site was surveyed in State Plane using the NAD83 horizontal datum and the NAVD88 vertical datum. The survey data was used to develop a Base Site Plan for the presentation of data collected during the investigation (i.e., groundwater elevation contours, extent of contaminated soil and groundwater, etc.). The base map identifies the property boundaries, utility poles, adjacent streets and properties, fences, manholes, subsurface utilities, and other distinguishing features present at the site. Following the Site Investigation field activities, the survey was updated to include monitoring well locations and elevations.

2.3 Geophysical Survey

A geophysical survey was conducted by Radar Solutions International (RSI) from December, 2008 through February, 2009, in order to identify subsurface anomalies at the site, including USTs, drain lines, septic tanks, and leach fields. The survey was conducted using ground-penetrating radar (GPR) and electromagnetic terrain conductivity (EM) to map these subsurface structures.

The geophysical survey noted various potential underground anomalies, including an abundance of buried metals, excavation areas that have been extensively filled with buried material (potentially car parts, drums, and demolition debris), reinforced concrete, buried utilities, areas of hydrocarbon attenuation, and USTs. Based on the findings, RSI recommended installing test pits in 11 locations. These recommendations were incorporated into the subsurface soil test pit investigation described in Section 2.4.1. The geophysical survey, dated February 2009, is included as Appendix B of this report.

2.4 Soil and Groundwater Investigation

2.4.1 Test Pit Investigation

Eight test pits were installed by the City Department of Public Works on May 14, 2009 for the purpose of investigating anomalies identified in the geophysical survey. Soils removed during this activity were placed back in the test pits upon completion. Test pit locations are shown on Figure 2 utilizing the prefix "TP." The test pit findings are discussed in Section 3.2.1

2.4.2 Surface Soil Sampling

Four surface soil samples were collected from the site in accordance with the approved Work Plan on November 11, 2009. The samples were taken in the vegetated areas to the south, southwest, and southeast of the structure. An additional four samples were collected during the supplemental site investigation in accordance with the approved Work Plan on May 15,2014.

The surface soil sample locations are depicted on Figure 2 utilizing the "SS" prefix. The samples were collected with stainless steel scoops from approximately 4-8 inches below grade. Overlying vegetation, where present, was removed from the sample locations prior to collection. Soil samples were homogenized in decontaminated stainless steel bowls and then placed in the appropriate sample containers. All samples were packed in a cooler on ice and picked up by the laboratory in accordance with chain of custody procedures. All surface soil samples were submitted to TestAmerica Laboratories of Buffalo, NY, for the analysis of semi-volatile organic compounds (SVOCs by EPA Method 8270). Surface soil samples SS-01, SS-02, SS-03, and SS-04 were also analyzed for VOCs (EPA Method 8260+MTBE), polychlorinated biphenyls (PCBs by EPA Method 8082), and the target analyte list (TAL) of metals (EPA Method 6010B). The surface soil sampling results are discussed in Section 3.2.2.

2.4.3 Subsurface Soil Boring Investigation

As described above, the purpose of the subsurface investigation described herein was to identify the presence and general extent of contaminants in subsurface soil that may have been impacted by historical site operations. The initial subsurface soil investigation was conducted November 11-19, 2009, and included the installation of 18 direct push (Geoprobe®) soil borings, 6 of which were completed as monitoring wells. The soil borings were installed at the locations depicted on Figure 2 using the "SB" prefix, and those that were completed as monitoring wells are depicted on Figure 2 using the "MW" prefix. Three monitoring well borings were installed at the most downgradient locations of the site on the west, central, and east ends of the southern boundary, and three were installed to the west, north, and east of the site structure.

Drilling activities were performed by Lyon Drilling using a trailer-mounted (tow-behind) CME-45 drill rig equipped with 4¼-inch inner diameter hollow stem augers (HSAs) and direct-push (Geoprobe®) capabilities. The switch-over from rotary methods to direct-push tooling and vice-versa was relatively time-consuming, so Lyon Drilling typically first sampled all locations (soil borings and monitoring wells) using the direct push tooling, and then returned to the well locations at a later time to install the monitoring wells using the auger drill rig. In general, soil samples were collected using successive pushes of a 4-foot long core barrel, which was assembled using a new and dedicated plastic liner before each sample was collected. In the event that direct push probe refusal was encountered before the target depth was achieved, Lyon

Drilling returned to that location with the auger drill rig and completed the subsurface soil sampling using HSAs and a 2-inch diameter by 2-foot long split-spoon barrel sampler.

B&L completed a subsequent subsurface investigation on May 14-15, 2010. Ten additional boring were advance, two of which were completed as monitoring wells. Eight of the ten borings were advanced on-site. One of the off-site borings was completed as a monitoring well. The soil borings were installed at the locations depicted on Figure 2 using the "SB" prefix, and those that were completed as monitoring wells are depicted on Figure 2 using the "MW" prefix.

Drilling activities were performed by Zebra Environmental Corp. (Zebra) using a fully equipped track-mounted Geoprobe DT6620 equipped with 4¼-inch inner diameter hollow stem augers (HSAs) and direct-push (Geoprobe®) capabilities. The switch-over from rotary methods to direct-push tooling and vice-versa was relatively time-consuming, so Zebra typically first sampled all locations (soil borings and monitoring wells) using the direct push tooling, and then returned to the well locations at a later time to install the monitoring wells using the auger drill rig. In general, soil samples were collected using successive pushes of a 4-foot long core barrel, which was assembled using a new and dedicated plastic liner before each sample was collected.

A B&L hydrogeologist observed the drilling activities. The soil borings were advanced to groundwater, to the presence of contamination (if observed) or to refusal. The samples were examined for moisture content and logged and described according to the Burmister Soil Classification System. Soil samples were also examined for visual and/or olfactory evidence of contamination. Soil borings were terminated at depths ranging from 9 feet to 27 feet below ground surface (bgs) and borings to be completed as monitoring wells were extended to depths ranging from 18 feet to 24 feet bgs. Bedrock was not encountered during the site investigation. The MacroCore® and split-spoon samplers were decontaminated by scrubbing with an Alconox® and water mixture, followed by a potable water rinse. Augers, split spoons, and drill rods (when used) were steam cleaned on a decontamination pad prior to setting up at each drilling location.

A PID was utilized to screen the soils from each probe hole for the presence of volatile vapors. PID readings were recorded following a direct scan of the soil cores in the open acetate liners. Soil samples were then placed in a sealable bag and allowed to equilibrate with ambient daily temperatures, which were typically between 40 and 50 degrees Fahrenheit. The headspace was then measured by inserting the PID into the bag and recording the peak and sustained vapor concentration. All measurements were recorded in the field log.

Soil samples were homogenized in decontaminated stainless steel bowls and then placed in the appropriate sample containers. One soil sample from each boring location was submitted to TestAmerica Laboratories for the analysis of one or all of the following: VOCs, SVOCs, PCBs, and TAL metals. The sample selected for laboratory analysis was typically collected from

the depth interval just above or just below the interpreted water table interface. Soil samples submitted for VOCs analysis were collected using three En-Core™ plunger type samplers per sample and unpreserved glass jars for the other analyses. All samples were packed in a cooler on ice and picked up by to the laboratory in accordance with chain of custody procedures defined in the applicable Work Plan.

Subsurface soil boring logs are attached in Appendix C and the soil sample Chains of Custody are found in Appendix D. The results of the subsurface soil sampling are discussed in Section 3.2.3.

2.4.4 Monitoring Well Installation and Development

Six overburden monitoring wells were installed from November 11-23, 2009 by Lyon Drilling. An additional two monitoring wells were installed on May 14-15, 2010 by Zebra Environmental. The locations are depicted on Figure 2 with the "MW" prefix. The surface completion at MW-06 was damaged by a snowplow shortly after installation, thereby compromising the integrity of this monitoring well. As a result, no development, groundwater sampling, or hydraulic conductivity testing was performed at this location. The monitoring wells were installed to perform a number of functions including:

- To determine the direction, hydraulic conductivity, hydraulic gradient, and seasonal variation of groundwater flow;
- To determine potential routes of contaminant migration; and
- To characterize levels of contaminants present in the groundwater.

The wells were installed to depths ranging from 13 to 24 feet bgs. As described above, the borings were initially sampled using direct-push methods until encountering the target depth or refusal. The direct push borings were then over-drilled using rotary methods and 4 1/4-inch HSAs to allow installation of a 2-inch diameter well. If direct-push refusal was initially encountered at a particular well location, the remainder of the screened interval was sampled using a split-spoon prior to well installation. The MacroCore® and split-spoon samplers were decontaminated by scrubbing with an Alconox® and water mixture, followed by a potable water rinse. Augers, split spoons, and drill rods (when used) were steam cleaned on a decontamination pad prior to setting up at each monitoring well location.

The six monitoring wells installed by Lyon Drilling were constructed using 10-feet of 0.010-inch factory slotted 2-inch diameter PVC screen. The two additional monitoring wells installed by Zebra Environmental were constructed using 5-feet of 0.010-inch factory slotted 2-inch diameter PVC screen. All eight monitoring wells were positioned to straddle the water table. Each well was fitted with the appropriate length of riser extending to approximately 6-inches below grade to permit the installation of flush-mount protectors. A washed silica sand pack was

placed around the screen and extended approximately 2-feet above the top of the screened interval. An approximately 3-foot thick bentonite plug was placed in the well annulus above the sand pack. The remaining annulus space was filled to 1-2 feet bgs with cement-bentonite grout. Surface completions for MW-01, MW-02, MW-06, and MW-08 consisted of flush-mount covers with concrete surface pads, and the PVC risers were capped with expandable rubber-seal caps and fitted with locks. MW-03, MW-04, MW-05, and MW-07 surface completions consisted of a 4" protective riser 2.5' above ground surface. The monitoring well completion logs are found with the soil boring logs in Appendix C.

Upon installation, the wells were developed by B&L staff. Well development was conducted to maximize removal of sediments and suspended particles from the screened interval and filter pack. In addition to removing the residual effects of drilling disturbance, the procedure also results in the preferential sorting and distribution of natural formation particles within the emplaced sand pack, creating a natural filter that enables formation waters to enter the well and resists subsequent infilling by sediments. Monitoring wells MW-01, MW-02, MW-03, MW-04, MW-05, and MW-06 were developed on February 10, 2010 using disposable bailers. Approximately 7 to 32 gallons of groundwater was removed from each well until there was a visible decrease in turbidity. Monitoring wells MW-07 and MW-08 were developed on May 22, 2014 using disposable bailers. Approximately 14 and 20 gallons were removed from MW-07 and MW-08, respectively, until there was a visible decrease in turbidity. Field measurements of temperature, pH, specific conductance, oxidation reduction potential (ORP), and turbidity were recorded and well development was considered complete when the field parameters had stabilized (where feasible). Well development records are included with the well completion logs in Appendix C.

2.4.5 Hydraulic Conductivity Testing

In-situ variable head hydraulic conductivity testing was performed following the completion of monitoring well installation and well development activities. Testing equipment included an electronic water level probe, a 5/8-inch by 4-foot long solid PVC slug and an In-Situ MiniTroll™ Data Logger (In-Situ, Inc.). The MiniTroll™ Data Logger is an automated measuring device designed to record small changes in a depressed or elevated head of water within a well. The instrument was connected to a pressure transducer that, when lowered into the water column, converted the pressure exerted by the head of water above it into a linear measurement of the depth of submergence.

The static water level was used as the reference point from which the instrument recorded test data. Falling head tests were performed by inserting the slug into the water and recording incremental decreasing head data until the water level had recovered at least to within 90% of the reference level. Rising head tests were then performed by removing the slug from the well and recording increasing head data until the water level had recovered at least to within 90% of the

static water level. Falling head data collected from the In-Situ MiniTroll® were evaluated using Aqtesolv® Software (HydroSOLVE, Inc.). Data collected from the In-Situ MiniTroll™ were used to determine hydraulic conductivity as discussed in the Site Hydrogeology section of this report (Section 3.1.5). Hydraulic conductivity analyses are included in Appendix E.

2.4.6 Groundwater Sampling

Prior to sampling, the wells were purged in order to collect a representative sample of the groundwater formation. Groundwater field sampling data sheets indicating the static water levels, amount of groundwater purged, and field characteristics of the samples are presented in Appendix F. Samples were collected from each location using the following general methodology:

1. The static water level was measured, and recorded to the nearest $1/100^{th}$ of a foot, using an electronic tape.
2. The volume of water in the well was calculated.
3. Three volumes of well water were purged from each well where possible.
4. Groundwater samples were collected using disposal bailers with the sample bottles filled in the order designated in the Sampling and Analysis Plan.
5. Measured field parameters, including temperature, pH, turbidity, specific conductance, ORP, and dissolved oxygen, were recorded, along with sample date and time.
6. Preserved samples were placed in coolers with ice along with the appropriate chain-of-custody forms for transport to the laboratory.

Groundwater samples were collected from MW-01, MW-02, MW-03, MW-04, MW-05, and MW-06 on February 23, 2010, and were submitted to Test America, the contract analytical laboratory the following day, for the analysis of VOCs, SVOCs, PCBs, and TAL metals. Groundwater samples were collected from MW-07 and MW-08 on May 22, 2014 and submitted to Test America the following day for the analysis of VOCs, SVOCs, PCBs, and TAL metals. The results of the groundwater samples are discussed in Section 3.2.5.

2.4.7 Soil Vapor Intrusion Investigation

A soil vapor intrusion investigation was completed concurrently with the supplemental investigation based on the subsurface soil and groundwater sample data previously collected at the 1030 East Dominick Street site (there were several VOC and SVOC impacts found in the surface soil, subsurface soil, and groundwater) and the supportive field observations during the Site Investigation activities. A total of six soil vapor sampling points were installed at locations

across the Site on May 14 and 15, 2014. Five of the soil vapor sampling points were located on-site and one was located off-site. The samples were collected on May 22, 2014.

The six soil gas vapor borings installed at the site are depicted on Figure 2. Soil vapor samples are identified by the pre-fix "SV" followed by a sequential number (i.e., SV-1, SV-2, etc.). A hollow core barrel equipped with a two-foot MacroCore sampler was installed to depth just above the water table: approximately 9-feet below ground surface. Tubing attached to a photoionization detector was then lowered to the desired depth. The soil gas boring was purged of air for approximately 30 second/foot prior to taking the PID reading. Gas samples were collected in summa canisters for laboratory VOC analysis. The soil gas holes were backfilled with the soil cuttings and bentonite plug to the surface. Any excess soil generated from the proposed soil gas activities was placed back downhole upon completion of the sampling activities. Geoprobing equipment and tools were properly decontaminated prior to use and between soil vapor point locations.

The samples were submitted to TestAmerica Laboratories of Buffalo, NY, for the analysis of VOCs (EPA Method TO-15). The sampling results are discussed in Section 3.2.5.

2.5 Quality Assurance/Quality Control

Several steps, as outlined below, were taken in the field to ensure that samples were representative of site conditions while minimizing the potential for cross-contamination.

2.5.1 Decontamination Procedures

The decontamination of non-dedicated equipment and tools used during drilling, well installation, and sampling activities was performed in accordance with the procedures outlined in the Work Plan and Sampling and Analysis Plan. Upon the completion of each boring, the drilling equipment and down-hole tools were cleaned with a high-pressure steam system and allowed to air dry. Between consecutive soil sample intervals, each MacroCore® sampler was scrubbed using an Alconox® soap wash and potable water rinse; and following each monitoring well installation, augers were decontaminated following completion of each boring. These steps provided assurance that soil samples and subsequent headspace measurements of volatile organic vapors were not subject to cross-contamination.

2.5.2 Field and Trip Blanks

The sampling procedures used during the Site Investigation involved dedicated (disposable) equipment. This included the use of disposable tubing for well development and disposable bailers for groundwater sampling. The submission of field blanks, therefore, was not required.

Trip blanks accompanied sample containers throughout all phases of water and/or soil sample collection for VOC parameters. Trip blanks received identical handling as all on-site samples to ensure that the sample bottles were properly prepared, handled, and analyzed by the laboratory without cross-contamination occurring (Table 1).

2.5.3 Documentation

Sample deliveries to the laboratory were accompanied by appropriate chain-of-custody records. Information relevant to the sampling activities was provided on these records, including sampling date and time, sample identification, number of bottles filled at each sampling location, preservatives used, bottle size, sampling method, date and time of shipment, trip blanks included, and release signature.

Field sampling data sheets were completed in the field for each monitoring well sampling location. Pertinent data, including sample location, date, volume purged, static water level, total well depth, weather conditions, sample appearance, parameters to be analyzed, and the results of field parameter determinations, were appropriately recorded. Groundwater sampling field data sheets are found in Appendix C, while Chain-of-Custody records are found in Appendix D.

2.5.4 Equipment Calibration

Instrument calibrations were performed in general accordance with the SAP. Water quality instrument calibration records are included with the field sampling data sheets in Appendix F.

2.6 Analytical Data Analysis

Throughout this report, the identified contaminants of concern (which are discussed in Section 3.0) in soil samples are compared to NYSDEC Part 375 Restricted – Residential SCOs, as requested by the NYSDEC and the City. This SCO applies to residential properties where there is common control of the property (e.g., apartment complexes, townhouse developments, etc.); single-family housing is excluded from this category. Farms and vegetable gardens are prohibited in this category, but community gardens may be allowed with NYSDEC approval (NYSDEC and NYSDOH, 2006). Groundwater data is compared to 6 NYCRR Part 703.5 Water Quality Standards.

Data summary tables were prepared for each of the analytical data packages received throughout the site investigation. The summary tables are found at the end of this report, while complete analytical laboratory reports are included electronically in Appendix G.

All sample data sets generated for this project (soil, sediment, groundwater, and quality assurance/quality control samples) are currently undergoing independent third-party data

validation. Therefore the analytical results shown herein are presented in draft form. Upon receipt of the Data Validation and Usability report, a finalized Site Investigation report will be issued. When available, the validation reports will be provided in Appendix H.

2.7 Wetland, Floodplains, and Sensitive Environment Survey

A limited wetland, floodplain, and sensitive environment survey was performed within areas immediately adjacent to the site to identify the presence and boundary of state-and federally-regulated features.

A qualitative assessment of potential ecological receptors was conducted during field visits by a B&L Environmental Scientist. The results of the Wetlands, Floodplains, and Sensitive Environment Survey and Public Health and Wildlife Risk Evaluation are presented in Sections 3.4 and 3.5, respectively.

3.0 Site Investigation Results

3.1 Physical Setting

3.1.1 Surface Features

The general topography over most of the site is generally flat, with a gentle slope to the north. A steep slope exists along the southern portion of the site, where the general site grade slopes down to the grade of the adjoining railroad property and properties further to the south, which slope gently to the south toward the Erie Canal. It is apparent that the majority of the site has been raised with historic fill material. According to the site survey by Cornerstone Land Surveying in 2008, there is an approximate 2-foot change in grade across the site with the exception of the eastern end of the site where the grade change is 5 feet. The regional topography slopes gently south-southwesterly towards the Mohawk River valley. The Erie Canal and the Mohawk River, located approximately 1,200 ft to 3,600 ft south of the site, respectively, flow generally from west to east in the Mohawk Valley.

3.1.2 Climate

The general climate in Oneida County is cool and humid, representative of the Northeastern United States (Pack, 1972). Summers are warm with occasional short periods of high temperatures. Winters are typically long and cold with high accumulations of snowfall.

Lengthy periods of either abnormally cold or warm weather result from the movement of high pressure (anti-cyclonic) systems into and through the Eastern United States. Cold winter temperatures prevail over New York whenever Arctic air masses, under high barometric pressure, flow southward from central Canada or from the Hudson Bay. High pressure systems often move just off the Atlantic coast, become more or less stagnant for several days, and then a persistent airflow from the southwest or south affects the State. This circulation brings the very warm, often humid weather of the summer season and the mild, more pleasant temperatures during the fall and spring seasons (Pack, 1972).

Annual precipitation for the Rome area (as recorded at Griffiss Air Force Base) for the period from 1971-2000 averaged approximately 46 inches. Average monthly precipitation was approximately 3.85 inches. The annual average temperature was 46.5 º F. January is the coldest month on average (20.8º F), while the average monthly temperature is highest in July (70.2º F).

3.1.3 Surface Water Hydrology

The general overland flow of surface water (i.e., precipitation) within the vicinity of the site follows the topography. Based on direct observations during field activities, surface water in the northern portion of the site, which is mostly covered by asphalt pavement or roof structures, flows to the stormwater drains along East Dominick Street or to the southern portion of the site. The southern portion of the site is unpaved, promoting surface water infiltration to the subsurface. Overland flow of surface water not infiltrating to the subsurface in the southern portion of the site follows topography to lower elevations to the south (toward the Erie Canal).

3.1.4 Site Geology

The United States Department of Agriculture's (USDA) Soil Survey for Oneida County maps this area of West Liberty Street as Alton-Urban land complex. The Alton complex parent material is described as gravelly loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits.

The site is located in the Hudson-Mohawk Lowland, which exhibits low elevation and relief. According to the New York State Museum (NYSM) Surficial Geologic Map of New York, the surficial geology at the site area is outwash sand and gravel – coarse to fine gravel with sand, well-rounded and stratified. Bedrock at the site is mapped by the NYS Museum and Science Service's Geologic Map of New York (1970) as the Ordovician-age Utica Shale that has been exposed by the southward and westward stripping of the overlying Silurian and Devonian limestone formations.

The subsurface investigation revealed sand and gravel fill from the surface to a depth of approximately 12 feet below ground surface. At this point the fill generally turned into a native sand and gravel, characterized as a brown fine to coarse sand and gravel. Groundwater was typically encountered at depths ranging between 12 to 16 feet. Bedrock was not encountered during the subsurface investigation. The subsurface boring logs and monitoring well completion diagrams are provided in Appendix C.

3.1.5 Site Hydrogeology

Static water elevations measured from the top of PVC in the overburden groundwater monitoring wells indicated a general groundwater flow direction from north to south towards the Erie Canal and the Mohawk River. Figure 3 depicts the groundwater contours based on static water levels collected in the monitoring wells in April 2010. Based on the April 2010 groundwater contours, the hydraulic gradient is approximately 0.004 feet per foot.

In-situ variable hydraulic conductivity testing was performed following the completion of monitoring well installation and well development. Data collected from the MiniTroll™ during

rising head slug testing was used to determine hydraulic conductivity for an unconfined aquifer system using various calculation methods within the AQTESOLV software (AQTESOLV for Windows Pro 3.5, 2002). The associated graphs indicate the displacement of the water column within the well plotted over the time necessary for the well to return to equilibrium (Appendix E). The Bouwer-Rice and Hvorslev calculation methods were utilized to determine the hydraulic conductivity at the site wells. The following table summarizes the test results:

Well Number	Test	Bouwer-Rice	Hvorslev	Geomean
MW-01	Test 1	2.2×10^{-2}	3.5×10^{-2}	2.8×10^{-2}
	Test 2	2.1×10^{-2}	3.5×10^{-2}	
	Test 3	2.4×10^{-2}	3.8×10^{-2}	
MW-02	Test 1	1.1×10^{-2}	1.7×10^{-2}	1.5×10^{-2}
	Test 2	1.2×10^{-2}	2.0×10^{-2}	
	Test 3	1.2×10^{-2}	2.0×10^{-2}	
MW-03	Test 1	4.2×10^{-2}	6.7×10^{-2}	5.2×10^{-2}
	Test 2	4.1×10^{-2}	6.3×10^{-2}	
	Test 3	4.2×10^{-2}	6.5×10^{-2}	
MW-04	Test 1	2.0×10^{-3}	3.2×10^{-3}	2.4×10^{-3}
	Test 2	1.8×10^{-3}	2.9×10^{-3}	
MW-05	Test 1	3.0×10^{-2}	4.9×10^{-2}	
	Test 2	2.6×10^{-2}	4.8×10^{-2}	3.7×10^{-2}
	Test 3	2.9×10^{-2}	4.7×10^{-2}	

Multiple slug tests were performed and analyzed and the geometric mean hydraulic conductivity values are presented above. The hydraulic conductivity values ranged from 1.8×10^{-3} cm/sec at MW-04 to 6.7×10^{-2} cm/sec at MW-03 for the sand and gravel deposits present at the site. The geometric mean hydraulic conductivity based on all of the monitoring well slug test analyses was 2.09×10^{-2} cm/sec. These values are generally consistent with published values for sand to sand and gravel sediments (Fetter 1994, Freeze & Cherry 1979).

The nearest downgradient surface water discharge point from the Site is the Erie Canal, approximately 1,200 feet to the south. Based on the geometric mean hydraulic conductivity (2.09×10^{-2} cm/sec), the observed hydraulic gradient (-0.004 ft per ft), and an assumed effective porosity of 25%, the average lateral groundwater seepage velocity was calculated to be approximately 0.95 feet per day. This suggests that a travel time of approximately 3 to 4 years is required for groundwater leaving the site to reach the Erie Canal.

3.1.6 Ecology

Potential wildlife impacts were assessed for the site during field inspections. The site area is located in an urban section of the City of Rome, and the land use adjacent to the site consists of commercial and residential properties. The land-use in the area would discourage many types of wildlife from utilizing the site; however, cats were frequently observed at the site and are likely owned by neighbors of the site. In addition, other potential species that could inhabit or traverse the site environs include mice, voles, rats, squirrels, woodchucks, rabbits, raccoons, and opossum.

The potential pathway for surface exposure is ingestion/ absorption of contaminated surface soils, and future remedial alternative(s) considered for the site should address this potential exposure pathway. Additional exposure to subsurface soils and groundwater is possible for species that burrow or inhabit burrows and those species that prey on them. Since no large burrows were observed on the site, this analysis is limited to mice, voles, and rats being the species that could receive primary exposure to site contaminants. It is possible that some secondary exposure to contaminants could occur in predators that consume potentially-contaminated rodents.

3.2 Nature and Extent of Contamination

The following section discusses the results of the Site Characterization and summarizes the distribution of contaminants at the site. Summary tables of the laboratory data are found in Tables 1-5 and the complete laboratory reports are found in Appendix G.

3.2.1 Test Pit Investigation Results

Eight test pits were installed to investigate the presence of anomalies identified during the geophysical survey (Appendix B). The test pit locations are illustrated on Figure 2. The following table details visual observations made during the test pit installations:

Test Pit	Test Pit Results
TP-1	Minor staining at 2.5' bgs; no odor or PID detections.
TP-2	No contamination encountered. Three pipes and miscellaneous debris encountered.
TP-3	Minor staining at 2' bgs; no odors or PID detections. Encountered wall, debris, scrap metal, cobbles, and pipe.
TP-4	No contamination encountered. Encountered pipes and fittings.
TP-5	Slight staining; no odor or PID detections.
TP-6	No contamination encountered. Concrete, rebar, and coal encountered.
TP-7	No contamination encountered. Debris including concrete, timber, wheels, and tires encountered.
TP-8	No contamination encountered. Concrete block wall and active sanitary sewer line encountered.

No samples were collected during the test pit investigation based on the general lack of visual and olfactory or PID evidence of contamination observed in the encountered soils.

3.2.2 Surface Soil Sampling Results

Eight surface soil samples (SS-01 through SS-08) were collected at the site and analyzed for SVOCs. Four of the eight samples collected were also analyzed for VOCs, PCBs, and TAL metals. The surface soil sample results are summarized in Table 3 and discussed below, and the complete analytical results are found in Appendix G. Sampling locations are depicted on Figure 2.

3.2.2.1 Surface Soil Results – VOCs

A total of eight surface soil samples were collected at the 1030 East Dominick Street site. Specifically, four surface soil samples were collected from the site on November 11, 2009 in accordance with the NYSDEC-approved Site Investigation Work Plan, while four additional surface soil samples were collected on May 15, 2014 as part of a supplemental site investigation. The surface soil samples were collected in the vegetated areas to the south, southwest, and southeast of the on-site building structure, as depicted on Figure 2.

While all eight of the surface soil samples (SS-01 through SS-08) were analyzed for the presence of SVOCs, only four of the surface soil samples were also analyzed for the presence of VOCs, PCBs, and TAL metals.

Surface soil samples SS-01, SS-02, SS-03, and SS-04 were analyzed for the presence of VOCs by EPA Method 8260. There were no VOCs exceedances of the applicable Part 375 Unrestricted Use SCOs. However, the VOCs laboratory analyses also reported the concentration of tentatively identified compounds (TICs), if present. The total detected concentration of VOC TICs for surface soil sample SS-01 was 14 micrograms per kilogram (µg/kg). There were no VOC TICs detected in the other surface soil samples. The TICs data is found in the laboratory analytical data summary reports in Appendix F.

3.2.2.2 Surface Soil Results – SVOCs

All eight samples collected were analyzed for SVOCs by EPA Method 8270. The following table illustrates the contaminant concentrations that exceeded the Part 375 Restricted Residential Use SCOs from the surface soil sampling:

Surface Soil NYSDEC Standards Exceedances: SVOCs (EPA Method 8270)		
Parameter	**Part 375 Standard (Restricted Residential) (ppm)**	**SS-02**
Benzo(a)anthracine	1,000	**6,100 J**
Benzo(a)pyrene	1,000	**5,400 J**
Benzo(b)flouranthene	1,000	**5,700 J**
Chrysene	3,900	**6,200 J**
Ideno(1,2,3-cd)pyrene	500	**3,000 J**

Notes:

Items in bold exceed NYSDEC Part 375 Restricted Residential Use SCOs.

Qualifiers:

J – Analyte detected at a level less than the Reporting Limit and greater than or equal to the Method Detection Limit. Concentrations within this range are estimated.

SVOCs were detected at concentrations over the laboratory detection limit but beneath the applicable Restricted Residential SCOs at all sample locations, with the exception of SS-05. Table 3 summarizes these findings. There were no TICs detected in the surface soil SVOCs analyses.

3.2.2.3 Surface Soil Results – Metals

Surface soil samples SS-01, SS-02, SS-03, and SS-04 were analyzed for target analyte list (TAL) of metals (EPA Method 6010B). Surface soil sample SS-02, collected on the eastern side of the site structure, exhibited concentrations of copper that exceed the NYSDEC Restricted Residential Use SCO values. The detected level of copper was 342 µg/kg, and was flagged with the qualifier "B", indicating that the analyte was detected in the associated method blank. This constituent is not typically associated with contamination derived from gasoline fueling operations, and may be attributable to the urban site setting. No other surface soil sample locations collected from the site had metals detections in excess of the NYSDEC Part 375 SCOs.

Additional metals were detected over the laboratory detection limits at sample locations SS-01, SS-02, SS-03, and SS-04, as summarized in Table 3. Detections were either beneath the applicable Restricted Residential SCOs or do not have a corresponding SCO.

3.2.2.4 Surface Soil Results – PCBs

The PCBs analyses of SS-01, SS-02, SS-03, and SS-04 revealed detectable concentrations of PCBs in each of the analyzed surface soil samples; however, total detected PCBs concentrations were well below the NYSDEC Part 375 Restricted-Residential SCO. Total

detected PCBs concentrations ranged from 21 µg/kg at SS-03 to 56 µg/kg at SS-02 (compared to applicable SCO of 1,000 µg/kg). Table 3 summarizes these findings.

3.2.3 Subsurface Soil Investigation Results

A total of 28 soil borings were conducted (8 of which were completed as monitoring wells) during the subsurface soil boring investigation activities. One soil boring and one monitoring well were advanced off-site to the south. Soil samples were collected continuously throughout each boring (with the exception of MW-7 and MW-8) and, based upon the field screening results, one sample was selected from each boring and submitted for laboratory analysis. The following table summarizes the vertical extent of visible contamination and the peak PID readings noted during the soil boring installation:

Onsite/ Offsite	Soil Boring	Observed Contamination	Peak PID Reading (ppm)	Depth of Impacts
Onsite	SB-01	Minor staining; slight odor	3.4	4’
Onsite	SB-02	Minor staining; slight fuel odor	7.9	0’-4’
Onsite	SB-03	Minor staining; no odor	0.8	0’-2’ and 4’-5’
Onsite	SB-04	Staining; slight to strong odor	1,160	0-8 and 12.5’-18.6’
Onsite	SB-05	Staining; strong odor	793	12-22’
Onsite	SB-06	None noted.	1.4	-
Onsite	SB-07	Minor black staining	1.1	0’-4’
Onsite	SB-08	Staining; moderate odor.	227	0'-4' and 14'-19'
Onsite	SB-09	Minor staining.	6	2'-9.5'
Onsite	SB-10	Minor staining	2.1	0’-4’
Onsite	SB-12	Minor staining.	3.5	8'-14'
Onsite	SB-13	Moderate odor and staining	15.9	14'-16'
Onsite	SB-14	Moderate odor	249	15'-18'
Onsite	SB-15	None noted.	0.0	-
Onsite	SB-16	Staining; odor; sheen.	408	15'-16'
Onsite	SB-17	Moderate odor	351	14'-16'
Onsite	SB-18	None noted.	0.2	-
Onsite	SB-19	Slight odor	71.1	14'-15'
Onsite	SB-20	None noted.	0.0	-
Offsite	SB-21	None noted	0.2	-
Onsite	MW-01	Stained; slight odor.	538	0'-8' and 12'-21'
Onsite	MW-02	Minor staining; odor.	4	3'-5' and 12'-14.5'
Onsite	MW-03	Staining	0.1	12'-16'
Onsite	MW-04	Staining; odor; possible sheen.	1,220	13'-15'
Onsite	MW-05	None noted	1.7	-
Onsite	MW-06	Minor Staining	2.5	0’-4’

Onsite/ Offsite	Soil Boring	Observed Contamination	Peak PID Reading (ppm)	Depth of Impacts
Onsite	MW-07[1]	Strong odor.	720	15'-16'
Offsite	MW-08[1]	Minor staining; odor.	24.7	10'-11.5' and 15'-16.5'

* Note: SB-11 does not exist.

[1] Soil from boring not collected or sampled.

Twenty soil samples (including the blind duplicate sample) were collected as part of the initial subsurface soil boring program on November 11-19, 2009. The samples were analyzed for VOCs, SVOCs, PCBs, and metals. An additional eight samples were collected as part of the subsequent subsurface soil boring program on May 14-15, 2014. The samples collected on-site were analyzed for VOCs and SVOCs. The sample collected from the off-site boring location SB-21 was analyzed for VOCs, SVOCs, PCBs, and metals. Sample locations are depicted on Figure 2. The subsurface soil sample results are summarized in Table 4 and discussed below, and the complete analytical results are found in Appendix G.

3.2.3.1 Subsurface Soil Results – VOCs

All 28 subsurface soil samples were analyzed for VOCs by EPA Method 8260. There were no VOCs exceedances of Part 375 Restricted Residential SCOs. VOCs were detected at concentrations over the laboratory detection limits at all sample locations, with the exception of SB-18. The findings are summarized in Table 4.

- Methylene chloride was detected in subsurface soil samples SB-02 and MW-01 and flagged "B", indicating that the analyte was detected in the associated method blank.

The VOCs analyses reported tentatively identified compounds (TICs), where detected. The total detected VOC TICs concentrations ranged from 11.4 µg/kg in the soil sample collected from the MW-02 soil boring, to 313,000 µg/kg at MW-04.

3.2.3.2 Subsurface Soil Results – SVOCs

There were no SVOCs exceedances of Part 375 Restricted Residential SCOs. SVOCs were detected at concentrations over the laboratory detection limits several sample locations, as summarized in Table 4.

The SVOCs analyses reported tentatively identified compounds (TICs), where detected. The total detected SVOC TICs concentrations ranged from 170 µg/kg in the soil sample collected from the MW-06 soil boring, to a concentration of 121,500 µg/kg at the SB-05 soil boring.

3.2.3.3 Subsurface Soil Results – Metals

There were no metals exceedances of the NYSDEC Part 375 Restricted-Residential SCOs reported for the subsurface soil samples collected during the subsurface investigation. There were detectable metal concentrations above the laboratory detection limits at all sample locations, as summarized in Table 4.

3.2.3.4 Subsurface Soil Results - PCBs

The PCBs analyses revealed detectable concentrations of PCBs in four subsurface soil samples; however, total detected PCBs concentrations were well below the NYSDEC Part 375 Restricted-Residential SCO. Total detected PCBs concentrations ranged from 7.3 µg/kg at SB-07 to 259 µg/kg at SB-05 (compared to applicable SCO of 1,000 µg/kg). Table 4 summarizes these findings.

3.2.4 Soil Vapor Sampling Results

Of the five on-site soil vapor monitoring points, two points (SV-3 and SV-5) exhibited a slight exceedance of the NYSDOH Air Guideline Value (AGV) for trichloroethene. Several low-level detections of various chlorinated and organic compounds were reported among the on-site soil vapor data. Total VOC detections among the on-site soil vapor points ranged from 123 ug/m3 at SV-1, to 1209 ug/m3 at SV-5. Off-site soil vapor monitoring point SV-6 did not exhibit any exceedances of the applicable AGVs. Similar to the on-site soil vapor points, several low-level detections of chlorinated and organic compounds were reported. The total concentration of VOCs detected in SV-6 was 494 ug/m3. The complete analytical results are found in Appendix G.

3.2.5 Groundwater Sampling Results

Groundwater samples were collected from the five permanent monitoring wells MW-01 through MW-05 on February 23, 2010. Groundwater samples from the on-site MW-07 and the off-site MW-08 were collected on May 22, 2014. The surface completion at MW-06 was damaged by a snowplow shortly after installation, thereby compromising the integrity of this monitoring well. As a result, groundwater sampling was not performed at this location.

A tabulated summary of the groundwater analytical data is provided in Table 5. The well locations and the groundwater contours are presented on Figure 3. The analytical results are summarized below, and the complete analytical results are found in Appendix G.

3.2.5.1 Groundwater Sample Results - VOCs

All seven of the collected groundwater samples were analyzed for VOCs by EPA Method 8260. As noted in the table below, VOC parameter concentration exceedances of the NYSDEC Part 703 Groundwater Standards were reported as follows:

6 NYCRR Part 703.5 Water Quality Standards Exceedances: VOCs (EPA Method 8260)

Parameter	Part 703.5 Criteria (µg/l)	MW-1	MW-4	MW-5	MW-7
Ethylbenzene	5	-	**94**	-	**130**
Isopropylbenzene	5	-	**32**	-	**60**
Toluene	5	-	**5.2**	-	-
Trichloroethene	5	**11**		**10**	**-**
Xylene	5	-	**550 E**	-	**770**

Notes:

Items in bold exceed NYSDEC Part 703.5 Criteria.

- Not Detected

Qualifiers:

E - Concentration exceeds the calibration range and therefore result is semi-quantitative.

The VOCs analyses reported the presence of TICs, when detected. A total detected TICs concentration for the VOCs analysis of 65.3 µg/l was reported for the MW-1, 3,810 µg/l for MW-4, and 4,710 µg/l for MW-4RE groundwater sample results. There were no other TICs detected in the groundwater samples. The TICs data is found in the laboratory analytical data summary reports in Appendix F.

3.2.5.2 Groundwater Sample Results - SVOCs

All seven of the collected groundwater samples were analyzed for SVOCs by EPA Method 8270. Exceedances of the NYSDEC Part 703 Groundwater Standards were observed as follows:

Groundwater Sample Exceedances: SVOCs (EPA Method 8270)				
Parameter	**Part 703.5 Criteria (µg/l)**	**MW-4**	**MW-5**	**MW-7**
4-Nitroaniline	5	-	**6.7 J**	
Benzo(a)anthracene	0.002	**0.7 J**	-	-
bis(2-Ethylhexyl)phthalate	5	**9.6 J**	-	-
Chrysene	0.002	**0.57 J**	-	-
Naphthalene	10	**61**	-	**97**

Notes:

Items in bold exceed NYSDEC Part 703.5 Criteria.

- Not Detected

Qualifiers:

J – Concentration is estimated.

There were detections of compounds below NYSDEC Part 703 Groundwater Standards in all samples, which are summarized in Table 5.

The SVOCs analyses reported TICs, where detected. SVOC TICs were detected at all monitoring well locations, ranging in total detectable concentration from 449.2 µg/l at MW-5 to 2,575 µg/l at MW-4. The TICs data are found in the laboratory analytical data summary reports in Appendix F.

3.2.5.3 Groundwater Sample Results – Metals

All seven of the collected groundwater samples were analyzed for metals by EPA Method 6010B. As indicated in the below table, widespread detections and frequent exceedances of the NYSDEC Part 703 Groundwater Standards were reported for several metals. However, given the elevated sample turbidity that was observed at each of the monitoring well locations (see field sampling data in Appendix E), it is likely that the metals parameter exceedances are largely due to sediment-bound particles suspended in the analyzed groundwater samples.

Groundwater Sample Exceedances: Metals Parameters (EPA Method 6010B)							
Parameter	**Part 703.5 Criteria µg/l**	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-8 (off-site)**
Arsenic	0.025	**0.0307**	**0.0281**	**0.0725**	-	**0.0568**	**-**
Chromium	0.05	**0.0737**	-	-	-	**0.0921**	**-**
Copper	0.2	-	-	**0.218**	-	**0.27**	**-**
Iron	-	**69.9**	**58.7**	**124**	**28.6**	**120**	**37.8**
Lead	-	**0.0348**	-	**0.0712**	**0.0354**	**0.0675**	**0.027**
Magnesium	-	**36**	**36.6**	-	-	**50.3**	**35.2**
Manganese	-	**4.36**	**3.12**	**8.13**	**3.07**	**10.5**	**2.7**
Nickel	0.1	-	-	-	-	**0.103**	**-**
Sodium	20	**217**	**113**	**172**	**158**	**82.1**	**193**

Notes:

Items in bold exceed NYSDEC Part 703.5 Criteria.

- Not Detected

There were detections of compounds below applicable NYSDEC Part 703 Groundwater Standards in all samples, which are summarized in Table 5.

3.2.5.4 Groundwater Sample Results – PCBs

All seven of the collected groundwater samples were analyzed for PCBs by EPA Method 8080. However, as shown on Table 5, PCBs were not detected in any of the groundwater samples collected at the site.

3.3 Contaminant Fate and Transport

Many physical and chemical processes can affect contamination migration within the different matrices at the Site. Contaminants in vapor, groundwater, and surface water migrate primarily via advection, mechanical dispersion, and/or diffusion. In this section, the contaminants encountered at the site and their chemical properties are discussed with regard to the potential routes of migration and transport mechanisms.

3.3.1 Potential Routes of Migration

3.3.1.1 Air Contaminant Transport

The lateral migration of non-particulate airborne contaminants typically occurs as a function of air movement. Vertically, contaminants can also migrate according to their specific densities and/or as a result of changes in air pressure gradients. Volatilization from groundwater

and/or soil is the primary route of airborne contamination. Due to the observed VOC and SVOC exceedances in surface soil and groundwater samples, and the low level concentrations of trichloroethene detected in two of the soil vapor samples above the NYSDOH-established AGV, this pathway appears to warrant further evaluation.

3.3.1.2 Soil Contaminant Transport

Several SVOCs and copper were observed above the NYSDEC Part 375 Restricted-Residential SCOs at a single surface soil sample location. The metals tend to form cations that bind to negatively charged soil, and are therefore less likely to migrate to the groundwater system. There were no exceedances of NYSDEC Part 375 Restricted-Residential SCOs reported for the subsurface soil samples collected during the subsurface investigation, indicating that no significant vertical migration from the surface soil to the subsurface soil has occurred.

3.3.1.3 Groundwater Contaminant Transport

There is contamination of VOCs and SVOCs present in the groundwater at the site, and several metals were detected above the NYSDEC Part 703 groundwater standard that are likely attributable sediment-bound particles (as evidenced by elevated sample turbidity). PCBs were undetected in groundwater at the site. However, because of the presence of contamination of VOCs and SVOCs, some of which were also identified in surface soil sample SS-02, groundwater is considered a potential contaminant migration pathway.

3.3.2 Contaminant Persistence and Migration

Based on the above, the VOC and SVOC contamination in the surface soils, soil vapor, and groundwater are considered to be the primary environmental concerns at the site. SVOCs and VOCs will persist where present, unless remedial efforts are employed. Remedial options are discussed in Section 4 (RAR) of this report.

3.4 Public Health and Wildlife Risk Assessment

3.4.1 Evaluation of Possible Exposure Pathways

The following assessment evaluates the observed soil, soil vapor, and groundwater contaminant conditions at the site, and the migration potential of these contaminants to determine which exposure pathways, if any, represent a level of risk requiring additional site remediation. Additionally, exposure pathways were evaluated for possible future events (e.g., site construction) that could directly expose potential site workers to the residual contaminants.

Typical exposure pathways for site contaminants include direct contact with impacted soil or groundwater (absorption pathway), inhalation of vapors from soil or groundwater

contamination (inhalation pathway), or ingestion of soil or groundwater contaminants (ingestion pathway). These pathways are discussed briefly below with respect to the site conditions encountered during the Remedial Investigation.

3.4.2 Evaluation of Absorption Pathway

VOCs and SVOCs were observed above the NYSDEC Part 375 Restricted-Residential SCOs at a single surface soil sample location. Because the surface soils are exposed, a potential exposure pathway exists with regards to surface soils at this location.

3.4.3 Evaluation of Inhalation Pathway

Volatilization from groundwater and/or soil is the primary route of airborne contamination. Due to the observation of VOC and SVOC exceedances in groundwater and soil samples, this pathway appears to warrant further evaluation.

As noted on Figure 2, soil vapor monitoring points SV-3 and SV-5 are both located downgradient of the existing on-site building structure at distances of greater than 30 feet. The on-site building structure does not contain a basement. In addition, there are no building structures located downgradient of SV-3 and SV-5, and off-site soil vapor monitoring point SV-6, which is located further downgradient to the south of the Con-Rail railroad tracks, did not exhibit any exceedances of the applicable AGVs. Therefore, given the lack of building structures located downgradient of SV-3 and SV-5, the presence of trichloroethene at concentrations that barely exceeded the established AGV does not pose a significant concern with regards to the potential for soil vapor migration and intrusion into on-site or adjacent off-site building structures.

3.4.4 Evaluation of Ingestion Pathway

There are no private water supply wells serving nearby residents (residents are on the City's public water supply), and as such, there are no complete exposure pathways for the ingestion of groundwater from the site. There were no exceedances of the NYSDEC Part 375 Restricted-Residential SCOs in subsurface soils, and therefore the ingestion via subsurface soil pathway does not require further evaluation.

Several SVOCs exceeded the NYSDEC Part 375 Restricted-Residential SCOs at surface soil location SS-02, and as such, this exposure pathway is complete.

3.4.5 Summary of Evaluation of Possible Exposure Pathways

Based on the evaluation of possible exposure pathways, the potential absorption, inhalation, and ingestion pathways are complete. The evaluation also determined that there are exposure pathways with regards to possible future events (e.g., site construction) that could directly expose potential site workers to the residual contaminants.

3.5 Wetland, Floodplains, and Sensitive Environment Survey

Based on the evaluation of possible exposure pathways, the potential absorption, inhalation, and ingestion pathways are complete. The evaluation also determined that there are exposure pathways with regards to possible future events (e.g., site construction) that could directly expose potential site workers to the residual contaminants.

A review was performed of available information relative to the presence of wetlands on and near the project site. New York State Freshwater Wetland Mapping and National Wetland Inventory (NWI) maps were reviewed and indicated that there are no designated Federal or State recognized Freshwater Wetlands on or adjacent to the site. Field visits to the site confirmed the absence of freshwater wetlands on or adjacent to the site. Review of the Federal Emergency Management Agency (FEMA) flood zone maps, which designated the site being situated in "Zone X", indicating that it is located in an area outside of the 500 year flood plain. .

Potential wildlife impacts were assessed for the site during field inspections. The site area is located in an urban section of the City of Rome, and the land use on and adjacent to the site consists of residential and commercial uses, with some nearby industrial properties. The land use in the area would discourage many types of wildlife from utilizing the site, and therefore the potential impacts to wildlife are limited and likely negligible.

Potential species that could inhabit or traverse the site environs include mice, voles, rats, squirrels, woodchucks, rabbits, raccoons, and opossum. The potential pathway for surface exposure is ingestion/ absorption of contaminated surface soils or groundwater. Since no large burrows were observed on the site, this analysis is limited to mice, voles, and rats being the species that could receive primary exposure to site contaminants, which are considered to be typical of urban soils. It is possible that some secondary exposure to contaminants could occur in predators that consume contaminated small mammals. However, because the contaminants are common in urban areas, there does not appear to be an imminent threat to wildlife.

As contamination of surface soils and groundwater is limited and isolated, there is minimal risk of wildlife impacts at the site and it appears that the completion of a Fish and Wildlife Impact Analysis (FWIA) is not warranted for the site.

4.0 Site Investigation Summary and Conclusions

4.1 Site Characterization Summary

The phased Site Investigation included an ecological evaluation, a test pit investigation, a soil boring and monitoring well installation program, the collection and laboratory analysis of soil, soil vapor, and groundwater samples, and the in-place testing of hydraulic conductivity.

The subsurface investigation revealed some fill and apparent alluvial sand, gravel, and cobble at all of the boring locations. An overall relatively finer-grained lacustrine sand unit with some silt was encountered throughout the site typically at a depth of 12 ft bgs. Groundwater was typically encountered at a depth of 12-16 ft bgs. Bedrock was not encountered during the subsurface investigation. The direction of groundwater flow was determined by analysis of static water levels at the temporary monitoring wells at the site. The overall general flow of groundwater is to the south.

Site investigation activities determined the on-site and off-site extent of surface soil, subsurface soil, groundwater, and soil vapor contamination originating from the site. Specifically, two of the on-site surface soil samples reported one or more semi-volatile organic compound (SVOC) parameters in exceedance of the NYDEC Part 375 Restricted-Residential Soil Cleanup Objectives (SCOs). While there were no volatile organic compound (VOC) exceedances of the applicable Part 375 Restricted-Residential SCOs in the analyzed surface soil samples, tentatively identified compounds (TICs) for VOCs were detected in one surface soil sample. Copper levels exceeded the Part 375 Restricted-Residential SCO in one of the surface soil samples, but this parameter was also detected in the method blank.

With regards to the analyzed subsurface soil samples collected at both on-site and off-site soil boring and monitoring well locations, there were no VOCs exceedances of the applicable Part 375 Restricted-Residential SCOs. However, field observations collected with a photoionization detector (PID) recorded VOC readings as high as 1,220 parts per million (ppm) in the on-site soil borings. There was one reported low level exceedance of a SVOC parameter, and both VOC and SVOC TICs were reported for various subsurface soil samples.

Two of the analyzed soil vapor samples exhibited a slight exceedance of the New York State Department of Health (NYSDOH) Air Guideline Value (AGV) for trichloroethene.

The groundwater sampling results exhibited one or more VOC parameter concentration exceedances in the four of the on-site water quality samples as compared to the applicable Part 703.5 Groundwater Standards, as well as the detection of VOC TICs in two of the analyzed groundwater samples. SVOC parameter concentration exceedances of the NYSDEC Part 703.5 Groundwater Standards were reported at three monitoring well locations, in addition to the

detection of SVOC TICs at all of the monitoring well locations. The groundwater sampling results exhibited metals parameter concentration exceedances in all of the on-site and off-site monitoring wells as compared to the Part 703.5 Groundwater Standards. However, the metals parameter concentration exceedances are likely attributable to elevated sample turbidity.

Based on our evaluation of the soil, soil vapor, and groundwater analytical laboratory test results and the completion of a Contaminant Fate and Transport assessment, which also considered possible future site development activities (e.g., site construction) that could potentially expose site workers to residual contaminants, B&L determined that potential ingestion, inhalation, and absorption exposure pathways exist at the site due to the presence of VOC and SVOC contamination in the surface soils, soil vapor, and groundwater. Therefore, appropriate site specific health and safety measures will be incorporated into the Site Management Plan for implementation during future construction activities to minimize exposure to impacted soils.

4.2 Recommendations

Based on the Remedial Investigation findings described herein, B&L recommends that appropriate site specific health and safety measures be incorporated into the Site Management Plan for implementation during future construction activities. No further remedial activities or IRMs are warranted at the site in advance of developing a Remedial Alternatives Report.

5.0 References

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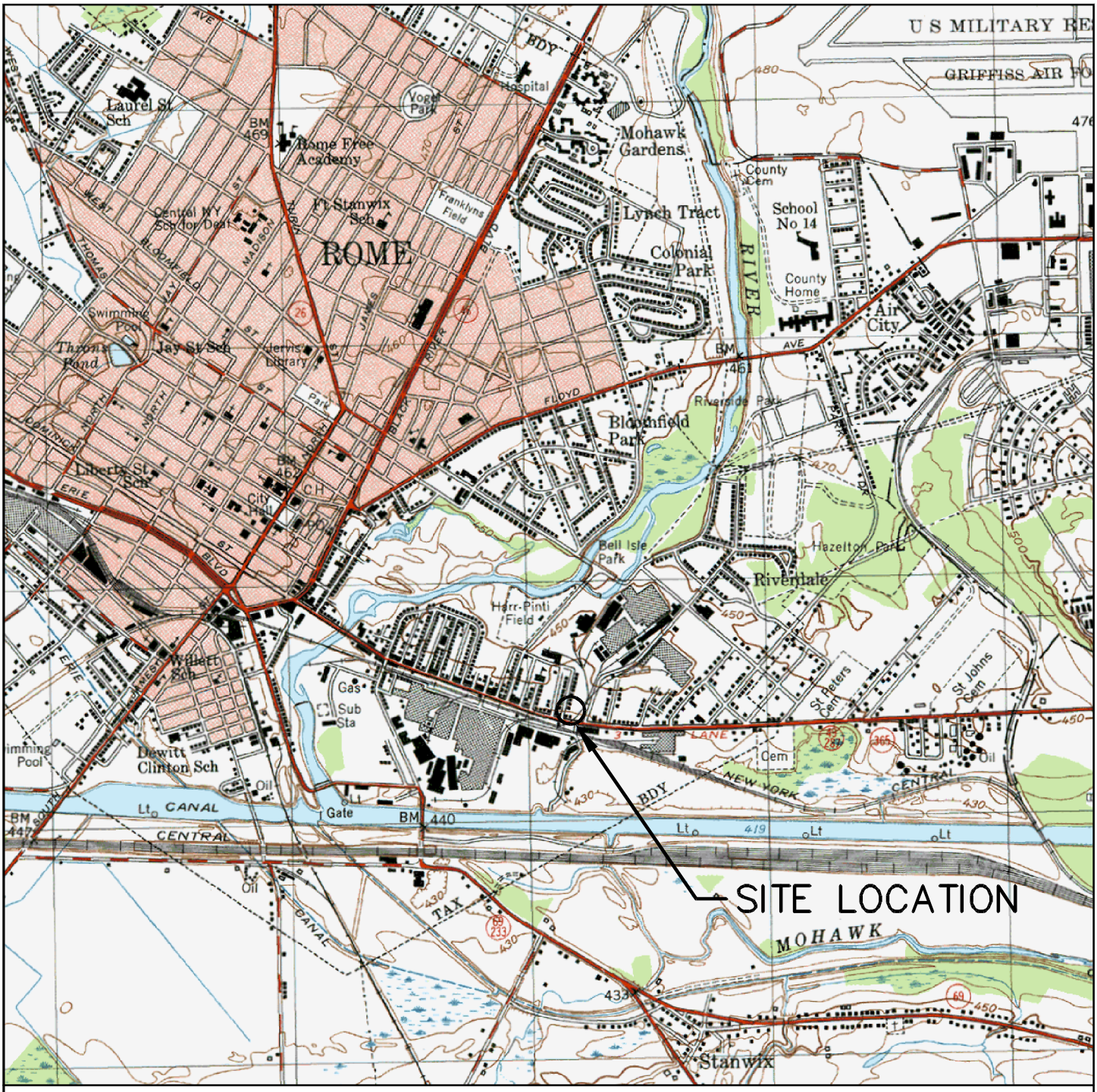
Figure 1

Site Location Map



SOURCE: ROME, NEW YORK U.S.G.S. QUADRANGLE MAPS, DATE 1984.

QUADRANGLE LOCATION

2000' 0 2000'

1"=2000'

N

Barton & Loguidice, P.C.

CITY OF ROME

SITE INVESTIGATION REPORT
1030 EAST DOMINICK STREET

SITE LOCATION PLAN

Figure Number
1

Project Number
245.005

Date
SEPTEMBER, 2011

Scale
1" = 2000'

CITY OF ROME ONEIDA COUNTY, NEW YORK

Plotted: Sep 06, 2011 - 8:37AM SYR By: jgs
I:\Shared\200\245005-S\SIR FIGURES\1030 E DOM\245005_SIR_FIG 1.dwg

Figure 2

Sample Location Plan

LEGEND

- MW-# MONITORING WELL LOCATION
- SB-# SOIL BORING LOCATION
- SS-# SURFACE SOIL SAMPLE LOCATION
- SV-# SOIL VAPOR SAMPLE LOCATION

NOTE: SB LOCATIONS ARE APPROXIMATE.

Plotted: May 18, 2016 – 3:03PM SYR By: jsp
I:\Shared\2005\245005-S\SIR FIGURES\1030 E DOM\245005_FIG 2_SITE LOCATION PLAN.dwg

Checked by ____ Drawn by JGS Designed by SBL In charge of SDN

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

COMPLETED CONSTRUCTION

Significant Construction Changes Are Shown

By _____ Date _____

Ck'd _____ Date _____

REVISIONS

CITY OF ROME
1030 EAST DOMINICK STREET

1030 EAST DOMINICK STREET SITE LOCATION PLAN

ONEIDEA COUNTY, NEW YORK

CITY OF ROME

Barton & Loguidice, D.P.C.

Date
MAY, 2016

Scale
1" = 20'

Sheet Number
2

File Number
245.005

Figure 3

Groundwater Contour Map

N

30' 0 30'
1"=30'

EAST DOMINICK STREET

EAST DOMINICK STREET

425

425

424.5

424.5

435

RIM:437.35

RIM:437.33

RIM:437.90

RIM:438.09

TG:437.74

TG:437.59

CP 24
MAG NAIL
N: 1169671.70
E: 1125251.33
Z: 437.4

CP 1092
N: 1169678.43
E: 1125365.34
Z: 438.09

CP 23
MAG NAIL
N: 1169667.62
E: 1125488.17
Z: 438.2

BM- Bench Tie In
Utility Pole
Elev. 440.29

LTP

Albert J. Tahan &
Bernadette A. Quenneville
Liber 2856 Page 362
TM #243.069-1-42

Benjamin D. Juliano
Instr. No. 2005-021643
TM #243.069-1-40

CON-RAIL CORP.
(reputed owner)

SB-1
SB-2
SB-3
SB-4
SB-5
SB-6
SB-7
SB-8
SB-9
SB-10
SB-12
SB-13

SS-01
SS-02
SS-03
SS-04

TP-1
TP-2
TP-3
TP-4
TP-5
TP-6
TP-7
TP-8

MW-01
(PVC EL. 438.28'
GRND EL. 438.4')

MW-02
(PVC EL. 437.28'
GRND EL. 437.7')

MW-03
(PVC EL. 438.36'
GRND EL. 435.9')

MW-04
(PVC EL. 439.06'
GRND EL. 436.0')

MW-05
(PVC EL. 438.00'
GRND EL. 435.6')

MW-06
(PVC EL. 437.64'
GRND EL. 437.9')

LEGEND

MW-#	MONITORING WELL LOCATION
SB-#	SOIL BORING LOCATION
SS-#	SURFACE SOIL SAMPLE LOCATION
+ TP-5	TEST PIT LOCATION

NOTE: SB LOCATIONS ARE APPROXIMATE.

Plotted: Sep 26, 2011 – 1:53PM SYR By: jgs
I:\Shared\200\245005-S\SIR FIGURES\1030 E DOM\245005_SIR_FIG 3.dwg

CITY OF ROME
SITE INVESTIGATION REPORT
1030 EAST DOMINICK STREET

POTENTIOMETRIC SURFACE MAP
APRIL – 2010

ONEIDA COUNTY, NEW YORK

CITY OF ROME

Barton & Loguidice, P.C.

SEPTEMBER, 2011

Scale
1" = 30'

Figure Number
3

Project Number
245.005

Tables

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard

				FIELD BLANK 8			FIELD BLANK 9			FIELD BLANK 10			FIELD BLANK 11			FIELD BLANK 12		
SAMPLE ID:				RSK0600-11			RSK0681-02			RSK0726-02			RSK0786-04			RSK0845-04		
LAB ORDER:																		
SAMPLE DATE:				11/11/2009 16:20			11/12/2009 16:50			11/13/2009 12:40			11/16/2009 17:15			11/17/2009 09:15		
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)	CAS	GWCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	5	a UG/L	0.26	U	1	0.26	U	1	0.26	U	1	1.0	U	1	1.0	U	1
1,1,2,2-Tetrachloroethane	79-34-5	5	a UG/L	0.21	U	1	0.21	U	1	0.21	U	1	1.0	U	1	1.0	U	1
1,1,2-Trichloroethane	79-00-5	1	- UG/L	0.23	U	1	0.23	U	1	0.23	U	1	1.0	U	1	1.0	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1	5	a UG/L	0.31	U	1	0.31	U	1	0.31	U	1	1.0	U	1	1.0	U	1
1,1-Dichloroethane	75-34-3	5	a UG/L	0.38	U	1	0.38	U	1	0.38	U	1	1.0	U	1	1.0	U	1
1,1-Dichloroethene	75-35-4	5	a UG/L	0.29	U	1	0.29	U	1	0.29	U	1	1.0	U	1	1.0	U	1
1,2,4-Trichlorobenzene	120-82-1	5	b UG/L	0.41	U	1	0.41	U	1	0.41	U	1	1.0	U	1	1.0	U	1
1,2-Dibromo-3-chloropropane	96-12-8	0.04	- UG/L	0.39	U	1	0.39	U	1	0.39	U	1	1.0	U	1	1.0	U	1
1,2-Dibromoethane	106-93-4	5	- UG/L	0.17	U	1	0.17	U	1	0.17	U	1	1.0	U	1	1.0	U	1
1,2-Dichlorobenzene	95-50-1	3	- UG/L	0.20	U	1	0.20	U	1	0.20	U	1	1.0	U	1	1.0	U	1
1,2-Dichloroethane	107-06-2	0.6	- UG/L	0.21	U	1	0.21	U	1	0.21	U	1	1.0	U	1	1.0	U	1
1,2-Dichloropropane	78-87-5	1	- UG/L	0.32	U	1	0.32	U	1	0.32	U	1	1.0	U	1	1.0	U	1
1,3-Dichlorobenzene	541-73-1	3	- UG/L	0.36	U	1	0.36	U	1	0.36	U	1	1.0	U	1	1.0	U	1
1,4-Dichlorobenzene	106-46-7	3	- UG/L	0.39	U	1	0.39	U	1	0.39	U	1	1.0	U	1	1.0	U	1
2-Butanone	78-93-3	50	- UG/L	1.3	U	1	1.3	U	1	1.3	U	1	5.0	U	1	5.0	U	1
2-Hexanone	591-78-6	50	- UG/L	1.2	U	1	1.2	U	1	1.2	U	1	5.0	U	1	5.0	U	1
4-Methyl-2-pentanone	108-10-1	-	- UG/L	0.91	U	1	0.91	U	1	0.91	U	1	5.0	U	1	5.0	U	1
Acetone	67-64-1	50	- UG/L	1.3	U	1	1.3	U	1	1.3	U	1	6.5		1	3.4	J	1
Benzene	71-43-2	1	- UG/L	0.41	U	1	0.41	U	1	0.41	U	1	1.0	U	1	1.0	U	1
Bromodichloromethane	75-27-4	-	- UG/L	0.39	U	1	0.39	U	1	0.39	U	1	1.0	U	1	1.0	U	1
Bromoform	75-25-2	50	- UG/L	0.26	U	1	0.26	U	1	0.26	U	1	1.0	U	1	1.0	U	1
Bromomethane	74-83-9	5	a UG/L	0.28	U,UJ	1	0.28	U	1	0.28	U	1	1.0	U	1	1.0	U	1
Carbon Disulfide	75-15-0	60	- UG/L	0.19	U	1	0.19	U	1	0.19	U	1	1.0	U	1	1.0	U	1
Carbon tetrachloride	56-23-5	5	- UG/L	0.27	U	1	0.27	U	1	0.27	U	1	1.0	U	1	1.0	U	1
Chlorobenzene	108-90-7	5	a UG/L	0.32	U	1	0.32	U	1	0.32	U	1	1.0	U	1	1.0	U	1
Chlorodibromomethane	124-48-1	50	- UG/L	0.32	U	1	0.32	U	1	0.32	U	1	1.0	U	1	1.0	U	1
Chloroethane	75-00-3	5	a UG/L	0.32	U,L	1	0.32	U	1	0.32	U	1	1.0	U	1	1.0	U	1
Chloroform	67-66-3	7	- UG/L	0.34	U	1	0.34	U	1	0.34	U	1	1.0	U	1	1.0	U	1
Chloromethane	74-87-3	5	a UG/L	0.35	U,UJ	1	0.35	U	1	0.35	U	1	1.0	U	1	1.0	U	1
cis-1,2-Dichloroethene	156-59-2	5	a UG/L	0.38	U	1	0.38	U	1	0.38	U	1	1.0	U	1	1.0	U	1
cis-1,3-Dichloropropene	10061-01-5	0.4	- UG/L	0.36	U	1	0.36	U	1	0.36	U	1	1.0	U	1	1.0	U	1
Cyclohexane	110-82-7	-	- UG/L	1.0	U	1	1.6		1	2.0		1	2.0		1	2.0		1
Dichlorodifluoromethane	75-71-8	5	a UG/L	0.29	U	1	0.29	U	1	0.29	U	1	1.0	U	1	1.0	U	1
Ethylbenzene	100-41-4	5	a UG/L	0.18	U	1	0.18	U	1	0.18	U	1	1.0	U	1	1.0	U	1
Isopropylbenzene	98-82-8	5	a UG/L	0.19	U	1	0.19	U	1	0.19	U	1	1.0	U	1	1.0	U	1
Methyl Acetate	79-20-9	-	- UG/L	0.50	U	1	0.50	U	1	0.50	U	1	1.0	U	1	1.0	U	1
Methyl tert-butyl ether	1634-04-4	-	- UG/L	0.16	U	1	0.16	U	1	0.16	U	1	1.0	U	1	1.0	U	1
Methylcyclohexane	108-87-2	-	- UG/L	0.50	U	1	0.50	U	1	0.50	U	1	1.0	U	1	1.0	U	1
Methylene chloride	75-09-2	5	a UG/L	0.44	U	1	3.7	U	1	3.9	U	1	2.3	U	1	2.7	U	1
Styrene	100-42-5	5	a UG/L	0.18	U	1	0.18	U	1	0.18	U	1	1.0	U	1	1.0	U	1
Tetrachloroethene	127-18-4	5	a UG/L	0.36	U	1	0.36	U	1	0.36	U	1	1.0	U	1	1.0	U	1
Toluene	108-88-3	5	a UG/L	2.4	U	1	2.4		1	1.5		1	2.9		1	2.7		1
trans-1,2-Dichloroethene	156-60-5	5	a UG/L	0.42	U	1	0.42	U	1	0.42	U	1	1.0	U	1	1.0	U	1
trans-1,3-Dichloropropene	10061-02-6	-	- UG/L	0.37	U	1	0.37	U	1	0.37	U	1	1.0	U	1	1.0	U	1
Trichloroethene	79-01-6	5	a UG/L	0.46	U	1	0.46	U	1	0.46	U	1	1.0	U	1	1.0	U	1
Trichlorofluoromethane	75-69-4	5	a UG/L	0.15	U	1	0.15	U	1	0.15	U	1	1.0	U	1	1.0	U	1
Vinyl chloride	75-01-4	2	- UG/L	0.24	U	1	0.24	U	1	0.24	U	1	1.0	U	1	1.0	U	1
Xylene	1330-20-7	5	- UG/L	0.66	U	1	0.66	U	1	0.66	U	1	2.0	U	1	2.0	U	1
TOTAL DETECTABLE			**UG/L**	**0**			**4**			**3.5**			**11.4**			**8.1**		

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard

					FIELD BLANK 13			FIELD BLANK 14			TRIP BLANK			TRIP BLANK			TRIP BLANK		
				SAMPLE ID:	RSK0893-02			RSK0953-02			RSK0600-12			RSK0681-06			RSK0726-05		
				LAB ORDER:															
				SAMPLE DATE:	11/18/2009 13:45			11/19/2009 16:25			11/11/2009 00:00			11/12/2009 00:00			11/13/2009 00:00		
VOLATILE ORGANIC COMPOUNDS																			
(EPA METHOD 8260)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	5	a	UG/L	1.0	U	1	1.0	U	1	0.26	U	1	0.26	U	1	0.26	U	1
1,1,2,2-Tetrachloroethane	79-34-5	5	a	UG/L	1.0	U	1	1.0	U	1	0.21	U	1	0.21	U	1	0.21	U	1
1,1,2-Trichloroethane	79-00-5	1	-	UG/L	1.0	U	1	1.0	U	1	0.23	U	1	0.23	U	1	0.23	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1	5	a	UG/L	1.0	U	1	1.0	U	1	0.31	U	1	0.31	U	1	0.31	U	1
1,1-Dichloroethane	75-34-3	5	a	UG/L	1.0	U	1	1.0	U	1	0.38	U	1	0.38	U	1	0.38	U	1
1,1-Dichloroethene	75-35-4	5	a	UG/L	1.0	U	1	1.0	U	1	0.29	U	1	0.29	U	1	0.29	U	1
1,2,4-Trichlorobenzene	120-82-1	5	b	UG/L	1.0	U	1	1.0	U	1	0.41	U	1	0.41	U	1	0.41	U	1
1,2-Dibromo-3-chloropropane	96-12-8	0.04	-	UG/L	1.0	U	1	1.0	U	1	0.39	U	1	0.39	U	1	0.39	U	1
1,2-Dibromoethane	106-93-4	5	-	UG/L	1.0	U	1	1.0	U	1	0.17	U	1	0.17	U	1	0.17	U	1
1,2-Dichlorobenzene	95-50-1	3	-	UG/L	1.0	U	1	1.0	U	1	0.20	U	1	0.20	U	1	0.20	U	1
1,2-Dichloroethane	107-06-2	0.6	-	UG/L	1.0	U	1	1.0	U	1	0.21	U	1	0.21	U	1	0.21	U	1
1,2-Dichloropropane	78-87-5	1	-	UG/L	1.0	U	1	1.0	U	1	0.32	U	1	0.32	U	1	0.32	U	1
1,3-Dichlorobenzene	541-73-1	3	-	UG/L	1.0	U	1	1.0	U	1	0.36	U	1	0.36	U	1	0.36	U	1
1,4-Dichlorobenzene	106-46-7	3	-	UG/L	1.0	U	1	1.0	U	1	0.39	U	1	0.39	U	1	0.39	U	1
2-Butanone	78-93-3	50	-	UG/L	5.0	U	1	5.0	U	1	1.3	U	1	1.3	U	1	1.3	U	1
2-Hexanone	591-78-6	50	-	UG/L	5.0	U	1	5.0	U	1	1.2	U	1	1.2	U	1	1.2	U	1
4-Methyl-2-pentanone	108-10-1	-	-	UG/L	5.0	U	1	5.0	U	1	0.91	U	1	0.91	U	1	0.91	U	1
Acetone	67-64-1	50	-	UG/L	5.0	U	1	5.0	U	1	1.3	U	1	1.3	U	1	1.3	U	1
Benzene	71-43-2	1	-	UG/L	1.0	U	1	1.0	U	1	0.41	U	1	0.41	U	1	0.41	U	1
Bromodichloromethane	75-27-4	-	-	UG/L	1.0	U	1	1.0	U	1	0.39	U	1	0.39	U	1	0.39	U	1
Bromoform	75-25-2	50	-	UG/L	1.0	U	1	1.0	U	1	0.26	U,UJ	1	0.26	U	1	0.26	U	1
Bromomethane	74-83-9	5	a	UG/L	1.0	U	1	1.0	U	1	0.28	U	1	0.28	U	1	0.28	U	1
Carbon Disulfide	75-15-0	60	-	UG/L	1.0	U	1	1.0	U	1	0.19	U	1	0.19	U	1	0.19	U	1
Carbon tetrachloride	56-23-5	5	-	UG/L	1.0	U	1	1.0	U	1	0.27	U	1	0.27	U	1	0.27	U	1
Chlorobenzene	108-90-7	5	a	UG/L	1.0	U	1	1.0	U	1	0.32	U	1	0.32	U	1	0.32	U	1
Chlorodibromomethane	124-48-1	50	-	UG/L	1.0	U	1	1.0	U	1	0.32	U	1	0.32	U	1	0.32	U	1
Chloroethane	75-00-3	5	a	UG/L	1.0	U	1	1.0	U	1	0.32	U,L	1	0.32	U	1	0.32	U	1
Chloroform	67-66-3	7	-	UG/L	1.0	U	1	1.0	U	1	0.34	U	1	0.34	U	1	0.34	U	1
Chloromethane	74-87-3	5	a	UG/L	1.0	U	1	1.0	U	1	0.35	U,UJ	1	0.35	U	1	0.35	U	1
cis-1,2-Dichloroethene	156-59-2	5	a	UG/L	1.0	U	1	1.0	U	1	0.38	U	1	0.38	U	1	0.38	U	1
cis-1,3-Dichloropropene	10061-01-5	0.4	-	UG/L	1.0	U	1	1.0	U	1	0.36	U	1	0.36	U	1	0.36	U	1
Cyclohexane	110-82-7	-	-	UG/L	1.8		1	2.4		1	1.3	U	1	1.4		1	1.3		1
Dichlorodifluoromethane	75-71-8	5	a	UG/L	1.0	U	1	1.0	U	1	0.29	U	1	0.29	U	1	0.29	U	1
Ethylbenzene	100-41-4	5	a	UG/L	1.0	U	1	1.0	U	1	0.18	U	1	0.18	U	1	0.18	U	1
Isopropylbenzene	98-82-8	5	a	UG/L	1.0	U	1	1.0	U	1	0.19	U	1	0.19	U	1	0.19	U	1
Methyl Acetate	79-20-9	-	-	UG/L	1.0	U	1	1.0	U	1	0.50	U	1	0.50	U	1	0.50	U	1
Methyl tert-butyl ether	1634-04-4	-	-	UG/L	1.0	U	1	1.0	U	1	0.16	U	1	0.16	U	1	0.16	U	1
Methylcyclohexane	108-87-2	-	-	UG/L	1.0	U	1	1.0	U	1	0.50	U	1	0.50	U	1	0.50	U	1
Methylene chloride	75-09-2	5	a	UG/L	2.6	U	1	2.8	B	1	0.44	U	1	3.3	U	1	2.7	U	1
Styrene	100-42-5	5	a	UG/L	1.0	U	1	1.0	U	1	0.18	U	1	0.18	U	1	0.18	U	1
Tetrachloroethene	127-18-4	5	a	UG/L	1.0	U	1	1.0	U	1	0.36	U	1	0.36	U	1	0.36	U	1
Toluene	108-88-3	5	a	UG/L	2.3		1	3.4		1	2.6	U	1	2.3		1	1.4		1
trans-1,2-Dichloroethene	156-60-5	5	a	UG/L	1.0	U	1	1.0	U	1	0.42	U	1	0.42	U	1	0.42	U	1
trans-1,3-Dichloropropene	10061-02-6	-	-	UG/L	1.0	U	1	1.0	U	1	0.37	U	1	0.37	U	1	0.37	U	1
Trichloroethene	79-01-6	5	a	UG/L	1.0	U	1	1.0	U	1	0.46	U	1	0.46	U	1	0.46	U	1
Trichlorofluoromethane	75-69-4	5	a	UG/L	1.0	U	1	1.0	U	1	0.15	U	1	0.15	U	1	0.15	U	1
Vinyl chloride	75-01-4	2	-	UG/L	1.0	U	1	1.0	U	1	0.24	U	1	0.24	U	1	0.24	U	1
Xylene	1330-20-7	5	-	UG/L	2.0	U	1	2.0	U	1	0.66	U	1	0.66	U	1	0.66	U	1
TOTAL DETECTABLE				**UG/L**	**4.1**			**8.6**			**0**			**3.7**			**2.7**		

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard

SAMPLE ID:	**TRIP BLANK**
LAB ORDER:	RTB1060-08
SAMPLE DATE:	02/23/2010 00:00

VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)	CAS	GWCO	Comment		RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	5	a	UG/L	0.26	U	1
1,1,2,2-Tetrachloroethane	79-34-5	5	a	UG/L	0.21	U	1
1,1,2-Trichloroethane	79-00-5	1	-	UG/L	0.23	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1	5	a	UG/L	0.31	U	1
1,1-Dichloroethane	75-34-3	5	a	UG/L	0.38	U	1
1,1-Dichloroethene	75-35-4	5	a	UG/L	0.29	U	1
1,2,4-Trichlorobenzene	120-82-1	5	b	UG/L	0.41	U	1
1,2-Dibromo-3-chloropropane	96-12-8	0.04	-	UG/L	0.39	U	1
1,2-Dibromoethane	106-93-4	5	-	UG/L	0.17	U	1
1,2-Dichlorobenzene	95-50-1	3	-	UG/L	0.20	U	1
1,2-Dichloroethane	107-06-2	0.6	-	UG/L	0.21	U	1
1,2-Dichloropropane	78-87-5	1	-	UG/L	0.32	U	1
1,3-Dichlorobenzene	541-73-1	3	-	UG/L	0.36	U	1
1,4-Dichlorobenzene	106-46-7	3	-	UG/L	0.39	U	1
2-Butanone	78-93-3	50	-	UG/L	1.3	U	1
2-Hexanone	591-78-6	50	-	UG/L	1.2	U	1
4-Methyl-2-pentanone	108-10-1	-	-	UG/L	0.91	U	1
Acetone	67-64-1	50	-	UG/L	1.3	U	1
Benzene	71-43-2	1	-	UG/L	0.41	U	1
Bromodichloromethane	75-27-4	-	-	UG/L	0.39	U	1
Bromoform	75-25-2	50	-	UG/L	0.26	U	1
Bromomethane	74-83-9	5	a	UG/L	0.28	U	1
Carbon Disulfide	75-15-0	60	-	UG/L	0.19	U	1
Carbon tetrachloride	56-23-5	5	-	UG/L	0.27	U	1
Chlorobenzene	108-90-7	5	a	UG/L	0.32	U	1
Chlorodibromomethane	124-48-1	50	-	UG/L	0.32	U	1
Chloroethane	75-00-3	5	a	UG/L	0.32	U	1
Chloroform	67-66-3	7	-	UG/L	0.34	U	1
Chloromethane	74-87-3	5	a	UG/L	0.35	U	1
cis-1,2-Dichloroethene	156-59-2	5	a	UG/L	0.38	U	1
cis-1,3-Dichloropropene	10061-01-5	0.4	-	UG/L	0.36	U	1
Cyclohexane	110-82-7	-	-	UG/L	0.53	U	1
Dichlorodifluoromethane	75-71-8	5	a	UG/L	0.29	U	1
Ethylbenzene	100-41-4	5	a	UG/L	0.18	U	1
Isopropylbenzene	98-82-8	5	a	UG/L	0.19	U	1
Methyl Acetate	79-20-9	-	-	UG/L	0.50	U	1
Methyl tert-butyl ether	1634-04-4	-	-	UG/L	0.16	U	1
Methylcyclohexane	108-87-2	-	-	UG/L	0.50	U	1
Methylene chloride	75-09-2	5	a	UG/L	0.44	U	1
Styrene	100-42-5	5	a	UG/L	0.18	U	1
Tetrachloroethene	127-18-4	5	a	UG/L	0.36	U	1
Toluene	108-88-3	5	a	UG/L	0.51	U	1
trans-1,2-Dichloroethene	156-60-5	5	a	UG/L	0.42	U	1
trans-1,3-Dichloropropene	10061-02-6	-	-	UG/L	0.37	U	1
Trichloroethene	79-01-6	5	a	UG/L	0.46	U	1
Trichlorofluoromethane	75-69-4	5	a	UG/L	0.15	U,L4	1
Vinyl chloride	75-01-4	2	-	UG/L	0.24	U	1
Xylene	1330-20-7	5	-	UG/L	0.66	U	1
TOTAL DETECTABLE				**UG/L**	**0**		

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard

				SAMPLE ID:	**TRIP BLANK**			**TRIP BLANK**			**TRIP BLANK**			**TRIP BLANK**			**Trip Blank**		
				LAB ORDER:	RSK0786-05			RSK0845-05			RSK0893-03			RSK0953-03			480-60100-17		
				SAMPLE DATE:	11/16/2009 00:00			11/17/2009 00:00			11/18/2009 00:00			11/19/2009 00:00			5/14/14 0:00		
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)	CAS	GW	CO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.8	U	1
1,1,2,2-Tetrachloroethane	79-34-5	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.2	U	1
1,1,2-Trichloroethane	79-00-5	1	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.2	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.3	U	1
1,1-Dichloroethane	75-34-3	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.4	U	1
1,1-Dichloroethene	75-35-4	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.3	U	1
1,2,4-Trichlorobenzene	120-82-1	5	b	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.4	U	1
1,2-Dibromo-3-chloropropane	96-12-8	0.04	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.4	U	1
1,2-Dibromoethane	106-93-4	5	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.7	U	1
1,2-Dichlorobenzene	95-50-1	3	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.8	U	1
1,2-Dichloroethane	107-06-2	0.6	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.2	U	1
1,2-Dichloropropane	78-87-5	1	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.7	U	1
1,3-Dichlorobenzene	541-73-1	3	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.8	U	1
1,4-Dichlorobenzene	106-46-7	3	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.8	U	1
2-Butanone	78-93-3	50	-	UG/L	5.0	U	1	5.0	U	1	5.0	U	1	5.0	U	1	1.3	U	1
2-Hexanone	591-78-6	50	-	UG/L	5.0	U	1	5.0	U	1	5.0	U	1	5.0	U	1	1.2	U	1
4-Methyl-2-pentanone	108-10-1	-	-	UG/L	5.0	U	1	5.0	U	1	5.0	U	1	5.0	U	1	2.1	U	1
Acetone	67-64-1	50	-	UG/L	5.0	U	1	5.0	U	1	5.0	U	1	5.0	U	1	3.0	J	1
Benzene	71-43-2	1	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.4	U	1
Bromodichloromethane	75-27-4	-	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.4	U	1
Bromoform	75-25-2	50	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.3	U	1
Bromomethane	74-83-9	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.7	U	1
Carbon Disulfide	75-15-0	60	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.2	U	1
Carbon tetrachloride	56-23-5	5	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.3	U	1
Chlorobenzene	108-90-7	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.8	U	1
Chlorodibromomethane	124-48-1	50	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.3	U	1
Chloroethane	75-00-3	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.3	U *	1
Chloroform	67-66-3	7	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.3	U	1
Chloromethane	74-87-3	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.4	U	1
cis-1,2-Dichloroethene	156-59-2	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.8	U	1
cis-1,3-Dichloropropene	10061-01-5	0.4	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.4	U	1
Cyclohexane	110-82-7	-	-	UG/L	1.8		1	2.4		1	1.6		1	2.4		1	0.18	U	1
Dichlorodifluoromethane	75-71-8	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.7	U	1
Ethylbenzene	100-41-4	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.7	U	1
Isopropylbenzene	98-82-8	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.8	U	1
Methyl Acetate	79-20-9	-	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.5	U	1
Methyl tert-butyl ether	1634-04-4	-	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.2	U	1
Methylcyclohexane	108-87-2	-	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.2	U	1
Methylene chloride	75-09-2	5	a	UG/L	2.2	U	1	2.6	U	1	2.1	UU	1	2.4	U	1	0.44	U	1
Styrene	100-42-5	5	a	UG/L	1.0	U	1	1.0	U	1	1	U	1	1.0	U	1	0.7	U	1
Tetrachloroethene	127-18-4	5	a	UG/L	1.0	U	1	1.0	U	1	1	U	1	1.0	U	1	0.4	U	1
Toluene	108-88-3	5	a	UG/L	2.5		1	2.9		1	2.7		1	3.1		1	0.51	U	1
trans-1,2-Dichloroethene	156-60-5	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.9	U	1
trans-1,3-Dichloropropene	10061-02-6	-	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.4	U	1
Trichloroethene	79-01-6	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.5	U	1
Trichlorofluoromethane	75-69-4	5	a	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.9	U	1
Vinyl chloride	75-01-4	2	-	UG/L	1.0	U	1	1.0	U	1	1.0	U	1	1.0	U	1	0.9	U	1
Xylene	1330-20-7	5	-	UG/L	2.0	U	1	2.0	U	1	2.0	U	1	2.0	U	1	0.7	U	1
TOTAL DETECTABLE				**UG/L**	**4.3**			**5.3**			**4.3**			**5.5**			**3**		

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard

				FIELD BLANK 8			FIELD BLANK 9			FIELD BLANK 10			FIELD BLANK 11			FIELD BLANK 12		
SAMPLE ID:				RSK0600-11			RSK0681-02			RSK0726-02			RSK0786-04			RSK0845-04		
LAB ORDER:				11/11/2009 16:20			11/12/2009 16:50			11/13/2009 12:40			11/16/2009 17:15			11/17/2009 09:15		
SAMPLE DATE:																		
SEMI-VOLATILE ORGANIC COMPOUNDS																		
(EPA METHOD 8270)	CAS	GWCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
2,4,5-Trichlorophenol	95-95-4	- -	UG/L	0.49	U	1	0.52	U	1	0.64	U	1	5.6	U	1	6.7	U	1
2,4,6-Trichlorophenol	88-06-2	- -	UG/L	0.62	U	1	0.66	U	1	0.81	U	1	5.6	U	1	6.7	U	1
2,4-Dichlorophenol	120-83-2	- -	UG/L	0.52	U	1	0.55	U	1	0.68	U	1	5.6	U	1	6.7	U	1
2,4-Dimethylphenol	105-67-9	- -	UG/L	0.51	U	1	0.54	U	1	0.67	U	1	5.6	U	1	6.7	U	1
2,4-Dinitrophenol	51-28-5	- -	UG/L	2.3	U	1	2.4	U	1	3.0	U	1	11	U	1	13	U	1
2,4-Dinitrotoluene	121-14-2	5	a UG/L	0.46	U	1	0.48	U	1	0.60	U	1	5.6	U	1	6.7	U	1
2,6-Dinitrotoluene	606-20-2	5	a UG/L	0.41	U	1	0.43	U	1	0.53	U	1	5.6	U	1	6.7	U	1
2-Chloronaphthalene	91-58-7	10	- UG/L	0.47	U	1	0.50	U	1	0.61	U	1	5.6	U	1	6.7	U	1
2-Chlorophenol	95-57-8	- -	UG/L	0.54	U	1	0.57	U	1	0.71	U	1	5.6	U	1	6.7	U	1
2-Methylnaphthalene	91-57-6	- -	UG/L	0.61	U	1	0.65	U	1	0.80	U	1	5.6	U	1	6.7	U	1
2-Methylphenol	95-48-7	- -	UG/L	0.41	U	1	0.43	U	1	0.53	U	1	5.6	U	1	6.7	U	1
2-Nitroaniline	88-74-4	5	a UG/L	0.43	U	1	0.45	U	1	0.56	U	1	11	U	1	13	U	1
2-Nitrophenol	88-75-5	- -	UG/L	0.49	U	1	0.52	U	1	0.64	U	1	5.6	U	1	6.7	U	1
3,3-Dichlorobenzidine	91-94-1	5	a UG/L	0.41	U	1	0.43	U	1	0.53	U	1	5.6	U,L	1	6.7	U,L	1
3-Nitroaniline	99-09-2	5	a UG/L	0.49	U	1	0.52	U	1	0.64	U	1	11	U	1	13	U	1
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/L	2.2	U	1	2.4	U	1	2.9	U	1	11	U	1	13	U	1
4-Bromophenyl-phenylether	101-55-3	- -	UG/L	0.46	U	1	0.49	U	1	0.60	U	1	5.6	U	1	6.7	U	1
4-Chloro-3-Methylphenol	59-50-7	- -	UG/L	0.46	U	1	0.49	U	1	0.60	U	1	5.6	U	1	6.7	U	1
4-Chloroaniline	106-47-8	5	a UG/L	0.60	U	1	0.64	U	1	0.79	U	1	5.6	U	1	6.7	U	1
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/L	0.36	U	1	0.38	U	1	0.47	U	1	5.6	U	1	6.7	U	1
4-Methylphenol	106-44-5	- -	UG/L	0.37	U	1	0.39	U	1	0.48	U	1	11	U	1	13	U	1
4-Nitroaniline	100-01-6	5	a UG/L	0.26	U	1	0.27	U	1	0.33	U	1	11	U	1	13	U	1
4-Nitrophenol	100-02-7	- -	UG/L	1.6	U	1	1.6	U	1	2.0	U	1	11	U	1	13	U	1
Acenaphthene	83-32-9	20	- UG/L	0.42	U	1	0.44	U	1	0.55	U	1	5.6	U	1	6.7	U	1
Acenaphthylene	208-96-8	20	- UG/L	0.39	U	1	0.41	U	1	0.51	U	1	5.6	U	1	6.7	U	1
Acetophenone	98-86-2	- -	UG/L	0.55	U	1	0.58	U	1	0.72	U	1	5.6	U	1	6.7	U	1
Anthracene	120-12-7	50	- UG/L	0.29	U	1	0.30	U	1	0.37	U	1	5.6	U	1	6.7	U	1
Atrazine	1912-24-9	7.5	- UG/L	0.47	U	1	0.50	U	1	0.61	U	1	5.6	U	1	6.7	U	1
Benzaldehyde	100-52-7	- -	UG/L	0.27	U	1	0.29	U	1	0.36	U	1	5.6	U	1	6.7	U	1
Benzo(a)anthracene	56-55-3	0.002	- UG/L	0.37	U	1	0.39	U	1	0.48	U	1	5.6	U	1	6.7	U	1
Benzo(a)pyrene	50-32-8	ND	- UG/L	0.48	U	1	0.51	U	1	0.63	U	1	5.6	U	1	6.7	U	1
Benzo(b)fluoranthene	205-99-2	0.002	- UG/L	0.35	U	1	0.37	U	1	0.45	U	1	5.6	U	1	6.7	U	1
Benzo(g,h,i)perylene	191-24-2	- -	UG/L	0.36	U	1	0.38	U	1	0.47	U	1	5.6	U	1	6.7	U	1
Benzo(k)fluoranthene	207-08-9	0.002	- UG/L	0.74	U	1	0.79	U	1	0.97	U	1	5.6	U	1	6.7	U	1
Biphenyl	92-52-4	5	a UG/L	0.67	U	1	0.71	U	1	0.87	U	1	5.6	U	1	6.7	U	1
bis(2-Chloroethoxy)methane	111-91-1	5	a UG/L	0.36	U	1	0.38	U	1	0.47	U	1	5.6	U	1	6.7	U	1
bis(2-Chloroethyl)Ether	111-44-4	1	- UG/L	0.41	U	1	0.43	U	1	0.53	U	1	5.6	U	1	6.7	U	1
Bis(2-chloroisopropyl)ether	108-60-1	5	a UG/L	0.53	U	1	0.56	U	1	0.69	U	1	5.6	U	1	6.7	U	1
bis(2-Ethylhexyl)phthalate	117-81-7	5	- UG/L	1.8	U	1	1.9	U	1	2.4	U	1	5.6	U	1	6.7	U	1
Butylbenzylphthalate	85-68-7	50	- UG/L	0.43	U	1	0.45	U	1	0.56	U	1	5.6	U	1	6.7	U	1
Caprolactam	105-60-2	- -	UG/L	2.2	U	1	2.4	U	1	2.9	U	1	5.6	U	1	6.7	U	1
Carbazole	86-74-8	- -	UG/L	0.31	U	1	0.32	U	1	0.40	U	1	5.6	U	1	6.7	U	1
Chrysene	218-01-9	0.002	- UG/L	0.34	U	1	0.36	U	1	0.44	U	1	5.6	U	1	6.7	U	1
Dibenzo(a,h)anthracene	53-70-3	- -	UG/L	0.43	U	1	0.45	U	1	0.56	U	1	5.6	U	1	6.7	U	1
Dibenzofuran	132-64-9	- -	UG/L	0.52	U	1	0.55	U	1	0.68	U	1	5.6	U	1	6.7	U	1
Diethylphthalate	84-66-2	50	- UG/L	0.22	U	1	0.24	U	1	0.29	U	1	5.6	U	1	6.7	U	1
Dimethylphthalate	131-11-3	50	- UG/L	0.37	U	1	0.39	U	1	0.48	U	1	5.6	U	1	6.7	U	1
Di-n-butylphthalate	84-74-2	50	- UG/L	0.32	U	1	5.4		1	0.41	U	1	5.6	U	1	6.7	U	1
Di-n-octylphthalate	117-84-0	50	- UG/L	0.48	U	1	0.51	U	1	0.63	U	1	5.6	U	1	6.7	U	1
Fluoranthene	206-44-0	50	- UG/L	0.41	U	1	0.43	U	1	0.53	U	1	5.6	U	1	6.7	U	1
Fluorene	86-73-7	50	- UG/L	0.37	U	1	0.39	U	1	0.48	U	1	5.6	U	1	6.7	U	1
Hexachlorobenzene	118-74-1	0.04	- UG/L	0.52	U	1	0.55	U	1	0.68	U	1	5.6	U	1	6.7	U	1
Hexachlorobutadiene	87-68-3	0.5	- UG/L	0.69	U	1	0.74	U	1	0.91	U	1	5.6	U	1	6.7	U	1
Hexachlorocyclopentadiene	77-47-4	5	a UG/L	0.60	U	1	0.64	U	1	0.79	U	1	5.6	U	1	6.7	U	1
Hexachloroethane	67-72-1	5	a UG/L	0.60	U	1	0.64	U	1	0.79	U	1	5.6	U	1	6.7	U	1
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	- UG/L	0.48	U	1	0.51	U	1	0.63	U	1	5.6	U	1	6.7	U	1
Isophorone	78-59-1	50	- UG/L	0.44	U	1	0.46	U	1	0.57	U	1	5.6	U	1	6.7	U	1
Naphthalene	91-20-3	10	- UG/L	0.78	U	1	0.82	U	1	1.0	U	1	5.6	U	1	6.7	U	1
Nitrobenzene	98-95-3	0.4	- UG/L	0.30	U	1	0.31	U	1	0.39	U	1	5.6	U	1	6.7	U	1
N-Nitroso-di-n-propylamine	621-64-7	50	- UG/L	0.55	U	1	0.58	U	1	0.72	U	1	5.6	U	1	6.7	U	1
N-Nitrosodiphenylamine(1)	86-30-6	50	- UG/L	0.52	U	1	0.55	U	1	0.68	U	1	5.6	U,L	1	6.7	U,L	1
Pentachlorophenol	87-86-5	- -	UG/L	2.2	U	1	2.4	U	1	2.9	U	1	11	U	1	13	U	1
Phenanthrene	85-01-8	50	- UG/L	0.45	U	1	0.48	U	1	0.59	U	1	5.6	U	1	6.7	U	1
Phenol	108-95-2	- -	UG/L	0.40	U	1	0.42	U	1	0.52	U	1	5.6	U	1	6.7	U	1
Pyrene	129-00-0	50	- UG/L	0.35	U	1	0.37	U	1	0.45	U	1	5.6	U	1	6.7	U	1
TOTAL DETECTABLE			**UG/L**	**0**			**5.4**			**0**			**0**			**0**		

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard				SAMPLE ID:	**FIELD BLANK 13**			**FIELD BLANK 14**			**TRIP BLANK**			**TRIP BLANK**			**TRIP BLANK**		
				LAB ORDER:	RSK0893-02			RSK0953-02			RSK0600-12			RSK0681-06			RSK0726-05		
				SAMPLE DATE:	11/18/2009 13:45			11/19/2009 16:25			11/11/2009 00:00			11/12/2009 00:00			11/13/2009 00:00		
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
2,4,5-Trichlorophenol	95-95-4	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	88-06-2	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	120-83-2	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	105-67-9	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	51-28-5	-	-	UG/L	17	U	1	13	U	1	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	121-14-2	5	a	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
2,6-Dinitrotoluene	606-20-2	5	a	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
2-Chloronaphthalene	91-58-7	10	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
2-Chlorophenol	95-57-8	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	91-57-6	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
2-Methylphenol	95-48-7	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
2-Nitroaniline	88-74-4	5	a	UG/L	17	U	1	13	U	1	-	-	-	-	-	-	-	-	-
2-Nitrophenol	88-75-5	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
3,3-Dichlorobenzidine	91-94-1	5	a	UG/L	8.3	U,L	1	6.7	U,L	1	-	-	-	-	-	-	-	-	-
3-Nitroaniline	99-09-2	5	a	UG/L	17	U	1	13	U	1	-	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	534-52-1	-	-	UG/L	17	U	1	13	U	1	-	-	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	101-55-3	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
4-Chloro-3-Methylphenol	59-50-7	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
4-Chloroaniline	106-47-8	5	a	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	7005-72-3	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
4-Methylphenol	106-44-5	-	-	UG/L	17	U	1	13	U	1	-	-	-	-	-	-	-	-	-
4-Nitroaniline	100-01-6	5	a	UG/L	17	U	1	13	U	1	-	-	-	-	-	-	-	-	-
4-Nitrophenol	100-02-7	-	-	UG/L	17	U	1	13	U	1	-	-	-	-	-	-	-	-	-
Acenaphthene	83-32-9	20	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Acenaphthylene	208-96-8	20	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Acetophenone	98-86-2	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Anthracene	120-12-7	50	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Atrazine	1912-24-9	7.5	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Benzaldehyde	100-52-7	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	56-55-3	0.002	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	50-32-8	ND	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	205-99-2	0.002	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	191-24-2	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	207-08-9	0.002	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Biphenyl	92-52-4	5	a	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	111-91-1	5	a	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
bis(2-Chloroethyl)Ether	111-44-4	1	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Bis(2-chloroisopropyl)ether	108-60-1	5	a	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	117-81-7	5	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Butylbenzylphthalate	85-68-7	50	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Caprolactam	105-60-2	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Carbazole	86-74-8	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Chrysene	218-01-9	0.002	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	53-70-3	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Dibenzofuran	132-64-9	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Diethylphthalate	84-66-2	50	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Dimethylphthalate	131-11-3	50	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Di-n-butylphthalate	84-74-2	50	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Di-n-octylphthalate	117-84-0	50	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Fluoranthene	206-44-0	50	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Fluorene	86-73-7	50	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	118-74-1	0.04	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	87-68-3	0.5	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	77-47-4	5	a	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Hexachloroethane	67-72-1	5	a	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Isophorone	78-59-1	50	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Naphthalene	91-20-3	10	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Nitrobenzene	98-95-3	0.4	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	621-64-7	50	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine(1)	86-30-6	50	-	UG/L	8.3	U,L	1	6.7	U,L	1	-	-	-	-	-	-	-	-	-
Pentachlorophenol	87-86-5	-	-	UG/L	17	U	1	13	U	1	-	-	-	-	-	-	-	-	-
Phenanthrene	85-01-8	50	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Phenol	108-95-2	-	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
Pyrene	129-00-0	50	-	UG/L	8.3	U	1	6.7	U	1	-	-	-	-	-	-	-	-	-
TOTAL DETECTABLE				**UG/L**	**0**			**0**			**0**			**0**			**0**		

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard

				SAMPLE ID:	**TRIP BLANK**	
				LAB ORDER:	RTB1060-08	
				SAMPLE DATE:	02/23/2010 00:00	
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)	CAS	GWCO	Comment		RESULT	QUAL DF
2,4,5-Trichlorophenol	95-95-4	- -		UG/L	-	- -
2,4,6-Trichlorophenol	88-06-2	- -		UG/L	-	- -
2,4-Dichlorophenol	120-83-2	- -		UG/L	-	- -
2,4-Dimethylphenol	105-67-9	- -		UG/L	-	- -
2,4-Dinitrophenol	51-28-5	- -		UG/L	-	- -
2,4-Dinitrotoluene	121-14-2	5	a	UG/L	-	- -
2,6-Dinitrotoluene	606-20-2	5	a	UG/L	-	- -
2-Chloronaphthalene	91-58-7	10	-	UG/L	-	- -
2-Chlorophenol	95-57-8	- -		UG/L	-	- -
2-Methylnaphthalene	91-57-6	- -		UG/L	-	- -
2-Methylphenol	95-48-7	- -		UG/L	-	- -
2-Nitroaniline	88-74-4	5	a	UG/L	-	- -
2-Nitrophenol	88-75-5	- -		UG/L	-	- -
3,3-Dichlorobenzidine	91-94-1	5	a	UG/L	-	- -
3-Nitroaniline	99-09-2	5	a	UG/L	-	- -
4,6-Dinitro-2-methylphenol	534-52-1	- -		UG/L	-	- -
4-Bromophenyl-phenylether	101-55-3	- -		UG/L	-	- -
4-Chloro-3-Methylphenol	59-50-7	- -		UG/L	-	- -
4-Chloroaniline	106-47-8	5	a	UG/L	-	- -
4-Chlorophenyl-phenylether	7005-72-3	- -		UG/L	-	- -
4-Methylphenol	106-44-5	- -		UG/L	-	- -
4-Nitroaniline	100-01-6	5	a	UG/L	-	- -
4-Nitrophenol	100-02-7	- -		UG/L	-	- -
Acenaphthene	83-32-9	20	-	UG/L	-	- -
Acenaphthylene	208-96-8	20	-	UG/L	-	- -
Acetophenone	98-86-2	- -		UG/L	-	- -
Anthracene	120-12-7	50	-	UG/L	-	- -
Atrazine	1912-24-9	7.5	-	UG/L	-	- -
Benzaldehyde	100-52-7	- -		UG/L	-	- -
Benzo(a)anthracene	56-55-3	0.002	-	UG/L	-	- -
Benzo(a)pyrene	50-32-8	ND	-	UG/L	-	- -
Benzo(b)fluoranthene	205-99-2	0.002	-	UG/L	-	- -
Benzo(g,h,i)perylene	191-24-2	- -		UG/L	-	- -
Benzo(k)fluoranthene	207-08-9	0.002	-	UG/L	-	- -
Biphenyl	92-52-4	5	a	UG/L	-	- -
bis(2-Chloroethoxy)methane	111-91-1	5	a	UG/L	-	- -
bis(2-Chloroethyl)Ether	111-44-4	1	-	UG/L	-	- -
Bis(2-chloroisopropyl)ether	108-60-1	5	a	UG/L	-	- -
bis(2-Ethylhexyl)phthalate	117-81-7	5	-	UG/L	-	- -
Butylbenzylphthalate	85-68-7	50	-	UG/L	-	- -
Caprolactam	105-60-2	- -		UG/L	-	- -
Carbazole	86-74-8	- -		UG/L	-	- -
Chrysene	218-01-9	0.002	-	UG/L	-	- -
Dibenzo(a,h)anthracene	53-70-3	- -		UG/L	-	- -
Dibenzofuran	132-64-9	- -		UG/L	-	- -
Diethylphthalate	84-66-2	50	-	UG/L	-	- -
Dimethylphthalate	131-11-3	50	-	UG/L	-	- -
Di-n-butylphthalate	84-74-2	50	-	UG/L	-	- -
Di-n-octylphthalate	117-84-0	50	-	UG/L	-	- -
Fluoranthene	206-44-0	50	-	UG/L	-	- -
Fluorene	86-73-7	50	-	UG/L	-	- -
Hexachlorobenzene	118-74-1	0.04	-	UG/L	-	- -
Hexachlorobutadiene	87-68-3	0.5	-	UG/L	-	- -
Hexachlorocyclopentadiene	77-47-4	5	a	UG/L	-	- -
Hexachloroethane	67-72-1	5	a	UG/L	-	- -
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	-	UG/L	-	- -
Isophorone	78-59-1	50	-	UG/L	-	- -
Naphthalene	91-20-3	10	-	UG/L	-	- -
Nitrobenzene	98-95-3	0.4	-	UG/L	-	- -
N-Nitroso-di-n-propylamine	621-64-7	50	-	UG/L	-	- -
N-Nitrosodiphenylamine(1)	86-30-6	50	-	UG/L	-	- -
Pentachlorophenol	87-86-5	- -		UG/L	-	- -
Phenanthrene	85-01-8	50	-	UG/L	-	- -
Phenol	108-95-2	- -		UG/L	-	- -
Pyrene	129-00-0	50	-	UG/L	-	- -
TOTAL DETECTABLE				**UG/L**	**0**	

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard

				SAMPLE ID:	**TRIP BLANK**			**TRIP BLANK**			**TRIP BLANK**			**TRIP BLANK**			**Trip Blank**	
				LAB ORDER:	RSK0786-05			RSK0845-05			RSK0893-03			RSK0953-03			480-60100-17	
				SAMPLE DATE:	11/16/2009 00:00			11/17/2009 00:00			11/18/2009 00:00			11/19/2009 00:00			5/14/14 0:00	
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL
2,4,5-Trichlorophenol	95-95-4	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
2,4,6-Trichlorophenol	88-06-2	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
2,4-Dichlorophenol	120-83-2	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
2,4-Dimethylphenol	105-67-9	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
2,4-Dinitrophenol	51-28-5	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
2,4-Dinitrotoluene	121-14-2	5	a	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
2,6-Dinitrotoluene	606-20-2	5	a	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
2-Chloronaphthalene	91-58-7	10	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
2-Chlorophenol	95-57-8	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
2-Methylnaphthalene	91-57-6	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
2-Methylphenol	95-48-7	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
2-Nitroaniline	88-74-4	5	a	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
2-Nitrophenol	88-75-5	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
3,3-Dichlorobenzidine	91-94-1	5	a	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
3-Nitroaniline	99-09-2	5	a	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
4,6-Dinitro-2-methylphenol	534-52-1	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
4-Bromophenyl-phenylether	101-55-3	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
4-Chloro-3-Methylphenol	59-50-7	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
4-Chloroaniline	106-47-8	5	a	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
4-Chlorophenyl-phenylether	7005-72-3	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
4-Methylphenol	106-44-5	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
4-Nitroaniline	100-01-6	5	a	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
4-Nitrophenol	100-02-7	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Acenaphthene	83-32-9	20	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Acenaphthylene	208-96-8	20	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Acetophenone	98-86-2	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Anthracene	120-12-7	50	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Atrazine	1912-24-9	7.5	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Benzaldehyde	100-52-7	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Benzo(a)anthracene	56-55-3	0.002	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Benzo(a)pyrene	50-32-8	ND	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Benzo(b)fluoranthene	205-99-2	0.002	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Benzo(g,h,i)perylene	191-24-2	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Benzo(k)fluoranthene	207-08-9	0.002	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Biphenyl	92-52-4	5	a	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
bis(2-Chloroethoxy)methane	111-91-1	5	a	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
bis(2-Chloroethyl)Ether	111-44-4	1	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Bis(2-chloroisopropyl)ether	108-60-1	5	a	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
bis(2-Ethylhexyl)phthalate	117-81-7	5	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Butylbenzylphthalate	85-68-7	50	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Caprolactam	105-60-2	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Carbazole	86-74-8	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Chrysene	218-01-9	0.002	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Dibenzo(a,h)anthracene	53-70-3	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Dibenzofuran	132-64-9	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Diethylphthalate	84-66-2	50	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Dimethylphthalate	131-11-3	50	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Di-n-butylphthalate	84-74-2	50	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Di-n-octylphthalate	117-84-0	50	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Fluoranthene	206-44-0	50	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Fluorene	86-73-7	50	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Hexachlorobenzene	118-74-1	0.04	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Hexachlorobutadiene	87-68-3	0.5	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Hexachlorocyclopentadiene	77-47-4	5	a	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Hexachloroethane	67-72-1	5	a	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Isophorone	78-59-1	50	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Naphthalene	91-20-3	10	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Nitrobenzene	98-95-3	0.4	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
N-Nitroso-di-n-propylamine	621-64-7	50	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
N-Nitrosodiphenylamine(1)	86-30-6	50	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Pentachlorophenol	87-86-5	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Phenanthrene	85-01-8	50	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Phenol	108-95-2	- -		UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
Pyrene	129-00-0	50	-	UG/L	-		- -	-		- -	-		- -	-		- -	-	- -
TOTAL DETECTABLE				**UG/L**	**0**			**0**			**0**			**0**			**0**	

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard

				SAMPLE ID:	**FIELD BLANK 8**			**FIELD BLANK 9**			**FIELD BLANK 10**			**FIELD BLANK 11**			**FIELD BLANK 12**		
				LAB ORDER:	RSK0600-11			RSK0681-02			RSK0726-02			RSK0786-04			RSK0845-04		
				SAMPLE DATE:	11/11/2009 16:20			11/12/2009 16:50			11/13/2009 12:40			11/16/2009 17:15			11/17/2009 09:15		
METALS (EPA METHOD 6010B)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	-	-	MG/L	-	-	-	0.072	J	1	0.040	U	1	0.200	U	1	0.200	U	1
Antimony	7440-36-0	0.003	-	MG/L	0.0068	U	1	0.0068	U	1	0.0068	U	1	0.0200	U	1	0.0200	U	1
Arsenic	7440-38-2	0.025	k	MG/L	0.0056	U	1	0.0056	U	1	0.0056	U	1	0.0100	U	1	0.0100	U	1
Barium	7440-39-3	1	-	MG/L	0.0005	CF6, J	1	0.0009	J	1	0.0003	J	1	0.0004	J	1	0.0004	J	1
Beryllium	7440-41-7	-	-	MG/L	0.0002	U	1	0.0002	U	1	0.0002	U	1	0.0020	U	1	0.0020	U	1
Cadmium	7440-43-9	0.005	-	MG/L	0.0003	U	1	0.0003	U	1	0.0003	U	1	0.0010	U	1	0.0010	U	1
Calcium	7440-70-2	-	-	MG/L	0.8	CF6	1	0.9		1	0.6		1	0.5		1	0.7		1
Chromium	18540-29-9	0.05	-	MG/L	0.0009	U	1	0.0015	J	1	0.0009	U	1	0.0040	U	1	0.0040	U	1
Cobalt	7440-48-4	-	-	MG/L	0.0006	U	1	0.0006	U	1	0.0006	U	1	0.0040	U	1	0.0040	U	1
Copper	7440-50-8	0.2	-	MG/L	0.0013	U	1	0.0013	U	1	0.0013	U	1	0.0100	U	1	0.0100	U	1
Iron	7439-89-6	0.3	-	MG/L	0.019	U	1	0.092		1	0.019	U	1	0.050	U	1	0.050	U	1
Lead	7439-92-1	0.025	-	MG/L	0.0030	U	1	0.0030	U	1	0.0030	U	1	0.0050	U	1	0.0050	U	1
Magnesium	7439-95-4	35	-	MG/L	0.193	CF6, J	1	0.204		1	0.161	J	1	0.112	J	1	0.188	J	1
Manganese	7439-96-5	0.3	-	MG/L	0.0008	CF6, J, B	1	0.0055		1	0.0008	J	1	0.0005	J	1	0.0004	J	1
Total Mercury	7439-97-6	0.0007	-	MG/L	0.0001	U	1	0.0001	U	1	0.0001	U	1	0.0002	U	1	0.0002	U	1
Nickel	7440-02-0	0.1	-	MG/L	0.0013	U	1	0.0013	U	1	0.0013	U	1	0.0100	U	1	0.0100	U	1
Potassium	7440-09-7	-	-	MG/L	0.050	U	1	0.050	U	1	0.050	U	1	0.500	U	1	0.500	U	1
Selenium	7782-49-2	0.01	-	MG/L	0.0087	U	1	0.0087	U	1	0.0087	U	1	0.0150	U	1	0.0150	U	1
Silver	7440-22-4	0.05	-	MG/L	0.0012	U	1	0.0012	U	1	0.0012	U	1	0.0030	U	1	0.0030	U	1
Sodium	7440-23-5	20	-	MG/L	-	-	-	0.4	J	1	0.5	J	1	0.3	J	1	0.3	J	1
Thallium	7440-28-0	0.0005	-	MG/L	0.0102	U	1	0.0102	U	1	0.0102	U	1	0.0200	U	1	0.0200	U	1
Vanadium	7440-62-2	-	-	MG/L	0.0011	U	1	0.0011	U	1	0.0011	U	1	0.0050	U	1	0.0050	U	1
Zinc	7440-66-6	2	-	MG/L	0.0015	U	1	0.0017	J	1	0.0027	J	1	0.0100	U	1	0.0100	U	1
TOTAL DETECTABLE				**MG/L**	**0.9943**			**1.6776**			**1.2648**			**0.9129**			**1.1888**		

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard

				SAMPLE ID:	**FIELD BLANK 13**			**FIELD BLANK 14**			**TRIP BLANK**			**TRIP BLANK**			**TRIP BLANK**		
				LAB ORDER:	RSK0893-02			RSK0953-02			RSK0600-12			RSK0681-06			RSK0726-05		
				SAMPLE DATE:	11/18/2009 13:45			11/19/2009 16:25			11/11/2009 00:00			11/12/2009 00:00			11/13/2009 00:00		
METALS																			
(EPA METHOD 6010B)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	-	-	MG/L	0.200	U	1	0.200	U	1	-	-	-	-	-	-	-	-	-
Antimony	7440-36-0	0.003	-	MG/L	0.0200	U	1	0.0200	U	1	-	-	-	-	-	-	-	-	-
Arsenic	7440-38-2	0.025	k	MG/L	0.0100	U	1	0.0100	U	1	-	-	-	-	-	-	-	-	-
Barium	7440-39-3	1	-	MG/L	0.0006	J	1	0.0004	J	1	-	-	-	-	-	-	-	-	-
Beryllium	7440-41-7	-	-	MG/L	0.0020	U	1	0.0020	U	1	-	-	-	-	-	-	-	-	-
Cadmium	7440-43-9	0.005	-	MG/L	0.0010	U	1	0.0010	U	1	-	-	-	-	-	-	-	-	-
Calcium	7440-70-2	-	-	MG/L	0.5		1	0.6		1	-	-	-	-	-	-	-	-	-
Chromium	18540-29-9	0.05	-	MG/L	0.0040	U	1	0.0040	U	1	-	-	-	-	-	-	-	-	-
Cobalt	7440-48-4	-	-	MG/L	0.0040	U	1	0.0040	U	1	-	-	-	-	-	-	-	-	-
Copper	7440-50-8	0.2	-	MG/L	0.0100	U	1	0.0100	U	1	-	-	-	-	-	-	-	-	-
Iron	7439-89-6	0.3	-	MG/L	0.083		1	0.052		1	-	-	-	-	-	-	-	-	-
Lead	7439-92-1	0.025	-	MG/L	0.0050	U	1	0.0050	U	1	-	-	-	-	-	-	-	-	-
Magnesium	7439-95-4	35	-	MG/L	0.120	J	1	0.128	J	1	-	-	-	-	-	-	-	-	-
Manganese	7439-96-5	0.3	-	MG/L	0.0025	J	1	0.0019	J	1	-	-	-	-	-	-	-	-	-
Total Mercury	7439-97-6	0.0007	-	MG/L	0.0002	U	1	0.0002	U	1	-	-	-	-	-	-	-	-	-
Nickel	7440-02-0	0.1	-	MG/L	0.0100	U	1	0.0100	U	1	-	-	-	-	-	-	-	-	-
Potassium	7440-09-7	-	-	MG/L	0.500	U	1	0.500	U	1	-	-	-	-	-	-	-	-	-
Selenium	7782-49-2	0.01	-	MG/L	0.0150	U	1	0.0150	U	1	-	-	-	-	-	-	-	-	-
Silver	7440-22-4	0.05	-	MG/L	0.0030	U	1	0.0030	U	1	-	-	-	-	-	-	-	-	-
Sodium	7440-23-5	20	-	MG/L	1.0	U	1	0.3	J	1	-	-	-	-	-	-	-	-	-
Thallium	7440-28-0	0.0005	-	MG/L	0.0200	U	1	0.0200	U	1	-	-	-	-	-	-	-	-	-
Vanadium	7440-62-2	-	-	MG/L	0.0050	U	1	0.0050	U	1	-	-	-	-	-	-	-	-	-
Zinc	7440-66-6	2	-	MG/L	0.0022	J	1	0.0100	U	1	-	-	-	-	-	-	-	-	-
TOTAL DETECTABLE				**MG/L**	**0.7083**			**1.0823**			**0**			**0**			**0**		

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard

					SAMPLE ID:	TRIP BLANK	
					LAB ORDER:	RTB1060-08	
					SAMPLE DATE:	02/23/2010 00:00	
METALS (EPA METHOD 6010B)	CAS	GWCO	Comment		RESULT	QUAL	DF
Aluminum	7429-90-5	-	-	MG/L	-	-	-
Antimony	7440-36-0	0.003	-	MG/L	-	-	-
Arsenic	7440-38-2	0.025	k	MG/L	-	-	-
Barium	7440-39-3	1	-	MG/L	-	-	-
Beryllium	7440-41-7	-	-	MG/L	-	-	-
Cadmium	7440-43-9	0.005	-	MG/L	-	-	-
Calcium	7440-70-2	-	-	MG/L	-	-	-
Chromium	18540-29-9	0.05	-	MG/L	-	-	-
Cobalt	7440-48-4	-	-	MG/L	-	-	-
Copper	7440-50-8	0.2	-	MG/L	-	-	-
Iron	7439-89-6	0.3	-	MG/L	-	-	-
Lead	7439-92-1	0.025	-	MG/L	-	-	-
Magnesium	7439-95-4	35	-	MG/L	-	-	-
Manganese	7439-96-5	0.3	-	MG/L	-	-	-
Total Mercury	7439-97-6	0.0007	-	MG/L	-	-	-
Nickel	7440-02-0	0.1	-	MG/L	-	-	-
Potassium	7440-09-7	-	-	MG/L	-	-	-
Selenium	7782-49-2	0.01	-	MG/L	-	-	-
Silver	7440-22-4	0.05	-	MG/L	-	-	-
Sodium	7440-23-5	20	-	MG/L	-	-	-
Thallium	7440-28-0	0.0005	-	MG/L	-	-	-
Vanadium	7440-62-2	-	-	MG/L	-	-	-
Zinc	7440-66-6	2	-	MG/L	-	-	-
TOTAL DETECTABLE				**MG/L**	**0**		

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard				SAMPLE ID:	**TRIP BLANK**			**TRIP BLANK**			**TRIP BLANK**			**TRIP BLANK**			**Trip Blank**	
				LAB ORDER:	RSK0786-05			RSK0845-05			RSK0893-03			RSK0953-03			480-60100-17	
				SAMPLE DATE:	11/16/2009 00:00			11/17/2009 00:00			11/18/2009 00:00			11/19/2009 00:00			5/14/14 0:00	
METALS																		
(EPA METHOD 6010B)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL
Aluminum	7429-90-5	-	-	MG/L	-		-	-		-	-		-	-		-	-	
Antimony	7440-36-0	0.003	-	MG/L	-		-	-		-	-		-	-		-	-	
Arsenic	7440-38-2	0.025	k	MG/L	-		-	-		-	-		-	-		-	-	
Barium	7440-39-3	1	-	MG/L	-		-	-		-	-		-	-		-	-	
Beryllium	7440-41-7	-	-	MG/L	-		-	-		-	-		-	-		-	-	
Cadmium	7440-43-9	0.005	-	MG/L	-		-	-		-	-		-	-		-	-	
Calcium	7440-70-2	-	-	MG/L	-		-	-		-	-		-	-		-	-	
Chromium	18540-29-9	0.05	-	MG/L	-		-	-		-	-		-	-		-	-	
Cobalt	7440-48-4	-	-	MG/L	-		-	-		-	-		-	-		-	-	
Copper	7440-50-8	0.2	-	MG/L	-		-	-		-	-		-	-		-	-	
Iron	7439-89-6	0.3	-	MG/L	-		-	-		-	-		-	-		-	-	
Lead	7439-92-1	0.025	-	MG/L	-		-	-		-	-		-	-		-	-	
Magnesium	7439-95-4	35	-	MG/L	-		-	-		-	-		-	-		-	-	
Manganese	7439-96-5	0.3	-	MG/L	-		-	-		-	-		-	-		-	-	
Total Mercury	7439-97-6	0.0007	-	MG/L	-		-	-		-	-		-	-		-	-	
Nickel	7440-02-0	0.1	-	MG/L	-		-	-		-	-		-	-		-	-	
Potassium	7440-09-7	-	-	MG/L	-		-	-		-	-		-	-		-	-	
Selenium	7782-49-2	0.01	-	MG/L	-		-	-		-	-		-	-		-	-	
Silver	7440-22-4	0.05	-	MG/L	-		-	-		-	-		-	-		-	-	
Sodium	7440-23-5	20	-	MG/L	-		-	-		-	-		-	-		-	-	
Thallium	7440-28-0	0.0005	-	MG/L	-		-	-		-	-		-	-		-	-	
Vanadium	7440-62-2	-	-	MG/L	-		-	-		-	-		-	-		-	-	
Zinc	7440-66-6	2	-	MG/L	-		-	-		-	-		-	-		-	-	
TOTAL DETECTABLE				**MG/L**	**0**			**0**			**0**			**0**			**0**	

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard				SAMPLE ID:	**FIELD BLANK 8**			**FIELD BLANK 9**			**FIELD BLANK 10**			**FIELD BLANK 11**			**FIELD BLANK 12**		
				LAB ORDER:	RSK0600-11			RSK0681-02			RSK0726-02			RSK0786-04			RSK0845-04		
				SAMPLE DATE:	11/11/2009 16:20			11/12/2009 16:50			11/13/2009 12:40			11/16/2009 17:15			11/17/2009 09:15		
PCBs (EPA METHOD 8080)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -	UG/L		0.21	U	1	0.22	U	1	0.27	U	1	0.52	U	1	0.54	U	1
Aroclor 1221	11104-28-2	- -	UG/L		0.21	U	1	0.22	U	1	0.27	U	1	0.52	U	1	0.54	U	1
Aroclor 1232	11141-16-5	- -	UG/L		0.21	U	1	0.22	U	1	0.27	U	1	0.52	U	1	0.54	U	1
Aroclor 1242	53469-21-9	- -	UG/L		0.21	U	1	0.22	U	1	0.27	U	1	0.52	U	1	0.54	U	1
Aroclor 1248	12672-29-6	- -	UG/L		0.21	U	1	0.22	U	1	0.27	U	1	0.52	U	1	0.54	U	1
Aroclor 1254	11097-69-1	- -	UG/L		0.30	U	1	0.31	U	1	0.38	U	1	0.52	U	1	0.54	U	1
Aroclor 1260	11096-82-5	- -	UG/L		0.30	U	1	0.31	U	1	0.38	U	1	0.52	U	1	0.54	U	1
Aroclor 1262	37324-23-5	- -	UG/L		0.30	U	1	0.31	U	1	0.38	U	1	0.52	U	1	0.54	U	1
Aroclor 1268	11100-14-4	- -	UG/L		0.30	U	1	0.31	U	1	0.38	U	1	0.52	U	1	0.54	U	1
TOTAL DETECTABLE	**1336-36-3**	**0.09**	**o** **UG/L**		**0**			**0**			**0**			**0**			**0**		

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard

				SAMPLE ID:	**FIELD BLANK 13**			**FIELD BLANK 14**			**TRIP BLANK**			**TRIP BLANK**			**TRIP BLANK**		
				LAB ORDER:	RSK0893-02			RSK0953-02			RSK0600-12			RSK0681-06			RSK0726-05		
				SAMPLE DATE:	11/18/2009 13:45			11/19/2009 16:25			11/11/2009 00:00			11/12/2009 00:00			11/13/2009 00:00		
PCBs (EPA METHOD 8080)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -	UG/L		0.56	U	1	0.52	U	1	-	- -		-	- -		-	- -	
Aroclor 1221	11104-28-2	- -	UG/L		0.56	U	1	0.52	U	1	-	- -		-	- -		-	- -	
Aroclor 1232	11141-16-5	- -	UG/L		0.56	U	1	0.52	U	1	-	- -		-	- -		-	- -	
Aroclor 1242	53469-21-9	- -	UG/L		0.56	U	1	0.52	U	1	-	- -		-	- -		-	- -	
Aroclor 1248	12672-29-6	- -	UG/L		0.56	U	1	0.52	U	1	-	- -		-	- -		-	- -	
Aroclor 1254	11097-69-1	- -	UG/L		0.56	U	1	0.52	U	1	-	- -		-	- -		-	- -	
Aroclor 1260	11096-82-5	- -	UG/L		0.56	U	1	0.52	U	1	-	- -		-	- -		-	- -	
Aroclor 1262	37324-23-5	- -	UG/L		0.56	U	1	0.52	U	1	-	- -		-	- -		-	- -	
Aroclor 1268	11100-14-4	- -	UG/L		0.56	U	1	0.52	U	1	-	- -		-	- -		-	- -	
TOTAL DETECTABLE	**1336-36-3**	**0.09**	**o**	**UG/L**	**0**			**0**			**0**			**0**			**0**		

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard

				SAMPLE ID:	**TRIP BLANK**		
				LAB ORDER:	RTB1060-08		
				SAMPLE DATE:	02/23/2010 00:00		
PCBs (EPA METHOD 8080)	CAS	GWCO	Comment		RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -	UG/L		-		- -
Aroclor 1221	11104-28-2	- -	UG/L		-		- -
Aroclor 1232	11141-16-5	- -	UG/L		-		- -
Aroclor 1242	53469-21-9	- -	UG/L		-		- -
Aroclor 1248	12672-29-6	- -	UG/L		-		- -
Aroclor 1254	11097-69-1	- -	UG/L		-		- -
Aroclor 1260	11096-82-5	- -	UG/L		-		- -
Aroclor 1262	37324-23-5	- -	UG/L		-		- -
Aroclor 1268	11100-14-4	- -	UG/L		-		- -
TOTAL DETECTABLE	**1336-36-3**	**0.09**	**o**	**UG/L**	**0**		

TABLE 1
FIELD/TRIP BLANKS

Part 703.5 Water Standard				SAMPLE ID:	**TRIP BLANK**			**TRIP BLANK**			**TRIP BLANK**			**TRIP BLANK**			**Trip Blank**	
				LAB ORDER:	RSK0786-05			RSK0845-05			RSK0893-03			RSK0953-03			480-60100-17	
				SAMPLE DATE:	11/16/2009 00:00			11/17/2009 00:00			11/18/2009 00:00			11/19/2009 00:00			5/14/14 0:00	
PCBs (EPA METHOD 8080)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL
Aroclor 1016	12674-11-2	- -	UG/L		-	- -		-	- -		-	- -		-	- -		-	- -
Aroclor 1221	11104-28-2	- -	UG/L		-	- -		-	- -		-	- -		-	- -		-	- -
Aroclor 1232	11141-16-5	- -	UG/L		-	- -		-	- -		-	- -		-	- -		-	- -
Aroclor 1242	53469-21-9	- -	UG/L		-	- -		-	- -		-	- -		-	- -		-	- -
Aroclor 1248	12672-29-6	- -	UG/L		-	- -		-	- -		-	- -		-	- -		-	- -
Aroclor 1254	11097-69-1	- -	UG/L		-	- -		-	- -		-	- -		-	- -		-	- -
Aroclor 1260	11096-82-5	- -	UG/L		-	- -		-	- -		-	- -		-	- -		-	- -
Aroclor 1262	37324-23-5	- -	UG/L		-	- -		-	- -		-	- -		-	- -		-	- -
Aroclor 1268	11100-14-4	- -	UG/L		-	- -		-	- -		-	- -		-	- -		-	- -
TOTAL DETECTABLE	**1336-36-3**	**0.09**	**o**	**UG/L**	**0**			**0**			**0**			**0**			**0**	

TABLE 2
SURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential				SAMPLE ID:	**1030ED-SS-01**			**1030ED-SS-02**			**1030ED-SS-03**		
				LAB ORDER:	RSK0600-06			RSK0600-01			RSK0600-05		
				SAMPLE DATE:	11/11/2009 11:45			11/11/2009 10:05			11/11/2009 11:30		
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	100000	a	UG/KG	0.50	U	1	0.48	U	1	0.52	U	1
1,1,2,2-Tetrachloroethane	79-34-5	-	-	UG/KG	1.1	U,UJ	1	1.1	U,UJ	1	1.2	U,UJ	1
1,1,2-Trichloroethane	79-00-5	-	-	UG/KG	0.34	U,UJ	1	0.33	U,UJ	1	0.36	U,UJ	1
1,1,2-Trichlorotrifluoroethane	76-13-1	-	-	UG/KG	3.4	U	1	3.3	U	1	3.6	U	1
1,1-Dichloroethane	75-34-3	26000	-	UG/KG	0.34	U	1	0.33	U	1	0.36	U	1
1,1-Dichloroethene	75-35-4	100000	a	UG/KG	0.84	U	1	0.81	U	1	0.88	U	1
1,2,4-Trichlorobenzene	120-82-1	-	-	UG/KG	0.42	U,UJ	1	0.40	U,UJ	1	0.44	U,UJ	1
1,2-Dibromo-3-chloropropane	96-12-8	-	-	UG/KG	3.4	U,UJ	1	3.3	U,UJ	1	3.6	U,UJ	1
1,2-Dibromoethane	106-93-4	-	-	UG/KG	0.26	U,UJ	1	0.25	U,UJ	1	0.27	U,UJ	1
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG	0.54	U,UJ	1	0.52	U,UJ	1	0.56	U,UJ	1
1,2-Dichloroethane	107-06-2	3100	-	UG/KG	0.34	U	1	0.33	U	1	0.36	U	1
1,2-Dichloropropane	78-87-5	-	-	UG/KG	3.4	U	1	3.3	U	1	3.6	U	1
1,3-Dichlorobenzene	541-73-1	49000	-	UG/KG	0.35	U,UJ	1	0.34	U,UJ	1	0.37	U,UJ	1
1,4-Dichlorobenzene	106-46-7	13000	-	UG/KG	0.96	U,UJ	1	0.93	U,UJ	1	1.0	U,UJ	1
2-Butanone	78-93-3	100000	a	UG/KG	2.5	U,UJ	1	2.4	U,UJ	1	2.6	U,UJ	1
2-Hexanone	591-78-6	-	-	UG/KG	2.4	U,UJ	1	2.3	U,UJ	1	2.5	U,UJ	1
4-Methyl-2-pentanone	108-10-1	-	-	UG/KG	2.2	U,UJ	1	2.2	U,UJ	1	2.4	U,UJ	1
Acetone	67-64-1	100000	b	UG/KG	1.5	U,J,UJ	1	1.5	U,J,UJ	1	1.6	U,J,UJ	1
Benzene	71-43-2	4800	-	UG/KG	0.34	U	1	0.32	U	1	0.35	U	1
Bromodichloromethane	594-18-3	-	-	UG/KG	0.35	U	1	0.34	U	1	0.37	U	1
Bromoform	75-25-2	-	-	UG/KG	3.4	U,L4,UJ	1	3.3	U	1	3.6	U,L4,UJ	1
Bromomethane	74-83-9	-	-	UG/KG	1.5	U	1	1.5	U,UJ	1	1.6	U,UJ	1
Carbon Disulfide	75-15-0	-	-	UG/KG	0.59	U	1	0.57	U	1	0.62	U	1
Carbon tetrachloride	56-23-5	2400	-	UG/KG	0.66	U	1	0.64	U	1	0.70	U	1
Chlorobenzene	108-90-7	100000	a	UG/KG	0.91	U	1	0.87	U	1	0.95	U	1
Chlorodibromomethane	124-48-1	-	-	UG/KG	0.38	U,L4,UJ	1	0.37	U,UJ	1	0.40	U,L4,UJ	1
Chloroethane	75-00-3	-	-	UG/KG	2.9	U,UJ	1	2.8	U,L,UJ	1	3.0	U,UJ	1
Chloroform	67-66-3	49000	-	UG/KG	0.42	U	1	0.41	U	1	0.45	U	1
Chloromethane	74-87-3	-	-	UG/KG	0.41	U	1	0.40	U	1	0.44	U	1
cis-1,2-Dichloroethene	156-59-2	100000	a	UG/KG	0.34	U	1	0.33	U	1	0.36	U	1
cis-1,3-Dichloropropene	10061-01-5	-	-	UG/KG	0.39	U	1	0.38	U	1	0.41	U	1
Cyclohexane	110-82-7	-	-	UG/KG	0.32	U	1	0.30	U	1	0.33	U	1
Dichlorodifluoromethane	75-71-8	-	-	UG/KG	0.57	U	1	0.55	U	1	0.60	U	1
Ethylbenzene	100-41-4	41000	-	UG/KG	0.47	U	1	0.46	U	1	0.50	U	1
Isopropylbenzene	98-82-8	-	-	UG/KG	1.0	U	1	1.0	U	1	1.1	U	1
Methyl Acetate	79-20-9	-	-	UG/KG	0.37	U	1	0.36	U	1	0.39	U	1
Methyl tert-butyl ether	1634-04-4	100000	a	UG/KG	0.67	U	1	0.65	U	1	0.71	U	1
Methylcyclohexane	108-87-2	-	-	UG/KG	0.44	U,J,UJ	1	0.43	U,J,UJ	1	0.47	U,J,UJ	1
Methylene chloride	75-09-2	100000	a	UG/KG	8.7	U	1	1.3	U	1	13	U	1
Styrene	100-42-5	-	-	UG/KG	0.34	U	1	0.33	U,L	1	0.36	U	1
Tetrachloroethene	127-18-4	19000	-	UG/KG	0.92	U,J,UJ	1	0.89	U,J,UJ	1	0.97	U,J,UJ	1
Toluene	108-88-3	100000	a	UG/KG	0.52	U,UJ	1	0.50	U,UJ	1	0.55	U,UJ	1
trans-1,2-Dichloroethene	156-60-5	100000	a	UG/KG	0.71	U	1	0.68	U	1	0.75	U	1
trans-1,3-Dichloropropene	10061-02-6	-	-	UG/KG	0.34	U,UJ	1	0.32	U,UJ	1	0.35	U,UJ	1
Trichloroethene	79-01-6	21000	-	UG/KG	0.47	U	1	0.46	U	1	0.50	U	1
Trichlorofluoromethane	75-69-4	-	-	UG/KG	0.65	U	1	0.63	U	1	0.68	U	1
Vinyl chloride	75-01-4	900	-	UG/KG	0.84	U	1	0.81	U	1	0.88	U	1
Xylene	1330-20-7	100000	a	UG/KG	1.2	U	1	1.1	U	1	1.2	U	1
TOTAL DETECTABLE					**0**			**0**			**0**		

TABLE 2
SURFACE SOIL

				SAMPLE ID:	1030ED-SS-04			1030ED-SS-05 (0-1)			1030ED-SS-06 (0-1)			1030ED-SS-07 (0-1)			1030ED-SS-08 (0-1)		
Restricted Soil Cleanup Objectives (SCO)				LAB ORDER:	RSK0600-04			480-60100-8			480-60100-9			480-60100-10			480-60100-11		
- Restricted Residential				SAMPLE DATE:	11/11/2009 11:10			5/15/14 9:25			5/15/14 9:35			5/15/14 9:38			5/15/14 9:48		
VOLATILE ORGANIC COMPOUNDS																			
(EPA METHOD 8260)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	100000	a	UG/KG	0.43	U	1												
1,1,2,2-Tetrachloroethane	79-34-5	-	-	UG/KG	0.97	U,UJ	1												
1,1,2-Trichloroethane	79-00-5	-	-	UG/KG	0.30	U,UJ	1												
1,1,2-Trichlorotrifluoroethane	76-13-1	-	-	UG/KG	3.0	U	1												
1,1-Dichloroethane	75-34-3	26000	-	UG/KG	0.30	U	1												
1,1-Dichloroethene	75-35-4	100000	a	UG/KG	0.73	U	1												
1,2,4-Trichlorobenzene	120-82-1	-	-	UG/KG	0.36	U,UJ	1												
1,2-Dibromo-3-chloropropane	96-12-8	-	-	UG/KG	3.0	U,UJ	1												
1,2-Dibromoethane	106-93-4	-	-	UG/KG	0.23	U,UJ	1												
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG	0.47	U,UJ	1												
1,2-Dichloroethane	107-06-2	3100	-	UG/KG	0.30	U	1												
1,2-Dichloropropane	78-87-5	-	-	UG/KG	3.0	U	1												
1,3-Dichlorobenzene	541-73-1	49000	-	UG/KG	0.31	U,UJ	1												
1,4-Dichlorobenzene	106-46-7	13000	-	UG/KG	0.84	U,UJ	1												
2-Butanone	78-93-3	100000	a	UG/KG	2.2	U,UJ	1												
2-Hexanone	591-78-6	-	-	UG/KG	2.1	U,UJ	1												
4-Methyl-2-pentanone	108-10-1	-	-	UG/KG	2.0	U,UJ	1												
Acetone	67-64-1	100000	b	UG/KG	1.3	U,J,UJ	1												
Benzene	71-43-2	4800	-	UG/KG	0.29	U	1												
Bromodichloromethane	594-18-3	-	-	UG/KG	0.31	U	1												
Bromoform	75-25-2	-	-	UG/KG	3.0	U,L4,UJ	1												
Bromomethane	74-83-9	-	-	UG/KG	1.3	U	1												
Carbon Disulfide	75-15-0	-	-	UG/KG	0.51	U	1												
Carbon tetrachloride	56-23-5	2400	-	UG/KG	0.58	U	1												
Chlorobenzene	108-90-7	100000	a	UG/KG	0.79	U	1												
Chlorodibromomethane	124-48-1	-	-	UG/KG	0.33	U,L4,UJ	1												
Chloroethane	75-00-3	-	-	UG/KG	2.5	U	1												
Chloroform	67-66-3	49000	-	UG/KG	0.37	U	1												
Chloromethane	74-87-3	-	-	UG/KG	0.36	U	1												
cis-1,2-Dichloroethene	156-59-2	100000	a	UG/KG	0.29	U	1												
cis-1,3-Dichloropropene	10061-01-5	-	-	UG/KG	0.34	U	1												
Cyclohexane	110-82-7	-	-	UG/KG	0.28	U	1												
Dichlorodifluoromethane	75-71-8	-	-	UG/KG	0.49	U	1												
Ethylbenzene	100-41-4	41000	-	UG/KG	0.41	U	1												
Isopropylbenzene	98-82-8	-	-	UG/KG	0.90	U	1												
Methyl Acetate	79-20-9	-	-	UG/KG	0.32	U	1												
Methyl tert-butyl ether	1634-04-4	100000	a	UG/KG	0.59	U	1												
Methylcyclohexane	108-87-2	-	-	UG/KG	0.39	U,J,UJ	1												
Methylene chloride	75-09-2	100000	a	UG/KG	6.6	U	1												
Styrene	100-42-5	-	-	UG/KG	0.30	U	1												
Tetrachloroethene	127-18-4	19000	-	UG/KG	0.80	U,J,UJ	1												
Toluene	108-88-3	100000	a	UG/KG	0.45	U,UJ	1												
trans-1,2-Dichloroethene	156-60-5	100000	a	UG/KG	0.62	U	1												
trans-1,3-Dichloropropene	10061-02-6	-	-	UG/KG	0.29	U,UJ	1												
Trichloroethene	79-01-6	21000	-	UG/KG	0.41	U	1												
Trichlorofluoromethane	75-69-4	-	-	UG/KG	0.57	U	1												
Vinyl chloride	75-01-4	900	-	UG/KG	0.73	U	1												
Xylene	1330-20-7	100000	a	UG/KG	1.0	U	1												
TOTAL DETECTABLE					**0**			**0**			**0**			**0**			**0**		

TABLE 2
SURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential			SAMPLE ID:	1030ED-SS-01			1030ED-SS-02			1030ED-SS-03		
			LAB ORDER:	RSK0600-06			RSK0600-01			RSK0600-05		
			SAMPLE DATE:	11/11/2009 11:45			11/11/2009 10:05			11/11/2009 11:30		
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)	CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG	440	U	10	4200	U	100	420	U	10
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG	130	U	10	1300	U	100	130	U	10
2,4-Dichlorophenol	120-83-2	- -	UG/KG	110	U	10	1000	U	100	100	U	10
2,4-Dimethylphenol	105-67-9	- -	UG/KG	550	U	10	5200	U	100	520	U	10
2,4-Dinitrophenol	51-28-5	- -	UG/KG	710	U	10	6700	U	100	670	U	10
2,4-Dinitrotoluene	121-14-2	- -	UG/KG	320	U	10	3000	U	100	300	U	10
2,6-Dinitrotoluene	606-20-2	- -	UG/KG	500	U	10	4700	U	100	470	U	10
2-Chloronaphthalene	91-58-7	- -	UG/KG	140	U	10	1300	U	100	130	U	10
2-Chlorophenol	95-57-8	- -	UG/KG	100	U	10	980	U	100	98	U	10
2-Methylnaphthalene	91-57-6	- -	UG/KG	25	U	10	230	U	100	23	U	10
2-Methylphenol	95-48-7	100000 a	UG/KG	63	U	10	590	U	100	59	U	10
2-Nitroaniline	88-74-4	- -	UG/KG	650	U	10	6200	U	100	620	U	10
2-Nitrophenol	88-75-5	- -	UG/KG	93	U	10	880	U	100	88	U	10
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG	1800	U	10	17000	U	100	1700	U	10
3-Nitroaniline	99-09-2	- -	UG/KG	470	U	10	4400	U	100	440	U	10
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG	700	U	10	6700	U	100	660	U	10
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG	650	U	10	6100	U	100	610	U	10
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG	84	U	10	790	U	100	79	U	10
4-Chloroaniline	106-47-8	- -	UG/KG	600	U	10	5700	U	100	560	U	10
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG	43	U	10	410	U	100	41	U	10
4-Methylphenol	106-44-5	100000 a	UG/KG	110	U,UJ	10	1100	U,UJ	100	110	U,UJ	10
4-Nitroaniline	100-01-6	- -	UG/KG	230	U	10	2200	U	100	210	U	10
4-Nitrophenol	100-02-7	- -	UG/KG	490	U	10	4700	U	100	470	U	10
Acenaphthene	83-32-9	100000 a	UG/KG	24	U	10	230	U	100	23	U	10
Acenaphthylene	208-96-8	100000 a	UG/KG	17	U	10	1600	J	100	16	U	10
Acetophenone	98-86-2	- -	UG/KG	100	U	10	990	U	100	99	U	10
Anthracene	120-12-7	100000 a	UG/KG	52	U	10	1700	J	100	49	U	10
Atrazine	1912-24-9	- -	UG/KG	91	U	10	860	U	100	86	U	10
Benzaldehyde	100-52-7	- -	UG/KG	220	U	10	2100	U	100	210	U	10
Benzo(a)anthracene	56-55-3	1000 f	UG/KG	250	J	10	6100	J	100	190	J	10
Benzo(a)pyrene	50-32-8	1000 f	UG/KG	230	J	10	5400	J	100	150	J	10
Benzo(b)fluoranthene	205-99-2	1000 f	UG/KG	270	J	10	5700	J	100	270	ID4, J	10
Benzo(g,h,i)perylene	191-24-2	100000 a	UG/KG	210	J	10	3900	J	100	130	J	10
Benzo(k)fluoranthene	207-08-9	3900 -	UG/KG	89	J	10	2000	J	100	21	U	10
Biphenyl	92-52-4	- -	UG/KG	130	U	10	1200	U	100	120	U	10
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG	110	U	10	1000	U	100	100	U	10
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG	180	U	10	1700	U	100	170	U	10
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG	210	U,UJ	10	2000	U,UJ	100	200	U,UJ	10
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG	660	U	10	6200	U	100	620	U	10
Butylbenzylphthalate	85-68-7	- -	UG/KG	550	U	10	5200	U	100	520	U	10
Caprolactam	105-60-2	- -	UG/KG	880	U	10	8300	U	100	830	U	10
Carbazole	86-74-8	- -	UG/KG	24	U	10	220	U	100	22	U	10
Chrysene	218-01-9	3900 -	UG/KG	270	J	10	6200	J	100	150	J	10
Dibenzo(a,h)anthracene	53-70-3	330 e	UG/KG	24	U	10	230	U	100	23	U	10
Dibenzofuran	132-64-9	- -	UG/KG	21	U	10	200	U	100	20	U	10
Diethylphthalate	84-66-2	- -	UG/KG	62	U	10	580	U	100	58	U	10
Dimethyl phthalate	131-11-3	- -	UG/KG	53	U	10	500	U	100	50	U	10
Di-n-butylphthalate	84-74-2	- -	UG/KG	700	U	10	6700	U	100	660	U	10
Di-n-octylphthalate	117-84-0	- -	UG/KG	48	U	10	450	U	100	45	U	10
Fluoranthene	206-44-0	100000 a	UG/KG	370	J	10	9700	J	100	260	J	10
Fluorene	86-73-7	100000 a	UG/KG	47	U	10	440	U	100	44	U	10
Hexachlorobenzene	118-74-1	- -	UG/KG	100	U	10	960	U	100	95	U	10
Hexachlorobutadiene	87-68-3	- -	UG/KG	100	U	10	990	U	100	98	U	10
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG	620	U	10	5800	U	100	580	U	10
Hexachloroethane	67-72-1	- -	UG/KG	160	U	10	1500	U	100	150	U	10
Indeno(1,2,3-cd)pyrene	193-39-5	500 -	UG/KG	140	J	10	3000	J	100	110	J	10
Isophorone	78-59-1	- -	UG/KG	100	U	10	960	U	100	96	U	10
Naphthalene	91-20-3	100000 a	UG/KG	34	U	10	320	U	100	32	U	10
Nitrobenzene	98-95-3	- -	UG/KG	90	U	10	850	U	100	85	U	10
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG	160	U	10	1500	U	100	150	U	10
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG	110	U	10	1100	U	100	110	U	10
Pentachlorophenol	87-86-5	6700 -	UG/KG	700	U	10	6600	U	100	660	U	10
Phenanthrene	85-01-8	100000 a	UG/KG	160	J	10	8100	J	100	170	J	10
Phenol	108-95-2	100000 a	UG/KG	210	U	10	2000	U	100	200	U	10
Pyrene	129-00-0	100000 a	UG/KG	540	J	10	11000	J	100	260	J	10
TOTAL DETECTABLE				**2529**			**64400**			**1690**		

TABLE 2
SURFACE SOIL

		SAMPLE ID:		**1030ED-SS-04**			**1030ED-SS-05 (0-1)**			**1030ED-SS-06 (0-1)**			**1030ED-SS-07 (0-1)**			**1030ED-SS-08 (0-1)**		
Restricted Soil Cleanup Objectives (SCO)		LAB ORDER:		RSK0600-04			480-60100-8			480-60100-9			480-60100-10			480-60100-11		
- Restricted Residential		SAMPLE DATE:		11/11/2009 11:10			5/15/14 9:25			5/15/14 9:35			5/15/14 9:38			5/15/14 9:48		
SEMI-VOLATILE ORGANIC COMPOUNDS																					
(EPA METHOD 8270)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG		440	U	10	7100	U	20	2100	U	10	3900	U	20	4000	U	20
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG		130	U	10	2100	U	20	630	U	10	1200	U	20	1200	U	20
2,4-Dichlorophenol	120-83-2	- -	UG/KG		100	U	10	1700	U	20	500	U	10	950	U	20	970	U	20
2,4-Dimethylphenol	105-67-9	- -	UG/KG		540	U	10	8800	U	20	2600	U	10	4900	U	20	5000	U	20
2,4-Dinitrophenol	51-28-5	- -	UG/KG		700	U	10	11000	U	20	3400	U	10	6300	U	20	6500	U	20
2,4-Dinitrotoluene	121-14-2	- -	UG/KG		310	U	10	5000	U	20	1500	U	10	2800	U	20	2900	U	20
2,6-Dinitrotoluene	606-20-2	- -	UG/KG		490	U	10	8000	U	20	2300	U	10	4400	U	20	4500	U	20
2-Chloronaphthalene	91-58-7	- -	UG/KG		130	U	10	2200	U	20	640	U	10	1200	U	20	1200	U	20
2-Chlorophenol	95-57-8	- -	UG/KG		100	U	10	1700	U	20	490	U	10	920	U	20	940	U	20
2-Methylnaphthalene	91-57-6	- -	UG/KG		24	U	10	390	U	20	120	U	10	220	U	20	220	U	20
2-Methylphenol	95-48-7	100000	a UG/KG		61	U	10	1000	U	20	300	U	10	560	U	20	570	U	20
2-Nitroaniline	88-74-4	- -	UG/KG		640	U	10	10000	U	20	3100	U	10	5800	U	20	5900	U	20
2-Nitrophenol	88-75-5	- -	UG/KG		91	U	10	1500	U	20	440	U	10	830	U	20	850	U	20
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG		1700	U	10	29000	U	20	8400	U	10	16000	U	20	16000	U	20
3-Nitroaniline	99-09-2	- -	UG/KG		460	U	10	7500	U	20	2200	U	10	4200	U	20	4300	U	20
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG		690	U	10	11000	U	20	3300	U	10	6200	U	20	6400	U	20
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG		630	U	10	10000	U	20	3100	U	10	5800	U	20	5900	U	20
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG		82	U	10	1300	U	20	390	U	10	740	U	20	760	U	20
4-Chloroaniline	106-47-8	- -	UG/KG		590	U	10	9600	U	20	2800	U	10	5300	U	20	5400	U	20
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG		43	U	10	690	U	20	200	U	10	390	U	20	400	U	20
4-Methylphenol	106-44-5	100000	a UG/KG		110	U,UJ	10	1800	U	20	530	U	10	1000	U	20	1000	U	20
4-Nitroaniline	100-01-6	- -	UG/KG		220	U	10	3600	U	20	1100	U	10	2000	U	20	2100	U	20
4-Nitrophenol	100-02-7	- -	UG/KG		480	U	10	7900	U	20	2300	U	10	4400	U	20	4500	U	20
Acenaphthene	83-32-9	100000	a UG/KG		110	J	10	380	U	20	110	U	10	210	U	20	220	U	20
Acenaphthylene	208-96-8	100000	a UG/KG		16	U	10	270	U	20	78	U	10	150	U	20	150	U	20
Acetophenone	98-86-2	- -	UG/KG		100	U	10	1700	U	20	490	U	10	930	U	20	950	U	20
Anthracene	120-12-7	100000	a UG/KG		220	J	10	830	U	20	250	U	10	460	U	20	470	U	20
Atrazine	1912-24-9	- -	UG/KG		89	U	10	1400	U	20	430	U	10	810	U	20	830	U	20
Benzaldehyde	100-52-7	- -	UG/KG		220	U	10	3600	U	20	1100	U	10	2000	U	20	2000	U	20
Benzo(a)anthracene	56-55-3	1000	f UG/KG		610	J	10	560	U	20	170	U	10	310	U	20	320	U	20
Benzo(a)pyrene	50-32-8	1000	f UG/KG		610	J	10	780	U	20	230	J	10	440	U	20	450	U	20
Benzo(b)fluoranthene	205-99-2	1000	f UG/KG		730	J	10	630	U	20	190	U	10	350	U	20	360	U	20
Benzo(g,h,i)perylene	191-24-2	100000	a UG/KG		470	J	10	390	U	20	120	U	10	220	U	20	220	U	20
Benzo(k)fluoranthene	207-08-9	3900	- UG/KG		260	J	10	360	U	20	110	U	10	200	U	20	200	U	20
Biphenyl	92-52-4	- -	UG/KG		120	U	10	2000	U	20	600	U	10	1100	U	20	1200	U	20
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG		110	U	10	3400	U	20	1000	U	10	1900	U	20	1900	U	20
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG		170	U	10	1800	U	20	520	U	10	980	U	20	1000	U	20
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG		210	U,UJ	10	2800	U	20	830	U	10	1600	U	20	1600	U	20
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG		640	U	10	10000	U	20	3100	U	10	5800	U	20	6000	U	20
Butylbenzylphthalate	85-68-7	- -	UG/KG		540	U	10	8700	U	20	2600	U	10	4900	U	20	5000	U	20
Caprolactam	105-60-2	- -	UG/KG		860	U	10	14000	U	20	4200	U	10	7800	U	20	8000	U	20
Carbazole	86-74-8	- -	UG/KG		23	U	10	380	U	20	110	U	10	210	U	20	210	U	20
Chrysene	218-01-9	3900	- UG/KG		630	J	10	330	U	20	96	J	10	180	J	20	190	U	20
Dibenzo(a,h)anthracene	53-70-3	330	e UG/KG		110	J	10	380	U	20	110	U	10	210	U	20	220	U	20
Dibenzofuran	132-64-9	- -	UG/KG		21	U	10	340	U	20	100	U	10	190	U	20	190	U	20
Diethylphthalate	84-66-2	- -	UG/KG		60	U	10	980	U	20	290	U	10	550	U	20	560	U	20
Dimethyl phthalate	131-11-3	- -	UG/KG		52	U	10	850	U	20	250	U	10	470	U	20	480	U	20
Di-n-butylphthalate	84-74-2	- -	UG/KG		690	U	10	11000	U	20	3300	U	10	6300	U	20	6400	U	20
Di-n-octylphthalate	117-84-0	- -	UG/KG		47	U	10	760	U	20	220	U	10	420	U	20	430	U	20
Fluoranthene	206-44-0	100000	a UG/KG		1300	J	10	470	U	20	140	J	10	260	J	20	270	J	20
Fluorene	86-73-7	100000	a UG/KG		46	U	10	750	U	20	220	U	10	420	U	20	430	U	20
Hexachlorobenzene	118-74-1	- -	UG/KG		99	U	10	1600	U	20	480	U	10	900	U	20	920	U	20
Hexachlorobutadiene	87-68-3	- -	UG/KG		100	U	10	1700	U	20	490	U	10	930	U	20	950	U	20
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG		600	U	10	9800	U	20	2900	U	10	5500	U	20	5600	U	20
Hexachloroethane	67-72-1	- -	UG/KG		150	U	10	2500	U	20	740	U	10	1400	U	20	1400	U	20
Indeno(1,2,3-cd)pyrene	193-39-5	500	- UG/KG		410	J	10	900	U	20	270	U	10	500	J	20	510	U	20
Isophorone	78-59-1	- -	UG/KG		100	U	10	1600	U	20	480	U	10	900	U	20	930	U	20
Naphthalene	91-20-3	100000	a UG/KG		33	U	10	540	U	20	160	U	10	300	U	20	310	U	20
Nitrobenzene	98-95-3	- -	UG/KG		88	U	10	1400	U	20	430	U	10	800	U	20	820	U	20
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG		160	U	10	2600	U	20	760	U	10	1400	U	20	1500	U	20
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG		110	U	10	1800	U	20	520	U	10	990	U	20	1000	U	20
Pentachlorophenol	87-86-5	6700	- UG/KG		680	U	10	11000	U	20	3300	U	10	6200	U	20	6400	U	20
Phenanthrene	85-01-8	100000	a UG/KG		1100	J	10	680	U	20	200	U	10	380	J	20	390	U	20
Phenol	108-95-2	100000	a UG/KG		210	U	10	3400	U	20	1000	U	10	1900	U	20	2000	U	20
Pyrene	129-00-0	100000	a UG/KG		1200	J	10	210	U	20	62	J	10	120	J	20	120	J	20
TOTAL DETECTABLE					**7760**			**0**			**0**			**0**			**0**		

TABLE 2
SURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential				SAMPLE ID:	**1030ED-SS-01**			**1030ED-SS-02**			**1030ED-SS-03**		
				LAB ORDER:	RSK0600-06			RSK0600-01			RSK0600-05		
				SAMPLE DATE:	11/11/2009 11:45			11/11/2009 10:05			11/11/2009 11:30		
METALS (EPA METHOD 6010B)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	-	-	MG/KG	8950	J	1	4870	J	1	10800	J	1
Antimony	7440-36-0	-	-	MG/KG	0.7	U,J,UJ	1	0.6	UJ,UJ	1	0.6	U,J,UJ	1
Arsenic	7440-38-2	16	f	MG/KG	4.7		1	6.0		1	6.0		1
Barium	7440-39-3	400	-	MG/KG	68.2	J	1	48.2	J	1	51.1	J	1
Beryllium	7440-41-7	72	-	MG/KG	0.419		1	0.294		1	0.452		1
Cadmium	7440-43-9	4.3	-	MG/KG	0.487		1	1.05		1	0.538		1
Calcium	7440-70-2	-	-	MG/KG	14800		1	87800	D08	5	6590		1
Chromium	18540-29-9	110	-	MG/KG	11.8		1	11.6		1	12.9		1
Cobalt	7440-48-4	-	-	MG/KG	6.63		1	3.88		1	6.54		1
Copper	7440-50-8	270	-	MG/KG	77.2	B	1	342	B	1	142	B	1
Iron	7439-89-6	-	-	MG/KG	18300	J	1	12000	J	1	21700	J	1
Lead	7439-92-1	400	-	MG/KG	49.3	J	1	157	J	1	72.6	J	1
Magnesium	7439-95-4	-	-	MG/KG	3330	J	1	5430	J	1	3250	J	1
Manganese	7439-96-5	2000	f	MG/KG	738	B,J	1	487	B,J	1	907	B,J	1
Total Mercury	7439-97-6	0.81	j	MG/KG	0.0474	J,UJ	1	0.175	J,UJ	1	0.0829	J,UJ	1
Nickel	7440-02-0	310	-	MG/KG	15.9		1	12.3		1	16.5		1
Potassium	7440-09-7	-	-	MG/KG	903		1	681		1	728		1
Selenium	7782-49-2	180	-	MG/KG	0.8	U	1	0.7	U	1	0.7	U	1
Silver	7440-22-4	180	-	MG/KG	0.09	U	1	0.091	J	1	0.102	J	1
Sodium	7440-23-5	-	-	MG/KG	125	J	1	74.7	J	1	56.6	J	1
Thallium	7440-28-0	-	-	MG/KG	0.4	U	1	0.3	U	1	0.3	U	1
Vanadium	7440-62-2	-	-	MG/KG	15.6		1	13.8		1	18.5		1
Zinc	7440-66-6	10000	d	MG/KG	154	B,J	1	215	B,J	1	126	B,J	1
TOTAL DETECTABLE				**MG/KG**	**47550.28**			**112154.1**			**44484.91**		

TABLE 2
SURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential				SAMPLE ID:	**1030ED-SS-04**			**1030ED-SS-05 (0-1)**			**1030ED-SS-06 (0-1)**			**1030ED-SS-07 (0-1)**			**1030ED-SS-08 (0-1)**		
				LAB ORDER:	RSK0600-04			480-60100-8			480-60100-9			480-60100-10			480-60100-11		
				SAMPLE DATE:	11/11/2009 11:10			5/15/14 9:25			5/15/14 9:35			5/15/14 9:38			5/15/14 9:48		
METALS (EPA METHOD 6010B)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	- -	MG/KG		6930	J	1												
Antimony	7440-36-0	- -	MG/KG		0.6	U,J,UJ	1												
Arsenic	7440-38-2	16 f	MG/KG		6.6		1												
Barium	7440-39-3	400 -	MG/KG		80.5	J	1												
Beryllium	7440-41-7	72 -	MG/KG		0.362		1												
Cadmium	7440-43-9	4.3 -	MG/KG		1.45		1												
Calcium	7440-70-2	- -	MG/KG		10800		1												
Chromium	18540-29-9	110 -	MG/KG		12.9		1												
Cobalt	7440-48-4	- -	MG/KG		5.48		1												
Copper	7440-50-8	270 -	MG/KG		193	B	1												
Iron	7439-89-6	- -	MG/KG		20400	J	1												
Lead	7439-92-1	400 -	MG/KG		241	J	1												
Magnesium	7439-95-4	- -	MG/KG		2440	J	1												
Manganese	7439-96-5	2000 f	MG/KG		652	B,J	1												
Total Mercury	7439-97-6	0.81 j	MG/KG		0.264	J,UJ	1												
Nickel	7440-02-0	310 -	MG/KG		14.8		1												
Potassium	7440-09-7	- -	MG/KG		678		1												
Selenium	7782-49-2	180 -	MG/KG		0.7	U	1												
Silver	7440-22-4	180 -	MG/KG		0.168	J	1												
Sodium	7440-23-5	- -	MG/KG		40.5	J	1												
Thallium	7440-28-0	- -	MG/KG		0.4	U	1												
Vanadium	7440-62-2	- -	MG/KG		16.0		1												
Zinc	7440-66-6	10000 d	MG/KG		251	B,J	1												
TOTAL DETECTABLE			**MG/KG**		**42764.02**			**0**			**0**			**0**			**0**		

TABLE 2
SURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential				SAMPLE ID:	**1030ED-SS-01**			**1030ED-SS-02**			**1030ED-SS-03**		
				LAB ORDER:	RSK0600-06			RSK0600-01			RSK0600-05		
				SAMPLE DATE:	11/11/2009 11:45			11/11/2009 10:05			11/11/2009 11:30		
PCBs (EPA METHOD 8080)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -	UG/KG		3.9	U	1	7.5	U	2	3.8	U	1
Aroclor 1221	11104-28-2	- -	UG/KG		3.9	U	1	7.5	U	2	3.8	U	1
Aroclor 1232	11141-16-5	- -	UG/KG		3.9	U	1	7.5	U	2	3.8	U	1
Aroclor 1242	53469-21-9	- -	UG/KG		4.4	U	1	8.3	U	2	4.2	U	1
Aroclor 1248	12672-29-6	- -	UG/KG		4.0	U	1	7.5	U	2	3.8	U	1
Aroclor 1254	11097-69-1	- -	UG/KG		4.3	U	1	8.1	U	2	4.1	U	1
Aroclor 1260	11096-82-5	- -	UG/KG		4.3	U	1	8.1	U	2	4.1	U	1
Aroclor 1262	37324-23-5	- -	UG/KG		30		1	56	J	2	21	J	1
Aroclor 1268	11100-14-4	- -	UG/KG		4.3	U	1	8.1	U	2	4.1	U	1
TOTAL DETECTABLE		**1,000**	**-**	**UG/KG**	**30**			**56**			**21**		

TABLE 2
SURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential				SAMPLE ID:	**1030ED-SS-04**			**1030ED-SS-05 (0-1)**			**1030ED-SS-06 (0-1)**			**1030ED-SS-07 (0-1)**			**1030ED-SS-08 (0-1)**		
				LAB ORDER:	RSK0600-04			480-60100-8			480-60100-9			480-60100-10			480-60100-11		
				SAMPLE DATE:	11/11/2009 11:10			5/15/14 9:25			5/15/14 9:35			5/15/14 9:38			5/15/14 9:48		
PCBs (EPA METHOD 8080)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -	UG/KG		3.9	U	1												
Aroclor 1221	11104-28-2	- -	UG/KG		3.9	U	1												
Aroclor 1232	11141-16-5	- -	UG/KG		3.9	U	1												
Aroclor 1242	53469-21-9	- -	UG/KG		4.3	U	1												
Aroclor 1248	12672-29-6	- -	UG/KG		3.9	U	1												
Aroclor 1254	11097-69-1	- -	UG/KG		4.2	U	1												
Aroclor 1260	11096-82-5	- -	UG/KG		4.2	U	1												
Aroclor 1262	37324-23-5	- -	UG/KG		38	J	1												
Aroclor 1268	11100-14-4	- -	UG/KG		4.2	U	1												
TOTAL DETECTABLE		**1,000**	**-**	**UG/KG**	**38**			**0**			**0**			**0**			**0**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

					1030ED-SB-01 (12-16)			1030ED-SB-02 (12-15)			1030ED-SB-03 (12-16)			1030ED-SB-04 (12-17)		
				SAMPLE ID:												
				LAB ORDER:	RSK0600-07			RSK0845-01			RSK0726-06			RSK0726-04		
				SAMPLE DATE:	11/11/2009 14:50			11/17/2009 10:30			11/13/2009 11:00			11/13/2009 15:15		
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	100000	a	UG/KG	0.35	U	1	5.2	U	1	0.42	U	1	0.35	U	1
1,1,2,2-Tetrachloroethane	79-34-5	-	-	UG/KG	0.79	U,UJ	1	5.2	U	1	0.94	U,UJ	1	0.78	U,UJ	1
1,1,2-Trichloroethane	79-00-5	-	-	UG/KG	0.25	U,UJ	1	5.2	U	1	0.29	U,UJ	1	0.24	U,UJ	1
1,1,2-Trichlorotrifluoroethane	76-13-1		- -	UG/KG	2.4	U	1	5.2	U	1	2.9	U	1	2.4	U	1
1,1-Dichloroethane	75-34-3	26000	-	UG/KG	0.24	U	1	5.2	U	1	0.29	U	1	0.24	U	1
1,1-Dichloroethene	75-35-4	100000	a	UG/KG	0.60	U	1	5.2	U	1	0.71	U	1	0.59	U	1
1,2,4-Trichlorobenzene	120-82-1	-	-	UG/KG	0.3	U,UJ	1	5.2	U	1	0.35	U,UJ	1	0.29	U,UJ	1
1,2-Dibromo-3-chloropropane	96-12-8	-	-	UG/KG	2.4	U,UJ	1	5.2	U	1	2.9	U,UJ	1	2.4	U,UJ	1
1,2-Dibromoethane	106-93-4	-	-	UG/KG	0.19	U,UJ	1	5.2	U	1	0.22	U,UJ	1	0.18	U,UJ	1
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG	0.38	U,UJ	1	5.2	U	1	0.45	U,UJ	1	0.38	U,UJ	1
1,2-Dichloroethane	107-06-2	3100	-	UG/KG	0.25	U	1	5.2	U	1	0.29	U	1	0.24	U	1
1,2-Dichloropropane	78-87-5		- -	UG/KG	2.4	U	1	5.2	U	1	2.9	U	1	2.4	U	1
1,3-Dichlorobenzene	541-73-1	49000	-	UG/KG	0.25	U,UJ	1	5.2	U	1	0.3	U,UJ	1	0.25	U,UJ	1
1,4-Dichlorobenzene	106-46-7	13000	-	UG/KG	0.68	U,UJ	1	5.2	U	1	0.81	U,UJ	1	0.67	U,UJ	1
2-Butanone	78-93-3	100000	a	UG/KG	1.8	U,UJ	1	26	U	1	2.1	U,UJ	1	1.8	U,UJ	1
2-Hexanone	591-78-6	-	-	UG/KG	1.7	U,UJ	1	26	U	1	2	U,UJ	1	1.7	U,UJ	1
4-Methyl-2-pentanone	108-10-1	-	-	UG/KG	1.6	U,UJ	1	26	U	1	1.9	U,UJ	1	1.6	U,UJ	1
Acetone	67-64-1	100000	b	UG/KG	1.1	U,J,UJ	1	2.4	J	1	1.3	U,J,UJ	1	120	J,UJ	1
Benzene	71-43-2	4800	-	UG/KG	0.24	U	1	5.2	U	1	0.28	U	1	0.24	U	1
Bromodichloromethane	594-18-3		- -	UG/KG	0.25	U	1	5.2	U	1	0.30	U	1	0.25	U	1
Bromoform	75-25-2		- -	UG/KG	2.4	U,L4,UJ	1	5.2	U	1	2.9	U	1	2.4	U,UJ	1
Bromomethane	74-83-9		- -	UG/KG	1.1	U	1	5.2	U	1	1.3	U	1	1.1	U	1
Carbon Disulfide	75-15-0		- -	UG/KG	0.42	U	1	5.2	U	1	0.50	U	1	1.9	J	1
Carbon tetrachloride	56-23-5	2400	-	UG/KG	0.47	U	1	5.2	U	1	0.56	U	1	0.47	U	1
Chlorobenzene	108-90-7	100000	a	UG/KG	0.64	U	1	5.2	U	1	0.76	U	1	0.64	U	1
Chlorodibromomethane	124-48-1	-	-	UG/KG	0.27	U,L4,UJ	1	5.2	U	1	0.32	U,UJ	1	0.27	U,UJ	1
Chloroethane	75-00-3		- -	UG/KG	2.0	U,UJ	1	5.2	U	1	2.4	U	1	2.0	U	1
Chloroform	67-66-3	49000	-	UG/KG	0.30	U	1	0.69	J	1	0.36	U	1	0.30	U	1
Chloromethane	74-87-3		- -	UG/KG	0.30	U	1	5.2	U	1	0.35	U	1	0.29	U	1
cis-1,2-Dichloroethene	156-59-2	100000	a	UG/KG	0.24	U	1	5.2	U	1	0.29	U	1	0.24	U	1
cis-1,3-Dichloropropene	10061-01-5		- -	UG/KG	0.28	U	1	5.2	U	1	0.33	U	1	0.27	U	1
Cyclohexane	110-82-7		- -	UG/KG	0.22	U	1	0.85	J	1	0.27	U	1	0.22	U	1
Dichlorodifluoromethane	75-71-8		- -	UG/KG	0.40	U	1	5.2	U	1	0.48	U	1	0.40	U,UJ	1
Ethylbenzene	100-41-4	41000	-	UG/KG	0.34	U	1	5.2	U	1	0.40	U	1	530	E	1
Isopropylbenzene	98-82-8		- -	UG/KG	0.74	U	1	5.2	U	1	0.87	U	1	180		1
Methyl Acetate	79-20-9		- -	UG/KG	0.26	U	1	5.2	U	1	0.31	U	1	0.26	U	1
Methyl tert-butyl ether	1634-04-4	100000	a	UG/KG	0.48	U	1	5.2	U	1	0.57	U	1	0.47	U	1
Methylcyclohexane	108-87-2	-	-	UG/KG	0.32	U,J,UJ	1	5.2	U	1	0.38	,UJ,UJ	1	0.31	U,J,UJ	1
Methylene chloride	75-09-2	100000	a	UG/KG	6.8	U	1	18	B	1	5.8	U	1	0.95	U	1
Styrene	100-42-5		- -	UG/KG	0.24	U	1	5.2	U	1	0.29	U,L	1	0.24	U	1
Tetrachloroethene	127-18-4	19000	-	UG/KG	0.66	U,J,UJ	1	5.2	U	1	0.78	U,J,UJ	1	0.65	U,J,UJ	1
Toluene	108-88-3	100000	a	UG/KG	0.37	U,UJ	1	0.75	J	1	0.44	U,UJ	1	0.36	U,UJ	1
trans-1,2-Dichloroethene	156-60-5	100000	a	UG/KG	0.50	U	1	5.2	U	1	0.60	U	1	0.50	U	1
trans-1,3-Dichloropropene	10061-02-6	-	-	UG/KG	0.24	U,UJ	1	5.2	U	1	0.28	U,UJ	1	0.24	U,UJ	1
Trichloroethene	79-01-6	21000	-	UG/KG	1.6	J	1	5.2	U	1	0.40	U	1	0.33	U	1
Trichlorofluoromethane	75-69-4		- -	UG/KG	0.46	U	1	5.2	U	1	0.55	U	1	0.46	U	1
Vinyl chloride	75-01-4	900	-	UG/KG	0.60	U	1	10	U	1	0.71	U	1	0.59	U	1
Xylene	1330-20-7	100000	a	UG/KG	0.82	U	1	10	U	1	0.97	U	1	2500	E	1
TOTAL DETECTABLE					**1.6**			**22.69**			**0**			**3331.9**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

					1030ED-SB-05 (12-16.8)			1030ED-SB-06 (12-16)			1030ED-BLIND DUPLICATE			1030ED-SB-07 (8-12)		
				SAMPLE ID:												
				LAB ORDER:	RSK0786-03			RSK0600-09			RSK0600-10			RSK0726-03		
				SAMPLE DATE:	11/16/2009 16:15			11/11/2009 16:55			11/11/2009 00:00			11/13/2009 11:50		
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	100000	a	UG/KG	4.7	U	1	0.34	U	1	0.37	U	1	0.40	U	1
1,1,2,2-Tetrachloroethane	79-34-5	-	-	UG/KG	4.7	U	1	0.76	U,UJ	1	0.82	U,UJ	1	0.89	U,UJ	1
1,1,2-Trichloroethane	79-00-5	-	-	UG/KG	4.7	U	1	0.24	U,UJ	1	0.26	U,UJ	1	0.27	U,UJ	1
1,1,2-Trichlorotrifluoroethane	76-13-1		- -	UG/KG	4.7	U	1	2.3	U,UJ	1	2.5	U	1	2.7	U	1
1,1-Dichloroethane	75-34-3	26000	-	UG/KG	4.7	U	1	0.23	U	1	0.25	U	1	0.27	U	1
1,1-Dichloroethene	75-35-4	100000	a	UG/KG	4.7	U	1	0.57	U	1	0.62	U	1	0.67	U	1
1,2,4-Trichlorobenzene	120-82-1	-	-	UG/KG	1	J	1	0.28	U,UJ	1	0.31	U,UJ	1	0.33	U,UJ	1
1,2-Dibromo-3-chloropropane	96-12-8	-	-	UG/KG	4.7	U	1	2.3	U,UJ	1	2.5	U,UJ	1	2.7	U,UJ	1
1,2-Dibromoethane	106-93-4	-	-	UG/KG	4.7	U	1	0.18	U,UJ	1	0.19	U,UJ	1	0.21	U,UJ	1
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG	45		1	0.37	U,UJ	1	0.4	U,UJ	1	0.43	U,UJ	1
1,2-Dichloroethane	107-06-2	3100	-	UG/KG	4.7	U	1	0.24	U	1	0.26	U	1	0.27	U	1
1,2-Dichloropropane	78-87-5		- -	UG/KG	4.7	U	1	2.3	U	1	2.5	U	1	2.7	U	1
1,3-Dichlorobenzene	541-73-1	49000	-	UG/KG	17		1	0.24	U,UJ	1	0.26	U,UJ	1	0.28	U,UJ	1
1,4-Dichlorobenzene	106-46-7	13000	-	UG/KG	54		1	0.66	U,UJ	1	0.71	U,UJ	1	0.76	U,UJ	1
2-Butanone	78-93-3	100000	a	UG/KG	23	U	1	1.7	U,UJ	1	1.9	U,UJ	1	2	U,UJ	1
2-Hexanone	591-78-6	-	-	UG/KG	23	U	1	1.6	U,UJ	1	1.8	U,UJ	1	1.9	U,UJ	1
4-Methyl-2-pentanone	108-10-1	-	-	UG/KG	23	U	1	1.5	U,UJ	1	1.7	U,UJ	1	1.8	U,UJ	1
Acetone	67-64-1	100000	b	UG/KG	23	U	1	1	U,J,UJ	1	1.1	U,J,UJ	1	1.2	U,J,UJ	1
Benzene	71-43-2	4800	-	UG/KG	4.7	U	1	0.23	U	1	0.25	U	1	0.27	U	1
Bromodichloromethane	594-18-3		- -	UG/KG	4.7	U	1	0.24	U	1	0.26	U	1	0.28	U	1
Bromoform	75-25-2		- -	UG/KG	4.7	U	1	2.3	U,L4,UJ	1	2.5	U,L4,UJ	1	2.7	U	1
Bromomethane	74-83-9		- -	UG/KG	4.7	U	1	1.0	U	1	1.1	U	1	1.2	U	1
Carbon Disulfide	75-15-0		- -	UG/KG	4.7	U	1	0.40	U,UJ	1	0.44	U	1	0.47	U	1
Carbon tetrachloride	56-23-5	2400	-	UG/KG	4.7	U	1	0.45	U	1	0.49	U	1	0.53	U	1
Chlorobenzene	108-90-7	100000	a	UG/KG	150		1	0.62	U	1	0.67	U	1	0.72	U	1
Chlorodibromomethane	124-48-1	-	-	UG/KG	4.7	U	1	0.26	U,L4,UJ	1	0.28	U,L4,UJ	1	0.3	U,UJ	1
Chloroethane	75-00-3		- -	UG/KG	4.7	U	1	1.9	U,UJ	1	2.1	U,UJ	1	2.3	U	1
Chloroform	67-66-3	49000	-	UG/KG	4.7	U	1	0.29	U	1	0.31	U	1	0.34	U	1
Chloromethane	74-87-3		- -	UG/KG	4.7	U	1	0.28	U	1	0.31	U	1	0.33	U	1
cis-1,2-Dichloroethene	156-59-2	100000	a	UG/KG	4.7	U	1	0.23	U	1	0.25	U	1	0.27	U	1
cis-1,3-Dichloropropene	10061-01-5		- -	UG/KG	4.7	U	1	0.27	U	1	0.29	U	1	0.31	U	1
Cyclohexane	110-82-7		- -	UG/KG	4.7	U	1	0.22	U,UJ	1	0.23	U	1	0.25	U	1
Dichlorodifluoromethane	75-71-8		- -	UG/KG	4.7	U	1	0.39	U	1	0.42	U	1	0.45	U	1
Ethylbenzene	100-41-4	41000	-	UG/KG	510	E	1	0.32	U	1	0.35	U	1	0.38	U	1
Isopropylbenzene	98-82-8		- -	UG/KG	120		1	0.71	U	1	0.77	U	1	0.82	U	1
Methyl Acetate	79-20-9		- -	UG/KG	4.7	U	1	0.25	U	1	0.28	U	1	0.30	U	1
Methyl tert-butyl ether	1634-04-4	100000	a	UG/KG	4.7	U	1	0.46	U	1	0.50	U	1	0.54	U	1
Methylcyclohexane	108-87-2	-	-	UG/KG	190	E	1	0.3	U,J,UJ	1	0.33	U,J,UJ	1	0.35	U,J,UJ	1
Methylene chloride	75-09-2	100000	a	UG/KG	4.7	U	1	10	U	1	13	U	1	5.5	U	1
Styrene	100-42-5		- -	UG/KG	4.7	U	1	0.23	U	1	0.25	U	1	0.27	U	1
Tetrachloroethene	127-18-4	19000	-	UG/KG	4.7	U	1	0.63	U,J,UJ	1	0.68	U,J,UJ	1	0.73	U,J,UJ	1
Toluene	108-88-3	100000	a	UG/KG	3.3	J	1	0.35	U,UJ	1	0.38	U,UJ	1	0.41	U,UJ	1
trans-1,2-Dichloroethene	156-60-5	100000	a	UG/KG	4.7	U	1	0.48	U	1	0.52	U	1	0.56	U	1
trans-1,3-Dichloropropene	10061-02-6	-	-	UG/KG	4.7	U	1	0.23	U,UJ	1	0.25	U,UJ	1	0.27	U,UJ	1
Trichloroethene	79-01-6	21000	-	UG/KG	4.7	U	1	3.6	J	1	3.4	J	1	0.38	U	1
Trichlorofluoromethane	75-69-4		- -	UG/KG	4.7	U	1	0.44	U	1	0.48	U	1	0.52	U	1
Vinyl chloride	75-01-4	900	-	UG/KG	9.3	U	1	0.57	U	1	0.62	U	1	0.67	U	1
Xylene	1330-20-7	100000	a	UG/KG	1500	E	1	0.79	U	1	0.85	U	1	0.92	U	1
TOTAL DETECTABLE					**2590.3**			**3.6**			**3.4**			**0**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

					1030ED-SB-08 (14.5-17.7)			1030ED-SB-08 (22.5-26.5)			1030ED-SB-09 (8-9.5)			1030ED-SB-10 (6-11.2)		
				SAMPLE ID:												
				LAB ORDER:	RSK0786-01			RSK0786-02			RSK0681-03			RSK0681-04		
				SAMPLE DATE:	11/16/2009 10:30			11/16/2009 11:30			11/12/2009 11:45			11/12/2009 14:00		
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	100000	a	UG/KG	4.6	U	1	4.5	U	1	0.45	U	1	0.43	U	1
1,1,2,2-Tetrachloroethane	79-34-5	-	-	UG/KG	4.6	U	1	4.5	U	1	1	U,UJ	1	0.96	U,UJ	1
1,1,2-Trichloroethane	79-00-5	-	-	UG/KG	4.6	U	1	4.5	U	1	0.31	U,UJ	1	0.3	U,UJ	1
1,1,2-Trichlorotrifluoroethane	76-13-1		- -	UG/KG	4.6	U	1	4.5	U	1	3.1	U	1	3.0	U	1
1,1-Dichloroethane	75-34-3	26000	-	UG/KG	4.6	U	1	4.5	U	1	0.30	U	1	0.29	U	1
1,1-Dichloroethene	75-35-4	100000	a	UG/KG	4.6	U	1	4.5	U	1	0.76	U	1	0.73	U	1
1,2,4-Trichlorobenzene	120-82-1	-	-	UG/KG	4.6	U	1	4.5	U	1	0.38	U,UJ	1	0.36	U,UJ	1
1,2-Dibromo-3-chloropropane	96-12-8	-	-	UG/KG	4.6	U	1	4.5	U	1	3.1	U,UJ	1	3	U,UJ	1
1,2-Dibromoethane	106-93-4	-	-	UG/KG	4.6	U	1	4.5	U	1	0.23	U,UJ	1	0.23	U,UJ	1
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG	4.6	U	1	4.5	U	1	0.48	U,UJ	1	0.47	U,UJ	1
1,2-Dichloroethane	107-06-2	3100	-	UG/KG	4.6	U	1	4.5	U	1	0.31	U	1	0.30	U	1
1,2-Dichloropropane	78-87-5		- -	UG/KG	4.6	U	1	4.5	U	1	3.1	U	1	3.0	U	1
1,3-Dichlorobenzene	541-73-1	49000	-	UG/KG	4.6	U	1	4.5	U	1	0.32	U,UJ	1	0.31	U,UJ	1
1,4-Dichlorobenzene	106-46-7	13000	-	UG/KG	4.6	U	1	4.5	U	1	0.86	U,UJ	1	0.83	U,UJ	1
2-Butanone	78-93-3	100000	a	UG/KG	23	U	1	23	U	1	2.3	U,UJ	1	2.2	U,UJ	1
2-Hexanone	591-78-6	-	-	UG/KG	23	U	1	23	U	1	2.1	U,UJ	1	2.1	U,UJ	1
4-Methyl-2-pentanone	108-10-1	-	-	UG/KG	23	U	1	23	U	1	2	U,UJ	1	2	U,UJ	1
Acetone	67-64-1	100000	b	UG/KG	23	U	1	23	U	1	20	J,UJ	1	7.8	J,UJ	1
Benzene	71-43-2	4800	-	UG/KG	4.6	U	1	4.5	U	1	0.30	U	1	0.29	U	1
Bromodichloromethane	594-18-3		- -	UG/KG	4.6	U	1	4.5	U	1	0.32	U	1	0.31	U	1
Bromoform	75-25-2		- -	UG/KG	4.6	U	1	4.5	U	1	3.1	U	1	3.0	U	1
Bromomethane	74-83-9		- -	UG/KG	4.6	U	1	4.5	U	1	1.4	U	1	1.3	U	1
Carbon Disulfide	75-15-0		- -	UG/KG	4.6	J,UJ	1	4.5	U,J,UJ	1	0.53	U	1	0.51	U	1
Carbon tetrachloride	56-23-5	2400	-	UG/KG	4.6	U	1	4.5	U	1	0.60	U	1	0.58	U	1
Chlorobenzene	108-90-7	100000	a	UG/KG	4.6	U	1	4.5	U	1	0.81	U	1	0.78	U	1
Chlorodibromomethane	124-48-1	-	-	UG/KG	4.6	U	1	4.5	U	1	0.34	U,UJ	1	0.33	U,UJ	1
Chloroethane	75-00-3		- -	UG/KG	4.6	U	1	4.5	U	1	2.6	U	1	2.5	U	1
Chloroform	67-66-3	49000	-	UG/KG	4.6	U	1	4.5	U	1	0.38	U	1	0.37	U	1
Chloromethane	74-87-3		- -	UG/KG	4.6	U	1	4.5	U	1	0.37	U	1	0.36	U	1
cis-1,2-Dichloroethene	156-59-2	100000	a	UG/KG	4.6	U	1	2.5	J	1	0.30	U	1	0.29	U	1
cis-1,3-Dichloropropene	10061-01-5		- -	UG/KG	4.6	U	1	4.5	U	1	0.35	U	1	0.34	U	1
Cyclohexane	110-82-7		- -	UG/KG	4.6	U	1	1.6	J	1	0.28	U	1	0.27	U	1
Dichlorodifluoromethane	75-71-8		- -	UG/KG	4.6	U	1	4.5	U	1	0.51	U	1	0.49	U	1
Ethylbenzene	100-41-4	41000	-	UG/KG	3.1	J	1	4.5	U	1	0.43	U	1	0.41	U	1
Isopropylbenzene	98-82-8		- -	UG/KG	2.7	J	1	4.5	U	1	0.93	U	1	0.90	U	1
Methyl Acetate	79-20-9		- -	UG/KG	4.6	U	1	4.5	U	1	0.33	U	1	0.32	U	1
Methyl tert-butyl ether	1634-04-4	100000	a	UG/KG	4.6	U	1	4.5	U	1	0.61	U	1	0.58	U	1
Methylcyclohexane	108-87-2	-	-	UG/KG	4.6	U	1	4.5	U	1	0.4	U,J,UJ	1	0.39	U,J,UJ	1
Methylene chloride	75-09-2	100000	a	UG/KG	6.2	U	1	4.5	U	1	6.2	U	1	6.8	U	1
Styrene	100-42-5		- -	UG/KG	4.6	U	1	4.5	U	1	0.31	U,L	1	0.30	U,L	1
Tetrachloroethene	127-18-4	19000	-	UG/KG	4.6	U	1	4.5	U	1	3	U,J,UJ	1	2.2	J,UJ	1
Toluene	108-88-3	100000	a	UG/KG	1.9	J	1	1.2	J	1	0.47	U,UJ	1	0.45	U,UJ	1
trans-1,2-Dichloroethene	156-60-5	100000	a	UG/KG	4.6	U	1	4.5	U	1	0.64	U	1	0.61	U	1
trans-1,3-Dichloropropene	10061-02-6	-	-	UG/KG	4.6	U	1	4.5	U	1	0.3	U,UJ	1	0.29	U,UJ	1
Trichloroethene	79-01-6	21000	-	UG/KG	4.6	U	1	10		1	0.43	U	1	0.41	U	1
Trichlorofluoromethane	75-69-4		- -	UG/KG	4.6	U	1	4.5	U	1	0.58	U	1	0.56	U	1
Vinyl chloride	75-01-4	900	-	UG/KG	9.2	U	1	9.1	U	1	0.75	U	1	0.73	U	1
Xylene	1330-20-7	100000	a	UG/KG	3.8	J	1	9.1	U	1	1.0	U	1	1.0	U	1
TOTAL DETECTABLE					**16.1**			**15.3**			**20**			**10**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

	SAMPLE ID:	1030ED-SB-12 (8-14.2)			1030ED-MW-01 (12-16.2)			1030ED-MW-01 (21-22.9)			1030ED-MW-02 (8-13.9)		
	LAB ORDER:	RSK0681-05			RSK0845-02			RSK0845-03			RSK0893-01		
	SAMPLE DATE:	11/12/2009 16:15			11/17/2009 13:30			11/17/2009 15:50			11/18/2009 12:30		
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)	CAS	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	0.44	U	1	4.6	U	1	5.0	U	1	5.2	U	1
1,1,2,2-Tetrachloroethane	79-34-5	0.99	U,UJ	1	4.6	U	1	5	U	1	5.2	U	1
1,1,2-Trichloroethane	79-00-5	0.31	U,UJ	1	4.6	U	1	5	U	1	5.2	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1	3.0	U	1	4.6	U	1	5.0	U	1	5.2	U	1
1,1-Dichloroethane	75-34-3	0.30	U	1	4.6	U	1	5.0	U	1	5.2	U	1
1,1-Dichloroethene	75-35-4	0.74	U	1	4.6	U	1	5.0	U	1	5.2	U	1
1,2,4-Trichlorobenzene	120-82-1	0.37	U,UJ	1	4.6	U	1	5	U	1	5.2	U	1
1,2-Dibromo-3-chloropropane	96-12-8	3	U,UJ	1	4.6	U	1	5	U	1	5.2	U	1
1,2-Dibromoethane	106-93-4	0.23	U,UJ	1	4.6	U	1	5	U	1	5.2	U	1
1,2-Dichlorobenzene	95-50-1	0.48	U,UJ	1	4.6	U	1	5	U	1	5.2	U	1
1,2-Dichloroethane	107-06-2	0.31	U	1	4.6	U	1	5.0	U	1	5.2	U	1
1,2-Dichloropropane	78-87-5	3.0	U	1	4.6	U	1	5.0	U	1	5.2	U	1
1,3-Dichlorobenzene	541-73-1	0.31	U,UJ	1	4.6	U	1	5	U	1	5.2	U	1
1,4-Dichlorobenzene	106-46-7	0.85	U,UJ	1	4.6	U	1	5	U	1	5.2	U	1
2-Butanone	78-93-3	2.2	U,UJ	1	23	U	1	25	U	1	26	U	1
2-Hexanone	591-78-6	2.1	U,UJ	1	23	U	1	25	U	1	26	U	1
4-Methyl-2-pentanone	108-10-1	2	U,UJ	1	23	U	1	25	U	1	26	U	1
Acetone	67-64-1	1.3	U,J,UJ	1	8.5	J	1	25	U	1	23	U	1
Benzene	71-43-2	0.30	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Bromodichloromethane	594-18-3	0.31	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Bromoform	75-25-2	3.0	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Bromomethane	74-83-9	1.3	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Carbon Disulfide	75-15-0	0.52	U	1	1.7	J	1	5.0	U,J,UJ	1	5.2	U,J,UJ	1
Carbon tetrachloride	56-23-5	0.59	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Chlorobenzene	108-90-7	0.80	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Chlorodibromomethane	124-48-1	0.34	U,UJ	1	4.6	U	1	5	U	1	5.2	U	1
Chloroethane	75-00-3	2.5	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Chloroform	67-66-3	0.38	U	1	4.6	U	1	1.4	J	1	5.2	U	1
Chloromethane	74-87-3	0.37	U	1	4.6	U	1	5.0	U	1	5.2	U	1
cis-1,2-Dichloroethene	156-59-2	0.30	U	1	4.6	U	1	5.0	U	1	5.2	U	1
cis-1,3-Dichloropropene	10061-01-5	0.35	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Cyclohexane	110-82-7	0.28	U	1	4.6	U	1	0.89	J	1	1.3	J	1
Dichlorodifluoromethane	75-71-8	0.50	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Ethylbenzene	100-41-4	0.42	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Isopropylbenzene	98-82-8	0.92	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Methyl Acetate	79-20-9	0.33	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Methyl tert-butyl ether	1634-04-4	0.60	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Methylcyclohexane	108-87-2	0.39	U,J,UJ	1	4.6	U	1	5	U	1	5.2	U	1
Methylene chloride	75-09-2	9.3	U	1	15	B	1	17	U	1	6.9	U	1
Styrene	100-42-5	0.30	U,L	1	4.6	U	1	5.0	U	1	5.2	U	1
Tetrachloroethene	127-18-4	1.4	U,J,UJ	1	4.6	U	1	5	U	1	5.2	U	1
Toluene	108-88-3	0.46	U,UJ	1	0.88	J	1	0.7	J	1	0.91	J	1
trans-1,2-Dichloroethene	156-60-5	0.63	U	1	4.6	U	1	5.0	U	1	5.2	U	1
trans-1,3-Dichloropropene	10061-02-6	0.3	U,UJ	1	4.6	U	1	5	U	1	5.2	U	1
Trichloroethene	79-01-6	0.42	U	1	1.2	J	1	12		1	5.2	U	1
Trichlorofluoromethane	75-69-4	0.58	U	1	4.6	U	1	5.0	U	1	5.2	U	1
Vinyl chloride	75-01-4	0.74	U	1	9.1	U	1	10	U	1	10	U	1
Xylene	1330-20-7	1.0	U	1	9.1	U	1	10	U	1	10	U	1
TOTAL DETECTABLE		**0**			**27.28**			**14.99**			**2.21**		

RSCO	Comment	
100000	a	UG/KG
-	-	UG/KG
-	-	UG/KG
-	-	UG/KG
26000	-	UG/KG
100000	a	UG/KG
-	-	UG/KG
-	-	UG/KG
-	-	UG/KG
100000	a	UG/KG
3100	-	UG/KG
-	-	UG/KG
49000	-	UG/KG
13000	-	UG/KG
100000	a	UG/KG
-	-	UG/KG
-	-	UG/KG
100000	b	UG/KG
4800	-	UG/KG
-	-	UG/KG
-	-	UG/KG
-	-	UG/KG
2400	-	UG/KG
100000	a	UG/KG
-	-	UG/KG
-	-	UG/KG
49000	-	UG/KG
-	-	UG/KG
100000	a	UG/KG
-	-	UG/KG
-	-	UG/KG
-	-	UG/KG
100000	a	UG/KG
41000	-	UG/KG
-	-	UG/KG
-	-	UG/KG
-	-	UG/KG
100000	a	UG/KG
-	-	UG/KG
100000	a	UG/KG
-	-	UG/KG
19000	-	UG/KG
100000	a	UG/KG
100000	a	UG/KG
-	-	UG/KG
21000	-	UG/KG
-	-	UG/KG
900	-	UG/KG
100000	a	UG/KG

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

					1030ED-MW-03 (12-15.9)			1030ED-MW-04 (13-15)			1030ED-MW-05 (8-12)			1030ED-MW-06 (12-16)		
				SAMPLE ID:												
				LAB ORDER:	RSK0726-01			RSK0953-01			RSK0681-01			RSK0600-08		
				SAMPLE DATE:	11/13/2009 09:40			11/19/2009 11:45			11/12/2009 09:45			11/11/2009 15:55		
VOLATILE ORGANIC COMPOUNDS								Solid-extr								
(EPA METHOD 8260)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	100000	a	UG/KG	0.41	U	1	94.0	U	1	0.38	U	1	0.39	U	1
1,1,2,2-Tetrachloroethane	79-34-5	-	-	UG/KG	0.92	U,UJ	1	94	U	1	0.84	U,UJ	1	0.87	U,UJ	1
1,1,2-Trichloroethane	79-00-5	-	-	UG/KG	0.29	U,UJ	1	94	U	1	0.26	U,UJ	1	0.27	U,UJ	1
1,1,2-Trichlorotrifluoroethane	76-13-1		- -	UG/KG	2.9	U	1	94.0	U,UJ	1	2.6	U	1	2.7	U	1
1,1-Dichloroethane	75-34-3	26000	-	UG/KG	0.28	U	1	94.0	U	1	0.26	U	1	0.27	U	1
1,1-Dichloroethene	75-35-4	100000	a	UG/KG	0.70	U	1	94.0	U	1	0.64	U	1	0.66	U	1
1,2,4-Trichlorobenzene	120-82-1	-	-	UG/KG	0.35	U,UJ	1	94	U	1	0.32	U,UJ	1	0.33	U,UJ	1
1,2-Dibromo-3-chloropropane	96-12-8	-	-	UG/KG	2.9	U,UJ	1	94	U	1	2.6	U,UJ	1	2.7	U,UJ	1
1,2-Dibromoethane	106-93-4	-	-	UG/KG	0.22	U,UJ	1	94	U	1	0.2	U,UJ	1	0.2	U,UJ	1
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG	0.45	U,UJ	1	94	U	1	0.41	U,UJ	1	0.42	U,UJ	1
1,2-Dichloroethane	107-06-2	3100	-	UG/KG	0.29	U	1	94.0	U	1	0.26	U	1	0.27	U	1
1,2-Dichloropropane	78-87-5		- -	UG/KG	2.9	U	1	94.0	U	1	2.6	U	1	2.7	U	1
1,3-Dichlorobenzene	541-73-1	49000	-	UG/KG	0.29	U,UJ	1	94	U	1	0.27	U,UJ	1	0.28	U,UJ	1
1,4-Dichlorobenzene	106-46-7	13000	-	UG/KG	0.8	U,UJ	1	94	U	1	0.73	U,UJ	1	0.75	U,UJ	1
2-Butanone	78-93-3	100000	a	UG/KG	2.1	U,UJ	1	470	U,UJ	1	1.9	U,UJ	1	2	U,UJ	1
2-Hexanone	591-78-6	-	-	UG/KG	2	U,UJ	1	470	U	1	1.8	U,UJ	1	1.9	U,UJ	1
4-Methyl-2-pentanone	108-10-1	-	-	UG/KG	1.9	U,UJ	1	470	U	1	1.7	U,UJ	1	1.8	U,UJ	1
Acetone	67-64-1	100000	b	UG/KG	6.3	J,UJ	1	470	U,UJ	1	12	J,UJ	1	1.2	U,J,UJ	1
Benzene	71-43-2	4800	-	UG/KG	0.28	U	1	94.0	U	1	0.25	U	1	0.26	U	1
Bromodichloromethane	594-18-3		- -	UG/KG	0.29	U	1	94.0	U	1	0.27	U	1	0.28	U	1
Bromoform	75-25-2		- -	UG/KG	2.9	U	1	94.0	U,UJ	1	2.6	U	1	2.7	U,L4,UJ	1
Bromomethane	74-83-9		- -	UG/KG	1.3	U	1	94.0	U	1	1.2	U	1	1.2	U	1
Carbon Disulfide	75-15-0		- -	UG/KG	0.49	U	1	94.0	U,J,UJ	1	0.45	U	1	0.46	U	1
Carbon tetrachloride	56-23-5	2400	-	UG/KG	0.55	U	1	94.0	U	1	0.50	U	1	0.52	U	1
Chlorobenzene	108-90-7	100000	a	UG/KG	0.75	U	1	94.0	U	1	0.68	U	1	0.71	U	1
Chlorodibromomethane	124-48-1	-	-	UG/KG	0.31	U,UJ	1	94	U	1	0.29	U,UJ	1	0.3	U,L4,UJ	1
Chloroethane	75-00-3		- -	UG/KG	2.4	U	1	94.0	U	1	2.2	U	1	2.2	U,UJ	1
Chloroform	67-66-3	49000	-	UG/KG	0.35	U	1	94.0	U	1	0.32	U	1	0.33	U	1
Chloromethane	74-87-3		- -	UG/KG	0.34	U	1	94.0	U	1	0.31	U	1	0.32	U	1
cis-1,2-Dichloroethene	156-59-2	100000	a	UG/KG	0.28	U	1	94.0	U	1	0.26	U	1	0.26	U	1
cis-1,3-Dichloropropene	10061-01-5		- -	UG/KG	0.32	U	1	94.0	U	1	0.30	U	1	0.31	U	1
Cyclohexane	110-82-7		- -	UG/KG	0.26	U	1	94	U	1	0.24	U	1	0.25	U	1
Dichlorodifluoromethane	75-71-8		- -	UG/KG	0.47	U	1	94.0	U	1	0.43	U	1	0.44	U	1
Ethylbenzene	100-41-4	41000	-	UG/KG	0.39	U	1	2100.0		1	0.36	U	1	0.37	U	1
Isopropylbenzene	98-82-8		- -	UG/KG	0.86	U	1	2800.0		1	0.78	U	1	0.81	U	1
Methyl Acetate	79-20-9		- -	UG/KG	0.31	U	1	94.0	U,UJ	1	0.28	U	1	0.29	U	1
Methyl tert-butyl ether	1634-04-4	100000	a	UG/KG	0.56	U	1	94.0	U,UJ	1	0.51	U	1	0.53	U	1
Methylcyclohexane	108-87-2	-	-	UG/KG	0.37	U,J,UJ	1	13000	E,J	1	0.34	U,J,UJ	1	0.35	U,J,UJ	1
Methylene chloride	75-09-2	100000	a	UG/KG	6.9	U	1	94	U	1	5.2	U	1	10	U	1
Styrene	100-42-5		- -	UG/KG	0.29	U	1	94.0	U	1	0.26	U,L	1	0.27	U	1
Tetrachloroethene	127-18-4	19000	-	UG/KG	0.77	U,J,UJ	1	94	U	1	0.7	U,J,UJ	1	0.72	U,J,UJ	1
Toluene	108-88-3	100000	a	UG/KG	0.43	U,UJ	1	65	J	1	0.39	U,UJ	1	0.41	U,UJ	1
trans-1,2-Dichloroethene	156-60-5	100000	a	UG/KG	0.59	U	1	94.0	U	1	0.54	U	1	0.55	U	1
trans-1,3-Dichloropropene	10061-02-6	-	-	UG/KG	0.28	U,UJ	1	94	U	1	0.25	U,UJ	1	0.26	U,UJ	1
Trichloroethene	79-01-6	21000	-	UG/KG	0.39	U	1	94.0	U	1	0.36	U	1	3.5	J	1
Trichlorofluoromethane	75-69-4		- -	UG/KG	0.54	U	1	94.0	U	1	0.49	U	1	0.51	U	1
Vinyl chloride	75-01-4	900	-	UG/KG	0.70	U	1	190	U	1	0.63	U	1	0.66	U	1
Xylene	1330-20-7	100000	a	UG/KG	0.96	U	1	11000		1	0.87	U	1	0.90	U	1
TOTAL DETECTABLE					**6.3**			**28965**			**12**			**3.5**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential				SAMPLE ID:	**SB-14 (15.5-16.5)**			**SB-16 (15-16)**			**SB-15 (11-12)**			**SB-20 (14-15)**		
				LAB ORDER:	480-60100-1			480-60100-2			480-60100-3			480-60100-4		
				SAMPLE DATE:	5/14/14 9:10			5/14/14 9:35			5/14/14 10:00			5/14/14 10:35		
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	100000	a	UG/KG	0.4	U	1	0.41	U	1	0.40	U	1	0.40	U	1
1,1,2,2-Tetrachloroethane	79-34-5	-	-	UG/KG	0.90	U	1	0.93	U	1	0.89	U	1	0.89	U	1
1,1,2-Trichloroethane	79-00-5	-	-	UG/KG	0.72	U	1	0.74	U	1	0.71	U	1	0.71	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1		- -	UG/KG	1.3	U	1	1.3	U	1	1.3	U	1	1.2	U	1
1,1-Dichloroethane	75-34-3	26000	-	UG/KG	0.67	U	1	0.70	U	1	0.67	U	1	0.67	U	1
1,1-Dichloroethene	75-35-4	100000	a	UG/KG	0.68	U	1	0.70	U	1	0.67	U	1	0.67	U	1
1,2,4-Trichlorobenzene	120-82-1	-	-	UG/KG	0.34	U	1	0.35	U	1	0.33	U	1	0.33	U	1
1,2-Dibromo-3-chloropropane	96-12-8	-	-	UG/KG	2.8	U	1	2.9	U	1	2.7	U	1	2.7	U	1
1,2-Dibromoethane	106-93-4	-	-	UG/KG	0.71	U	1	0.73	U	1	0.70	U	1	0.70	U	1
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG	0.43	U	1	0.45	U	1	0.43	U	1	0.43	U	1
1,2-Dichloroethane	107-06-2	3100	-	UG/KG	0.28	U	1	0.29	U	1	0.28	U	1	0.27	U	1
1,2-Dichloropropane	78-87-5		- -	UG/KG	2.8	U	1	2.9	U	1	2.7	U	1	2.7	U	1
1,3-Dichlorobenzene	541-73-1	49000	-	UG/KG	0.28	U	1	0.29	U	1	0.28	U	1	0.28	U	1
1,4-Dichlorobenzene	106-46-7	13000	-	UG/KG	0.77	U	1	0.80	U	1	0.77	U	1	0.76	U	1
2-Butanone	78-93-3	100000	a	UG/KG	2.0	U *	1	2.1	U *	1	2.0	U *	1	2.0	U *	1
2-Hexanone	591-78-6	-	-	UG/KG	2.8	U	1	2.9	U	1	2.7	U	1	2.7	U	1
4-Methyl-2-pentanone	108-10-1	-	-	UG/KG	1.8	U	1	1.9	U	1	1.8	U	1	1.8	U	1
Acetone	67-64-1	100000	b	UG/KG	4.7	J	1	4.8	J	1	4.6	U	1	4.6	U	1
Benzene	71-43-2	4800	-	UG/KG	0.27	U	1	0.28	U	1	0.27	U	1	0.27	U	1
Bromodichloromethane	594-18-3		- -	UG/KG	0.74	U	1	0.76	U	1	0.73	U	1	0.73	U	1
Bromoform	75-25-2		- -	UG/KG	2.8	U	1	2.9	U	1	2.7	U	1	2.7	U	1
Bromomethane	74-83-9		- -	UG/KG	0.50	U	1	0.51	U	1	0.49	U	1	0.49	U	1
Carbon Disulfide	75-15-0		- -	UG/KG	2.8	U	1	2.9	U	1	2.7	U	1	2.7	U	1
Carbon tetrachloride	56-23-5	2400	-	UG/KG	0.54	U	1	0.55	U	1	0.53	U	1	0.53	U	1
Chlorobenzene	108-90-7	100000	a	UG/KG	0.73	U	1	0.75	U	1	0.72	U	1	0.72	U	1
Chlorodibromomethane	124-48-1	-	-	UG/KG	0.71	U	1	0.73	U	1	0.70	U	1	0.70	U	1
Chloroethane	75-00-3		- -	UG/KG	1.2	U	1	1.3	U	1	1.2	U	1	1.2	U	1
Chloroform	67-66-3	49000	-	UG/KG	0.34	U	1	0.35	U	1	0.34	U	1	0.34	U	1
Chloromethane	74-87-3		- -	UG/KG	0.33	U	1	0.34	U	1	0.33	U	1	0.33	U	1
cis-1,2-Dichloroethene	156-59-2	100000	a	UG/KG	0.71	U	1	0.73	U	1	0.70	U	1	0.70	U	1
cis-1,3-Dichloropropene	10061-01-5		- -	UG/KG	0.80	U	1	0.82	U	1	0.79	U	1	0.79	U	1
Cyclohexane	110-82-7		- -	UG/KG	0.77	U	1	0.80	U	1	0.77	U	1	0.76	U	1
Dichlorodifluoromethane	75-71-8		- -	UG/KG	0.46	U	1	0.47	U	1	0.45	U	1	0.45	U	1
Ethylbenzene	100-41-4	41000	-	UG/KG	0.38	J	1	0.39	U	1	0.38	U	1	0.38	U	1
Isopropylbenzene	98-82-8		- -	UG/KG	0.83	U	1	0.86	U	1	0.83	U	1	0.82	U	1
Methyl Acetate	79-20-9		- -	UG/KG	3.3	U	1	3.4	U	1	3.3	U	1	3.3	U	1
Methyl tert-butyl ether	1634-04-4	100000	a	UG/KG	0.54	U	1	0.56	U	1	0.54	U	1	0.54	U	1
Methylcyclohexane	108-87-2	-	-	UG/KG	0.84	U	1	0.87	U	1	0.83	U	1	0.83	U	1
Methylene chloride	75-09-2	100000	a	UG/KG	2.5	U	1	2.6	U	1	2.5	U	1	2.5	U	1
Styrene	100-42-5		- -	UG/KG	0.28	U	1	0.29	U	1	0.27	U	1	0.27	U	1
Tetrachloroethene	127-18-4	19000	-	UG/KG	0.74	U	1	0.77	U	1	0.74	J	1	0.73	U	1
Toluene	108-88-3	100000	a	UG/KG	0.42	J	1	0.43	U	1	0.41	U	1	0.41	U	1
trans-1,2-Dichloroethene	156-60-5	100000	a	UG/KG	0.57	U	1	0.59	U	1	0.57	U	1	0.56	U	1
trans-1,3-Dichloropropene	10061-02-6	-	-	UG/KG	2.4	U	1	2.5	U	1	2.4	U	1	2.4	U	1
Trichloroethene	79-01-6	21000	-	UG/KG	1.2	U	1	1.3	U	1	1.2	U	1	1.2	U	1
Trichlorofluoromethane	75-69-4		- -	UG/KG	0.52	J	1	0.54	J	1	0.52	U	1	0.52	J	1
Vinyl chloride	75-01-4	900	-	UG/KG	0.67	U	1	0.70	U	1	0.67	U	1	0.67	U	1
Xylene	1330-20-7	100000	a	UG/KG	0.93	J	1	0.96	U	1	0.92	U	1	0.92	U	1
TOTAL DETECTABLE					**0**			**0**			**0**			**0**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential				SAMPLE ID:	SB-19 (14-15)			SB-17 (14-16)			SB-18 (4-5)			OFFSITE- SB-21 (10-12)		
				LAB ORDER:	480-60100-5			480-60100-6			480-60100-7			480-60100-12		
				SAMPLE DATE:	5/14/14 11:05			5/14/14 11:40			5/14/14 11:55			5/15/14 13:00		
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	100000	a	UG/KG	0.39	U	1	2.9	U	1	0.44	U	1	0.42	U	1
1,1,2,2-Tetrachloroethane	79-34-5	-	-	UG/KG	0.87	U	1	6.5	U	1	0.99	U	1	0.94	U	1
1,1,2-Trichloroethane	79-00-5	-	-	UG/KG	0.7	U	1	5.2	U	1	0.79	U	1	0.75	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1		- -	UG/KG	1.2	U	1	9.2	U	1	1.4	U	1	1.3	U	1
1,1-Dichloroethane	75-34-3	26000	-	UG/KG	0.66	U	1	4.9	U	1	0.74	U	1	0.71	U	1
1,1-Dichloroethene	75-35-4	100000	a	UG/KG	0.66	U	1	4.9	U	1	0.75	U	1	0.71	U	1
1,2,4-Trichlorobenzene	120-82-1	-	-	UG/KG	0.33	U	1	2.4	U	1	0.37	U	1	0.35	U	1
1,2-Dibromo-3-chloropropane	96-12-8	-	-	UG/KG	2.7	U	1	20	U	1	3.0	U	1	2.9	U	1
1,2-Dibromoethane	106-93-4	-	-	UG/KG	0.69	U	1	5.2	U	1	0.78	U	1	0.74	U	1
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG	0.42	U	1	3.1	U	1	0.48	U	1	0.45	U	1
1,2-Dichloroethane	107-06-2	3100	-	UG/KG	0.27	U	1	2.0	U	1	0.31	U	1	0.29	U	1
1,2-Dichloropropane	78-87-5		- -	UG/KG	2.7	U	1	20	U	1	3.0	U	1	2.9	U	1
1,3-Dichlorobenzene	541-73-1	49000	-	UG/KG	0.28	U	1	2.1	U	1	0.31	U	1	0.30	U	1
1,4-Dichlorobenzene	106-46-7	13000	-	UG/KG	0.75	U	1	5.6	U	1	0.85	U	1	0.81	U	1
2-Butanone	78-93-3	100000	a	UG/KG	2.0	U *	1	15	U *	1	2.2	U *	1	2.1	U *	1
2-Hexanone	591-78-6	-	-	UG/KG	2.7	U	1	20	U	1	3.0	U	1	2.9	U	1
4-Methyl-2-pentanone	108-10-1	-	-	UG/KG	1.8	U	1	13	U	1	2.0	U	1	1.9	U	1
Acetone	67-64-1	100000	b	UG/KG	4.5	J	1	34	U	1	5.1	U	1	4.9	J	1
Benzene	71-43-2	4800	-	UG/KG	0.26	U	1	2.0	U	1	0.30	U	1	0.28	U	1
Bromodichloromethane	594-18-3		- -	UG/KG	0.72	U	1	5.4	U	1	0.82	U	1	0.78	U	1
Bromoform	75-25-2		- -	UG/KG	2.7	U	1	20	U	1	3.0	U	1	2.9	U	1
Bromomethane	74-83-9		- -	UG/KG	0.49	U	1	3.6	U	1	0.55	U	1	0.52	U	1
Carbon Disulfide	75-15-0		- -	UG/KG	2.7	U	1	20	U	1	3.0	U	1	2.9	U	1
Carbon tetrachloride	56-23-5	2400	-	UG/KG	0.52	U	1	3.9	U	1	0.59	U	1	0.56	U	1
Chlorobenzene	108-90-7	100000	a	UG/KG	0.71	U	1	5.3	U	1	0.80	U	1	0.76	U	1
Chlorodibromomethane	124-48-1	-	-	UG/KG	0.69	U	1	5.1	U	1	0.78	U	1	0.74	U	1
Chloroethane	75-00-3		- -	UG/KG	1.2	U	1	9.1	U	1	1.4	U	1	1.3	U	1
Chloroform	67-66-3	49000	-	UG/KG	0.33	U	1	2.5	U	1	0.38	U	1	0.36	U	1
Chloromethane	74-87-3		- -	UG/KG	0.33	U	1	2.4	U	1	0.37	U	1	0.35	U	1
cis-1,2-Dichloroethene	156-59-2	100000	a	UG/KG	0.69	U	1	5.1	U	1	0.78	U	1	0.74	U	1
cis-1,3-Dichloropropene	10061-01-5		- -	UG/KG	0.78	U	1	5.8	U	1	0.88	U	1	0.83	U	1
Cyclohexane	110-82-7		- -	UG/KG	0.75	U	1	5.6	U	1	0.85	U	1	0.81	U	1
Dichlorodifluoromethane	75-71-8		- -	UG/KG	0.45	U	1	3.3	U	1	0.50	U	1	0.48	U	1
Ethylbenzene	100-41-4	41000	-	UG/KG	0.37	J	1	2.8		1	0.42	U	1	0.40	U	1
Isopropylbenzene	98-82-8		- -	UG/KG	0.81	U	1	6.1		1	0.92	U	1	0.87	U	1
Methyl Acetate	79-20-9		- -	UG/KG	3.3	U	1	24	U	1	3.7	U	1	3.5	U	1
Methyl tert-butyl ether	1634-04-4	100000	a	UG/KG	0.53	U	1	3.9	U	1	0.60	U	1	0.57	U	1
Methylcyclohexane	108-87-2	-	-	UG/KG	0.82	U	1	6.1		1	0.93	U	1	0.88	U	1
Methylene chloride	75-09-2	100000	a	UG/KG	2.5	U	1	18	U	1	2.8	U	1	2.7	U	1
Styrene	100-42-5		- -	UG/KG	0.27	U	1	2.0	U	1	0.30	U	1	0.29	U	1
Tetrachloroethene	127-18-4	19000	-	UG/KG	0.72	U	1	5.4	U	1	0.82	U	1	0.78	U	1
Toluene	108-88-3	100000	a	UG/KG	0.41	U	1	3.0	U	1	0.46	U	1	0.44	U	1
trans-1,2-Dichloroethene	156-60-5	100000	a	UG/KG	0.56	U	1	4.1	U	1	0.63	U	1	0.60	U	1
trans-1,3-Dichloropropene	10061-02-6	-	-	UG/KG	2.4	U	1	18	U	1	2.7	U	1	2.5	U	1
Trichloroethene	79-01-6	21000	-	UG/KG	1.2	U	1	8.8	U	1	1.3	U	1	1.3	U	1
Trichlorofluoromethane	75-69-4		- -	UG/KG	0.51	J	1	3.8	U	1	0.58	U	1	0.55	J	1
Vinyl chloride	75-01-4	900	-	UG/KG	0.66	U	1	4.9	U	1	0.74	U	1	0.71	U	1
Xylene	1330-20-7	100000	a	UG/KG	0.91		1	6.8		1	1.0	U	1	0.97	U	1
TOTAL DETECTABLE					**0**			**0**			**0**			**0.55**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

	SAMPLE ID:	1030ED-SB-01 (12-16)			1030ED-SB-02 (12-15)			1030ED-SB-03 (12-16)			1030ED-SB-04 (12-17)		
	LAB ORDER:	RSK0600-07			RSK0845-01			RSK0726-06			RSK0726-04		
	SAMPLE DATE:	11/11/2009 14:50			11/17/2009 10:30			11/13/2009 11:00			11/13/2009 15:15		
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)	CAS	RSCO	Comment	RESULT QUAL DF			RESULT QUAL DF			RESULT QUAL DF			RESULT QUAL DF		
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG	200	U	5	190	U	1	44	U	1	40	U	1
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG	60	U	5	190	U	1	13	U	1	12	U	1
2,4-Dichlorophenol	120-83-2	- -	UG/KG	48	U	5	190	U	1	11	U	1	9.7	U	1
2,4-Dimethylphenol	105-67-9	- -	UG/KG	250	U	5	190	U,UJ	1	55	U	1	50	U	1
2,4-Dinitrophenol	51-28-5	- -	UG/KG	320	U	5	370	U	1	71	U	1	65	U	1
2,4-Dinitrotoluene	121-14-2	- -	UG/KG	140	U	5	190	U	1	32	U	1	29	U	1
2,6-Dinitrotoluene	606-20-2	- -	UG/KG	220	U	5	190	U	1	50	U	1	45	U	1
2-Chloronaphthalene	91-58-7	- -	UG/KG	61	U	5	190	U	1	14	U	1	12	U	1
2-Chlorophenol	95-57-8	- -	UG/KG	46	U	5	190	U	1	10	U	1	9.4	U	1
2-Methylnaphthalene	91-57-6	- -	UG/KG	11	U	5	190	U,J	1	2.5	U	1	1600		1
2-Methylphenol	95-48-7	100000	a UG/KG	28	U	5	190	U	1	6.3	U	1	5.7	U	1
2-Nitroaniline	88-74-4	- -	UG/KG	290	U	5	370	U	1	65	U	1	59	U	1
2-Nitrophenol	88-75-5	- -	UG/KG	42	U	5	190	U	1	9.3	U	1	8.5	U	1
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG	800	U	5	190	U	1	180	U	1	160	U	1
3-Nitroaniline	99-09-2	- -	UG/KG	210	U	5	370	U	1	47	U	1	43	U	1
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG	310	U	5	370	U	1	70	U	1	64	U	1
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG	290	U	5	190	U	1	65	U	1	59	U	1
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG	37	U	5	190	U	1	8.4	U	1	7.6	U	1
4-Chloroaniline	106-47-8	- -	UG/KG	270	U	5	190	U	1	60	U	1	54	U	1
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG	19	U	5	190	U	1	4.3	U	1	3.9	U	1
4-Methylphenol	106-44-5	100000	a UG/KG	51	U,UJ	5	370	U	1	11	U	1	10	U	1
4-Nitroaniline	100-01-6	- -	UG/KG	100	U	5	370	U	1	23	U	1	21	U	1
4-Nitrophenol	100-02-7	- -	UG/KG	220	U	5	370	U	1	49	U	1	45	U	1
Acenaphthene	83-32-9	100000	a UG/KG	11	U	5	190	U	1	2.4	U	1	2.2	U	1
Acenaphthylene	208-96-8	100000	a UG/KG	7.4	U	5	190	U	1	1.7	U	1	1.5	U	1
Acetophenone	98-86-2	- -	UG/KG	47	U	5	190	U	1	10	U	1	9.5	U	1
Anthracene	120-12-7	100000	a UG/KG	23	U	5	190	U	1	5.2	U	1	4.7	U	1
Atrazine	1912-24-9	- -	UG/KG	40	U	5	190	U	1	9.1	U	1	8.2	U	1
Benzaldehyde	100-52-7	- -	UG/KG	100	U	5	190	U	1	22	U	1	20	U	1
Benzo(a)anthracene	56-55-3	1000	f UG/KG	140	J	5	190	U	1	3.5	U	1	3.2	U	1
Benzo(a)pyrene	50-32-8	1000	f UG/KG	110	J	5	190	U	1	4.9	U	1	4.5	U	1
Benzo(b)fluoranthene	205-99-2	1000	f UG/KG	170	ID4, J	5	190	U	1	4.0	U	1	3.6	U	1
Benzo(g,h,i)perylene	191-24-2	100000	a UG/KG	75	J	5	190	U	1	2.4	U	1	2.2	U	1
Benzo(k)fluoranthene	207-08-9	3900	- UG/KG	10	U	5	190	U	1	2.2	U	1	2.0	U	1
Biphenyl	92-52-4	- -	UG/KG	57	U	5	190	U	1	13	U	1	38	J	1
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG	49	U	5	190	U	1	11	U	1	10	U	1
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG	79	U	5	190	U	1	18	U	1	16	U	1
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG	95	U,UJ	5	190	U	1	21	U	1	19	U	1
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG	290	U	5	190	U	1	66	U	1	60	U	1
Butylbenzylphthalate	85-68-7	- -	UG/KG	240	U	5	190	U	1	55	U	1	50	U	1
Caprolactam	105-60-2	- -	UG/KG	390	U	5	190	U	1	88	U	1	80	U	1
Carbazole	86-74-8	- -	UG/KG	11	U	5	190	U	1	2.4	U	1	2.1	U	1
Chrysene	218-01-9	3900	- UG/KG	120	J	5	190	U	1	2.0	U	1	1.9	U	1
Dibenzo(a,h)anthracene	53-70-3	330	e UG/KG	11	U	5	190	U	1	2.4	U	1	2.2	U	1
Dibenzofuran	132-64-9	- -	UG/KG	9.5	U	5	190	U	1	2.1	U	1	1.9	U	1
Diethylphthalate	84-66-2	- -	UG/KG	27	U	5	190	U	1	6.2	U	1	5.6	U	1
Dimethyl phthalate	131-11-3	- -	UG/KG	24	U	5	190	U	1	5.3	U	1	4.8	U	1
Di-n-butylphthalate	84-74-2	- -	UG/KG	310	U	5	190	U	1	70	U	1	64	U	1
Di-n-octylphthalate	117-84-0	- -	UG/KG	21	U	5	190	U	1	4.8	U	1	4.3	U	1
Fluoranthene	206-44-0	100000	a UG/KG	180	J	5	190	U	1	3.0	U	1	11	J	1
Fluorene	86-73-7	100000	a UG/KG	21	U	5	190	U	1	4.7	U	1	34	J	1
Hexachlorobenzene	118-74-1	- -	UG/KG	45	U	5	190	U	1	10	U	1	9.2	U	1
Hexachlorobutadiene	87-68-3	- -	UG/KG	47	U	5	190	U	1	10	U	1	9.5	U	1
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG	280	U	5	190	U	1	62	U	1	56	U	1
Hexachloroethane	67-72-1	- -	UG/KG	70	U	5	190	U	1	16	U	1	14	U	1
Indeno(1,2,3-cd)pyrene	193-39-5	500	- UG/KG	59	J	5	190	U	1	5.6	U	1	5.1	U	1
Isophorone	78-59-1	- -	UG/KG	45	U	5	190	U	1	10	U	1	9.3	U	1
Naphthalene	91-20-3	100000	a UG/KG	15	U	5	190	U	1	3.4	U	1	470		1
Nitrobenzene	98-95-3	- -	UG/KG	40	U	5	190	U	1	9.0	U	1	8.2	U	1
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG	72	U	5	190	U	1	16	U	1	15	U	1
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG	50	U	5	190	U	1	11	U	1	10	U	1
Pentachlorophenol	87-86-5	6700	- UG/KG	310	U	5	370	U	1	70	U	1	64	U	1
Phenanthrene	85-01-8	100000	a UG/KG	77	J	5	190	U	1	4.3	U	1	65	J	1
Phenol	108-95-2	100000	a UG/KG	96	U	5	190	U	1	21	U	1	20	U	1
Pyrene	129-00-0	100000	a UG/KG	170	J	5	190	U	1	1.3	U	1	28	J	1
TOTAL DETECTABLE				**1101**			**0**			**0**			**2246**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

	SAMPLE ID:	1030ED-SB-05 (12-16.8)			1030ED-SB-06 (12-16)			1030ED-BLIND DUPLICATE			1030ED-SB-07 (8-12)		
	LAB ORDER:	RSK0786-03			RSK0600-09			RSK0600-10			RSK0726-03		
	SAMPLE DATE:	11/16/2009 16:15			11/11/2009 16:55			11/11/2009 00:00			11/13/2009 11:50		
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG		180	U	1	41	U	1	42	U	1	40	U	1
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG		180	U	1	12	U	1	13	U	1	12	U	1
2,4-Dichlorophenol	120-83-2	- -	UG/KG		180	U	1	9.8	U	1	10	U	1	9.5	U	1
2,4-Dimethylphenol	105-67-9	- -	UG/KG		180	U,UJ	1	51	U	1	52	U	1	49	U	1
2,4-Dinitrophenol	51-28-5	- -	UG/KG		360	U	1	66	U	1	67	U	1	63	U	1
2,4-Dinitrotoluene	121-14-2	- -	UG/KG		180	U	1	29	U	1	30	U	1	28	U	1
2,6-Dinitrotoluene	606-20-2	- -	UG/KG		180	U	1	46	U	1	47	U	1	44	U	1
2-Chloronaphthalene	91-58-7	- -	UG/KG		180	U	1	13	U	1	13	U	1	12	U	1
2-Chlorophenol	95-57-8	- -	UG/KG		180	U	1	9.6	U	1	9.8	U	1	9.2	U	1
2-Methylnaphthalene	91-57-6	- -	UG/KG		5400	J	1	2.3	U	1	2.3	U	1	24	J	1
2-Methylphenol	95-48-7	100000	a UG/KG		180	U	1	5.8	U	1	5.9	U	1	5.6	U	1
2-Nitroaniline	88-74-4	- -	UG/KG		360	U	1	60	U	1	61	U	1	58	U	1
2-Nitrophenol	88-75-5	- -	UG/KG		180	U	1	8.6	U	1	8.8	U	1	8.3	U	1
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG		180	U	1	160	U	1	170	U	1	160	U	1
3-Nitroaniline	99-09-2	- -	UG/KG		360	U	1	43	U	1	44	U	1	42	U	1
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG		360	U	1	65	U	1	66	U	1	63	U	1
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG		180	U	1	60	U	1	61	U	1	58	U	1
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG		180	U	1	7.7	U	1	7.9	U	1	7.5	U	1
4-Chloroaniline	106-47-8	- -	UG/KG		180	U	1	55	U	1	56	U	1	53	U	1
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG		180	U	1	4.0	U	1	4.1	U	1	3.9	U	1
4-Methylphenol	106-44-5	100000	a UG/KG		360	U,UJ	1	10	U,UJ	1	11	U,UJ	1	10	U	1
4-Nitroaniline	100-01-6	- -	UG/KG		360	U	1	21	U	1	21	U	1	20	U	1
4-Nitrophenol	100-02-7	- -	UG/KG		360	U	1	45	U	1	46	U	1	44	U	1
Acenaphthene	83-32-9	100000	a UG/KG		100	J	1	2.2	U	1	2.3	U	1	37	J	1
Acenaphthylene	208-96-8	100000	a UG/KG		180	U	1	1.5	U	1	1.6	U	1	7.2	J	1
Acetophenone	98-86-2	- -	UG/KG		180	U	1	9.6	U	1	9.8	U	1	9.3	U	1
Anthracene	120-12-7	100000	a UG/KG		180	U	1	4.8	U	1	4.9	U	1	96	J	1
Atrazine	1912-24-9	- -	UG/KG		180	U	1	8.4	U	1	8.5	U	1	8.1	U	1
Benzaldehyde	100-52-7	- -	UG/KG		180	U	1	21	U	1	21	U	1	20	U	1
Benzo(a)anthracene	56-55-3	1000	f UG/KG		79	J	1	3.2	U	1	3.3	U	1	180		1
Benzo(a)pyrene	50-32-8	1000	f UG/KG		180	U	1	4.5	U	1	4.6	U	1	120	J	1
Benzo(b)fluoranthene	205-99-2	1000	f UG/KG		180	U	1	3.6	U	1	3.7	U	1	140	J	1
Benzo(g,h,i)perylene	191-24-2	100000	a UG/KG		64	J	1	2.3	U	1	2.3	U	1	79	J	1
Benzo(k)fluoranthene	207-08-9	3900	- UG/KG		180	U	1	2.1	U	1	2.1	U	1	60	J	1
Biphenyl	92-52-4	- -	UG/KG		120	J	1	12	U	1	12	U	1	11	U	1
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG		180	U	1	10	U	1	10	U	1	9.9	U	1
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG		180	U	1	16	U	1	17	U	1	16	U	1
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG		180	U,C,UJ	1	20	U,UJ	1	20	U,UJ	1	19	U	1
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG		620		1	60	U	1	62	U	1	58	U	1
Butylbenzylphthalate	85-68-7	- -	UG/KG		180	U	1	50	U	1	51	U	1	49	U	1
Caprolactam	105-60-2	- -	UG/KG		180	U	1	81	U	1	83	U	1	78	U	1
Carbazole	86-74-8	- -	UG/KG		180	U	1	2.2	U	1	2.2	U	1	50	J	1
Chrysene	218-01-9	3900	- UG/KG		110	J	1	1.9	U	1	1.9	U	1	150	J	1
Dibenzo(a,h)anthracene	53-70-3	330	e UG/KG		180	U	1	2.2	U	1	2.3	U	1	2.1	U	1
Dibenzofuran	132-64-9	- -	UG/KG		180	U	1	2.0	U	1	2.0	U	1	36	J	1
Diethylphthalate	84-66-2	- -	UG/KG		180	U	1	5.7	U	1	5.8	U	1	5.5	U	1
Dimethyl phthalate	131-11-3	- -	UG/KG		180	U	1	4.9	U	1	5.0	U	1	4.7	U	1
Di-n-butylphthalate	84-74-2	- -	UG/KG		97	J	1	65	U	1	66	U	1	63	U	1
Di-n-octylphthalate	117-84-0	- -	UG/KG		180	U	1	4.4	U	1	4.5	U	1	4.2	U	1
Fluoranthene	206-44-0	100000	a UG/KG		210		1	2.7	U	1	2.8	U	1	370		1
Fluorene	86-73-7	100000	a UG/KG		240		1	4.3	U	1	4.4	U	1	43	J	1
Hexachlorobenzene	118-74-1	- -	UG/KG		180	U	1	9.3	U	1	9.5	U	1	9.0	U	1
Hexachlorobutadiene	87-68-3	- -	UG/KG		180	U	1	9.6	U	1	9.8	U	1	9.3	U	1
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG		180	U	1	57	U	1	58	U	1	55	U	1
Hexachloroethane	67-72-1	- -	UG/KG		180	U	1	15	U	1	15	U	1	14	U	1
Indeno(1,2,3-cd)pyrene	193-39-5	500	- UG/KG		180	U	1	5.2	U	1	5.3	U	1	79	J	1
Isophorone	78-59-1	- -	UG/KG		180	U	1	9.4	U	1	9.6	U	1	9.1	U	1
Naphthalene	91-20-3	100000	a UG/KG		4200		1	3.1	U	1	3.2	U	1	42	J	1
Nitrobenzene	98-95-3	- -	UG/KG		180	U	1	8.3	U	1	8.5	U	1	8.0	U	1
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG		180	U	1	15	U	1	15	U	1	14	U	1
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG		180	U	1	10	U	1	10	U	1	9.9	U	1
Pentachlorophenol	87-86-5	6700	- UG/KG		360	U	1	64	U	1	66	U	1	62	U	1
Phenanthrene	85-01-8	100000	a UG/KG		740		1	3.9	U	1	4.0	U	1	390		1
Phenol	108-95-2	100000	a UG/KG		180	U	1	20	U	1	20	U	1	19	U	1
Pyrene	129-00-0	100000	a UG/KG		310		1	1.2	U	1	1.2	U	1	280		1
TOTAL DETECTABLE					**12290**			**0**			**0**			**2183.2**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

	SAMPLE ID:	1030ED-SB-08 (14.5-17.7)			1030ED-SB-08 (22.5-26.5)			1030ED-SB-09 (8-9.5)			1030ED-SB-10 (6-11.2)		
	LAB ORDER:	RSK0786-01			RSK0786-02			RSK0681-03			RSK0681-04		
	SAMPLE DATE:	11/16/2009 10:30			11/16/2009 11:30			11/12/2009 11:45			11/12/2009 14:00		
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)	CAS	RSCO	Comment	RESULT QUAL DF			RESULT QUAL DF			RESULT QUAL DF			RESULT QUAL DF		
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG	190	U	1	190	U	1	41	U	1	200	U	5
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG	190	U	1	190	U	1	13	U	1	60	U	5
2,4-Dichlorophenol	120-83-2	- -	UG/KG	190	U	1	190	U	1	10	U	1	48	U	5
2,4-Dimethylphenol	105-67-9	- -	UG/KG	190	U,UJ	1	190	U,UJ	1	51	U	1	250	U	5
2,4-Dinitrophenol	51-28-5	- -	UG/KG	360	U	1	360	U	1	67	U	1	320	U	5
2,4-Dinitrotoluene	121-14-2	- -	UG/KG	190	U	1	190	U	1	29	U	1	140	U	5
2,6-Dinitrotoluene	606-20-2	- -	UG/KG	190	U	1	190	U	1	47	U	1	220	U	5
2-Chloronaphthalene	91-58-7	- -	UG/KG	190	U	1	190	U	1	13	U	1	61	U	5
2-Chlorophenol	95-57-8	- -	UG/KG	190	U	1	190	U	1	9.7	U	1	46	U	5
2-Methylnaphthalene	91-57-6	- -	UG/KG	190	U,J	1	190	U,J	1	2.3	U	1	11	U	5
2-Methylphenol	95-48-7	100000	a UG/KG	190	U	1	190	U	1	5.8	U	1	28	U	5
2-Nitroaniline	88-74-4	- -	UG/KG	360	U	1	360	U	1	61	U	1	290	U	5
2-Nitrophenol	88-75-5	- -	UG/KG	190	U	1	190	U	1	8.7	U	1	42	U	5
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG	190	U	1	190	U	1	170	U	1	800	U	5
3-Nitroaniline	99-09-2	- -	UG/KG	360	U	1	360	U	1	44	U	1	210	U	5
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG	360	U	1	360	U	1	66	U	1	310	U	5
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG	190	U	1	190	U	1	61	U	1	290	U	5
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG	190	U	1	190	U	1	7.8	U	1	38	U	5
4-Chloroaniline	106-47-8	- -	UG/KG	190	U	1	190	U	1	56	U	1	270	U	5
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG	190	U	1	190	U	1	4.1	U	1	19	U	5
4-Methylphenol	106-44-5	100000	a UG/KG	360	U,UJ	1	360	U,UJ	1	11	U	1	51	U	5
4-Nitroaniline	100-01-6	- -	UG/KG	360	U	1	360	U	1	21	U	1	100	U	5
4-Nitrophenol	100-02-7	- -	UG/KG	360	U	1	360	U	1	46	U	1	220	U	5
Acenaphthene	83-32-9	100000	a UG/KG	190	U	1	190	U	1	2.2	U	1	11	U	5
Acenaphthylene	208-96-8	100000	a UG/KG	190	U	1	190	U	1	1.6	U	1	7.5	U	5
Acetophenone	98-86-2	- -	UG/KG	190	U	1	190	U	1	9.8	U	1	47	U	5
Anthracene	120-12-7	100000	a UG/KG	190	U	1	190	U	1	4.9	U	1	23	U	5
Atrazine	1912-24-9	- -	UG/KG	190	U	1	190	U	1	8.5	U	1	41	U	5
Benzaldehyde	100-52-7	- -	UG/KG	190	U	1	190	U	1	21	U	1	100	U	5
Benzo(a)anthracene	56-55-3	1000	f UG/KG	190	U	1	190	U	1	3.3	U	1	16	U	5
Benzo(a)pyrene	50-32-8	1000	f UG/KG	190	U	1	190	U	1	4.6	U	1	22	U	5
Benzo(b)fluoranthene	205-99-2	1000	f UG/KG	190	U	1	190	U	1	3.7	U	1	18	U	5
Benzo(g,h,i)perylene	191-24-2	100000	a UG/KG	190	U	1	190	U	1	17	J	1	11	U	5
Benzo(k)fluoranthene	207-08-9	3900	- UG/KG	190	U	1	190	U	1	2.1	U	1	10	U	5
Biphenyl	92-52-4	- -	UG/KG	190	U	1	190	U	1	12	U	1	57	U	5
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG	190	U	1	190	U	1	10	U	1	50	U	5
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG	190	U	1	190	U	1	16	U	1	79	U	5
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG	190	U,C,UJ	1	190	U,C,UJ	1	20	U	1	95	U	5
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG	190	U	1	190	U	1	61	U	1	290	U	5
Butylbenzylphthalate	85-68-7	- -	UG/KG	190	U	1	190	U	1	51	U	1	240	U	5
Caprolactam	105-60-2	- -	UG/KG	310		1	370		1	82	U	1	390	U	5
Carbazole	86-74-8	- -	UG/KG	190	U	1	190	U	1	2.2	U	1	11	U	5
Chrysene	218-01-9	3900	- UG/KG	190	U	1	190	U	1	1.9	U	1	9.1	U	5
Dibenzo(a,h)anthracene	53-70-3	330	e UG/KG	190	U	1	190	U	1	2.2	U	1	11	U	5
Dibenzofuran	132-64-9	- -	UG/KG	190	U	1	190	U	1	2.0	U	1	9.5	U	5
Diethylphthalate	84-66-2	- -	UG/KG	190	U	1	190	U	1	5.7	U	1	28	U	5
Dimethyl phthalate	131-11-3	- -	UG/KG	190	U	1	190	U	1	5.0	U	1	24	U	5
Di-n-butylphthalate	84-74-2	- -	UG/KG	190	U	1	190	U	1	66	U	1	320	U	5
Di-n-octylphthalate	117-84-0	- -	UG/KG	190	U	1	190	U	1	4.4	U	1	21	U	5
Fluoranthene	206-44-0	100000	a UG/KG	190	U	1	190	U	1	36	J	1	13	U	5
Fluorene	86-73-7	100000	a UG/KG	190	U	1	190	U	1	4.4	U	1	21	U	5
Hexachlorobenzene	118-74-1	- -	UG/KG	190	U	1	190	U	1	9.4	U	1	45	U	5
Hexachlorobutadiene	87-68-3	- -	UG/KG	190	U	1	190	U	1	9.7	U	1	47	U	5
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG	190	U	1	190	U	1	58	U	1	280	U	5
Hexachloroethane	67-72-1	- -	UG/KG	190	U	1	190	U	1	15	U	1	71	U	5
Indeno(1,2,3-cd)pyrene	193-39-5	500	- UG/KG	190	U	1	190	U	1	14	J	1	25	U	5
Isophorone	78-59-1	- -	UG/KG	190	U	1	190	U	1	9.5	U	1	46	U	5
Naphthalene	91-20-3	100000	a UG/KG	190	U	1	190	U	1	3.2	U	1	15	U	5
Nitrobenzene	98-95-3	- -	UG/KG	190	U	1	190	U	1	8.4	U	1	40	U	5
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG	190	U	1	190	U	1	15	U	1	72	U	5
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG	190	U	1	190	U	1	10	U	1	50	U	5
Pentachlorophenol	87-86-5	6700	- UG/KG	360	U	1	360	U	1	65	U	1	310	U	5
Phenanthrene	85-01-8	100000	a UG/KG	190	U	1	190	U	1	24	J	1	19	U	5
Phenol	108-95-2	100000	a UG/KG	190	U	1	190	U	1	20	U	1	96	U	5
Pyrene	129-00-0	100000	a UG/KG	190	U	1	190	U	1	30	J	1	5.9	U	5
TOTAL DETECTABLE				**310**			**370**			**121**			**0**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

	SAMPLE ID:	1030ED-SB-12 (8-14.2)			1030ED-MW-01 (12-16.2)			1030ED-MW-01 (21-22.9)			1030ED-MW-02 (8-13.9)		
	LAB ORDER:	RSK0681-05			RSK0845-02			RSK0845-03			RSK0893-01		
	SAMPLE DATE:	11/12/2009 16:15			11/17/2009 13:30			11/17/2009 15:50			11/18/2009 12:30		
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)	CAS	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
2,4,5-Trichlorophenol	95-95-4	44	U	1	180	U	1	180	U	1	970	U	5
2,4,6-Trichlorophenol	88-06-2	13	U	1	180	U	1	180	U	1	970	U	5
2,4-Dichlorophenol	120-83-2	11	U	1	180	U	1	180	U	1	970	U	5
2,4-Dimethylphenol	105-67-9	55	U	1	180	U,UJ	1	180	U,UJ	1	970	U,UJ	5
2,4-Dinitrophenol	51-28-5	71	U	1	350	U	1	350	U	1	1900	U	5
2,4-Dinitrotoluene	121-14-2	31	U	1	180	U	1	180	U	1	970	U	5
2,6-Dinitrotoluene	606-20-2	49	U	1	180	U	1	180	U	1	970	U	5
2-Chloronaphthalene	91-58-7	14	U	1	180	U	1	180	U	1	970	U	5
2-Chlorophenol	95-57-8	10	U	1	180	U	1	180	U	1	970	U	5
2-Methylnaphthalene	91-57-6	2.4	U	1	180	U,J	1	180	U,J	1	970	U,J	5
2-Methylphenol	95-48-7	6.2	U	1	180	U	1	180	U	1	970	U	5
2-Nitroaniline	88-74-4	65	U	1	350	U	1	350	U	1	1900	U	5
2-Nitrophenol	88-75-5	9.2	U	1	180	U	1	180	U	1	970	U	5
3,3-Dichlorobenzidine	91-94-1	180	U	1	180	U	1	180	U	1	970	U	5
3-Nitroaniline	99-09-2	46	U	1	350	U	1	350	U	1	1900	U	5
4,6-Dinitro-2-methylphenol	534-52-1	70	U	1	350	U	1	350	U	1	1900	U	5
4-Bromophenyl-phenylether	101-55-3	64	U	1	180	U	1	180	U	1	970	U	5
4-Chloro-3-Methylphenol	59-50-7	8.3	U	1	180	U	1	180	U	1	970	U	5
4-Chloroaniline	106-47-8	59	U	1	180	U	1	180	U	1	970	U	5
4-Chlorophenyl-phenylether	7005-72-3	4.3	U	1	180	U	1	180	U	1	970	U	5
4-Methylphenol	106-44-5	11	U	1	350	U	1	350	U	1	1900	U,UJ	5
4-Nitroaniline	100-01-6	23	U	1	350	U	1	350	U	1	1900	U	5
4-Nitrophenol	100-02-7	49	U	1	350	U	1	350	U	1	1900	U	5
Acenaphthene	83-32-9	2.4	U	1	180	U	1	180	U	1	970	U	5
Acenaphthylene	208-96-8	1.7	U	1	180	U	1	180	U	1	970	U	5
Acetophenone	98-86-2	10	U	1	180	U	1	180	U	1	970	U	5
Anthracene	120-12-7	5.2	U	1	180	U	1	180	U	1	970	U	5
Atrazine	1912-24-9	9.0	U	1	180	U	1	180	U	1	970	U	5
Benzaldehyde	100-52-7	22	U	1	180	U	1	180	U	1	970	U	5
Benzo(a)anthracene	56-55-3	3.5	U	1	15	J	1	180	U	1	970	U	5
Benzo(a)pyrene	50-32-8	4.9	U	1	180	U	1	180	U	1	970	U	5
Benzo(b)fluoranthene	205-99-2	3.9	U	1	180	U	1	180	U	1	970	U	5
Benzo(g,h,i)perylene	191-24-2	2.4	U	1	180	U	1	180	U	1	970	U	5
Benzo(k)fluoranthene	207-08-9	2.2	U	1	180	U	1	180	U	1	970	U	5
Biphenyl	92-52-4	13	U	1	180	U	1	180	U	1	970	U	5
bis(2-Chloroethoxy)methane	111-91-1	11	U	1	180	U	1	180	U	1	970	U	5
bis(2-Chloroethyl)Ether	111-44-4	17	U	1	180	U	1	180	U	1	970	U	5
Bis(2-chloroisopropyl)ether	108-60-1	21	U	1	180	U	1	180	U	1	970	U	5
bis(2-Ethylhexyl)phthalate	117-81-7	75	J	1	180	U	1	180	U	1	970	U	5
Butylbenzylphthalate	85-68-7	54	U	1	180	U	1	180	U	1	970	U	5
Caprolactam	105-60-2	87	U	1	180	U	1	180	U	1	970	U	5
Carbazole	86-74-8	2.3	U	1	180	U	1	180	U	1	970	U	5
Chrysene	218-01-9	2.0	U	1	15	J	1	180	U	1	970	U	5
Dibenzo(a,h)anthracene	53-70-3	2.4	U	1	180	U	1	180	U	1	970	U	5
Dibenzofuran	132-64-9	2.1	U	1	180	U	1	180	U	1	970	U	5
Diethylphthalate	84-66-2	6.1	U	1	180	U	1	180	U	1	970	U	5
Dimethyl phthalate	131-11-3	5.3	U	1	180	U	1	180	U	1	970	U	5
Di-n-butylphthalate	84-74-2	70	U	1	180	U	1	180	U	1	970	U	5
Di-n-octylphthalate	117-84-0	4.7	U	1	180	U	1	180	U	1	970	U	5
Fluoranthene	206-44-0	2.9	U	1	44	J	1	180	U	1	970	U	5
Fluorene	86-73-7	4.7	U	1	180	U	1	180	U	1	970	U	5
Hexachlorobenzene	118-74-1	10	U	1	180	U	1	180	U	1	970	U	5
Hexachlorobutadiene	87-68-3	10	U	1	180	U	1	180	U	1	970	U	5
Hexachlorocyclopentadiene	77-47-4	61	U	1	180	U	1	180	U	1	970	U	5
Hexachloroethane	67-72-1	16	U	1	180	U	1	180	U	1	970	U	5
Indeno(1,2,3-cd)pyrene	193-39-5	5.6	U	1	180	U	1	180	U	1	970	U	5
Isophorone	78-59-1	10	U	1	180	U	1	180	U	1	970	U	5
Naphthalene	91-20-3	3.4	U	1	180	U	1	180	U	1	970	U	5
Nitrobenzene	98-95-3	9.0	U	1	180	U	1	180	U	1	970	U	5
N-Nitroso-di-n-propylamine	621-64-7	16	U	1	180	U	1	180	U	1	970	U	5
N-Nitrosodiphenylamine(1)	86-30-6	11	U	1	180	U	1	180	U	1	970	U	5
Pentachlorophenol	87-86-5	69	U	1	350	U	1	350	U	1	1900	U	5
Phenanthrene	85-01-8	4.2	U	1	36	J	1	180	U	1	970	U	5
Phenol	108-95-2	21	U	1	180	U	1	180	U	1	970	U	5
Pyrene	129-00-0	1.3	U	1	53	J	1	180	U	1	970	U	5
TOTAL DETECTABLE		**75**			**163**			**0**			**0**		

RSCO	Comment	
- -	UG/KG	
100000	a	UG/KG
1000	f	UG/KG
3900	-	UG/KG
330	e	UG/KG
500	-	UG/KG
6700	-	UG/KG

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

				1030ED-MW-03 (12-15.9)			1030ED-MW-04 (13-15)			1030ED-MW-05 (8-12)			1030ED-MW-06 (12-16)		
			SAMPLE ID:												
			LAB ORDER:	RSK0726-01			RSK0953-01			RSK0681-01			RSK0600-08		
			SAMPLE DATE:	11/13/2009 09:40			11/19/2009 11:45			11/12/2009 09:45			11/11/2009 15:55		
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)	CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG	47	U	1	940	U	5	410	U	10	40	U	1
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG	14	U	1	940	U	5	120	U	10	12	U	1
2,4-Dichlorophenol	120-83-2	- -	UG/KG	11	U	1	940	U	5	98	U	10	9.6	U	1
2,4-Dimethylphenol	105-67-9	- -	UG/KG	58	U	1	940	U,UJ	5	500	U	10	50	U	1
2,4-Dinitrophenol	51-28-5	- -	UG/KG	75	U	1	1800	U	5	650	U	10	64	U	1
2,4-Dinitrotoluene	121-14-2	- -	UG/KG	33	U	1	940	U	5	290	U	10	28	U	1
2,6-Dinitrotoluene	606-20-2	- -	UG/KG	53	U	1	940	U	5	460	U	10	45	U	1
2-Chloronaphthalene	91-58-7	- -	UG/KG	14	U	1	940	U	5	130	U	10	12	U	1
2-Chlorophenol	95-57-8	- -	UG/KG	11	U	1	940	U	5	95	U	10	9.3	U	1
2-Methylnaphthalene	91-57-6	- -	UG/KG	2.6	U	1	5600	J	5	23	U	10	2.2	U	1
2-Methylphenol	95-48-7	100000	a UG/KG	6.6	U	1	940	U	5	57	U	10	5.6	U	1
2-Nitroaniline	88-74-4	- -	UG/KG	69	U	1	1800	U	5	600	U	10	59	U	1
2-Nitrophenol	88-75-5	- -	UG/KG	9.8	U	1	940	U	5	85	U	10	8.4	U	1
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG	190	U	1	940	U	5	1600	U	10	160	U	1
3-Nitroaniline	99-09-2	- -	UG/KG	49	U	1	1800	U	5	430	U	10	42	U	1
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG	74	U	1	1800	U	5	640	U	10	63	U	1
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG	68	U	1	940	U	5	590	U	10	58	U	1
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG	8.8	U	1	940	U	5	77	U	10	7.5	U	1
4-Chloroaniline	106-47-8	- -	UG/KG	63	U	1	940	U	5	550	U	10	54	U	1
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG	4.6	U	1	940	U	5	40	U	10	3.9	U	1
4-Methylphenol	106-44-5	100000	a UG/KG	12	U	1	1800	U,UJ	5	100	U	10	10	U,UJ	1
4-Nitroaniline	100-01-6	- -	UG/KG	24	U	1	1800	U	5	210	U	10	20	U	1
4-Nitrophenol	100-02-7	- -	UG/KG	52	U	1	1800	U	5	450	U	10	44	U	1
Acenaphthene	83-32-9	100000	a UG/KG	2.5	U	1	130	J	5	22	U	10	2.2	U	1
Acenaphthylene	208-96-8	100000	a UG/KG	1.8	U	1	940	U	5	15	U	10	1.5	U	1
Acetophenone	98-86-2	- -	UG/KG	11	U	1	940	U	5	96	U	10	9.4	U	1
Anthracene	120-12-7	100000	a UG/KG	5.5	U	1	190	J	5	48	U	10	4.7	U	1
Atrazine	1912-24-9	- -	UG/KG	9.6	U	1	940	U,L4	5	83	U	10	8.2	U	1
Benzaldehyde	100-52-7	- -	UG/KG	24	U	1	940	U	5	200	U	10	20	U	1
Benzo(a)anthracene	56-55-3	1000	f UG/KG	3.7	U	1	310	J	5	260	J	10	3.2	U	1
Benzo(a)pyrene	50-32-8	1000	f UG/KG	5.2	U	1	230	J	5	180	J	10	4.4	U	1
Benzo(b)fluoranthene	205-99-2	1000	f UG/KG	4.2	U	1	340	J	5	330	J	10	3.6	U	1
Benzo(g,h,i)perylene	191-24-2	100000	a UG/KG	2.6	U	1	120	J	5	160	J	10	2.2	U	1
Benzo(k)fluoranthene	207-08-9	3900	- UG/KG	2.4	U	1	140	J	5	21	U	10	2.0	U	1
Biphenyl	92-52-4	- -	UG/KG	13	U	1	86	J	5	120	U	10	11	U	1
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG	12	U	1	940	U	5	100	U	10	10	U	1
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG	19	U	1	940	U	5	160	U	10	16	U	1
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG	22	U	1	940	U	5	190	U	10	19	U,UJ	1
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG	69	U	1	940	U	5	600	U	10	59	U	1
Butylbenzylphthalate	85-68-7	- -	UG/KG	58	U	1	940	U	5	500	U	10	49	U	1
Caprolactam	105-60-2	- -	UG/KG	93	U	1	940	U	5	810	U	10	79	U	1
Carbazole	86-74-8	- -	UG/KG	2.5	U	1	940	U	5	22	U	10	2.1	U	1
Chrysene	218-01-9	3900	- UG/KG	2.2	U	1	370	J	5	240	J	10	1.8	U	1
Dibenzo(a,h)anthracene	53-70-3	330	e UG/KG	2.5	U	1	940	U	5	22	U	10	2.2	U	1
Dibenzofuran	132-64-9	- -	UG/KG	2.2	U	1	940	U	5	19	U	10	1.9	U	1
Diethylphthalate	84-66-2	- -	UG/KG	6.5	U	1	940	U	5	56	U	10	5.5	U	1
Dimethyl phthalate	131-11-3	- -	UG/KG	5.6	U	1	940	U	5	49	U	10	4.8	U	1
Di-n-butylphthalate	84-74-2	- -	UG/KG	74	U	1	940	U	5	640	U	10	63	U	1
Di-n-octylphthalate	117-84-0	- -	UG/KG	5.0	U	1	940	U	5	44	U	10	4.3	U	1
Fluoranthene	206-44-0	100000	a UG/KG	3.1	U	1	780	J	5	360	J	10	2.7	U	1
Fluorene	86-73-7	100000	a UG/KG	5.0	U	1	180	J	5	43	U	10	4.2	U	1
Hexachlorobenzene	118-74-1	- -	UG/KG	11	U	1	940	U	5	93	U	10	9.1	U	1
Hexachlorobutadiene	87-68-3	- -	UG/KG	11	U	1	940	U	5	95	U	10	9.4	U	1
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG	65	U	1	940	U	5	560	U	10	55	U	1
Hexachloroethane	67-72-1	- -	UG/KG	17	U	1	940	U	5	140	U	10	14	U	1
Indeno(1,2,3-cd)pyrene	193-39-5	500	- UG/KG	6.0	U	1	100	J	5	130	J	10	5.1	U	1
Isophorone	78-59-1	- -	UG/KG	11	U	1	940	U	5	93	U	10	9.2	U	1
Naphthalene	91-20-3	100000	a UG/KG	3.6	U	1	1300		5	31	U	10	3.1	U	1
Nitrobenzene	98-95-3	- -	UG/KG	9.5	U	1	940	U	5	83	U	10	8.1	U	1
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG	17	U	1	940	U	5	150	U	10	15	U	1
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG	12	U	1	940	U,L	5	100	U	10	10	U	1
Pentachlorophenol	87-86-5	6700	- UG/KG	74	U	1	1800	U	5	640	U	10	63	U	1
Phenanthrene	85-01-8	100000	a UG/KG	4.5	U	1	840	J	5	250	J	10	3.8	U	1
Phenol	108-95-2	100000	a UG/KG	23	U	1	940	U	5	200	U	10	19	U	1
Pyrene	129-00-0	100000	a UG/KG	1.4	U	1	610	J	5	350	J	10	1.2	U	1
TOTAL DETECTABLE				**0**			**11326**			**2260**			**0**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

	SAMPLE ID:	SB-14 (15.5-16.5)			SB-16 (15-16)			SB-15 (11-12)			SB-20 (14-15)		
	LAB ORDER:	480-60100-1			480-60100-2			480-60100-3			480-60100-4		
	SAMPLE DATE:	5/14/14 9:10			5/14/14 9:35			5/14/14 10:00			5/14/14 10:35		
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)	CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG	40	U	1	42	U	1	200	U	5	40	U	1
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG	12	U	1	13	U	1	61	U	5	12	U	1
2,4-Dichlorophenol	120-83-2	- -	UG/KG	9.7	U	1	10	U	1	48	U	5	9.6	U	1
2,4-Dimethylphenol	105-67-9	- -	UG/KG	50	U	1	52	U	1	250	U	5	50	U	1
2,4-Dinitrophenol	51-28-5	- -	UG/KG	65	U	1	67	U	1	320	U	5	64	U	1
2,4-Dinitrotoluene	121-14-2	- -	UG/KG	29	U	1	30	U	1	140	U	5	28	U	1
2,6-Dinitrotoluene	606-20-2	- -	UG/KG	45	U	1	47	U	1	220	U	5	45	U	1
2-Chloronaphthalene	91-58-7	- -	UG/KG	12	U	1	13	U	1	62	U	5	12	U	1
2-Chlorophenol	95-57-8	- -	UG/KG	9.4	U	1	9.8	U	1	47	U	5	9.3	U	1
2-Methylnaphthalene	91-57-6	- -	UG/KG	2.2	U	1	2.3	U	1	11	U	5	2.2	J	1
2-Methylphenol	95-48-7	100000	a UG/KG	5.7	U	1	5.9	U	1	28	U	5	5.6	U	1
2-Nitroaniline	88-74-4	- -	UG/KG	60	U	1	62	U	1	290	U	5	59	U	1
2-Nitrophenol	88-75-5	- -	UG/KG	8.5	U	1	8.8	U	1	42	U	5	8.4	U	1
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG	160	U	1	170	U	1	800	U	5	160	U	1
3-Nitroaniline	99-09-2	- -	UG/KG	43	U	1	44	U	1	210	U	5	42	U	1
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG	64	U	1	66	U	1	320	U	5	63	U	1
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG	59	U	1	61	U	1	290	U	5	58	U	1
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG	7.6	U	1	7.9	U	1	38	U	5	7.5	U	1
4-Chloroaniline	106-47-8	- -	UG/KG	54	U	1	56	U	1	270	U	5	54	U	1
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG	4.0	U	1	4.1	U	1	20	U	5	3.9	U	1
4-Methylphenol	106-44-5	100000	a UG/KG	10	U	1	11	U	1	51	U	5	10	U	1
4-Nitroaniline	100-01-6	- -	UG/KG	21	U	1	21	U	1	100	U	5	20	U	1
4-Nitrophenol	100-02-7	- -	UG/KG	45	U	1	47	U	1	220	U	5	44	U	1
Acenaphthene	83-32-9	100000	a UG/KG	2.2	U	1	2.3	U	1	11	U	5	2.2	J	1
Acenaphthylene	208-96-8	100000	a UG/KG	1.5	U	1	1.6	U	1	7.5	U	5	1.5	J	1
Acetophenone	98-86-2	- -	UG/KG	9.5	U	1	9.9	U	1	47	U	5	9.4	U	1
Anthracene	120-12-7	100000	a UG/KG	4.8	J	1	4.9	U	1	23	U	5	4.7	J	1
Atrazine	1912-24-9	- -	UG/KG	8.3	U	1	8.6	U	1	41	U	5	8.2	U	1
Benzaldehyde	100-52-7	- -	UG/KG	20	U	1	21	U	1	100	U	5	20	U	1
Benzo(a)anthracene	56-55-3	1000	f UG/KG	3.2	U	1	3.3	U	1	16	U	5	3.2		1
Benzo(a)pyrene	50-32-8	1000	f UG/KG	4.5	U	1	4.6	U	1	22	U	5	4.4		1
Benzo(b)fluoranthene	205-99-2	1000	f UG/KG	3.6	U	1	3.7	U	1	18	U	5	3.6		1
Benzo(g,h,i)perylene	191-24-2	100000	a UG/KG	2.2	U	1	2.3	U	1	11	U	5	2.2		1
Benzo(k)fluoranthene	207-08-9	3900	- UG/KG	2.0	U	1	2.1	U	1	10	U	5	2.0	J	1
Biphenyl	92-52-4	- -	UG/KG	12	U	1	12	U	1	57	U	5	11	U	1
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG	10	U	1	10	U	1	50	U	5	10	U	1
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG	16	U	1	17	U	1	79	U	5	16	U	1
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG	19	U	1	20	U	1	96	U	5	19	U	1
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG	60	U	1	62	U	1	300	U	5	59	U	1
Butylbenzylphthalate	85-68-7	- -	UG/KG	50	U	1	52	U	1	250	U	5	49	U	1
Caprolactam	105-60-2	- -	UG/KG	80	U	1	83	U	1	400	U	5	79	U	1
Carbazole	86-74-8	- -	UG/KG	2.1	U	1	2.2	U	1	11	U	5	2.1	J	1
Chrysene	218-01-9	3900	- UG/KG	1.9	U	1	1.9	U	1	9.2	U	5	1.8		1
Dibenzo(a,h)anthracene	53-70-3	330	e UG/KG	2.2	U	1	2.3	U	1	11	U	5	2.2	U	1
Dibenzofuran	132-64-9	- -	UG/KG	1.9	U	1	2.0	U	1	9.5	U	5	1.9	J	1
Diethylphthalate	84-66-2	- -	UG/KG	5.6	U	1	5.8	U	1	28	U	5	5.5	U	1
Dimethyl phthalate	131-11-3	- -	UG/KG	4.8	U	1	5.0	U	1	24	U	5	4.8	U	1
Di-n-butylphthalate	84-74-2	- -	UG/KG	64	U	1	66	U	1	320	U	5	63	U	1
Di-n-octylphthalate	117-84-0	- -	UG/KG	4.3	U	1	4.5	U	1	21	U	5	4.3	U	1
Fluoranthene	206-44-0	100000	a UG/KG	2.7	J	1	2.8	J	1	13	U	5	2.7		1
Fluorene	86-73-7	100000	a UG/KG	4.3	U	1	4.4	U	1	21	U	5	4.2	J	1
Hexachlorobenzene	118-74-1	- -	UG/KG	9.2	U	1	9.5	U	1	46	U	5	9.1	U	1
Hexachlorobutadiene	87-68-3	- -	UG/KG	9.5	U	1	9.8	U	1	47	U	5	9.4	U	1
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG	56	U	1	58	U	1	280	U	5	55	U	1
Hexachloroethane	67-72-1	- -	UG/KG	14	U	1	15	U	1	71	U	5	14	U	1
Indeno(1,2,3-cd)pyrene	193-39-5	500	- UG/KG	5.1	U	1	5.3	U	1	25	U	5	5.1		1
Isophorone	78-59-1	- -	UG/KG	9.3	U	1	9.6	U	1	46	U	5	9.2	U	1
Naphthalene	91-20-3	100000	a UG/KG	3.1	U	1	3.2	U	1	15	U	5	3.1	U	1
Nitrobenzene	98-95-3	- -	UG/KG	8.2	U	1	8.5	U	1	41	U	5	8.1	U	1
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG	15	U	1	15	U	1	73	U	5	15	U	1
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG	10	U	1	11	U	1	50	U	5	10	U	1
Pentachlorophenol	87-86-5	6700	- UG/KG	64	U	1	66	U	1	310	U	5	63	U	1
Phenanthrene	85-01-8	100000	a UG/KG	3.9	J	1	4.0	U	1	19	U	5	3.8		1
Phenol	108-95-2	100000	a UG/KG	20	U	1	20	U	1	97	U	5	19	U	1
Pyrene	129-00-0	100000	a UG/KG	1.2	J	1	1.2	J	1	5.9	U	5	1.2		1
TOTAL DETECTABLE				**0**			**0**			**0**			**0**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential			SAMPLE ID:	SB-19 (14-15)			SB-17 (14-16)			SB-18 (4-5)			OFFSITE- SB-21 (10-12)	
			LAB ORDER:	480-60100-5			480-60100-6			480-60100-7			480-60100-12	
			SAMPLE DATE:	5/14/14 11:05			5/14/14 11:40			5/14/14 11:55			5/15/14 13:00	
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)	CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG	40	U	1	40	U	1	450	U	10	44	U 1
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG	12	U	1	12	U	1	140	U	10	13	U 1
2,4-Dichlorophenol	120-83-2	- -	UG/KG	9.6	U	1	9.7	U	1	110	U	10	10	U 1
2,4-Dimethylphenol	105-67-9	- -	UG/KG	50	U	1	50	U	1	560	U	10	54	U 1
2,4-Dinitrophenol	51-28-5	- -	UG/KG	64	U	1	65	U	1	730	U	10	70	U 1
2,4-Dinitrotoluene	121-14-2	- -	UG/KG	28	U	1	29	U	1	320	U	10	31	U 1
2,6-Dinitrotoluene	606-20-2	- -	UG/KG	45	U	1	45	U	1	510	U	10	49	U 1
2-Chloronaphthalene	91-58-7	- -	UG/KG	12	U	1	12	U	1	140	U	10	13	U 1
2-Chlorophenol	95-57-8	- -	UG/KG	9.3	U	1	9.4	U	1	110	U	10	10	U 1
2-Methylnaphthalene	91-57-6	- -	UG/KG	2.2	J	1	2.2		1	25	J	10	2.4	U 1
2-Methylphenol	95-48-7	100000	a UG/KG	5.6	U	1	5.7	U	1	64	U	10	6.1	U 1
2-Nitroaniline	88-74-4	- -	UG/KG	59	U	1	59	U	1	670	U	10	64	U 1
2-Nitrophenol	88-75-5	- -	UG/KG	8.4	U	1	8.5	U	1	95	U	10	9.1	U 1
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG	160	U	1	160	U	1	1800	U	10	180	U 1
3-Nitroaniline	99-09-2	- -	UG/KG	42	U	1	43	U	1	480	U	10	46	U 1
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG	63	U	1	64	U	1	720	U	10	69	U 1
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG	58	U	1	59	U	1	660	U	10	64	U 1
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG	7.5	U	1	7.6	U	1	85	U	10	8.2	U 1
4-Chloroaniline	106-47-8	- -	UG/KG	54	U	1	54	U	1	610	U	10	59	U 1
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG	3.9	U	1	3.9	U	1	44	U	10	4.3	U 1
4-Methylphenol	106-44-5	100000	a UG/KG	10	U	1	10	U	1	120	U	10	11	U 1
4-Nitroaniline	100-01-6	- -	UG/KG	20	U	1	21	U	1	230	U	10	22	U 1
4-Nitrophenol	100-02-7	- -	UG/KG	44	U	1	45	U	1	500	U	10	48	U 1
Acenaphthene	83-32-9	100000	a UG/KG	2.2	U	1	2.2	U	1	24	U	10	2.3	U 1
Acenaphthylene	208-96-8	100000	a UG/KG	1.5	U	1	1.5	U	1	17	U	10	1.6	U 1
Acetophenone	98-86-2	- -	UG/KG	9.4	U	1	9.5	U	1	110	U	10	10	U 1
Anthracene	120-12-7	100000	a UG/KG	4.7	U	1	4.7	U	1	53	J	10	5.1	U 1
Atrazine	1912-24-9	- -	UG/KG	8.2	U	1	8.2	U	1	92	U	10	8.9	U 1
Benzaldehyde	100-52-7	- -	UG/KG	20	U	1	20	U	1	230	U	10	22	U 1
Benzo(a)anthracene	56-55-3	1000	f UG/KG	3.2	U	1	3.2	U	1	36	J	10	3.4	U 1
Benzo(a)pyrene	50-32-8	1000	f UG/KG	4.4	U	1	4.5	U	1	50	J	10	4.8	U 1
Benzo(b)fluoranthene	205-99-2	1000	f UG/KG	3.6	U	1	3.6	U	1	40	J	10	3.9	U 1
Benzo(g,h,i)perylene	191-24-2	100000	a UG/KG	2.2	U	1	2.2	U	1	25	J	10	2.4	U 1
Benzo(k)fluoranthene	207-08-9	3900	- UG/KG	2.0	U	1	2.0	U	1	23	J	10	2.2	U 1
Biphenyl	92-52-4	- -	UG/KG	11	U	1	12	U	1	130	U	10	12	U 1
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG	10	U	1	10	U	1	110	U	10	11	U 1
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG	16	U	1	16	U	1	180	U	10	17	U 1
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG	19	U	1	19	U	1	220	U	10	21	U 1
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG	59	U	1	60	U	1	670	U	10	64	U 1
Butylbenzylphthalate	85-68-7	- -	UG/KG	49	U	1	50	U	1	560	U	10	54	U 1
Caprolactam	105-60-2	- -	UG/KG	79	U	1	80	U	1	900	U	10	86	U 1
Carbazole	86-74-8	- -	UG/KG	2.1	U	1	2.1	U	1	24	U	10	2.3	U 1
Chrysene	218-01-9	3900	- UG/KG	1.8	U	1	1.9	U	1	21	J	10	2.0	U 1
Dibenzo(a,h)anthracene	53-70-3	330	e UG/KG	2.2	U	1	2.2	U	1	24	U	10	2.3	U 1
Dibenzofuran	132-64-9	- -	UG/KG	1.9	U	1	1.9	U	1	22	U	10	2.1	U 1
Diethylphthalate	84-66-2	- -	UG/KG	5.5	U	1	5.6	U	1	63	U	10	6.0	U 1
Dimethyl phthalate	131-11-3	- -	UG/KG	4.8	U	1	4.8	U	1	54	U	10	5.2	U 1
Di-n-butylphthalate	84-74-2	- -	UG/KG	63	U	1	64	U	1	720	U	10	69	U 1
Di-n-octylphthalate	117-84-0	- -	UG/KG	4.3	U	1	4.3	U	1	48	U	10	4.7	U 1
Fluoranthene	206-44-0	100000	a UG/KG	2.7	U	1	2.7	U	1	30	J	10	2.9	U 1
Fluorene	86-73-7	100000	a UG/KG	4.2	U	1	4.3	J	1	48	U	10	4.6	U 1
Hexachlorobenzene	118-74-1	- -	UG/KG	9.1	U	1	9.2	U	1	100	U	10	9.9	U 1
Hexachlorobutadiene	87-68-3	- -	UG/KG	9.4	U	1	9.5	U	1	110	U	10	10	U 1
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG	55	U	1	56	U	1	630	U	10	60	U 1
Hexachloroethane	67-72-1	- -	UG/KG	14	U	1	14	U	1	160	U	10	15	U 1
Indeno(1,2,3-cd)pyrene	193-39-5	500	- UG/KG	5.1	U	1	5.1	U	1	57	J	10	5.5	U 1
Isophorone	78-59-1	- -	UG/KG	9.2	U	1	9.2	U	1	100	U	10	10	U 1
Naphthalene	91-20-3	100000	a UG/KG	3.1	J	1	3.1	U	1	35	U	10	3.3	U 1
Nitrobenzene	98-95-3	- -	UG/KG	8.1	U	1	8.2	U	1	92	U	10	8.9	U 1
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG	15	U	1	15	U	1	160	U	10	16	U 1
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG	10	U	1	10	U	1	110	U	10	11	U 1
Pentachlorophenol	87-86-5	6700	- UG/KG	63	U	1	63	U	1	710	U	10	68	U 1
Phenanthrene	85-01-8	100000	a UG/KG	3.8	U	1	3.9	J	1	44	J	10	4.2	U 1
Phenol	108-95-2	100000	a UG/KG	19	U	1	19	U	1	220	U	10	21	U 1
Pyrene	129-00-0	100000	a UG/KG	1.2	U	1	1.2	U	1	13	J	10	1.3	U 1
TOTAL DETECTABLE				**0**			**0**			**0**			**0**	

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

				1030ED-SB-01 (12-16)			1030ED-SB-02 (12-15)			1030ED-SB-03 (12-16)			1030ED-SB-04 (12-17)		
SAMPLE ID:				RSK0600-07			RSK0845-01			RSK0726-06			RSK0726-04		
LAB ORDER:				11/11/2009 14:50			11/17/2009 10:30			11/13/2009 11:00			11/13/2009 15:15		
SAMPLE DATE:															
METALS (EPA METHOD 6010B)	CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	- -	MG/KG	7380	J	1	4570		1	5330	J	1	4650	J	1
Antimony	7440-36-0	- -	MG/KG	0.6	U,UJ	1	17.5	U	1	0.6	U,UJ	1	0.6	U,UJ	1
Arsenic	7440-38-2	16 -	MG/KG	5.1		1	5.5		1	7.5		1	3.7		1
Barium	7440-39-3	400 -	MG/KG	49.8	J	1	17.3		1	21.2	J	1	21.4	J	1
Beryllium	7440-41-7	72 -	MG/KG	0.317		1	0.215	J	1	0.240		1	0.236		1
Cadmium	7440-43-9	4.3 -	MG/KG	0.255		1	0.246		1	0.137	J	1	0.075	J	1
Calcium	7440-70-2	- -	MG/KG	8120	J	1	33600		1	5230	J	1	57600	J	1
Chromium	18540-29-9	110 -	MG/KG	11.8		1	5.92		1	6.71		1	6.52		1
Cobalt	7440-48-4	- -	MG/KG	6.12		1	4.63		1	6.17		1	4.26		1
Copper	7440-50-8	270 -	MG/KG	47.0	B	1	16.1	B	1	17.8		1	20.0		1
Iron	7439-89-6	- -	MG/KG	20800		1	11900		1	18600	J	1	12600	J	1
Lead	7439-92-1	400 -	MG/KG	13.3	J	1	3.5		1	5.2	B,J	1	7.7	B,J	1
Magnesium	7439-95-4	- -	MG/KG	5380	J	1	4830		1	2790	J	1	6550	J	1
Manganese	7439-96-5	2000 -	MG/KG	1180	B,J	1	472	B	1	480	J	1	816	J	1
Total Mercury	7439-97-6	0.81 -	MG/KG	0.0278	J,UJ	1	0.0225	U	1	0.0101	U,J,UJ	1	0.0088	U,J,UJ	1
Nickel	7440-02-0	310 -	MG/KG	14.7		1	9.43		1	13.2		1	9.52		1
Potassium	7440-09-7	- -	MG/KG	1060	J	1	935		1	833	J	1	974	J	1
Selenium	7782-49-2	180 -	MG/KG	0.7	U	1	4.7	U	1	0.7	U	1	0.7	U	1
Silver	7440-22-4	180 -	MG/KG	0.080	U	1	0.582	U	1	0.080	U	1	0.078	U	1
Sodium	7440-23-5	- -	MG/KG	109	J	1	299		1	187		1	75.8	J	1
Thallium	7440-28-0	- -	MG/KG	0.3	U	1	1.8	J	1	0.3	U	1	0.3	U	1
Vanadium	7440-62-2	- -	MG/KG	13.6		1	8.31		1	10.2		1	8.78		1
Zinc	7440-66-6	10000 -	MG/KG	57.6	B	1	43.6	B	1	33.6		1	29.4		1
TOTAL DETECTABLE			**MG/KG**	**44,248.62**			**56,722.55**			**33,571.96**			**83,377.39**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

				1030ED-SB-05 (12-16.8)			1030ED-SB-06 (12-16)			1030ED-BLIND DUPLICATE			1030ED-SB-07 (8-12)		
			SAMPLE ID:	RSK0786-03			RSK0600-09			RSK0600-10			RSK0726-03		
			LAB ORDER:												
			SAMPLE DATE:	11/16/2009 16:15			11/11/2009 16:55			11/11/2009 00:00			11/13/2009 11:50		
METALS (EPA METHOD 6010B)	CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	- -	MG/KG	4410		1	5720	J	1	5380	J	1	5390	J	1
Antimony	7440-36-0	- -	MG/KG	16.4	U	1	0.6	U,UJ	1	0.6	U,UJ	1	0.6	U,UJ	1
Arsenic	7440-38-2	16 -	MG/KG	6.9		1	3.5		1	3.6		1	4.1		1
Barium	7440-39-3	400 -	MG/KG	22.0		1	21.5	J	1	19.3	J	1	34.4	J	1
Beryllium	7440-41-7	72 -	MG/KG	0.185	J	1	0.272		1	0.272		1	0.284		1
Cadmium	7440-43-9	4.3 -	MG/KG	0.125	J	1	0.088	J	1	0.088	J	1	0.131	J	1
Calcium	7440-70-2	- -	MG/KG	49100		1	32800	J	1	48000	J	1	7570	J	1
Chromium	18540-29-9	110 -	MG/KG	8.98		1	8.50		1	7.98		1	8.76		1
Cobalt	7440-48-4	- -	MG/KG	5.18		1	4.80		1	4.66		1	4.68		1
Copper	7440-50-8	270 -	MG/KG	21.9	B	1	19.5	B	1	18.9	B	1	57.3		1
Iron	7439-89-6	- -	MG/KG	13600		1	14100	J	1	13500	J	1	13200	J	1
Lead	7439-92-1	400 -	MG/KG	11.1		1	6.0	J	1	4.5	J	1	22.5	B,J	1
Magnesium	7439-95-4	- -	MG/KG	7610		1	4160	J	1	5040	J	1	2440	J	1
Manganese	7439-96-5	2000 -	MG/KG	1160	B	1	472	B,J	1	474	B,J	1	337	J	1
Total Mercury	7439-97-6	0.81 -	MG/KG	0.0098	J	1	0.0093	U,J,UJ	1	0.0096	U,J,UJ	1	0.0138	J,UJ	1
Nickel	7440-02-0	310 -	MG/KG	9.93		1	11.1		1	10.6		1	11.3		1
Potassium	7440-09-7	- -	MG/KG	645		1	1000	J	1	986	J	1	717	J	1
Selenium	7782-49-2	180 -	MG/KG	4.4	U	1	0.7	U	1	0.6	U	1	0.6	U	1
Silver	7440-22-4	180 -	MG/KG	0.548	U	1	0.084	U	1	0.076	U	1	0.077	U	1
Sodium	7440-23-5	- -	MG/KG	96.6	J	1	40.9	J	1	33.8	U	1	51.0	J	1
Thallium	7440-28-0	- -	MG/KG	2.3	J	1	0.4	U	1	0.3	U	1	0.3	U	1
Vanadium	7440-62-2	- -	MG/KG	8.81		1	9.93		1	9.46		1	9.91		1
Zinc	7440-66-6	10000 -	MG/KG	31.8	B	1	33.6	B	1	30.9	B	1	53.6		1
TOTAL DETECTABLE			**MG/KG**	**76,750.82**			**58,411.69**			**73,490.26**			**29,911.98**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

				1030ED-SB-08 (14.5-17.7)			1030ED-SB-08 (22.5-26.5)			1030ED-SB-09 (8-9.5)			1030ED-SB-10 (6-11.2)		
SAMPLE ID:				RSK0786-01			RSK0786-02			RSK0681-03			RSK0681-04		
LAB ORDER:															
SAMPLE DATE:				11/16/2009 10:30			11/16/2009 11:30			11/12/2009 11:45			11/12/2009 14:00		
METALS (EPA METHOD 6010B)	CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	- -	MG/KG	4620		1	5190		1	10400	J	1	10400	J	1
Antimony	7440-36-0	- -	MG/KG	16.9	U	1	16.3	U	1	0.6	U,UJ	1	0.6	U,UJ	1
Arsenic	7440-38-2	16	- MG/KG	5.2		1	7.5		1	4.9		1	5.4		1
Barium	7440-39-3	400	- MG/KG	20.2		1	26.4		1	64.0	J	1	65.7	J	1
Beryllium	7440-41-7	72	- MG/KG	0.184	J	1	0.244		1	0.441		1	0.431		1
Cadmium	7440-43-9	4.3	- MG/KG	0.160	J	1	0.192	J	1	0.334		1	0.445		1
Calcium	7440-70-2	- -	MG/KG	65100		1	99600	D08	5	13000	J	1	4020	J	1
Chromium	18540-29-9	110	- MG/KG	12.7		1	7.76		1	14.4		1	11.6		1
Cobalt	7440-48-4	- -	MG/KG	4.30		1	5.77		1	7.02		1	6.71		1
Copper	7440-50-8	270	- MG/KG	25.0	B	1	30.6	B	1	54.3		1	43.9		1
Iron	7439-89-6	- -	MG/KG	12500		1	14500		1	22100	B,J	1	23700	B,J	1
Lead	7439-92-1	400	- MG/KG	3.4		1	4.7		1	49.4	J	1	24.2	J	1
Magnesium	7439-95-4	- -	MG/KG	5510		1	19400		1	3670	B,J	1	3590	B,J	1
Manganese	7439-96-5	2000	- MG/KG	493	B	1	570	B	1	1170	B,J	1	1580	B,J	1
Total Mercury	7439-97-6	0.81	- MG/KG	0.0212	U	1	0.0226	U	1	0.152	J,UJ	1	0.0624	J,UJ	1
Nickel	7440-02-0	310	- MG/KG	9.11		1	10.7		1	15.7		1	15.5		1
Potassium	7440-09-7	- -	MG/KG	941		1	1250		1	744	J	1	939	J	1
Selenium	7782-49-2	180	- MG/KG	4.5	U	1	4.3	U	1	0.6	U	1	0.6	U	1
Silver	7440-22-4	180	- MG/KG	0.564	U	1	0.543	U	1	0.072	U	1	0.074	U	1
Sodium	7440-23-5	- -	MG/KG	93.6	J	1	162		1	64.7	J	1	92.5	J	1
Thallium	7440-28-0	- -	MG/KG	1.7	J	1	1.7	J	1	0.3	U	1	0.3	U	1
Vanadium	7440-62-2	- -	MG/KG	8.30		1	9.33		1	16.3		1	16.8		1
Zinc	7440-66-6	10000	- MG/KG	33.9	B	1	33.4	B	1	80.0	B	1	67.6	B	1
TOTAL DETECTABLE			**MG/KG**	**89,381.75**			**140,810.30**			**51,455.65**			**44,579.85**		

TABLE 3
SUBSURFACE SOIL

				1030ED-SB-12 (8-14.2)			1030ED-MW-01 (12-16.2)			1030ED-MW-01 (21-22.9)			1030ED-MW-02 (8-13.9)		
Restricted Soil Cleanup Objectives (SCO) - Restricted Residential			SAMPLE ID:	RSK0681-05			RSK0845-02			RSK0845-03			RSK0893-01		
			LAB ORDER:												
			SAMPLE DATE:	11/12/2009 16:15			11/17/2009 13:30			11/17/2009 15:50			11/18/2009 12:30		
METALS (EPA METHOD 6010B)	CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	- -	MG/KG	8800	J	1	6570		1	5110		1	7000		1
Antimony	7440-36-0	- -	MG/KG	0.7	U,UJ	1	16.7	U	1	17.3	U	1	16.5	U	1
Arsenic	7440-38-2	16 -	MG/KG	4.2		1	7.2		1	6.5		1	7.9		1
Barium	7440-39-3	400 -	MG/KG	34.4	J	1	24.2		1	22.6		1	32.9		1
Beryllium	7440-41-7	72 -	MG/KG	0.368		1	0.279		1	0.232		1	0.299		1
Cadmium	7440-43-9	4.3 -	MG/KG	0.137	J	1	0.138	J	1	0.120	J	1	0.271		1
Calcium	7440-70-2	- -	MG/KG	1140	J	1	36500		1	88500	D08	5	28800		1
Chromium	18540-29-9	110 -	MG/KG	11.8		1	20.7		1	6.36		1	10.3		1
Cobalt	7440-48-4	- -	MG/KG	6.34		1	6.51		1	5.12		1	7.14		1
Copper	7440-50-8	270 -	MG/KG	32.4		1	28.8	B	1	23.8	B	1	32.3		1
Iron	7439-89-6	- -	MG/KG	20300	B	1	19200		1	16200		1	19000		1
Lead	7439-92-1	400 -	MG/KG	7.7	J	1	9.9		1	3.1		1	6.1		1
Magnesium	7439-95-4	- -	MG/KG	3750	B,J	1	4250		1	5290		1	4570	B	1
Manganese	7439-96-5	2000 -	MG/KG	893	B,J	1	774	B	1	545	B	1	1250	B	1
Total Mercury	7439-97-6	0.81 -	MG/KG	0.0386	J,UJ	1	0.0096	J	1	0.0218	U	1	0.0235		1
Nickel	7440-02-0	310 -	MG/KG	15.4		1	14.4		1	11.3		1	14.0		1
Potassium	7440-09-7	- -	MG/KG	786	J	1	1130		1	645		1	863		1
Selenium	7782-49-2	180 -	MG/KG	0.7	U	1	4.5	U	1	4.6	U	1	4.4	U	1
Silver	7440-22-4	180 -	MG/KG	0.086	U	1	0.558	U	1	0.576	U	1	0.550	U	1
Sodium	7440-23-5	- -	MG/KG	54.8	J	1	156		1	98.7	J	1	155		1
Thallium	7440-28-0	- -	MG/KG	0.4	U	1	2.5	J	1	2.6	J	1	2.4	J	1
Vanadium	7440-62-2	- -	MG/KG	13.8		1	12.6		1	8.73		1	12.6		1
Zinc	7440-66-6	10000 -	MG/KG	77.0	B	1	42.5	B	1	33.1	B	1	44.8		1
TOTAL DETECTABLE			**MG/KG**	**35,927.38**			**68,749.74**			**116,512.26**			**61,809.03**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

				1030ED-MW-03 (12-15.9)			1030ED-MW-04 (13-15)			1030ED-MW-05 (8-12)			1030ED-MW-06 (12-16)		
			SAMPLE ID:												
			LAB ORDER:	RSK0726-01			RSK0953-01			RSK0681-01			RSK0600-08		
			SAMPLE DATE:	11/13/2009 09:40			11/19/2009 11:45			11/12/2009 09:45			11/11/2009 15:55		
METALS (EPA METHOD 6010B)	CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	-	MG/KG	5430	J	1	5520		1	7150	J	1	11800	J	1
Antimony	7440-36-0	-	MG/KG	0.7	U,UJ	1	18.0	U	1	0.6	U,UJ	1	0.7	U,UJ	1
Arsenic	7440-38-2	16	MG/KG	4.5		1	5.9		1	3.4		1	4.6		1
Barium	7440-39-3	400	MG/KG	17.5	J	1	24.6		1	34.4	J	1	51.9	J	1
Beryllium	7440-41-7	72	MG/KG	0.257	J	1	0.326		1	0.308		1	0.472		1
Cadmium	7440-43-9	4.3	MG/KG	0.070	J	1	0.249		1	0.154	J	1	0.266		1
Calcium	7440-70-2	-	MG/KG	34500	J	1	91200	D08	5	9640	J	1	15700	J	1
Chromium	18540-29-9	110	MG/KG	6.84		1	7.58		1	9.61		1	22.5		1
Cobalt	7440-48-4	-	MG/KG	4.94		1	6.85		1	5.61		1	8.03		1
Copper	7440-50-8	270	MG/KG	18.5		1	25.2		1	55.9		1	41.7	B	1
Iron	7439-89-6	-	MG/KG	14100	J	1	17900		1	16200	B,J	1	30900	J	1
Lead	7439-92-1	400	MG/KG	4.1	B,J	1	5.6		1	10.9	J	1	13.8	J	1
Magnesium	7439-95-4	-	MG/KG	4080	J	1	9780	B	1	3130	B,J	1	5810	J	1
Manganese	7439-96-5	2000	MG/KG	533	J	1	1040	B	1	633	B,J	1	1020	B,J	1
Total Mercury	7439-97-6	0.81	MG/KG	0.0099	U,J,UJ	1	0.0209	U	1	0.0204	J,UJ	1	0.0092	U,J,UJ	1
Nickel	7440-02-0	310	MG/KG	11.4		1	12.7		1	12.9		1	20.1		1
Potassium	7440-09-7	-	MG/KG	1030	J	1	849		1	931	J	1	1250	J	1
Selenium	7782-49-2	180	MG/KG	0.8	U	1	4.8	U	1	0.6	U	1	0.7	U	1
Silver	7440-22-4	180	MG/KG	0.094	U	1	0.601	U	1	0.073	U	1	0.086	U	1
Sodium	7440-23-5	-	MG/KG	155	J	1	124	J	1	40.1	J	1	116	J	1
Thallium	7440-28-0	-	MG/KG	0.4	U	1	2.2	J	1	0.3	U	1	0.4	U	1
Vanadium	7440-62-2	-	MG/KG	9.58		1	9.88		1	12.1		1	19.0		1
Zinc	7440-66-6	10000	MG/KG	30.2		1	35.2		1	53.7	B	1	63.9	B	1
TOTAL DETECTABLE			**MG/KG**	**59,935.89**			**126,549.29**			**37,923.10**			**66,842.27**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential				SAMPLE ID:	SB-14 (15.5-16.5)			SB-16 (15-16)			SB-15 (11-12)			SB-20 (14-15)		
				LAB ORDER:	480-60100-1			480-60100-2			480-60100-3			480-60100-4		
				SAMPLE DATE:	5/14/14 9:10			5/14/14 9:35			5/14/14 10:00			5/14/14 10:35		
METALS (EPA METHOD 6010B)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	-	-	MG/KG												
Antimony	7440-36-0	-	-	MG/KG												
Arsenic	7440-38-2	16	-	MG/KG												
Barium	7440-39-3	400	-	MG/KG												
Beryllium	7440-41-7	72	-	MG/KG												
Cadmium	7440-43-9	4.3	-	MG/KG												
Calcium	7440-70-2	-	-	MG/KG												
Chromium	18540-29-9	110	-	MG/KG												
Cobalt	7440-48-4	-	-	MG/KG												
Copper	7440-50-8	270	-	MG/KG												
Iron	7439-89-6	-	-	MG/KG												
Lead	7439-92-1	400	-	MG/KG												
Magnesium	7439-95-4	-	-	MG/KG												
Manganese	7439-96-5	2000	-	MG/KG												
Total Mercury	7439-97-6	0.81	-	MG/KG												
Nickel	7440-02-0	310	-	MG/KG												
Potassium	7440-09-7	-	-	MG/KG												
Selenium	7782-49-2	180	-	MG/KG												
Silver	7440-22-4	180	-	MG/KG												
Sodium	7440-23-5	-	-	MG/KG												
Thallium	7440-28-0	-	-	MG/KG												
Vanadium	7440-62-2	-	-	MG/KG												
Zinc	7440-66-6	10000	-	MG/KG												
TOTAL DETECTABLE				**MG/KG**	**0.00**			**0.00**			**0.00**			**0.00**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential				SAMPLE ID:	**SB-19 (14-15)**			**SB-17 (14-16)**			**SB-18 (4-5)**			**OFFSITE- SB-21 (10-12)**	
				LAB ORDER:	480-60100-5			480-60100-6			480-60100-7			480-60100-12	
				SAMPLE DATE:	5/14/14 11:05			5/14/14 11:40			5/14/14 11:55			5/15/14 13:00	
METALS (EPA METHOD 6010B)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL
Aluminum	7429-90-5	-	-	MG/KG										5.7	
Antimony	7440-36-0	-	-	MG/KG										0.52	U
Arsenic	7440-38-2	16	-	MG/KG										0.52	B
Barium	7440-39-3	400	-	MG/KG										0.14	^
Beryllium	7440-41-7	72	-	MG/KG										0.036	
Cadmium	7440-43-9	4.3	-	MG/KG										0.039	J
Calcium	7440-70-2	-	-	MG/KG										4.3	B
Chromium	18540-29-9	110	-	MG/KG										0.26	
Cobalt	7440-48-4	-	-	MG/KG										0.064	
Copper	7440-50-8	270	-	MG/KG										0.27	
Iron	7439-89-6	-	-	MG/KG										1.4	^
Lead	7439-92-1	400	-	MG/KG										0.31	
Magnesium	7439-95-4	-	-	MG/KG										1.2	B
Manganese	7439-96-5	2000	-	MG/KG										0.041	^ B
Total Mercury	7439-97-6	0.81	-	MG/KG										0.0099	J
Nickel	7440-02-0	310	-	MG/KG										0.30	
Potassium	7440-09-7	-	-	MG/KG										25.8	
Selenium	7782-49-2	180	-	MG/KG										0.52	J B
Silver	7440-22-4	180	-	MG/KG										0.26	U
Sodium	7440-23-5	-	-	MG/KG										16.7	J
Thallium	7440-28-0	-	-	MG/KG										0.39	U
Vanadium	7440-62-2	-	-	MG/KG										0.14	
Zinc	7440-66-6	10000	-	MG/KG										0.20	
TOTAL DETECTABLE				**MG/KG**	**0.00**			**0.00**			**0.00**			**0.01**	

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

				1030ED-SB-01 (12-16)			1030ED-SB-02 (12-15)			1030ED-SB-03 (12-16)			1030ED-SB-04 (12-17)		
SAMPLE ID:				RSK0600-07			RSK0845-01			RSK0726-06			RSK0726-04		
LAB ORDER:				11/11/2009 14:50			11/17/2009 10:30			11/13/2009 11:00			11/13/2009 15:15		
SAMPLE DATE:															
PCBs (EPA METHOD 8080)	CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -	UG/KG	3.6	U	1	19	U	1	4.0	U	1	3.6	U	1
Aroclor 1221	11104-28-2	- -	UG/KG	3.6	U	1	19	U	1	4.0	U	1	3.6	U	1
Aroclor 1232	11141-16-5	- -	UG/KG	3.6	U	1	19	U	1	4.0	U	1	3.6	U	1
Aroclor 1242	53469-21-9	- -	UG/KG	4.0	U	1	19	U	1	4.5	U	1	4.0	U	1
Aroclor 1248	12672-29-6	- -	UG/KG	3.6	U	1	19	U	1	4.0	U	1	3.6	U	1
Aroclor 1254	11097-69-1	- -	UG/KG	3.9	U	1	19	U	1	4.3	U	1	3.9	U	1
Aroclor 1260	11096-82-5	- -	UG/KG	3.9	U	1	19	U	1	4.3	U	1	3.9	U	1
Aroclor 1262	37324-23-5	- -	UG/KG	3.9	U	1	19	U	1	4.4	U	1	3.9	U	1
Aroclor 1268	11100-14-4	- -	UG/KG	3.9	U	1	19	U	1	4.3	U	1	3.9	U	1
TOTAL DETECTABLE		**1,000**	**-** **UG/KG**	**0**			**0**			**0**			**0**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

				SAMPLE ID:	1030ED-SB-05 (12-16.8)			1030ED-SB-06 (12-16)			1030ED-BLIND DUPLICATE			1030ED-SB-07 (8-12)		
				LAB ORDER:	RSK0786-03			RSK0600-09			RSK0600-10			RSK0726-03		
				SAMPLE DATE:	11/16/2009 16:15			11/11/2009 16:55			11/11/2009 00:00			11/13/2009 11:50		
PCBs (EPA METHOD 8080)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -	UG/KG		18	U	1	3.6	U	1	3.7	U	1	3.6	U	1
Aroclor 1221	11104-28-2	- -	UG/KG		18	U	1	3.6	U	1	3.7	U	1	3.6	U	1
Aroclor 1232	11141-16-5	- -	UG/KG		18	U	1	3.6	U	1	3.7	U	1	3.6	U	1
Aroclor 1242	53469-21-9	- -	UG/KG		130		1	4.0	U,J	1	4.1	U	1	4.0	U	1
Aroclor 1248	12672-29-6	- -	UG/KG		98		1	3.6	U	1	3.7	U	1	3.6	U	1
Aroclor 1254	11097-69-1	- -	UG/KG		18	U	1	3.9	U	1	4.0	U	1	3.9	U	1
Aroclor 1260	11096-82-5	- -	UG/KG		31		1	3.9	U	1	4.0	U	1	7.3	J	1
Aroclor 1262	37324-23-5	- -	UG/KG		18	U	1	3.9	U	1	4.0	U	1	3.9	U	1
Aroclor 1268	11100-14-4	- -	UG/KG		18	U	1	3.9	U	1	4.0	U	1	3.9	U	1
TOTAL DETECTABLE		**1,000**	**-**	**UG/KG**	**259**			**0**			**0**			**7.3**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

				SAMPLE ID:	1030ED-SB-08 (14.5-17.7)			1030ED-SB-08 (22.5-26.5)			1030ED-SB-09 (8-9.5)			1030ED-SB-10 (6-11.2)		
				LAB ORDER:	RSK0786-01			RSK0786-02			RSK0681-03			RSK0681-04		
				SAMPLE DATE:	11/16/2009 10:30			11/16/2009 11:30			11/12/2009 11:45			11/12/2009 14:00		
PCBs (EPA METHOD 8080)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -	UG/KG		18	U	1	18	U	1	3.6	U	1	3.6	U	1
Aroclor 1221	11104-28-2	- -	UG/KG		18	U	1	18	U	1	3.6	U	1	3.6	U	1
Aroclor 1232	11141-16-5	- -	UG/KG		18	U	1	18	U	1	3.6	U	1	3.6	U	1
Aroclor 1242	53469-21-9	- -	UG/KG		18	U	1	18	U	1	4.0	U	1	4.0	U	1
Aroclor 1248	12672-29-6	- -	UG/KG		18	U	1	18	U	1	3.6	U	1	3.6	U	1
Aroclor 1254	11097-69-1	- -	UG/KG		18	U	1	18	U	1	3.9	U	1	11	J	1
Aroclor 1260	11096-82-5	- -	UG/KG		18	U	1	18	U	1	3.9	U	1	3.9	U	1
Aroclor 1262	37324-23-5	- -	UG/KG		18	U	1	18	U	1	3.9	U	1	3.9	U	1
Aroclor 1268	11100-14-4	- -	UG/KG		18	U	1	18	U	1	3.9	U	1	3.9	U	1
TOTAL DETECTABLE		**1,000**	**-**	**UG/KG**	**0**			**0**			**0**			**11**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

				SAMPLE ID:	1030ED-SB-12 (8-14.2)			1030ED-MW-01 (12-16.2)			1030ED-MW-01 (21-22.9)			1030ED-MW-02 (8-13.9)		
				LAB ORDER:	RSK0681-05			RSK0845-02			RSK0845-03			RSK0893-01		
				SAMPLE DATE:	11/12/2009 16:15			11/17/2009 13:30			11/17/2009 15:50			11/18/2009 12:30		
PCBs (EPA METHOD 8080)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -	UG/KG		3.9	U	1	18	U	1	18	U	1	19	U	1
Aroclor 1221	11104-28-2	- -	UG/KG		3.9	U	1	18	U	1	18	U	1	19	U	1
Aroclor 1232	11141-16-5	- -	UG/KG		3.9	U	1	18	U	1	18	U	1	19	U	1
Aroclor 1242	53469-21-9	- -	UG/KG		4.3	U	1	18	U	1	18	U	1	19	U	1
Aroclor 1248	12672-29-6	- -	UG/KG		3.9	U	1	18	U	1	18	U	1	19	U	1
Aroclor 1254	11097-69-1	- -	UG/KG		4.2	U	1	18	U	1	18	U	1	19	U	1
Aroclor 1260	11096-82-5	- -	UG/KG		4.2	U	1	18	U	1	18	U	1	19	U	1
Aroclor 1262	37324-23-5	- -	UG/KG		4.2	U	1	18	U	1	18	U	1	19	U	1
Aroclor 1268	11100-14-4	- -	UG/KG		4.2	U	1	18	U	1	18	U	1	19	U	1
TOTAL DETECTABLE		**1,000**	**-**	**UG/KG**	**0**			**0**			**0**			**0**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential

				1030ED-MW-03 (12-15.9)			1030ED-MW-04 (13-15)			1030ED-MW-05 (8-12)			1030ED-MW-06 (12-16)		
			SAMPLE ID:												
			LAB ORDER:	RSK0726-01			RSK0953-01			RSK0681-01			RSK0600-08		
			SAMPLE DATE:	11/13/2009 09:40			11/19/2009 11:45			11/12/2009 09:45			11/11/2009 15:55		
PCBs (EPA METHOD 8080)	CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -	UG/KG	4.2	U	1	18	U	1	3.6	U	1	3.5	U	1
Aroclor 1221	11104-28-2	- -	UG/KG	4.2	U	1	18	U	1	3.6	U	1	3.5	U	1
Aroclor 1232	11141-16-5	- -	UG/KG	4.2	U	1	18	U	1	3.6	U	1	3.5	U	1
Aroclor 1242	53469-21-9	- -	UG/KG	4.6	U	1	18	U	1	4.0	U	1	3.9	U	1
Aroclor 1248	12672-29-6	- -	UG/KG	4.2	U	1	18	U	1	3.6	U	1	3.5	U	1
Aroclor 1254	11097-69-1	- -	UG/KG	4.5	U	1	18	U	1	8.5	J	1	3.8	U	1
Aroclor 1260	11096-82-5	- -	UG/KG	4.5	U	1	18	U	1	3.9	J	1	3.8	U	1
Aroclor 1262	37324-23-5	- -	UG/KG	4.5	U	1	18	U	1	3.9	U	1	3.8	U	1
Aroclor 1268	11100-14-4	- -	UG/KG	4.5	U	1	18	U	1	3.9	U	1	3.8	U	1
TOTAL DETECTABLE		**1,000**	**-** **UG/KG**	**0**			**0**			**12.4**			**0**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential				SAMPLE ID:	SB-14 (15.5-16.5)			SB-16 (15-16)			SB-15 (11-12)			SB-20 (14-15)		
				LAB ORDER:	480-60100-1			480-60100-2			480-60100-3			480-60100-4		
				SAMPLE DATE:	5/14/14 9:10			5/14/14 9:35			5/14/14 10:00			5/14/14 10:35		
PCBs (EPA METHOD 8080)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -	UG/KG													
Aroclor 1221	11104-28-2	- -	UG/KG													
Aroclor 1232	11141-16-5	- -	UG/KG													
Aroclor 1242	53469-21-9	- -	UG/KG													
Aroclor 1248	12672-29-6	- -	UG/KG													
Aroclor 1254	11097-69-1	- -	UG/KG													
Aroclor 1260	11096-82-5	- -	UG/KG													
Aroclor 1262	37324-23-5	- -	UG/KG													
Aroclor 1268	11100-14-4	- -	UG/KG													
TOTAL DETECTABLE		**1,000**	**-**	**UG/KG**	**0**			**0**			**0**			**0**		

TABLE 3
SUBSURFACE SOIL

Restricted Soil Cleanup Objectives (SCO) - Restricted Residential				SAMPLE ID:	SB-19 (14-15)			SB-17 (14-16)			SB-18 (4-5)			OFFSITE- SB-21 (10-12)		
				LAB ORDER:	480-60100-5			480-60100-6			480-60100-7			480-60100-12		
				SAMPLE DATE:	5/14/14 11:05			5/14/14 11:40			5/14/14 11:55			5/15/14 13:00		
PCBs (EPA METHOD 8080)	CAS	RSCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	
Aroclor 1016	12674-11-2	- -	UG/KG											0.046	U	1
Aroclor 1221	11104-28-2	- -	UG/KG											0.046	U	1
Aroclor 1232	11141-16-5	- -	UG/KG											0.046	U	1
Aroclor 1242	53469-21-9	- -	UG/KG											0.046	U	1
Aroclor 1248	12672-29-6	- -	UG/KG											0.046	U	1
Aroclor 1254	11097-69-1	- -	UG/KG											0.11	U	1
Aroclor 1260	11096-82-5	- -	UG/KG											0.11	U	1
Aroclor 1262	37324-23-5	- -	UG/KG													
Aroclor 1268	11100-14-4	- -	UG/KG													
TOTAL DETECTABLE		**1,000**	**-**	**UG/KG**	**0**			**0**			**0**			**0**		

TABLE 4
GROUNDWATER

Part 703.5 Water Standard

				SAMPLE ID:	**1030ED-MW-1**			**1030ED-MW-2**			**1030ED-MW-3**		
				LAB ORDER:	RTB1060-01			RTB1060-04			RTB1060-05		
				SAMPLE DATE:	02/23/2010 11:47			02/23/2010 13:00			02/23/2010 14:00		
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	5	a	UG/L	0.26	U	1	0.26	U	1	0.26	U	1
1,1,2,2-Tetrachloroethane	79-34-5	5	a	UG/L	0.21	U	1	0.21	U	1	0.21	U	1
1,1,2-Trichloroethane	79-00-5	1	-	UG/L	0.23	U	1	0.23	U	1	0.23	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1	5	a	UG/L	0.31	U	1	0.31	U	1	0.31	U	1
1,1-Dichloroethane	75-34-3	5	a	UG/L	0.38	U	1	0.38	U	1	0.38	U	1
1,1-Dichloroethene	75-35-4	5	a	UG/L	0.29	U	1	0.29	U	1	0.29	U	1
1,2,4-Trichlorobenzene	120-82-1	5	b	UG/L	0.41	U	1	0.41	U	1	0.41	U	1
1,2-Dibromo-3-chloropropane	96-12-8	0.04	-	UG/L	0.39	U	1	0.39	U	1	0.39	U	1
1,2-Dibromoethane	106-93-4	5	-	UG/L	0.17	U	1	0.17	U	1	0.17	U	1
1,2-Dichlorobenzene	95-50-1	3	-	UG/L	0.2	U	1	0.2	U	1	0.2	U	1
1,2-Dichloroethane	107-06-2	0.6	-	UG/L	0.21	U	1	0.21	U	1	0.21	U	1
1,2-Dichloropropane	78-87-5	1	-	UG/L	0.32	U	1	0.32	U	1	0.32	U	1
1,3-Dichlorobenzene	541-73-1	3	-	UG/L	0.36	U	1	0.36	U	1	0.36	U	1
1,4-Dichlorobenzene	106-46-7	3	-	UG/L	0.39	U	1	0.39	U	1	0.39	U	1
2-Butanone	78-93-3	50	-	UG/L	1.3	U	1	1.3	U	1	1.3	U	1
2-Hexanone	591-78-6	50	-	UG/L	1.2	U	1	1.2	U	1	1.2	U	1
4-Methyl-2-pentanone	108-10-1	-	-	UG/L	0.91	U	1	0.91	U	1	0.91	U	1
Acetone	67-64-1	50	-	UG/L	1.3	U	1	1.3	U	1	1.3	U	1
Benzene	71-43-2	1	-	UG/L	0.41	U	1	0.41	U	1	0.41	U	1
Bromodichloromethane	75-27-4	-	-	UG/L	0.39	U	1	0.39	U	1	0.39	U	1
Bromoform	75-25-2	50	-	UG/L	0.26	U	1	0.26	U	1	0.26	U	1
Bromomethane	74-83-9	5	a	UG/L	0.28	U,UJ	1	0.28	U,UJ	1	0.28	U,UJ	1
Carbon Disulfide	75-15-0	60	-	UG/L	0.19	U	1	0.19	U	1	0.19	U	1
Carbon tetrachloride	56-23-5	5	-	UG/L	0.27	U	1	0.27	U	1	0.27	U	1
Chlorobenzene	108-90-7	5	a	UG/L	0.32	U	1	0.32	U	1	0.32	U	1
Chlorodibromomethane	124-48-1	50	-	UG/L	0.32	U	1	0.32	U	1	0.32	U	1
Chloroethane	75-00-3	5	a	UG/L	0.32	U	1	0.32	U	1	0.32	U	1
Chloroform	67-66-3	7	-	UG/L	3.4		1	1.3		1	0.34	U	1
Chloromethane	74-87-3	5	a	UG/L	0.35	U	1	0.35	U	1	0.35	U	1
cis-1,2-Dichloroethene	156-59-2	5	a	UG/L	0.38	U	1	0.38	U	1	0.38	U	1
cis-1,3-Dichloropropene	10061-01-5	0.4	-	UG/L	0.36	U	1	0.36	U	1	0.36	U	1
Cyclohexane	110-82-7	-	-	UG/L	0.53	U	1	0.53	U	1	0.53	U	1
Dichlorodifluoromethane	75-71-8	5	a	UG/L	0.29	U	1	0.29	U	1	0.29	U	1
Ethylbenzene	100-41-4	5	a	UG/L	0.18	U	1	0.18	U	1	0.18	U	1
Isopropylbenzene	98-82-8	5	a	UG/L	0.19	U	1	0.19	U	1	0.19	U	1
Methyl Acetate	79-20-9	-	-	UG/L	0.5	U	1	0.5	U	1	0.5	U	1
Methyl tert-butyl ether	1634-04-4	-	-	UG/L	0.16	U	1	0.16	U	1	0.16	U	1
Methylcyclohexane	108-87-2	-	-	UG/L	0.5	U	1	0.5	U	1	0.5	U	1
Methylene chloride	75-09-2	5	a	UG/L	0.44	U	1	0.44	U	1	0.44	U	1
Styrene	100-42-5	5	a	UG/L	0.18	U	1	0.18	U	1	0.18	U	1
Tetrachloroethene	127-18-4	5	a	UG/L	0.36	U	1	0.36	U	1	0.36	U	1
Toluene	108-88-3	5	a	UG/L	0.51	U	1	0.51	U	1	0.51	U	1
trans-1,2-Dichloroethene	156-60-5	5	a	UG/L	0.42	U	1	0.42	U	1	0.42	U	1
trans-1,3-Dichloropropene	10061-02-6	-	-	UG/L	0.37	U	1	0.37	U	1	0.37	U	1
Trichloroethene	79-01-6	5	a	UG/L	11		1	0.46	U	1	0.46	U	1
Trichlorofluoromethane	75-69-4	5	a	UG/L	0.15	U,L4,UJ	1	0.15	U,L4,UJ	1	0.15	U,L4,UJ	1
Vinyl chloride	75-01-4	2	-	UG/L	0.24	U	1	0.24	U	1	0.24	U	1
Xylene	1330-20-7	5	-	UG/L	0.66	U	1	0.66	U	1	0.66	U	1
TOTAL DETECTABLE				**UG/L**	**14.4**			**1.3**			**0**		

TABLE 4
GROUNDWATER

Part 703.5 Water Standard

				SAMPLE ID:	**1030ED-MW-4**			**1030ED-MW-5**			**1030ED-MW-07**			**1030ED-MW-08**		
				LAB ORDER:	RTB1060-06			RTB1060-07			480-60526-11			480-60526-12		
				SAMPLE DATE:	02/23/2010 13:35			02/23/2010 13:25			5/22/14 12:56 PM			5/22/14 12:25 PM		
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	5	a	UG/L	0.26	U	1	0.26	U	1	8.2	U	1	0.82	U	1
1,1,2,2-Tetrachloroethane	79-34-5	5	a	UG/L	0.21	U	1	0.21	U	1	2.1	U	1	0.21	U	1
1,1,2-Trichloroethane	79-00-5	1	-	UG/L	0.23	U	1	0.23	U	1	3.1	U	1	0.31	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1	5	a	UG/L	0.31	U	1	0.31	U	1	2.3	U	1	0.23	U	1
1,1-Dichloroethane	75-34-3	5	a	UG/L	0.38	U	1	0.38	U	1	3.8	U	1	0.38	U	1
1,1-Dichloroethene	75-35-4	5	a	UG/L	0.29	U	1	0.29	U	1	2.9	U	1	0.29	U	1
1,2,4-Trichlorobenzene	120-82-1	5	b	UG/L	0.41	U	1	0.41	U	1	4.1	U	1	0.41	U	1
1,2-Dibromo-3-chloropropane	96-12-8	0.04	-	UG/L	0.39	U	1	0.39	U	1	3.9	U	1	0.39	U	1
1,2-Dibromoethane	106-93-4	5	-	UG/L	0.17	U	1	0.17	U	1	7.3	U	1	0.73	U	1
1,2-Dichlorobenzene	95-50-1	3	-	UG/L	0.2	U	1	0.2	U	1	7.9	U	1	0.79	U	1
1,2-Dichloroethane	107-06-2	0.6	-	UG/L	0.21	U	1	0.21	U	1	2.1	U	1	0.21	U	1
1,2-Dichloropropane	78-87-5	1	-	UG/L	0.32	U	1	0.32	U	1	7.2	U	1	0.72	U	1
1,3-Dichlorobenzene	541-73-1	3	-	UG/L	0.36	U	1	0.36	U	1	7.8	U	1	0.78	U	1
1,4-Dichlorobenzene	106-46-7	3	-	UG/L	0.39	U	1	0.39	U	1	8.4	U	1	0.84	U	1
2-Butanone	78-93-3	50	-	UG/L	6.9		1	1.3	U	1	13	U	1	1.3	U	1
2-Hexanone	591-78-6	50	-	UG/L	1.2	U	1	1.2	U	1	12	U	1	1.2	U	1
4-Methyl-2-pentanone	108-10-1	-	-	UG/L	0.91	U	1	0.91	U	1	21	U	1	2.1	U	1
Acetone	67-64-1	50	-	UG/L	18		1	1.3	U	1	30	U	1	3.0	U	1
Benzene	71-43-2	1	-	UG/L	0.41	U	1	0.41	U	1	4.1	U	1	0.41	U	1
Bromodichloromethane	75-27-4	-	-	UG/L	0.39	U	1	0.39	U	1	3.9	U	1	0.39	U	1
Bromoform	75-25-2	50	-	UG/L	0.26	U	1	0.26	U	1	2.6	U	1	0.26	U	1
Bromomethane	74-83-9	5	a	UG/L	0.28	U,UJ	1	0.28	U,UJ	1	6.9	U	1	0.69	U	1
Carbon Disulfide	75-15-0	60	-	UG/L	0.19	U	1	0.19	U	1	1.9	U	1	0.19	J	1
Carbon tetrachloride	56-23-5	5	-	UG/L	0.27	U	1	0.27	U	1	2.7	U	1	0.27	U	1
Chlorobenzene	108-90-7	5	a	UG/L	0.32	U	1	0.32	U	1	7.5	U	1	0.75	U	1
Chlorodibromomethane	124-48-1	50	-	UG/L	0.32	U	1	0.32	U	1	3.2	U	1	0.32	U	1
Chloroethane	75-00-3	5	a	UG/L	0.32	U	1	0.32	U	1	3.2	U	1	0.32	U	1
Chloroform	67-66-3	7	-	UG/L	3.4		1	2		1	3.4	U	1	0.34	U	1
Chloromethane	74-87-3	5	a	UG/L	0.35	U	1	0.35	U	1	3.5	U	1	0.35	U	1
cis-1,2-Dichloroethene	156-59-2	5	a	UG/L	0.38	U	1	0.38	U	1	8.1	U	1	0.81	U	1
cis-1,3-Dichloropropene	10061-01-5	0.4	-	UG/L	0.36	U	1	0.36	U	1	3.6	U	1	0.36	U	1
Cyclohexane	110-82-7	-	-	UG/L	86		1	0.53	U	1	1.8		1	0.18	U	1
Dichlorodifluoromethane	75-71-8	5	a	UG/L	0.29	U	1	0.29	U	1	6.8	U *	1	0.68	U *	1
Ethylbenzene	100-41-4	5	a	UG/L	94		1	0.18	U	1	7.4		1	0.74	U	1
Isopropylbenzene	98-82-8	5	a	UG/L	32		1	0.19	U	1	7.9		1	0.79	U	1
Methyl Acetate	79-20-9	-	-	UG/L	0.5	U	1	0.5	U	1	5.0	U	1	0.50	U	1
Methyl tert-butyl ether	1634-04-4	-	-	UG/L	0.16	U	1	0.16	U	1	1.6	U	1	0.16	U	1
Methylcyclohexane	108-87-2	-	-	UG/L	65		1	0.5	U	1	1.6		1	0.16	U	1
Methylene chloride	75-09-2	5	a	UG/L	0.44	U	1	0.44	U	1	4.4	U	1	0.44	U	1
Styrene	100-42-5	5	a	UG/L	0.18	U	1	0.18	U	1	7.3	U	1	0.73	U	1
Tetrachloroethene	127-18-4	5	a	UG/L	0.36	U	1	0.36	U	1	3.6	U	1	0.36	U	1
Toluene	108-88-3	5	a	UG/L	5.2		1	0.51	U	1	5.1	U	1	0.51	U	1
trans-1,2-Dichloroethene	156-60-5	5	a	UG/L	0.42	U	1	0.42	U	1	9.0	U	1	0.90	U	1
trans-1,3-Dichloropropene	10061-02-6	-	-	UG/L	0.37	U	1	0.37	U	1	3.7	U	1	0.37	U	1
Trichloroethene	79-01-6	5	a	UG/L	3.9		1	10		1	4.6	U	1	0.46		1
Trichlorofluoromethane	75-69-4	5	a	UG/L	0.15	U,L4,UJ	1	0.15	U	1	8.8	U	1	0.88	U	1
Vinyl chloride	75-01-4	2	-	UG/L	0.24	U	1	0.24	U	1	9.0	U	1	0.90	U	1
Xylene	1330-20-7	5	-	UG/L	550	E	1	0.66	U	1	6.6		1	0.66	U	1
TOTAL DETECTABLE				**UG/L**	**864.4**			**12**			**1.8**			**0**		

TABLE 4
GROUNDWATER

Part 703.5 Water Standard

				SAMPLE ID:	**1030ED-MW-1**			**1030ED-MW-2**			**1030ED-MW-3**		
				LAB ORDER:	RTB1060-01			RTB1060-04			RTB1060-05		
				SAMPLE DATE:	02/23/2010 11:47			02/23/2010 13:00			02/23/2010 14:00		
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
2,4,5-Trichlorophenol	95-95-4	-	-	UG/L	0.48	U	1	0.46	U	1	0.45	U	1
2,4,6-Trichlorophenol	88-06-2	-	-	UG/L	0.6	U	1	0.59	U	1	0.58	U	1
2,4-Dichlorophenol	120-83-2	-	-	UG/L	0.5	U	1	0.49	U	1	0.48	U	1
2,4-Dimethylphenol	105-67-9	-	-	UG/L	0.5	U	1	0.48	U	1	0.47	U	1
2,4-Dinitrophenol	51-28-5	-	-	UG/L	2.2	U	1	2.1	U	1	2.1	U	1
2,4-Dinitrotoluene	121-14-2	5	a	UG/L	0.44	U	1	0.43	U	1	0.42	U	1
2,6-Dinitrotoluene	606-20-2	5	a	UG/L	0.4	U	1	0.38	U	1	0.38	U	1
2-Chloronaphthalene	91-58-7	10	-	UG/L	0.46	U	1	0.44	U	1	0.43	U	1
2-Chlorophenol	95-57-8	-	-	UG/L	0.52	U	1	0.51	U	1	0.5	U	1
2-Methylnaphthalene	91-57-6	-	-	UG/L	0.59	U	1	0.58	U	1	0.57	U	1
2-Methylphenol	95-48-7	-	-	UG/L	0.4	U	1	0.38	U	1	0.38	U	1
2-Nitroaniline	88-74-4	5	a	UG/L	0.42	U	1	0.4	U	1	0.4	U	1
2-Nitrophenol	88-75-5	-	-	UG/L	0.48	U	1	0.46	U	1	0.45	U	1
3,3-Dichlorobenzidine	91-94-1	5	a	UG/L	0.4	U	1	0.38	U	1	0.38	U	1
3-Nitroaniline	99-09-2	5	a	UG/L	0.48	U	1	0.46	U	1	0.45	U	1
4,6-Dinitro-2-methylphenol	534-52-1	-	-	UG/L	2.2	U	1	2.1	U	1	2.1	U	1
4-Bromophenyl-phenylether	101-55-3	-	-	UG/L	0.45	U	1	0.43	U	1	0.42	U	1
4-Chloro-3-Methylphenol	59-50-7	-	-	UG/L	0.45	U	1	0.43	U	1	0.42	U	1
4-Chloroaniline	106-47-8	5	a	UG/L	0.58	U	1	0.57	U	1	1.8	J	1
4-Chlorophenyl-phenylether	7005-72-3	-	-	UG/L	0.35	U	1	0.34	U	1	0.33	U	1
4-Methylphenol	106-44-5	-	-	UG/L	0.36	U	1	0.35	U	1	0.34	U	1
4-Nitroaniline	100-01-6	5	a	UG/L	0.25	U	1	2.3	J	1	4.9	J	1
4-Nitrophenol	100-02-7	-	-	UG/L	1.5	U	1	1.5	U	1	1.4	U	1
Acenaphthene	83-32-9	20	-	UG/L	0.41	U	1	0.39	U	1	0.39	U	1
Acenaphthylene	208-96-8	20	-	UG/L	0.38	U	1	0.37	U	1	0.36	U	1
Acetophenone	98-86-2	-	-	UG/L	0.53	U	1	0.52	U	1	0.51	U	1
Anthracene	120-12-7	50	-	UG/L	0.28	U	1	0.27	U	1	0.26	U	1
Atrazine	1912-24-9	7.5	-	UG/L	0.46	U	1	0.44	U	1	0.43	U	1
Benzaldehyde	100-52-7	-	-	UG/L	0.26	U	1	0.26	U	1	0.25	U	1
Benzo(a)anthracene	56-55-3	0.002	-	UG/L	0.36	U	1	0.35	U	1	0.34	U	1
Benzo(a)pyrene	50-32-8	ND	-	UG/L	0.47	U	1	0.45	U	1	0.44	U	1
Benzo(b)fluoranthene	205-99-2	0.002	-	UG/L	0.34	U	1	0.33	U	1	0.32	U	1
Benzo(g,h,i)perylene	191-24-2	-	-	UG/L	0.35	U	1	0.34	U	1	0.33	U	1
Benzo(k)fluoranthene	207-08-9	0.002	-	UG/L	0.72	U	1	0.7	U	1	0.69	U	1
Biphenyl	92-52-4	5	a	UG/L	0.65	U	1	0.63	U	1	0.62	U	1
bis(2-Chloroethoxy)methane	111-91-1	5	a	UG/L	0.35	U	1	0.34	U	1	0.33	U	1
bis(2-Chloroethyl)Ether	111-44-4	1	-	UG/L	0.4	U	1	0.38	U	1	0.38	U	1
Bis(2-chloroisopropyl)ether	108-60-1	5	a	UG/L	0.51	U	1	0.5	U	1	0.49	U	1
bis(2-Ethylhexyl)phthalate	117-81-7	5	-	UG/L	2	J,UJ	1	1.7	U,J,UJ	1	1.8	J,UJ	1
Butylbenzylphthalate	85-68-7	50	-	UG/L	0.42	U	1	0.4	U	1	0.4	U	1
Caprolactam	105-60-2	-	-	UG/L	2.2	U	1	10		1	16		1
Carbazole	86-74-8	-	-	UG/L	0.3	U	1	0.29	U	1	0.28	U	1
Chrysene	218-01-9	0.002	-	UG/L	0.33	U	1	0.32	U	1	0.31	U	1
Dibenzo(a,h)anthracene	53-70-3	-	-	UG/L	0.42	U	1	0.4	U	1	0.4	U	1
Dibenzofuran	132-64-9	-	-	UG/L	0.5	U	1	0.49	U	1	0.48	U	1
Diethylphthalate	84-66-2	50	-	UG/L	0.22	U	1	0.54	J	1	0.21	U	1
Dimethylphthalate	131-11-3	50	-	UG/L	0.36	U,UJ	1	0.35	U,UJ	1	0.34	U,UJ	1
Di-n-butylphthalate	84-74-2	50	-	UG/L	5	U,UJ	1	4.8	U,UJ	1	4.7	U,UJ	1
Di-n-octylphthalate	117-84-0	50	-	UG/L	0.47	U	1	0.45	U	1	0.44	U	1
Fluoranthene	206-44-0	50	-	UG/L	0.4	U	1	0.38	U	1	0.38	U	1
Fluorene	86-73-7	50	-	UG/L	0.36	U	1	0.35	U	1	0.34	U	1
Hexachlorobenzene	118-74-1	0.04	-	UG/L	0.5	U	1	0.49	U	1	0.48	U	1
Hexachlorobutadiene	87-68-3	0.5	-	UG/L	0.67	U	1	0.65	U	1	0.64	U	1
Hexachlorocyclopentadiene	77-47-4	5	a	UG/L	0.58	U	1	0.57	U	1	0.56	U	1
Hexachloroethane	67-72-1	5	a	UG/L	0.58	U	1	0.57	U	1	0.56	U	1
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	-	UG/L	0.47	U	1	0.45	U	1	0.44	U	1
Isophorone	78-59-1	50	-	UG/L	0.43	U	1	0.41	U	1	0.41	U	1
Naphthalene	91-20-3	10	-	UG/L	0.75	U	1	0.73	U	1	0.72	U	1
Nitrobenzene	98-95-3	0.4	-	UG/L	0.29	U	1	0.28	U	1	0.27	U	1
N-Nitroso-di-n-propylamine	621-64-7	50	-	UG/L	0.53	U	1	0.52	U	1	0.51	U	1
N-Nitrosodiphenylamine(1)	86-30-6	50	-	UG/L	0.5	U	1	0.49	U	1	0.48	U	1
Pentachlorophenol	87-86-5	-	-	UG/L	2.2	U	1	2.1	U	1	2.1	U	1
Phenanthrene	85-01-8	50	-	UG/L	0.44	U	1	0.42	U	1	0.42	U	1
Phenol	108-95-2	-	-	UG/L	0.39	U	1	0.38	U	1	0.37	U	1
Pyrene	129-00-0	50	-	UG/L	0.34	U	1	0.33	U	1	0.32	U	1
TOTAL DETECTABLE				**UG/L**	**2**			**12.84**			**24.5**		

TABLE 4
GROUNDWATER

Part 703.5 Water Standard

				SAMPLE ID:	**1030ED-MW-4**			**1030ED-MW-5**			**1030ED-MW-07**			**1030ED-MW-08**		
				LAB ORDER:	RTB1060-06			RTB1060-07			480-60526-11			480-60526-12		
				SAMPLE DATE:	02/23/2010 13:35			02/23/2010 13:25			5/22/14 12:56 PM			5/22/14 12:25 PM		
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
2,4,5-Trichlorophenol	95-95-4	-	-	UG/L	0.46	U	1	0.46	U	1	0.44	U	1	0.44	U	1
2,4,6-Trichlorophenol	88-06-2	-	-	UG/L	0.58	U	1	0.58	U	1	0.56	U	1	0.56	U	1
2,4-Dichlorophenol	120-83-2	-	-	UG/L	0.49	U	1	0.49	U	1	0.47	U	1	0.47	U	1
2,4-Dimethylphenol	105-67-9	-	-	UG/L	7		1	0.48	U	1	0.46	U	1	0.46	U	1
2,4-Dinitrophenol	51-28-5	-	-	UG/L	2.1	U	1	2.1	U	1	2.0	U	1	2.0	U	1
2,4-Dinitrotoluene	121-14-2	5	a	UG/L	0.43	U	1	0.43	U	1	0.41	U	1	0.41	U	1
2,6-Dinitrotoluene	606-20-2	5	a	UG/L	0.38	U	1	0.38	U	1	0.37	U	1	0.37	U	1
2-Chloronaphthalene	91-58-7	10	-	UG/L	0.44	U	1	0.44	U	1	0.42	U	1	0.42	U	1
2-Chlorophenol	95-57-8	-	-	UG/L	0.5	U	1	0.5	U	1	0.49	U	1	0.49	U	1
2-Methylnaphthalene	91-57-6	-	-	UG/L	53		1	0.57	U	1	0.55		1	0.55	U	1
2-Methylphenol	95-48-7	-	-	UG/L	0.38	U	1	0.38	U	1	0.37	U	1	0.37	U	1
2-Nitroaniline	88-74-4	5	a	UG/L	0.4	U,UJ	1	0.4	U,UJ	1	0.39	U	1	0.38	U	1
2-Nitrophenol	88-75-5	-	-	UG/L	0.46	U	1	0.46	U	1	0.44	U	1	0.44	U	1
3,3-Dichlorobenzidine	91-94-1	5	a	UG/L	0.38	U	1	0.38	U	1	0.37	U	1	0.37	U	1
3-Nitroaniline	99-09-2	5	a	UG/L	0.46	U	1	0.46	U	1	0.44	U *	1	0.44	U *	1
4,6-Dinitro-2-methylphenol	534-52-1	-	-	UG/L	2.1	U	1	2.1	U	1	2.0	U	1	2.0	U	1
4-Bromophenyl-phenylether	101-55-3	-	-	UG/L	0.43	U	1	0.43	U	1	0.42	U	1	0.41	U	1
4-Chloro-3-Methylphenol	59-50-7	-	-	UG/L	0.43	U	1	0.43	U	1	0.42	U	1	0.41	U	1
4-Chloroaniline	106-47-8	5	a	UG/L	0.56	U	1	1.6	J	1	0.54	U	1	0.54	U	1
4-Chlorophenyl-phenylether	7005-72-3	-	-	UG/L	0.33	U	1	0.33	U	1	0.32	U	1	0.32	U	1
4-Methylphenol	106-44-5	-	-	UG/L	1.8	J	1	0.34	U	1	0.33	J*	1	0.33	J *	1
4-Nitroaniline	100-01-6	5	a	UG/L	0.24	U	1	6.7	J	1	0.23	U	1	0.23	U	1
4-Nitrophenol	100-02-7	-	-	UG/L	1.4	U	1	1.4	U	1	1.4	U	1	1.4	U	1
Acenaphthene	83-32-9	20	-	UG/L	2.9	J	1	0.39	U	1	0.38	J	1	0.38	U	1
Acenaphthylene	208-96-8	20	-	UG/L	0.36	U	1	0.36	U	1	0.35	U	1	0.35	U	1
Acetophenone	98-86-2	-	-	UG/L	0.51	U	1	0.51	U	1	0.50	U	1	0.49	U	1
Anthracene	120-12-7	50	-	UG/L	1.5	J	1	0.27	U	1	0.26	U	1	0.26	J	1
Atrazine	1912-24-9	7.5	-	UG/L	0.44	U	1	0.44	U	1	0.42	U	1	0.42	U	1
Benzaldehyde	100-52-7	-	-	UG/L	0.25	U	1	0.25	U	1	0.25	U	1	0.24	U	1
Benzo(a)anthracene	56-55-3	0.002	-	UG/L	0.7	J	1	0.34	U	1	0.33	U	1	0.33	U	1
Benzo(a)pyrene	50-32-8	ND	-	UG/L	0.45	U	1	0.45	U	1	0.43	U	1	0.43	U	1
Benzo(b)fluoranthene	205-99-2	0.002	-	UG/L	0.32	U	1	0.32	U	1	0.31	U	1	0.31	U	1
Benzo(g,h,i)perylene	191-24-2	-	-	UG/L	0.33	U	1	0.33	U	1	0.32	U	1	0.32	U	1
Benzo(k)fluoranthene	207-08-9	0.002	-	UG/L	0.7	U	1	0.7	U	1	0.67	U	1	0.67	U	1
Biphenyl	92-52-4	5	a	UG/L	0.7	J	1	0.62	U	1	0.60	U	1	0.60	U	1
bis(2-Chloroethoxy)methane	111-91-1	5	a	UG/L	0.33	U	1	0.33	U	1	0.48	U	1	0.48	U	1
bis(2-Chloroethyl)Ether	111-44-4	1	-	UG/L	0.38	U	1	0.38	U	1	0.32	U	1	0.32	U	1
Bis(2-chloroisopropyl)ether	108-60-1	5	a	UG/L	0.5	U	1	0.5	U	1	0.37	U	1	0.37	U	1
bis(2-Ethylhexyl)phthalate	117-81-7	5	-	UG/L	9.6	J,UJ	1	1.7	U,J,UJ	1	1.7	U	1	1.6	U	1
Butylbenzylphthalate	85-68-7	50	-	UG/L	0.4	U	1	0.4	U	1	0.39	U	1	0.38	U	1
Caprolactam	105-60-2	-	-	UG/L	2.1	U	1	17		1	2.0	U	1	2.0	U	1
Carbazole	86-74-8	-	-	UG/L	1.7	J	1	0.29	U	1	0.28	U	1	0.27	U	1
Chrysene	218-01-9	0.002	-	UG/L	0.57	J	1	0.31	U	1	0.30	U	1	0.30	U	1
Dibenzo(a,h)anthracene	53-70-3	-	-	UG/L	0.4	U	1	0.4	U	1	0.39	U	1	0.38	U	1
Dibenzofuran	132-64-9	-	-	UG/L	1.8	J	1	0.49	U	1	0.47	U	1	0.47	U	1
Diethylphthalate	84-66-2	50	-	UG/L	0.21	U	1	0.21	U	1	0.20	U	1	0.20	U	1
Dimethylphthalate	131-11-3	50	-	UG/L	0.34	U	1	0.34	U	1	0.33	U	1	0.33	U	1
Di-n-butylphthalate	84-74-2	50	-	UG/L	4.8	U	1	4.8	U	1	0.29	U	1	0.28	U	1
Di-n-octylphthalate	117-84-0	50	-	UG/L	0.45	U	1	0.45	U	1	0.43	U	1	0.43	U	1
Fluoranthene	206-44-0	50	-	UG/L	2.9	J	1	0.38	U	1	0.37	U	1	0.37	U	1
Fluorene	86-73-7	50	-	UG/L	2.7	J	1	0.34	U	1	0.33	J	1	0.33	J	1
Hexachlorobenzene	118-74-1	0.04	-	UG/L	0.49	U	1	0.49	U	1	0.47	U *	1	0.47	U *	1
Hexachlorobutadiene	87-68-3	0.5	-	UG/L	0.65	U	1	0.65	U	1	0.63	U	1	0.62	U	1
Hexachlorocyclopentadiene	77-47-4	5	a	UG/L	0.56	U	1	0.56	U	1	0.54	U	1	0.54	U	1
Hexachloroethane	67-72-1	5	a	UG/L	0.56	U	1	0.56	U	1	0.54	U	1	0.54	U	1
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	-	UG/L	0.45	U	1	0.45	U	1	0.43	U	1	0.43	U	1
Isophorone	78-59-1	50	-	UG/L	0.41	U	1	0.41	U	1	0.40	U	1	0.39	U	1
Naphthalene	91-20-3	10	-	UG/L	61		1	0.72	U	1	3.5		1	0.70	U	1
Nitrobenzene	98-95-3	0.4	-	UG/L	0.28	U	1	0.28	U	1	0.27	U	1	0.27	U	1
N-Nitroso-di-n-propylamine	621-64-7	50	-	UG/L	0.51	U	1	0.51	U	1	0.50	U	1	0.49	U	1
N-Nitrosodiphenylamine(1)	86-30-6	50	-	UG/L	0.49	U	1	0.49	U	1	0.47	U	1	0.47	U	1
Pentachlorophenol	87-86-5	-	-	UG/L	2.1	U	1	2.1	U	1	2.0	U	1	2.0	U	1
Phenanthrene	85-01-8	50	-	UG/L	5.3		1	0.42	U	1	0.41	J	1	0.40	J	1
Phenol	108-95-2	-	-	UG/L	0.37	U	1	0.37	U	1	0.36	U	1	0.36	U	1
Pyrene	129-00-0	50	-	UG/L	1.9	J	1	0.32	U	1	0.31	U	1	0.31	J	1
TOTAL DETECTABLE				**UG/L**	**155.07**			**25.3**			**3.5**			**0**		

TABLE 4
GROUNDWATER

Part 703.5 Water Standard

				SAMPLE ID:	**1030ED-MW-1**			**1030ED-MW-2**			**1030ED-MW-3**		
				LAB ORDER:	RTB1060-01			RTB1060-04			RTB1060-05		
				SAMPLE DATE:	02/23/2010 11:47			02/23/2010 13:00			02/23/2010 14:00		
METALS (EPA METHOD 6010B)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	-	-	MG/L	28.8		1	23.1		1	34		1
Antimony	7440-36-0	0.003	-	MG/L	0.0068	U	1	0.0068	U	1	0.0068	U	1
Arsenic	7440-38-2	0.025	k	MG/L	0.0307		1	0.0281		1	0.0725		1
Barium	7440-39-3	1	-	MG/L	0.197		1	0.177		1	0.225		1
Beryllium	7440-41-7	-	-	MG/L	0.0015	J	1	0.0012	J	1	0.002		1
Cadmium	7440-43-9	0.005	-	MG/L	0.0005	J	1	0.0005	J	1	0.0015		1
Calcium	7440-70-2	-	-	MG/L	289		1	258		1	158		1
Chromium	18540-29-9	0.05	-	MG/L	0.0737		1	0.0463		1	0.0488		1
Cobalt	7440-48-4	-	-	MG/L	0.0268		1	0.023		1	0.0475		1
Copper	7440-50-8	0.2	-	MG/L	0.133		1	0.0913		1	0.218		1
Iron	7439-89-6	0.3	-	MG/L	69.9		1	58.7		1	124		1
Lead	7439-92-1	0.025	-	MG/L	0.0348		1	0.0174		1	0.0712		1
Magnesium	7439-95-4	35	-	MG/L	36		1	36.6		1	25.5		1
Manganese	7439-96-5	0.3	-	MG/L	4.36		1	3.12		1	8.13		1
Total Mercury	7439-97-6	0.0007	-	MG/L	0.0001	U,S6	1	0.0001	U,S6	1	0.0001	S6, J	1
Nickel	7440-02-0	0.1	-	MG/L	0.0482		1	0.0392		1	0.0781		1
Potassium	7440-09-7	-	-	MG/L	12.9		1	11.3		1	11.8		1
Selenium	7782-49-2	0.01	-	MG/L	0.0087	U	1	0.0087	U	1	0.0087	U	1
Silver	7440-22-4	0.05	-	MG/L	0.0012	U	1	0.0012	U	1	0.0012	U	1
Sodium	7440-23-5	20	-	MG/L	217		1	113		1	172		1
Thallium	7440-28-0	0.0005	-	MG/L	0.0102	U	1	0.0102	U	1	0.0102	U	1
Vanadium	7440-62-2	-	-	MG/L	0.0548		1	0.0431		1	0.081		1
Zinc	7440-66-6	2	-	MG/L	0.174		1	0.131		1	0.259		1
TOTAL DETECTABLE				**MG/L**	**658.735**			**504.4181**			**534.5347**		

TABLE 4
GROUNDWATER

Part 703.5 Water Standard

				SAMPLE ID:	**1030ED-MW-4**			**1030ED-MW-5**			**1030ED-MW-07**			**1030ED-MW-08**		
				LAB ORDER:	RTB1060-06			RTB1060-07			480-60526-11			480-60526-12		
				SAMPLE DATE:	02/23/2010 13:35			02/23/2010 13:25			5/22/14 12:56 PM			5/22/14 12:25 PM		
METALS (EPA METHOD 6010B)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	-	-	MG/L	12.3		1	50.2		1	0.060		1	0.060		1
Antimony	7440-36-0	0.003	-	MG/L	0.0068	U	1	0.0068	U	1	0.0068	U	1	0.0068	U	1
Arsenic	7440-38-2	0.025	k	MG/L	0.0155		1	0.0568		1	0.0056	U	1	0.0056		1
Barium	7440-39-3	1	-	MG/L	0.179		1	0.313		1	0.00070		1	0.00070		1
Beryllium	7440-41-7	-	-	MG/L	0.0006	J	1	0.0028		1	0.00030	U	1	0.00030	J	1
Cadmium	7440-43-9	0.005	-	MG/L	0.0003	U	1	0.0013		1	0.00050	U	1	0.00050	J	1
Calcium	7440-70-2	-	-	MG/L	155		1	311		1	0.10		1	0.10		1
Chromium	18540-29-9	0.05	-	MG/L	0.0216		1	0.0921		1	0.0010		1	0.0010		1
Cobalt	7440-48-4	-	-	MG/L	0.0105		1	0.0728		1	0.00063		1	0.00063		1
Copper	7440-50-8	0.2	-	MG/L	0.108		1	0.27		1	0.0016		1	0.0016		1
Iron	7439-89-6	0.3	-	MG/L	28.6		1	120		1	0.019		1	0.019		1
Lead	7439-92-1	0.025	-	MG/L	0.0354		1	0.0675		1	0.0030	J	1	0.0030		1
Magnesium	7439-95-4	35	-	MG/L	21.4		1	50.3		1	0.043		1	0.043		1
Manganese	7439-96-5	0.3	-	MG/L	3.07		1	10.5		1	0.00040		1	0.00040		1
Total Mercury	7439-97-6	0.0007	-	MG/L	0.0001	U	1	0.0001	S6, J	1	0.00012	U	1	0.00012	U	1
Nickel	7440-02-0	0.1	-	MG/L	0.0208		1	0.103		1	0.0013	J	1	0.0013		1
Potassium	7440-09-7	-	-	MG/L	8.81		1	16.1		1	0.10		1	0.10		1
Selenium	7782-49-2	0.01	-	MG/L	0.0087	U	1	0.0087	U	1	0.0087	U	1	0.0087	U	1
Silver	7440-22-4	0.05	-	MG/L	0.0012	U	1	0.0012	U	1	0.0017	U	1	0.0017	U	1
Sodium	7440-23-5	20	-	MG/L	158		1	82.1		1	0.32		1	0.32		1
Thallium	7440-28-0	0.0005	-	MG/L	0.0102	U	1	0.0102	U	1	0.010	U	1	0.010	U	1
Vanadium	7440-62-2	-	-	MG/L	0.0233		1	0.0998		1	0.0015		1	0.0015		1
Zinc	7440-66-6	2	-	MG/L	0.115		1	0.319		1	0.0015		1	0.0015		1
TOTAL DETECTABLE				**MG/L**	**387.7097**			**641.5982**			**0**			**0**		

TABLE 4
GROUNDWATER

Part 703.5 Water Standard

				SAMPLE ID:	**1030ED-MW-1**			**1030ED-MW-2**			**1030ED-MW-3**		
				LAB ORDER:	RTB1060-01			RTB1060-04			RTB1060-05		
				SAMPLE DATE:	02/23/2010 11:47			02/23/2010 13:00			02/23/2010 14:00		
PCBs (EPA METHOD 8080)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -		UG/L	0.18	U	1	0.17	U	1	0.17	U	1
Aroclor 1221	11104-28-2	- -		UG/L	0.18	U	1	0.17	U	1	0.17	U	1
Aroclor 1232	11141-16-5	- -		UG/L	0.18	U	1	0.17	U	1	0.17	U	1
Aroclor 1242	53469-21-9	- -		UG/L	0.18	U	1	0.17	U	1	0.17	U	1
Aroclor 1248	12672-29-6	- -		UG/L	0.18	U	1	0.17	U	1	0.17	U	1
Aroclor 1254	11097-69-1	- -		UG/L	0.25	U	1	0.24	U	1	0.24	U	1
Aroclor 1260	11096-82-5	- -		UG/L	0.25	U	1	0.24	U	1	0.24	U	1
Aroclor 1262	37324-23-5	- -		UG/L	0.25	U	1	0.24	U	1	0.24	U	1
Aroclor 1268	11100-14-4	- -		UG/L	0.25	U	1	0.24	U	1	0.24	U	1
TOTAL DETECTABLE	**1336-36-3**	**0.09**	**o**	**UG/L**	**0**			**0**			**0**		

TABLE 4
GROUNDWATER

Part 703.5 Water Standard

				SAMPLE ID:	**1030ED-MW-4**			**1030ED-MW-5**			**1030ED-MW-07**			**1030ED-MW-08**		
				LAB ORDER:	RTB1060-06			RTB1060-07			480-60526-11			480-60526-12		
				SAMPLE DATE:	02/23/2010 13:35			02/23/2010 13:25			5/22/14 12:56 PM			5/22/14 12:25 PM		
PCBs (EPA METHOD 8080)	CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -		UG/L	0.17	U	1	0.17	U	1	0.16	U	1	0.16	U	1
Aroclor 1221	11104-28-2	- -		UG/L	0.17	U	1	0.17	U	1	0.16	U	1	0.16	U	1
Aroclor 1232	11141-16-5	- -		UG/L	0.17	U	1	0.17	U	1	0.16	U	1	0.16	U	1
Aroclor 1242	53469-21-9	- -		UG/L	0.17	U	1	0.17	U	1	0.16	U	1	0.16	U	1
Aroclor 1248	12672-29-6	- -		UG/L	0.17	U	1	0.17	U	1	0.16	U	1	0.16	U	1
Aroclor 1254	11097-69-1	- -		UG/L	0.24	U	1	0.24	U	1	0.23	U	1	0.23	U	1
Aroclor 1260	11096-82-5	- -		UG/L	0.24	U	1	0.24	U	1	0.23	U	1	0.23	U	1
Aroclor 1262	37324-23-5	- -		UG/L	0.24	U	1	0.24	U	1						
Aroclor 1268	11100-14-4	- -		UG/L	0.24	U	1	0.24	U	1						
TOTAL DETECTABLE	**1336-36-3**	**0.09**	**o**	**UG/L**	**0**			**0**			**0**			**0**		

Appendix A

USEPA Correspondence Regarding Site Investigation Work Plan

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2

DATE:

SUBJECT: Review of the Environmental Restoration Program Site Investigation Work Plan and Sampling and Analysis Plan for the City of Rome, Oneida County, New York

FROM: Patricia A. Sheridan, Environmental Scientist
Hazardous Waste Support Branch

TO: Phil Clappin, Brownfields Project Manager
Program Support Branch

I have reviewed the Site Investigation Work Plan and the Sampling and Analysis Plan for the City of Rome, Oneida County, New York for the Environmental Site Restoration Program which includes five properties at: 508 W. Liberty Street; 1333 E. Dominick Street; 701 Lawrence Street; 1030 E. Dominick Street; and 1201 E. Dominick Street. The purpose of the review is to determine if the documents adhere to the quality assurance (QA) policy and procedures outlined in the USEPA Region 2 Brownfields Project Planning Guidance for use by Region 2 Brownfields grant recipients.

If you have any questions, please contact me at 732-321-6780.

8/6/2008 CONCURRENCES

Name: sheridan		Init: pas	Date: 07/31/08		Filename: bfRomeSIWPandSAP5SitesComments73008.doc			
Symbol	HWSB-SST	HWSB-SST						
Surname	Sheridan	Hudek						
Date								

REGION II FORM 1320-1 (9/85)

Attachment

Comments on the Site Investigation Work Plan and Sampling and Analysis Plan for the City of Rome

Site Investigation Work Plan Comments:

1. Page 1, Section 1.0. This section must include a brief discussion that the funding the City of Rome received for this project also involves grant money from the USEPA Brownfields Program.

Since EPA grant funds are being used for this project, it is recommended that the AU.S. EPA Region 2 Brownfields Project Planning Guidance,@ Volumes 1 and 2, May 2000 Final be utilized as a source for conducting site investigations to ensure specific quality assurance elements are covered throughout the Work Plan and the Sampling and Analysis Plan (SAP). Please include this reference in this section of the Work Plan.

2. Page 2, 3rd Paragraph. The text states that the SAP includes a quality management plan and a data management plan. These documents appear to be missing in the SAP. Please provide.

3. Page 41, Section 4.1. Regarding the project objective discussion for this site, it is recommended that the information also include the following:

- where, when and how will the samples be collected, and the data generated;
- who will use the data;
- what will the data be used for;
- how much data is needed; how will the data be reported;
- how will the data be managed and archived.

Define the regulatory standards for which the resulting data will be compared.

4. Page 41, Section 4.1. Regarding bullet seven, please confirm if the on-site drums will be sampled prior to removal during this site investigation.

5. Page 47, Section 5.1.4. The selection of the laboratory must be made prior to the mobilization and collection of samples associated with this project. Please provide the name of the laboratory in this discussion. Include all appropriate information specific to the laboratory regarding documentation to support laboratory capability; State laboratory certification programs; and performance in analyzing samples utilizing the selected methods.

6. Page 50, Section 5.2.1.2. See Comment #5.

7. Page 58, Section 5.2.3. Please confirm if a separate laboratory will be providing the soil gas analysis. Include all appropriate information specific to the laboratory regarding documentation to support laboratory capability; State laboratory certification programs; and performance in analyzing samples utilizing this method.

8. Page 64. It is recommended that a project time line be provided in order to reflect the actual date the project activities will occur.

Sampling and Analysis Plan Comments:

1. Page 3, Section 2.1. The selection of the laboratory must be made prior to the mobilization and collection of samples associated with this project. Please provide the name of the laboratory in this discussion.

2. Page 4. What is meant by the term Laboratory Confirmational data? Define specifics.

3. Page 4. What is the process used to determine whether laboratory sample data is used for closure or IRM decisions in order to be subject to an independent third-party data validation?

All sample data generated for this project should undergo an independent third-party data validation, including those not listed as examples of data requiring validation such as soil gas results. Clarification is needed as to whether the "petroleum-contaminated soil plume clearance samples" includes surface and sub-surface soils, and sediments.

4. Page 7, Section 3.3. Please provide the extraction and digestion methods to be used prior to SW-846 analyses.

5. Page 8. For EPA Method 6010B, the text is incorrect as metals samples are not extracted but rather digested. Please provide the digestion method to be used for this analysis.

6. Table 1. Footnote #3 references that samples requiring off-site disposal will also be subjected to TCLP analysis. There is no discussion in the SAP regarding this topic. Specific information must be included in the SAP regarding the name laboratory to perform this analysis; the analytical methods to be used; the data validation of the TCLP sample results to determine whether the samples should go for off-site disposal etc.

7. Page 13, Section 4.2. The following Region 2 procedures should be used when performing decontamination of sampling equipment:

A Detergent/tap water wash;
A Tap water rinse;
A 10% nitric acid (ultra pure) rinse (if sampling for metals);
A Deionized/distilled water rinse;
A Acetone or methanol/hexane rinse (pesticide grade or better);
A Deionized/distilled water rinse;
A Air dry

During periods of transportation and non-use, all decontaminated sampling equipment should be wrapped in aluminum foil.

8. Page 17, Section 4.3.3. It is recommended that soil samples for VOC analysis be collected using an En Core™ sampler, or similar tube or plunger type sampler. The sampling device is inserted into undisturbed soil, such as a retrieved split spoon or directly into the exposed soil surface. The 5-gram plug of soil (approximately) is then capped and sent to the laboratory where it will be preserved, extracted and analyzed. Volume requirements under the current CLP method states that three (3) En Core™ vials and one (1) unpreserved 60 ml jar be sent per sample location. The laboratory should be provided with sufficient En Core™ or similar type samples for the purpose of screening, analysis and re-analysis, if necessary, as well as for MS/MSD. It should be noted that the holding time for the En Core™ or similar type samples is 48 hours from time of collection to preservation.

9. Page 19, #5. Please include the following procedure for homogenizing soil samples within this section:

- Remove rocks, twigs leaves and other debris from sampling device, if they are not considered part of the samples;
- Place in a stainless steel bowl and thoroughly mix using a stainless steel spoon;
- Scrape the sample from the sides, corners and bottom of bowl, roll to the middle of the bowl and mix;
- The sample should then be quartered and moved to the fours corners of the bowl;
- Each quartered should be individually mixed, and then rolled to the center of the bowl and then entire sample mixed again.

10. Page 41, Section 5.1. There is no discussion of the use of samples labels. Please include, and provide an example.

11. Page 43. Please provide an example of the custody seal to be used for this project.

12. Page 43. All sample bottle containers should meet all guidelines specified in *Specification and Guidance for Obtaining Contaminant-Free Sample Containers*, EPA 540/R-93/051 and OSWER Directive 9240.0-05A (EPA, 1992b).

13. Page 48, Section 5.4.3. Please provide the name of the third party independent data validator for this project. It is recommended that applicable Standard Operating Procedures (SOPs) pertaining to SW-846 methodology be used for this project. Such documents can be obtained from the USEPA Region 2 quality assurance web site at:

http://www.epa.gov/Region2/qa/documents.htm

August 20, 2008

Ms. Diane Shoemaker
Director of Community Development
City of Rome
198 N. Washington Street
Rome, New York 13440-5815

Re: Site Investigation Work Plan
EPA Brownfields Assessment Grant Program
City of Rome, New York

File: 245.005

Dear Ms. Shoemaker:

We have reviewed the comments prepared by Ms. Patricia Sheridan of the U.S. Environmental Protection Agency (EPA) regarding the February 2008 Site Investigation Work Plan prepared by Barton & Loguidice, P.C. (B&L) for the five (5) EPA Brownfield sites located in the City of Rome, New York. Listed below in the order they appear are Ms. Sheridan's comments followed by our response and subsequent action, if any.

Site Investigation Work Plan Comments:

1. Page 1, Section 1.0. This section must include a brief discussion that the funding the City of Rome received for this project also involves grant money from the USEPA Brownfields Program.

Since EPA grant funds are being used for this project, it is recommended that the "U.S. EPA Region 2 Brownfields Project Planning Guidance," Volumes 1 and 2, May 2000 Final be utilized as a source for conducting site investigations to ensure specific quality assurance elements are covered throughout the Work Plan and the Sampling and Analysis Plan (SAP). Please include this reference in this section of the Work Plan.

The first sentence in Section 1.0 (Introduction) has been reworded to state the following:

> "The City of Rome was selected by the U.S. Environmental Protection Agency (EPA) to receive a Brownfields assessment grant, and has also been approved by the New York State Department of Environmental Conservation (NYSDEC) to receive funds from the 1996 Clean Water/Clean Air Bond Act, under the provisions of the Environmental Restoration Program (ERP), to conduct Site Investigations and related activities at five properties within the City."

The experience to listen. The power to solve.
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A sentence has been added to the second paragraph in Section 1.0 that states the following:

> "In addition to the above referenced NYSDEC publications, the USEPA Region 2 Brownfields Project Planning Guidance, Volumes 1 and 2, dated May 2000 (Final), will be utilized to ensure that EPA-specified quality assurance elements are adhered to while performing the Site Investigation."

2. Page 2, 3rd Paragraph. The text states that the SAP includes a quality management plan and a data management plan. These documents appear to be missing in the SAP. Please provide.

The quality management and data management plans that are included in the Sampling and Analysis Plan (SAP) are not presented as stand-alone documents, but instead are incorporated into the text of the SAP. Specifically, the quality management plan specifies the procedures to be followed in the performance of the field investigation, including the sampling and laboratory analyses presented in the Work Plan, and the quality and assurance procedures to be used during the Site Investigation. The intent of the data management plan is to establish document control policies to be adhered to during the Site Investigation, including a description of data documentation materials and procedures, project file requirements, and report formats.

3. Page 41, Section 4.1. Regarding the project objective discussion for this site, it is recommended that the information also include the following:

- *where, when and how will the samples be collected, and the data generated;*
- *who will use the data;*
- *what will the data be used for;*
- *how much data is needed; how will the data be reported;*
- *how will the data be managed and archived.*

Define the regulatory standards for which the resulting data will be compared.

At the request of the New York State Department of Environmental Conservation (NYSDEC) B&L prepared a single, comprehensive Work Plan document that describes the Site Investigations to be performed at five (5) separate properties in the City of Rome. As such, the intent of Section 4.1 (Project Objectives) is to list in general terms the Site Investigation activities to be performed at each subject parcel. However, a detailed description of each site, including identified areas of concern (AOC), is presented in Section 2.0 of the Work Plan, while Section 5.2 of the Work Plan provides a more in-depth discussion of the various Site investigation activities to be performed at each of the subject parcels. Figures 5 through 10 of the Work Plan depict the proposed number and location of the various samples to be collected at

each site, while Table 1 of the Work Plan presents a Site Investigation sample matrix that lists the number of samples (per media type) to be collected at each site and the laboratory analyses to be performed.

Upon completion of Site Investigation activities, B&L will review the data to determine the nature and extent of contamination on each site, and to develop a qualitative assessment of ecological risks and human health exposure concerns posed by each site. These results will be used to evaluate the need for subsequent remedial activities and to perform an analysis of alternatives. The SAP included in Appendix A of the Work Plan provides a detailed description of how the data will be reported, including the manner by which the data will be managed and archived, while Section 3.1 (Relevant Guidance and Regulatory Criteria) of the Work Plan presents a listing of the regulatory standards to which the data generated at each site will be compared to.

4. Page 41, Section 4.1. Regarding bullet seven, please confirm if the on-site drums will be sampled prior to removal during this site investigation.

The contents of on-site drums will be sampled and verified prior to their removal from the site. It is anticipated that the services of a licensed hazardous waste removal contractor will be utilized to accomplish this task.

5. Page 47, Section 5.1.4. The selection of the laboratory must be made prior to the mobilization and collection of samples associated with this project. Please provide the name of the laboratory in this discussion. Include all appropriate information specific to the laboratory regarding documentation to support laboratory capability; State laboratory certification programs; and performance in analyzing samples utilizing the selected methods.

Within the next several weeks B&L will be soliciting competitive bid quotes from qualified analytical laboratories to work on this project. The chosen laboratory will be required to provide B&L with appropriate paperwork and documentation to verify that they are NYSDOH ELAP certified to perform the required analyses. B&L will forward this laboratory-specific information to the EPA for review and approval prior to the initiation of sample collection activities.

6. Page 50, Section 5.2.1.2. See Comment #5.

Please refer to the above noted response for Comment No. 5.

7. Page 58, Section 5.2.3. Please confirm if a separate laboratory will be providing the soil gas analysis. Include all appropriate information specific to the laboratory regarding documentation to support laboratory capability; State laboratory certification programs; and performance in analyzing samples utilizing this method.

The laboratory services solicitation issued by B&L will include provisions for the analysis of soil gas samples. In the event that the selected laboratory intends to subcontract with a separate lab for soil gas analytical services, B&L will require the same paperwork and documentation from the subcontract lab as the prime lab. This information will be forwarded to the EPA for review and approval upon our receipt.

8. Page 64. It is recommended that a project time line be provided in order to reflect the actual date the project activities will occur.

It is our understanding that Site Investigation activities may not commence on this project until such time that the EPA has approved the Work Plan. Therefore, once we have received EPA approval our Response to Comment letter (as presented herein) and the Site Investigation Work Plan, we will revise the Project Schedule which is presented as Figure 12 in the Work Plan.

Sampling and Analysis Plan Comments:

1. Page 3, Section 2.1. The selection of the laboratory must be made prior to the mobilization and collection of samples associated with this project. Please provide the name of the laboratory in this discussion.

Please refer to our response to comment No. 5 above under "Site Investigation Work Plan Comments".

2. Page 4. What is meant by the term Laboratory Confirmational data? Define specifics.

As discussed on Page 3 of the SAP, "Laboratory Confirmational Data Quality (ASP/CLP)" is the highest level of data quality that can be requested of an analytical testing laboratory, and is based on the degree of precision, accuracy, and completeness that must be achieved by the laboratory while performing sample analysis. Laboratory Confirmational Data Quality requires the analytical laboratory to be NYSDOH ELAP-certified for ASP/CLP categories, and mandates that the laboratory provide internal quality control documentation that is derived from the ASP/CLP reporting protocols. This internal quality control documentation is also referred to as laboratory conformational data.

3. Page 4. What is the process used to determine whether laboratory sample data is used for closure or IRM decisions in order to be subject to an independent third-party data validation?

All sample data generated for this project should undergo an independent third-party data validation, including those not listed as examples of data requiring validation such as soil gas results. Clarification is needed as to whether the "petroleum-contaminated soil plume clearance samples" includes surface and sub-surface soils, and sediments.

The various media samples that are collected following the completion of an IRM or remedial activity are referred to as confirmatory samples or post remediation samples. The purpose of confirmatory and post remediation samples is to verify that project cleanup requirements have been met. As such, the laboratory data generated from the analysis of confirmatory samples will be subject to independent third-party data validation.

As discussed in Attachment A (Data Validation Scope of Work) of the SAP,

> "The purpose of data validation is to define and document analytical data quality and determine if the data quality is sufficient for the intended use(s) of the data. In accordance with NYSDEC requirements, all project data must be of known and acceptable quality. Data validation is performed to establish the data quality for all data which are to be considered when making project closure or IRM decisions. Laboratories will be required to submit results that are supported by sufficient back-up data and QA/QC results to enable the reviewer to conclusively determine the quality of the data."

Given the above stated NYSDEC requirements, B&L does not feel that it is necessary (or cost effective) for all of the sample data generated during this project to undergo data validation.

4. Page 7, Section 3.3. Please provide the extraction and digestion methods to be used prior to SW-846 analyses.

Please refer to the information presented on attached Table 2 (SW-846 Extraction/Preparation Methods). This table has been added to the SAP.

5. Page 8. For EPA Method 6010B, the text is incorrect as metals samples are not extracted but rather digested. Please provide the digestion method to be used for this analysis.

The digestion method to be used for the metals analysis of sediment and soil samples is Method 3050B. Digestion method 3005A will be used for the dissolved metals analysis of water samples, while digestion method 3010A will be used for the total metals analysis of water samples.

6. Table 1. Footnote #3 references that samples requiring off-site disposal will also be subjected to TCLP analysis. There is no discussion in the SAP regarding this topic. Specific information must be included in the SAP regarding the name laboratory to perform this analysis; the analytical methods to be used; the data validation of the TCLP sample results to determine whether the samples should go for off-site disposal etc.

As previously noted, the analytical laboratory to be utilized on this project has yet to be selected. In the event that the off-site disposal of contaminated soil or groundwater is required as part of the Site Investigation, a representative number of samples will be submitted to the selected laboratory for the analysis of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), Target Analyte List (TAL) metals, PCBs, and pesticides (1333 East Dominick Street site only), using the toxicity characteristic leaching procedure (TCLP) laboratory method. In addition, the submitted samples will also be analyzed for reactivity, ignitability, and corrosivity in accordance with EPA SW-846 Methods. The laboratory data generated from the TCLP analysis of the aforementioned samples will be submitted for independent third-party data validation.

7. Page 13, Section 4.2. The following Region 2 procedures should be used when performing decontamination of sampling equipment:

- *Detergent/tap water wash;*
- *Tap water rinse;*
- *10% nitric acid (ultra pure) rinse (if sampling for metals);*
- *Deionized/distilled water rinse;*
- *Acetone or methanol/hexane rinse (pesticide grade or better);*
- *Deionized/distilled water rinse;*
- *Air dry*

During periods of transportation and non-use, all decontaminated sampling equipment should be wrapped in aluminum foil.

The decontamination procedures presented in Section 4.2.1 (Decontamination of Sampling Equipment) of the SAP have been revised to incorporate the above noted EPA Region 2 decontamination procedures. In addition, the requirement that all sampling equipment be

wrapped in aluminum foil following the completion of decontamination procedures has also been added to Section 4.2.1 of the SAP.

8. Page 17, Section 4.3.3. It is recommended that soil samples for VOC analysis be collected using an En Core™ sampler, or similar tube or plunger type sampler. The sampling device is inserted into undisturbed soil, such as a retrieved split spoon or directly into the exposed soil surface. The 5-gram plug of soil (approximately) is then capped and sent to the laboratory where it will be preserved, extracted and analyzed. Volume requirements under the current CLP method states that three (3) En Core™ vials and one (1) unpreserved 60 ml jar be sent per sample location. The laboratory should be provided with sufficient En Core™ or similar type samples for the purpose of screening, analysis and re-analysis, if necessary, as well as for MS/MSD. It should be noted that the holding time for the En Core™ or similar type samples is 48 hours from time of collection to preservation.

Section 4.3.3 (Soil Sampling and Screening) of the SAP has been revised to include the EPA Region 2 provision that soil samples obtained for VOC analysis be collected using an En Core™ sampler in accordance with the above noted procedures.

9. Page 19, #5. Please include the following procedure for homogenizing soil samples within this section:

- *Remove rocks, twigs leaves and other debris from sampling device, if they are not considered part of the samples;*
- *Place in a stainless steel bowl and thoroughly mix using a stainless steel spoon;*
- *Scrape the sample from the sides, corners and bottom of bowl, roll to the middle of the bowl and mix;*
- *The sample should then be quartered and moved to the fours corners of the bowl;*
- *Each quartered should be individually mixed, and then rolled to the center of the bowl and then entire sample mixed again.*

Item No. 5 of Section 4.3.3 (Soil Sampling and Screening) of the SAP has been revised to include the above stated EPA Region 2 procedure for the homogenization of soil samples that will be submitted for the analysis of SVOCs, PCBs, and metals.

10. Page 41, Section 5.1. There is no discussion of the use of samples labels. Please include, and provide an example.

As noted in Item No. 8 of Section 4.3.3 (Soil Sampling and Screening) of the SAP,

> "Sample Jars will be labeled with the following information: project name, project number, location identification, sample depth interval, blow counts, and date. This information will also be recorded in the bound field log book."

Section 3.2 (Sample Designation) of the SAP lists the specific alphanumeric code that will be used to identify each site, and also indicates the designated letter codes that have been assigned to the different media types.

With respect to the labels that will be placed on laboratory sample containers, B&L will request the selected laboratory to provide us with pre-printed labels for our use during the Site Investigation. Therefore, we will provide the EPA with an example label once an analytical laboratory has been selected for the project.

11. Page 43. Please provide an example of the custody seal to be used for this project.

Similar to our above response, B&L will provide the EPA with an example of the custody seal to be utilized once the services of an analytical testing laboratory has been retained for this project.

12. Page 43. All sample bottle containers should meet all guidelines specified in Specification and Guidance for Obtaining Contaminant-Free Sample Containers, EPA 540/R-93/051 and OSWER Directive 9240.0-05A (EPA, 1992b).

B&L will require the selected analytical laboratory to provide us with sample bottle containers that meet the above noted EPA guidelines.

13. Page 48, Section 5.4.3. Please provide the name of the third party independent data validator for this project. It is recommended that applicable Standard Operating Procedures (SOPs) pertaining to SW-846 methodology be used for this project. Such documents can be obtained from the USEPA Region 2 quality assurance web site at:
http://www.epa.gov/Region2/qa/documents.htm

The third party independent data validator to be used on this project is Mr. Michael Fifield of B&L. Mr. Fifield has 20 years of experience as a data validator, and is very familiar with the EPA-issued SOPs pertaining to the SW-846 to be used on this project.

Following your review of our response to comments and indicated revisions to the Site Investigation Work Plan and SAP, please feel free to contact me should you have additional questions or would like to discuss any of our responses in greater detail prior to issuing EPA approval of the noted revisions.

Very truly yours,

BARTON & LOGUIDICE, P.C.

Stephen B. Le Fevre P.G., C.P.G.
Managing Hydrogeologist

SBL/ojf

Enclosure

cc: Frank Tallarino, City of Rome
Chris Mercurio, City of Rome
Scott Nostrand, B&L
Mike Brother, B&L

Table 2 - SW-846 Extraction/Preparation Methods		
Parameter	**Soil/Sediment**	**Water**
Volatiles (8260B)	5021/5032/5035	5030/5032
Semivolatiles (8270D)	3540/3541/3550C cleanup (3600C)	3510/3520 cleanup (3600C)
PCBs (8082A)	3540/3541/3545/3546/3562 cleanup (3665)	3510/3520/3535 cleanup (3665)
Pesticides (8081B)	3540/3541/3545/3546/3562 cleanup (3610/3620/3630/3640/3660)	3510/3520/3535 cleanup (3610/3620/3630/3640/3660)
Herbicides (8151A)	8151A	8151A

Rome's Work Plan – 2nd set of comments

Rome revised and submitted changes to the work plan based on the original comments provided by EPA's Edison office. I submitted those changes to Edison and they had several more comments. Some of these comments are recommended changes whereas others are must changes. I am forwarding the items that Edison indicates are must changes to you so that you can revise the work plan accordingly. I am not requiring Rome to change the work plan based on any further suggestive/recommended changes by Edison. As a result, once you address the following changes the work plan will be approved and you may begin its implementation.

1. B and L states that it will be soliciting competitive bids from qualified labs within the next several weeks. If there is any update to this (RFP has been issued, contract lab has been selected, etc.) please state it in the work plan.
2. The lab will be able to provide for soil gas analysis – is this still the case (will the request be written to include this type of sample?).
3. It is unclear whether all or just confirmatory data will be validated in accordance with the QA/QC validation methods proposed in the work plan.

Please confirm that you have made or will make these changes to the work plan. Once this is done the work plan shall be approved and implementation can begin.

October 20, 2008

Ms. Diane Shoemaker
Director of Community Development
City of Rome
198 N. Washington Street
Rome, New York 13440-5815

Re: Second Set of EPA Comments
Site Investigation Work Plan
EPA Brownfields Assessment Grant Program
City of Rome, New York

File: 245.005

Dear Ms. Shoemaker:

We have reviewed the second set of comments prepared by Ms. Patricia Sheridan and Mr. Philip Clappin of the U.S. Environmental Protection Agency (EPA) regarding the February 2008 Site Investigation Work Plan prepared by Barton & Loguidice, P.C. (B&L) for the five (5) EPA Brownfield sites located in the City of Rome, New York. Based upon our review of the attached EPA transmittal, we have prepared the following responses to the EPA's comments. In addition, we have enclosed previously requested paperwork and documentation to verify that TestAmerica Laboratories Inc. is an Environmental Laboratory Approval Program (ELAP) certified laboratory by the New York State Department of Health (NYSDOH) to perform the required analyses.

Listed below in the order they appear are the second set of EPA's comments followed by our response and subsequent action, if any.

1. *B and L states that it will be soliciting competitive bids from qualified labs within the next several weeks. If there is any update to this (RFP has been issued, contract lab has been selected, etc.) please state it in the work plan.*

   On August 22, 2008, B&L solicited competitive bid quotes from a total of five (5) qualified analytical laboratories for the laboratory analysis of sediment, soil, groundwater, sludge, aqueous, and soil gas samples to be collected at each of the six (6) City of Rome Brownfield sites. It should be noted that B&L sent request for quotations to only those labs that are currently ELAP-certified by the NYSDOH for all of the ASP/CLP categories included in this project. Upon our review and evaluation of the received bids, B&L has retained the services of TestAmerica Laboratories, Inc. to provide the requested analytical laboratory testing services for the City of Rome Brownfield sites.

   As previously requested by the EPA, we have enclosed appropriate paperwork specific to TestAmerica Laboratories Inc. that verifies that the laboratory is ELAP-certified to perform the required analyses in accordance with the specified methods. In addition, we have attached a copy of the lab's Quality Assurance Manual for the EPA's review and information. And finally, as previously requested by the EPA, we have also enclosed a paper copy of the sample jar labels and custody seals that will be used on this project.

The experience to listen. The power to solve.

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2. *The lab will be able to provide for soil gas analysis – is this still the case (will the request be written to include this type of sample?).*

   In addition to the laboratory analyses of soil and groundwater samples, TestAmerica Laboratories Inc. will also be responsible for performing soil gas analyses. As noted on the attached ELAP certificates (refer to the last two sheets), the TestAmerica laboratory facility located in South Burlington, Vermont is ELAP-certified to perform soil gas analyses for this project.

3. *It is unclear whether all or just confirmatory data will be validated in accordance with the QA/QC validation methods proposed in the work plan.*

   In accordance with the previous recommendation made by the EPA, all of the sediment, soil, groundwater, and soil gas samples collected during this project will undergo data validation. As previously noted, the third party independent data validator to be used on this project is Mr. Michael Fifield of B&L. Mr. Fifield has 20 years of experience as a data validator, and is very familiar with the EPA-issued SOPs pertaining to the SW-846 methods to be used on this project.

Following your review of our response to comments and enclosures, please feel free to contact me should you have additional questions or would like to discuss any of our responses in greater detail prior to forwarding this information to the EPA for their review and approval.

Very truly yours,

BARTON & LOGUIDICE, P.C.

Stephen B. Le Fevre P.G., C.P.G.
Managing Hydrogeologist

SBL/jas

Enclosure

cc: Frank Tallarino, City of Rome
Chris Mercurio, City of Rome
Scott Nostrand, B&L

Appendix B

Geophysical Survey Results

RSI Geophysics for the 21st Century
Radar Solutions International™

February 28, 2009

Mr. Steven B. LeFevre, P.G.
Managing Hydrogeologist
Barton & Loguidice, P.C.
2 Corporate Plaza
264 Washington Ave. Ext.
Albany, N.Y. 12203

Via Email: slefevre@bartonandloguidice.com

Re: Final Report
Geophysical Surveys for USTs
GPR, EM-31 and EM-61 Investigations
City of Rome Environmental Restoration Project
Rome, New York

Dear Steven:

In accordance with your authorization, Radar Solutions International (RSI) conducted ground penetrating radar (GPR), EM-31 and EM-61 induction surveys at the above-referenced properties on Tuesday, Thursday and Friday, October 28th, 30th and 31st, 2008, and throughout the following week from Monday, November 3rd, to Friday, November 7th, 2008. GPR and electromagnetic surveys were conducted to help locate possible USTs. RSI's finalized survey results and interpretations are summarized below.

LOCATION AND SURVEY CONTROL

This project involved surveys of six sites within the City of Rome, Oneida County, New York. Three of these sites were located along East Dominick Street, at 1030, 1201-1207, and 1313-1333 East Dominick Street. Another site was located at 508 West Liberty Street. The remaining two sites were the 701 Lawrence Street and Lawrence and Martin Street properties.

508 West Liberty Street

This area of investigation encompassed the open areas along the eastern side of the building and extended from West Park Street in the northeast to West Liberty Street in the southwest. The eastern extent of the area of investigation ends at the property boundary. The majority of the area was covered with fill except for where there was concrete pavement. There was also some grassy areas near the southern (southwestern) site boundary just north (northeast) of the sidewalk and between the sidewalk and the street. The EM-31 survey was conducted during consistently light to moderate rainfall. Due to the accumulation of water at ground surface, the GPR survey was conducted on another day.

A geophysical survey grid was established with maximum dimensions of approximately 80 by 230 feet in size. Grid node 0E and 10S corresponds to the northeast corner of the chain-link fence parallel to the building. The geophysical grid was oriented parallel and perpendicular to the building walls. Because there was reportedly a 10,000 gallon UST abandoned on the property, both GPR and EM-31 survey lines were spaced 5 feet apart parallel to the building. Transverse GPR lines were also obtained perpendicular to the building at a five foot interval.

1030 East Dominick Street

The site located at 1030 East Dominick Street is currently the location of Mike Jr's Auto Repair. The area of investigation encompasses the accessible areas around the perimeter of the building. Outside of the building, the area of investigation in the northern part of the site is an asphalt-paved parking area, with a reinforced concrete sidewalk just around the northwestern corner of the building. The southern part of the site is mostly composed of fill material of varying sizes which is overgrown with grass in some parts. Due to the current use of the site, the site is littered with a large amount of scrap metal, the majority of which were removed prior to mobilization to this site. The area of investigation is bordered in the south by a railroad track. Also along this border to the west of the building there were large piles of fill accompanied by significant amounts of tall brush. Because of the need to coordinate our activities with the active auto repair business, it was necessary to conduct geophysical surveying after another heavy rainfall, which resulted in large puddles of water and mud on the site reducing the effectiveness of GPR.

A geophysical survey grid was established with maximum dimensions of approximately 320 feet by 130 feet in size. Grid node 160E and 40S corresponds to the building's northwest corner closest to East Dominick Street. The geophysical grid was oriented parallel and perpendicular to the building walls. EM-61 survey lines were spaced 2.5 feet apart, near to and parallel to all sides of the building and 5 feet apart, parallel to the street, otherwise. GPR lines obtained parallel and perpendicular to the building, were spaced 2.5 to 5 feet apart.

1201-1207 East Dominick Street

As with the 1030 East Dominick Street site, the area of investigation encompasses all the accessible areas around the perimeter of the building and within the property boundary. South of the building and closer to the street asphalt pavement is present with a concrete pad, while east, west and north of the building the site is mostly grass. A reinforced concrete sidewalk was present along the western and southern walls of the building.

A geophysical survey grid was established parallel and perpendicular to the building and sidewalk along East Dominick Street, and had a maximum dimension of approximately 150 by 220 feet. Grid node 80E and 60N is 4' west of the building's southwest corner. The geophysical grid was oriented parallel and perpendicular to the building walls. EM-61 survey lines were spaced 2.5 feet apart near to and parallel to each side of the building and 5 feet apart parallel to East Dominick Street for the rest of the site. GPR lines, obtained parallel and perpendicular to the building, were spaced 2.5 to 5 feet apart.

1313-1333 East Dominick Street

This was by far the largest of the six sites. The area of investigation encompasses the accessible areas around the perimeter of the building, inclusive of the loading dock areas and the open areas at the rear of the property. Due to the site layout and the orientation of the building relative to the desired survey line orientation, the area of investigation was broken up into 7 individual grids, namely, Grids A through G.

The area covered by Grid A consisted of grass and asphalt pavement and extended from the north edge of East Dominick Street to the building and included all areas south of the building. Geophysical survey Grid A was established with maximum dimensions of approximately 370 by 260 feet in size. Grid node 0E and 0N corresponds to the southwest corner of the chain-link fence closest to East Dominick Street, while Line 0N corresponds to the location of the rod iron fence located immediately north of the sidewalk along the north side of East Dominick Street. Geophysical Grid A was oriented parallel and perpendicular to East Dominick Street and therefore approached the building's southwestern wall at an angle. Therefore, Grids B and C were established parallel to the building's edge to maximize the detection of possible USTs oriented parallel to the building. Within Grid A, there was reportedly a former gasoline station building located approximately 50 feet north of East Dominick and 80 to 100 feet west of the existing building. EM-61 survey lines were spaced 2.5 to 5 feet apart, with the tighter line spacings being located in proximity to the reported gasoline station. EM-61 lines were oriented parallel to East Dominick Street. GPR lines were spaced 2.5 to 5 feet apart, depending upon proximity to potential buried targets, and oriented both perpendicular and parallel to East Dominick Street.

To obtain survey lines parallel and perpendicular to the southwestern wall of the building, two geophysical grids were established parallel to the wall. Grid node 0E and 10N of Grid B corresponds to the building's southwest corner and has the maximum dimensions of approximately 140 by 10 feet in size. About 140 feet southeast of the southwest corner of the building, the building wall jogs towards the northeast and then makes another 90° angle turn in the previous orientation. This is where Grid C begins. The approximate dimensions of Grid C are 110 by 20 feet as a result of the trees along the wall that extend about 10 feet off the wall. For Grids B and C, EM-61 and GPR survey lines were spaced 2.5 feet apart and oriented parallel to the building.

The next two grids, D & E, were oriented parallel and perpendicular to the northwestern wall of the building and separated from each other by a chain-link fence. Within each grid was a former loading dock. Grid node 0W and 0N of Grid D corresponds to the southwest corner of the building. EM-61 and GPR survey lines were spaced 2.5 to 5 feet apart. The EM-61 lines were oriented parallel to the loading dock ramp, perpendicular to the building, while the GPR lines were obtained both parallel and perpendicular to the building. Grid node 0W and 0N of Grid E corresponds to where the chain-link fence separating the two loading dock areas meets the building. The EM-61 lines, spaced 2.5 feet apart, were oriented perpendicular to the northwest facing wall of the building. GPR survey lines were oriented both perpendicular to and parallel to the building, and were spaced 2.5 to 5 feet apart.

Grid F, located along the northeast facing wall of the building, is the closest grid to the northernmost corner of the building. Grid F has dimensions of 240 by 15 feet. Grid node 0N and 0E corresponds with the northwestern corner of the building while grid line 0N is the northeast

facing wall of the building. The EM-61 line spacing was 2.5 feet and the lines were oriented parallel to the building. GPR lines were spaced 2.5 feet parallel to the building and 10 feet perpendicular to the building.

Grid G, located in the eastern portion of the site encompasses the enclosed rectangular courtyard with a southeast facing building wall as the northwestern boundary and a northeast facing building wall as the southwestern boundary. A chain-link fence outlines the remaining perimeter. A geophysical survey grid was established with maximum dimensions of approximately 165 by 120 feet in size. Grid node 0E and 0N corresponds to the corner created by the building walls. The geophysical grid was oriented parallel and perpendicular to the building walls. EM-61 survey lines were spaced 2.5 feet apart, while GPR lines, obtained parallel and perpendicular to the building, were spaced 2.5 to 5 feet apart.

Lawrence and Martin Streets

The area of investigation encompasses the accessible areas. Unfortunately, the majority of the site was inaccessible for both the GPR and EM-61 systems due to the site's not being sufficiently degrubbed of trees, brush, and metal scrap. As a result, the geophysical survey grid could only be established along the north boundary of the site, immediately south of Martin Street, parallel and perpendicular to Martin Street with dimensions 260 by 40 feet. Grid node 0E and 0N is 30 feet north of the chain link fence bordering the north end of the property, aligned with TP-1, which was located at 10S and 0E. EM-61 survey lines were spaced 2.5 feet apart and obtained parallel to the street. It should be noted that lines were only conducted from 0N to 10N and at 40N.

701 Lawrence Street

As with the Lawrence and Martin Street sites, the majority of the site was inaccessible to both the GPR and EM-61 systems. The area of investigation encompasses the accessible areas around the eastern and northern perimeter of the property. Outside of the property, the area of investigation is an asphalt paved driveway east of the property, a grassy area further east of the property and north of Erie Canal, and an asphalt paved sidewalk north of the property.

A geophysical survey grid was established with maximum dimensions of approximately 170 by 230 feet in size. Grid node 0E and 0N corresponds to the building's northwest corner closest to Lawrence Street. The geophysical grid was oriented parallel and perpendicular to the building. EM-61 and GPR survey lines were spaced 5 feet apart, and oriented parallel to the building.

METHODOLOGY

Three geophysical methods were used to help identify possible USTs. A time-domain model EM-61 electromagnetic induction meter manufactured by Geonics LTD, was used to detect and determine the approximate mass of buried metal. The Geonics EM-31 terrain conductivity meter has a similar use as the EM-61, detecting metal to depths of 20 to 25 feet, and was used to help detect buried metal beneath the reinforced concrete pad at the 508 West Liberty site. GPR was used to characterize buried metal targets, determining their approximate size, shape and orientation, and depth.

EM-61 Time Domain Induction

The EM-61 instrument, developed by Geonics, LLD., was originally designed for detecting unexploded ordinance, including when in proximity to above-ground metal targets. Because of the relatively small response from overhead power lines and nearby metal fences and vehicles, the EM-61 has been adopted by the environmental industry for urban geophysical surveys.

The EM-61 technology measures the strength of the electromagnetic field, measured in millivolts, induced within buried metal objects after the primary electromagnetic pulse has been switched off. In this particular model (Mark II), measurements are obtained at both top and bottom receiver coils at four different time increments, called “time-gates”. High induced voltages indicate the presence of above or below ground metal. In the absence of any metal, the differential measurement (i.e. the value at the top coil minus the value at the bottom coil) is zero. Positive, high-amplitude differential readings indicate that metal is likely to be present below grade. The higher the induced voltages, the more massive the metal target, especially when observed in the later time-gates.

EM-61 data are typically collected along lines parallel to the long axis of the site using a line spacing of 2.5 feet for total coverage. At the office, EM-61 data were transferred to a computer and contoured (i.e. data with similar values were shaded similarly to bring out patterns of high and low values). Red and orange-filled contours are indicative of high residual electrical values associated with metal objects. Large spatial distribution and amplitude of observed anomalies indicate large buried metal targets.

EM-31 Terrain Conductivity

The EM-terrain conductivity meter is an induction-type instrument which measures terrain conductivity without electrodes or direct soil contact. The terrain conductivity method operates on the principle that secondary electric and magnetic currents can be induced in metal objects and conductive bodies, such as iron or steel USTs, salt and other conductive plumes, sludge, etc., when an electric field is applied. This instrumentation measures the secondary magnetic field strength relative to the primary magnetic field and converts it directly into a conductivity value, measured in millimhos per meter (mmhos/m), with a resolution of 1 mmho/m.

The EM-31 also records the amount of phase-shift occurring between primary and secondary magnetic fields. The in-phase component measures that portion of the secondary magnetic field that is aligned, or in-phase, with the primary field. Because metal objects are almost perfect conductors, there is often no phase shift between primary and secondary magnetic fields. Hence, metal objects are detectable using the in-phase component (measured in parts per thousand or ppt). Additionally, in the presence of metal, conductivity values are often negative ("polarity reversals") and highly irregular.

The transmitting and receiving coils in the EM31-DL have a fixed separation of 3 meters, and when used in its normal operating mode (vertical dipole mode), the EM-31 achieves a depth of penetration of about 6 meters, or about 20 feet. The instrument response is more affected by near-surface than by deeper material, especially when used in the vertical dipole mode.

Data are typically collected at 1 second intervals along survey lines spaced 5 to 10 feet apart, and are recorded on a portable data-logger. Both components (i.e. the quadrature phase or conductivity, and the in-phase) of the induced EM field are recorded. The EM data were then transferred to desktop computer and contoured (i.e. data with similar values were shaded similarly to bring out patterns of high and low conductivity and in-phase values).

EM terrain conductivity data is adversely influenced by above-ground metal, such as cars, dumpsters, and buildings, and by electrical sources of noise, such as overhead power lines and radio broadcasting stations. These above-ground sources can create noise which may adversely effect an EM survey, and create unreliable conductivity data. For this reason, the EM-61 instrument is superior to the EM-31, except when reinforced concrete is present.

Buried metal may be concealed by highly conductive soils, such as sludge and landfill materials. This effect may be mitigated by using the in-phase component of the induced magnetic field in conjunction with the conductivity for data interpretation.

To obtain accurate conductivity readings, the terrain conductivity meter must first be calibrated in an area free of buried metal and overhead power lines. Because the survey area had significant sources of cultural noise, the EM-31 instrument could not be calibrated on-site, and hence there could be up to a 5% error in absolute conductivity and in-phase values.

Ground Penetrating Radar

The GPR method operates by transmitting low-powered microwave energy into the ground using an ultra-wide band (UWB) transceiver antenna. EM energy from the antenna propagates at frequencies ranging from 10 MHz to 3 GHZ, although antenna frequencies for commercially available antennas typically range from 200 MHz to 1.5 Ghz. The peak power of this antenna is 20 to 100 times less the wattage of a cellular phone, and the energy is directed into the ground (and not at the operator) by means of shielding on the top side of the antenna. The GPR signal is then reflected back to the antenna by materials with contrasting electrical impedance, which is primarily determined by dielectric and conductivity properties of the material, its magnetic permeability, and its physical properties. The greater the contrast in the real dielectric permittivity (RDP) of two materials, the greater the reflection amplitude. Typically, high-amplitude reflections occur at lithologic or mineralogic changes, or where there is a sudden change in water content.

A material's dielectric properties are primarily determined by mineralogy, and water content. A soil with a high iron and/or magnesium content, or one that contains mineralogical clay or other platey minerals, will have a higher RPD value than a quartz-rich sand. Similarly, a soil that has a high porosity and is water saturated will have a higher RDP for the same unsaturated soil.

Reflections observed on GPR records can be non-unique, meaning that a similar reflector can be caused by different objects. Strong reflections are typically produced from metal objects, which has an RDP of 1,000, the water-table, and from clay layers. Objects, such as USTs and utilities, that have a discrete length and width, typically produce hyperbolic reflections on GPR records.

The success of the GPR methodology also depends on the amount of EM signal attenuation experienced at any given site. GPR signal attenuation is caused by four loss mechanisms:

conductive losses, molecular relaxation losses, "clay" (or interfacial polization) losses, and scattering losses (Kutrubes, 1986). By far, the greatest source of loss is caused by conduction losses, such as which occur when road salt or clay is present. Conduction losses are most severe at frequencies of 300 MHz and below. The greater the soil/medium conductivity the more attenuation and loss of resolution there will be. Road salt contributes to conduction signal loss, even in the warm months and after heavy rains, as road salt still resides within the asphalt pores and soils beneath it.

The GPR data for this project were acquired using both the GSSI SIR 2000 and GSSI SIR 3000 digital radar systems and 400 MHz antenna. GPR data were collected continuously along survey lines spaced 2.5 to 5 feet apart. GPR data were processed using GSSI's proprietary radar software processing package, RADAN©. GPR data were normalized and a 3D GPR file produced for each area. This file was visually inspected for reflectors characteristic of USTs, utilities, and other possible targets.

RESULTS

GPR signal penetration was generally fair, penetrating a maximum of 4 to 6 feet below grade, which is typical for this type of site in this area of New York, especially when road salt is a factor. In some areas where the ground was very saturated with rainwater and where other contamination may be a factor, penetration with the GPR was reduced to as little as 1.5 feet. For this reason, a greater reliance was placed on EM-61 data, which is not impacted by wet and salty conditions. The results of our survey are presented on Figures 1 through 20 of this report. All figures are presented at a scale of 1 inch = 30 feet, unless otherwise noted by the scale bar legend. Key results are presented below.

1201-1207 East Dominick Street

- Figures 1 through 3 present interpreted EM-61 and GPR results. Contoured EM-61 differential measurement data (Figure 1) indicate that there is buried metal mostly to the west and south of the existing building. The high-amplitude, linear anomalies trending south southwest from the building are indicative of piping associated with the former pump island (shown as solid grey lines). The high-amplitude, rectangularly shaped anomaly is likely attributed to the reinforced concrete pad beneath the former pump island and apron.

- Southwest and southeast trending linear anomalies located on either side of the former pump island are also attributed to buried utilities. Larger responses were at observed 70E and 45N and at 50E and 32N. The latter target is coincident with an area that has been previously excavated, as indicated by the GPR (Figures 2 and 3). However, no large hyperbolic reflectors were observed coincident with the EM anomaly. It is possible that there is a target deeper than the GPR's investigative depth, which was about 3 to 4 feet in the paved portions of this site. As with the latter target, no large GPR targets were observed coincident with the former anomaly indicated by the EM-61. However, a zone of severe GPR attenuation, which can be indicative of soil and/or groundwater contamination or a concentration of road-salt, was observed coincident and immediately south of this EM-61 target.

- The location of a suspected UST was confirmed by both EM-61 and GPR. Contoured EM-61 results (Figure 1) show piping trending from the west side of the building to the west, toward station 40E and 85N. A large EM anomaly was observed from 26E to about 38E, the approximate end of the UST, as indicated by GPR. Because of the unevenness of the ground surface, the proximity of concrete rubble and trees, it was not possible to get coverage directly over the known UST. However, based on GPR information obtained immediately adjacent and over the east edge of the UST, we believe the UST is approximately 2 feet below grade, and that is has an approximate 1,000 gallon capacity.

- Several other metal targets are indicated by GPR and EM-61. Several large hyperbolic reflectors were observed at 78E, from 30N to 40N, at an approximate 2.5 to 3 foot depth. These target(s) are coincident with the large EM anomaly coincident with the former tank pad. These large hyperbolic reflectors appear to align, and may represent two utilities that trend from the former pump island towards the large EM anomaly located at 70E and 45N and where the zone of attenuation was observed.

- Another group of large GPR reflectors observed at an approximate 4 to 4.5 foot depth suggests a target at the east edge of the pump island pad from 102E to about 112E, and from 20N to 35N. The size of this target may be indicative of another 1,000 gallon UST.

- Three additional targets were observed to the north of the building within the grass area. Two of these targets appear small in size. One target, which was observed at an approximate 3.5 to 4 foot depth and appears to have some metal associated with it, is centered at grid node 95E and 100N. A high-amplitude EM anomaly was observed coincident and immediately south of this target. It is possible that this target is associated with the septic system.

- A second metal target is indicated by the large EM anomaly centered at 145E and 125N. However, no GPR reflectors indicative of a UST were observed coincident with the anomaly. It is likely that this EM anomaly is attributed to a known septic tank the location of which was reportedly nearby based on information from aerial photos and from historical information of the site.

- The third target observed to the south of the building is immediately adjacent to the building. Large GPR reflectors were observed from 1.5 to 2 feet below grade. There also appears to be a vent pipe coincident with the target's location at 127E and 90N. This target could represent a small UST, given its location adjacent to the building and proximity to a vent pipe. However, there does not appear to be an anomaly specifically associated with this target as it is located within the large EM anomaly associated with the building. It is possible that the vent pipe is associated with the nearby AST, located at 100E and 90N, and that this target represents piping associated with the septic tank.

1030 East Dominick Street

- Figures 4 through 6 summarize GPR and EM-61 results at the 1030 East Dominick Street property. Figure 4 indicates an abundance of buried metal on this site. Large EM-61 anomalies are observed off the northwest corner of the existing building which trend from the building from 140E to 185E and 50S to the street, from 130E to 170E, and 0N.

Likewise, a large anomalous area was observed to the southwest of the building, between 100E and 300E. The large horizontal extent of this EM anomaly, as well as the large extent of the anomaly observed along the southwest property boundary, suggests that the area has been extensively filled with buried metal. Sources of the EM anomalies behind the building may include car parts, drums, and demolition debris. The large anomaly observed to the east and north of the building may represent a reinforced concrete pad, associated with the former gasoline station, as well as to buried utilities and possible USTs. Isolated, but large EM anomalies observed centered around 84E, 12S, 11.5E, 18.5S, and 13E, 74S could also be attributed to possible USTs.

- GPR signal penetration was highly variable, ranging from 1.5 to 4 feet throughout the site. Several large GPR reflectors were observed within 60 feet west of the building. One possible UST is located at an approximate 2.5 to 3 foot depth, immediately adjacent to the building from 150E to 160E and from 65S to 60S.

- Another group of large GPR reflectors is located from 120E to 126E and from about 45S to 35S. The area appears to have been previously excavated. Hence, this target could also represent a UST, probably with a capacity of 1,000 gallons or less.

- Likewise, the group of large GPR reflectors located between 120E and 135E, and 65S and 50S, could also feasibly represent two small USTs. Because of the presence of multiple large reflectors and due to the attenuation attributed to wet, clay-rich, and possibly contaminated soil, we can not confirm for certain whether these targets represent USTs; however, they appear to be metallic.

- Areas of GPR signal penetration have been delineated on Figures 5 and 6 in dark yellow dashed rule. These areas may be attributed to an area of increased moisture, increased clay within the soil, or possibly to hydrocarbon contamination. The majority of attenuation areas are not coincident with EM anomalies indicating buried metal. However, the area of attenuation observed between 100E and 120E and from 50S to 30S and immediately west and north of large EM and GPR anomalies, could feasibly be attributed to hydrocarbon attenuation.

1313-1333 East Dominick Street

Grids A, B, and C:

- Figures 6 through 8 summarize EM-61 and GPR results for the large area located west of the large existing building. Contoured differential results (Figure 6) indicate that there are two large areas where buried metal is located: between 78E and 102E, and 60N to 87N, and from 105E to 135E, and 10N to 45N. One of these two locations represents the location of the former gasoline station building; the other location may represent buried reinforced concrete pads and possibly USTs associated with the former station.

- GPR data indicates that the area coincident with the large EM anomalous area located between 78E and 102E and 60N to 87N, has been previously excavated or that the ground has been disturbed. No large GPR reflectors were observed coincident with the large EM target. Several small, shallow targets were observed coincident with the

second large EM anomalous area. A handful of large, weak-amplitude GPR reflectors were also observed within the area. Two weak reflectors were observed as deep as 3.5 feet. However, none of these targets appear to group together, and most large targets were observed at depths no greater than 1.5 feet. A GPR anomaly indicative of a buried concrete slab, possibly associated with the former pump island, was observed near 120E and 27N.

- A third, moderately large area where EM anomalies were observed is present between 140E and 165E and from 5N and 30N. The shape of the highest amplitude area suggests two long, narrow targets, possibly buried utilities. However, GPR targets indicative of buried USTs were not observed coincident with the EM anomalies. The deepest target was observed at an approximate 2 foot depth.

Grids D, E, F, G:

- Figures 10 through 12 summarize results from Grids D through G at the 1313-1333 East Dominck site. Figure 10 indicates that other than interference from the building, and from reinforced concrete structures and curbing, there is a limited amount of buried metal. There appears to be four areas in Grids D, E, and G, that could feasibly represent buried metal. One potential target is located near 80W and 10N of Grid D, although the proximity of above-ground sources of interference and the lack of large GPR targets suggest that the anomaly may be attributed to a non-UST source, such as a utility.

- Similarly, EM-61 results indicate that there is possibly buried metal in Grid E at 82W and 60N. However, no GPR targets were observed coincident with it, and again there is a above-ground structure that may elevate differential measurement values.

- Two large GPR reflectors were observed at an approximate 2 foot depth at the southwest corner of the area of investigation, adjacent to the building. The associated EM anomaly is relatively small and can likely be attributed to the adjacent building. Hence, the GPR target may be more likely to be attributed to a large diameter utility crossing the grid at an angle rather than to a small UST.

- In Grid G, a large GPR target was observed at an approximate 2 foot depth between 0E and 25E and from 7N to 18N. The target appears to be oblique to the survey grid, and there is a large EM anomaly coincident with it. This target is likely to represent a UST.

508 West Liberty Street

- Figures 13 through 15 summarize geophysical results at the 508 West Liberty Street property. Contoured EM-31 results indicate that buried metal, shown as a negative conductivity value (dark blue to black filled contours) on Figure 13, is present between 15E and 35E and 50S and 80S. A group of large GPR reflectors are observed coincident within the EM anomaly, from 10E to 35E and 52S to 60S, is attributed to a 10,000 gallon UST known to exist, but whose exact location was unknown (Figure 14). This UST is approximately 2 to 2.5 feet below the reinforced concrete slab and is oriented roughly parallel to grid east-west.

- A second, large negative conductivity anomaly was observed between 45E and 55E, and from 90S to 70S. No large GPR target was observed coincident to this anomaly. However, it is possible that there is another large metal target present south and east of the 10,000 gallon UST.

- Another group of large GPR reflectors were observed at an approximate 3 foot depth, between 62E and 80E and from 80S to 72S, which could represent another, smaller, UST. However, there is not much of an EM anomaly coincident with the group of GPR reflectors.

- A utility is indicated in contoured EM-31, trending parallel to 5E, from 0S to 100S. The EM anomaly appears to enlarge to the south, as one approaches the building. It is possible that the anomaly observed south of 102S is attributed to a UST. However, it is equally possible that the anomaly is attributed to the proximity of the building, especially as there were no large GPR reflectors observed coincident with the large EM anomaly.

- A second utility is indicated trending from 120S and 20E to 21E, 190S. The anomaly continues further to the south, from 190S to the street at 230S. Large GPR targets were observed at an approximate 4 foot depth from 190S to 230S. Given the elongated shape of the target, it is likely that the source of this anomaly is attributed to a buried utility and not to a UST

701 Lawrence Street

- Figures 16 through 18 summarize results from the 701 Lawrence property. Figure 16 shows contoured EM-61 results, and indicates that there is buried metal east of 50E and in proximity to the former building. There are also isolated areas where buried metal is indicated, such as near 90W, 172S, 70W, 181S, and 45W, 165S. GPR signal penetration was again limited, primarily due to wet, saturated conditions. There were no large hyperbolic reflectors observed coincident with these and other EM anomalies that would suggest the presence of USTs, but that is likely due to the limited investigative depth.

- There are indications that the ground has been excavated and/or disturbed in the west portion of the site, and in other isolated areas throughout the site.

Lawrence and Martin Streets

- Figures 19 and 20 present contoured EM-61 data from the third time gate (Figure 19) and differential results (Figure 20). The purpose of conducting EM-61 survey at either edge of the roadway was to determine the location of the buried piping trending from the large ASTs stored on the property to the canal distribution center, located north of Martin Street. Contoured EM-61 data indicates that the pipes trend from 262E, 25S where a 48 inch diameter pipe is visible, to 0N, 238E, to 200E, 40N, to 190E, 47N, where the pipe appears to daylight again.

- A second, smaller pipe may cross the road, trending from 246E, 0N to 246E, 40N. There is no clear indication of additional pipes crossing the road, although, there is a remote possibility that there is another northwest trending pipe located at the western portion of the area of investigation.

SUMMARY

The presence of one UST has been confirmed at the 1201-1207 East Dominick site. The UST is centered around Grid node 30E and 85N and appears to be no larger than a 1,000 gallon capacity UST. There are several other large EM anomalies. A large GPR target, which could represent another UST was observed just east of the former tank island, near 105E and 15N at an approximate 3.5 to 4 foot depth. Likewise, GPR data indicate another large target near 80E and 35N located at an approximate 2.5 foot depth. However, these reflectors may also be attributed to UST related piping, trending from the former pump island to another large EM anomaly located at 70E and 45N. A zone of attenuation was observed coincident with this EM anomaly, which can possibly be attributed to hydrocarbon contamination. Other potential buried metal targets of unknown origin are shown on Figure 3.

There are numerous indications of buried metal on the 1030 East Dominick property. The majority of buried metal located south and far to the west of the existing building are attributed to metal within the fill material, possibly due to car parts, drum fragments, and reinforced concrete demolition debris. To the immediate west of the building, there appear to be numerous large GPR targets coincident with large EM anomalies. Some of these targets may be attributed to small USTs, such as those with a 500 to 1,000 gallon capacity.

Likewise, there are three large anomalous areas located to the west of the existing building within Grid A of the 1313 to 1333 East Dominick property. The anomalous EM areas are likely caused by buried metal from the remnants of the former gasoline station that reportedly existed and was demolished. The rectangular shaped EM anomaly located between 80E and 100E and from 60N to 90N may be attributed to the floor slab of the former building. The larger anomalous area located to the southeast between 105E to 130E and from 15N to 50N may be attributed to remnants of the former pump island and possibly to USTs. GPR signal penetration was limited, so large GPR reflectors indicative of USTs were not observed coincident with the large EM anomalies.

At the 1313-1333 Site, within Grids D through G, there is one probable UST within Grid G near 12E and 14N. There are other large EM anomalies; however, there are no corresponding large GPR reflectors that would suggest additional USTs.

At the 508 West Liberty Site, GPR and EM-31 confirmed the location of the 10,000 gallon UST known to exist on site, but whose location was unknown. A second, smaller UST may be present near 75E and 77S, as evidenced by large GPR reflectors. However, there is no large EM anomaly coincident with the target observed on the GPR data. There also appears to be two utilities trending parallel to 5E and 20E, with large EM anomalies located to the south of these pipes. However, the observed EM anomalies are likely attributed to the building's proximity and to a large diameter, deep utility.

At the 701 Lawrence Street property, the eastern half of the site appears to contain buried metal. Given the lack of GPR signal penetration, no deep GPR targets were identified to confirm that some of these metal targets represent USTs. There are several EM anomalies in the western portion of the stie which indicate isolated buried metal targets. Again, the presence of USTs coincident with these EM anomalies could not be confirmed due to the lack of GPR signal penetration.

The location of one large diameter pipe associated with the distribution system trending from the large ASTs to the canal was located using the EM-61. The pipe trends from 262E, 25S, where it was observed, to 0N, 238E, to 200E, 40N, to 190E, 47N, where the pipe is visible again. A second, smaller diameter pipe is present to the east of the large 48 diameter pipe, trending parallel to 246E.

RECOMMENDATIONS

As the nature of geophysics is subjective, RSI recommends the following test pits as confirmation for our interpretation. Please excavate with caution, as not all utilities may have been detected and delineated on our GPR map.

1201-1206 East Dominick:

1. 34E, 84N: probable UST, 1,000 gallon capacity observed about 1.5 to 2 feet below grade
2. 106E, 27N: possible UST, 1,000 gallon capacity observed about 3.5 to 4 feet below grade
3. 77.5E, 33.5N: possible UST or large diameter utilities observed 2 to 2.5 feet below grade
4. 71E, 46.5N: possible UST, Large EM anomaly coincident with an area of attenuation
5. 48E, 33.5N: tentative UST, large EM anomaly possibly associated with UST or utility
6. 124.5E, 92.5N: possible small UST in proximity to possible vent pipe. Minimal EM anomaly
7. 95E, 99N: buried metal target possible associated with septic system
8. 143.5E, 125.5N: large EM anomaly probably associated with septic tank

1030 East Dominick:

1. 124.5E, 92.5N: possible 500-1,000 gallon UST observed 2.5 to 3 feet below grade
2. 95.E, 99.N: possible 500 to 1,000 gallon UST observed 2.5 to 3 feet below grade.
3. 143.5E, 125.5N: possible 500 to 1,000 gallon UST observed 2.5 to 3 feet below grade
4. 151E, 58S: Possible UST coincident with Large EM anomaly and weak GPR reflectors observed 2.5 to 3 feet below grade.
5. 172E, 32S: Large EM anomaly with no GPR reflectors
6. 113E, 54S: Large EM anomaly with no GPR reflectors
7. 91.5E, 53S: Large EM anomaly with no GPR reflectors
8. 84E, 22S: Large EM anomaly with no GPR reflectors
9. 110, 85E: Large EM anomaly with no GPR reflectors
10. 12E, 28S: Large EM anomaly with no GPR reflectors
11. 13E, 85S: Large EM anomaly with no GPR reflectors

1313 - 1331 East Dominick Grids A-C:

1. Grid A: 89E, 82.5N: Possible UST or Floor Slab: Large EM anomaly coincident with possible excavation.
2. 125E, 41.5N: large EM anomaly associated with possible UST or pump island
3. 112E, 25.5N: large EM anomaly associated with possible UST or pump island
4. 116E, 14N: large EM anomaly associated with possible UST or pump island
5. 146.5E, 17N: large EM anomaly associated with possible UST or pump island
6. 162E, 18.5N: large EM anomaly associated with possible UST or utility
7. 181E, 28N: large EM anomaly associated with possible UST or utility

1313 - 1331 East Dominick Grids D-G:

1. Grid E: 12.5W, 50N, tentative UST, possible utility coincident with large EM anomaly
2. Grid G: 14.5E, 13N: possible UST, 1,000-2,000 gallons observed at approximately 2.0 feet below grade.

508 West Liberty:

1. 23.5E, , 55S: probable 10,000 gallon UST located 2.0 to 2.5 feet below grade
2. 70E, 76S: possible UST, 1,000 gallon capacity located 3.0 to 3.5 feet below grade

701 Lawrence:

1. 42W, 27S: large EM anomaly of uncertain origin
2. 46W, 168S: large EM anomaly of uncertain origin
3. 71W, 184S: large EM anomaly of uncertain origin
4. 90.5W, 175S: large EM anomaly of uncertain origin

***

We appreciate this opportunity to work with Barton and Loguidice again. Please call should you have any inquiries regarding this or future assignments.

Sincerely,
RADAR SOLUTIONS INTERNATIONAL

Doria L. Kutrubes

Doria Kutrubes, M.Sc., P.G
President and Senior Geophysicist

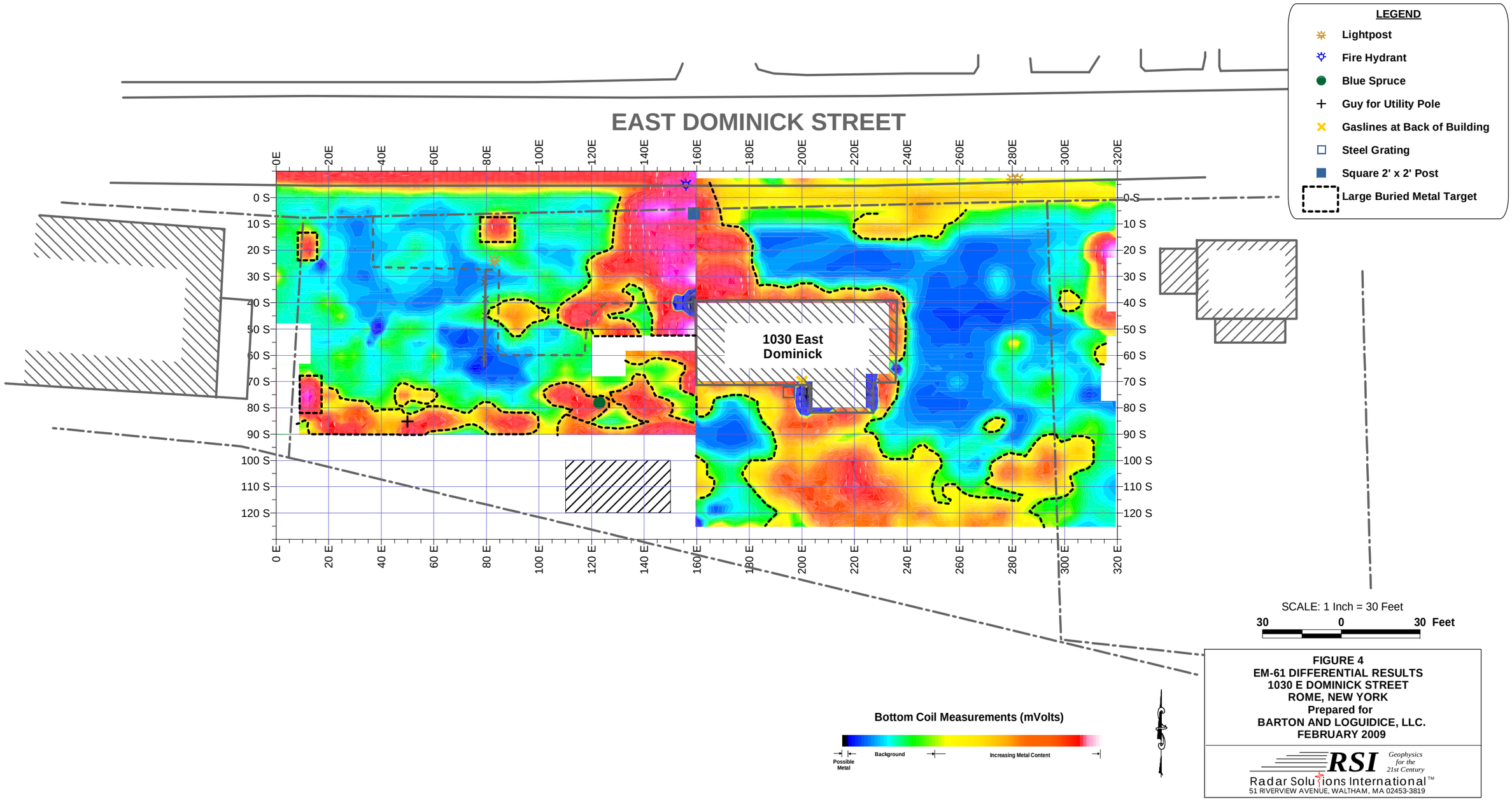

FIGURE 4
EM-61 DIFFERENTIAL RESULTS
1030 E DOMINICK STREET
ROME, NEW YORK
Prepared for
BARTON AND LOGUIDICE, LLC.
FEBRUARY 2009

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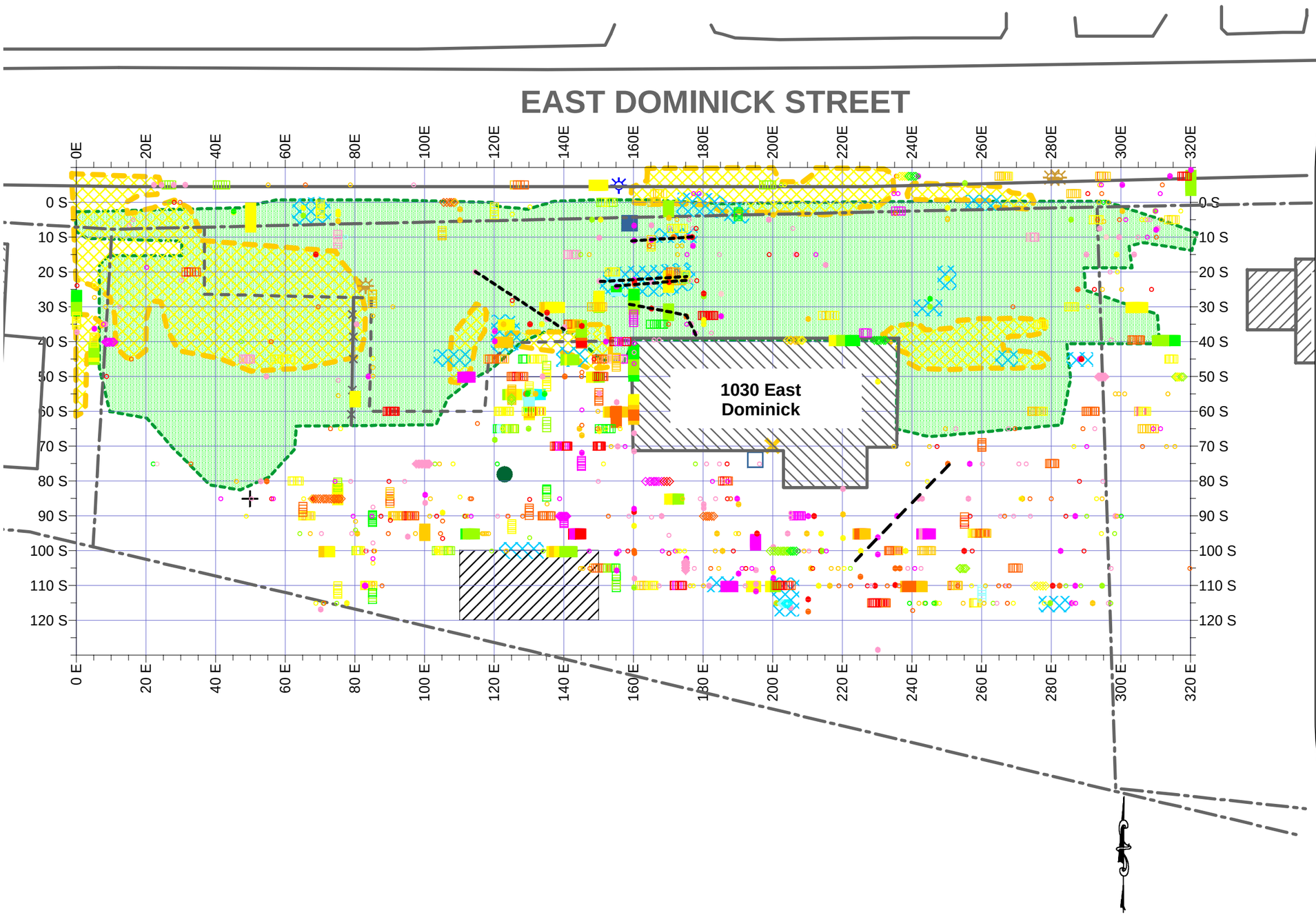

LEGEND

- Small GPR Reflector (possible utility, metal scrap, cobble); depth (ft) as noted
- Weak, Small Amplitude Reflector (probable cobble, possible metal scrap); depth (ft) as indicated
- Large, High-Amplitude GPR Reflector (possible utility, reflector possible associated with a UST); depth (ft.) as indicated:
  - 0.0 ft. to 0.5 ft.
  - 0.5 ft. to 1.0 ft.
  - 1.0 ft. to 1.5 ft.
  - 1.5 ft. to 2.0 ft.
  - 2.0 ft. to 2.5 ft.
  - 2.5 ft. to 3.0 ft.
  - 3.0 ft. to 3.5 ft.
  - 3.5 ft. to 4.0 ft.
  - 4.0 ft. to 4.5 ft.
  - 4.5 ft. to 5.0 ft.
  - 5.0 ft. to 5.5 ft.
  - 5.5 ft. to 6.0 ft.
  - 6.0 ft. to 7.0 ft.
  - 7.0 ft. to 8.0 ft.
- Large, Weak GPR Reflector (possible boulder, concrete rubble, utility); depth(ft) as noted above
- Irregularly-shaped GPR reflector; Depth (ft) as noted above
- Area of Excavation
- Area of Attenuation (possible hudrocarbon contamination)
- Utility Interpreted from EM and GPR Data
- Recommended Test Pit

SCALE: 1 Inch = 30 Feet

30 0 30 Feet

FIGURE 5
INTERPRETED GPR RESULTS
1030 E DOMINICK STREET
ROME, NEW YORK
Prepared for
BARTON AND LOGUIDICE, LLC.
FEBRUARY 2009

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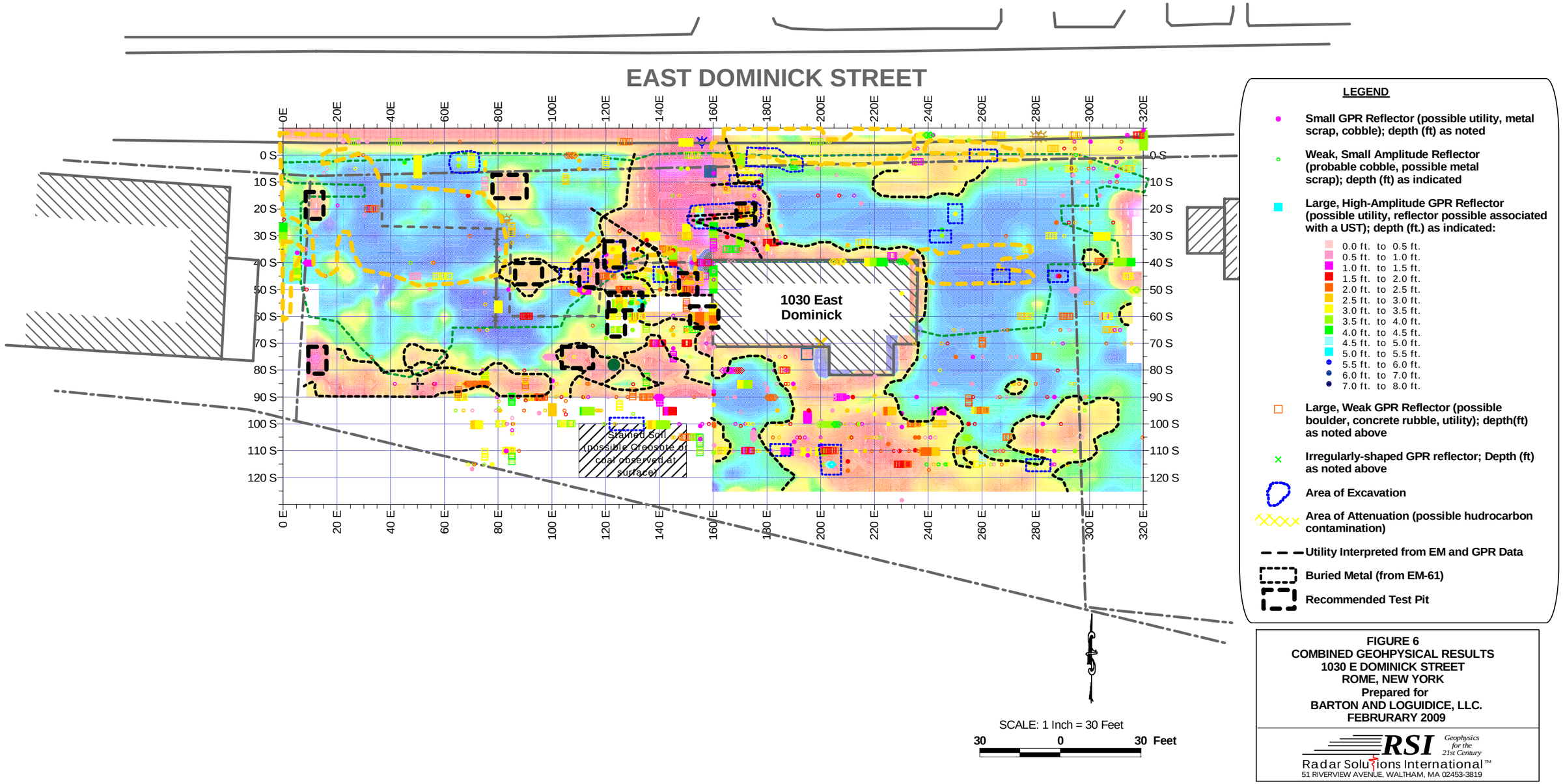

LEGEND

- Small GPR Reflector (possible utility, metal scrap, cobble); depth (ft) as noted
- Weak, Small Amplitude Reflector (probable cobble, possible metal scrap); depth (ft) as indicated
- Large, High-Amplitude GPR Reflector (possible utility, reflector possible associated with a UST); depth (ft.) as indicated:
  - 0.0 ft. to 0.5 ft.
  - 0.5 ft. to 1.0 ft.
  - 1.0 ft. to 1.5 ft.
  - 1.5 ft. to 2.0 ft.
  - 2.0 ft. to 2.5 ft.
  - 2.5 ft. to 3.0 ft.
  - 3.0 ft. to 3.5 ft.
  - 3.5 ft. to 4.0 ft.
  - 4.0 ft. to 4.5 ft.
  - 4.5 ft. to 5.0 ft.
  - 5.0 ft. to 5.5 ft.
  - 5.5 ft. to 6.0 ft.
  - 6.0 ft. to 7.0 ft.
  - 7.0 ft. to 8.0 ft.
- Large, Weak GPR Reflector (possible boulder, concrete rubble, utility); depth(ft) as noted above
- Irregularly-shaped GPR reflector; Depth (ft) as noted above
- Area of Excavation
- Area of Attenuation (possible hudrocarbon contamination)
- Utility Interpreted from EM and GPR Data
- Buried Metal (from EM-61)
- Recommended Test Pit

FIGURE 6
COMBINED GEOHPYSICAL RESULTS
1030 E DOMINICK STREET
ROME, NEW YORK
Prepared for
BARTON AND LOGUIDICE, LLC.
FEBRURARY 2009

RSI Geophysics for the 21st Century
Radar Solutions International™
51 RIVERVIEW AVENUE, WALTHAM, MA 02453-3819

Appendix C

Soil Boring and Well Completion Logs and Well Development Logs

SUBSURFACE INVESTIGATION LOG

Boring No. **MW-01**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve LeFevre				or 2"-3" dia. split-spoons (where indicated). Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/17-18/2009			**Borehole Diam:**	2"	**Total Depth:**	22.9
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125498.04	**Ground Elevation:**	438.40	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	1169568.69	**TOC Elevation:**	438.28	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-01

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	**SAND AND GRAVEL FILL:** Brown to Black fine to medium SAND AND GRAVEL, some asphalt material, brick fragments, moist, some staining, little to no odor	S-1	0-4	2.4	0.4	0.8	SAND AND GRAVEL FILL	*4" flush-mount protective casing*; *Portland concrete surface seal*
2									*Top of cement-bentonite grout ~1.5'*
3									
4	MC	Brown fine to medium SAND, some fine to medium Gravel and Cobble fragments, soft, moist, little staining in upper portion, moist	S-2	4-8	1.8	0.0			
5									*Top of choker sandpack 5.5'*
6						2.7	0.9		*Top of bentonite chip seal 6.0'*
7						1.7			2.5' steel rod (tape-weight) broke off while installing bentonite seal
8	MC	Same as above, Brown fine to medium SAND and coarse to fine GRAVEL, Cobble fragments, firm, dry grades to moist, no odor or visual staining	S-3	8-12	1.8	0.4			
9									*Top of choker sandpack 9.0' 10/18/09*
10						0.3	0.8		*Top of choker sandpack 9.5' 10/17/09*
11						0.4			
12		Moist grades to wet							*Top of screen 11.5'*

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-01

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC <COMPOSITE ANALYTICAL SAMPLE COLLECTED>	**SAND AND GRAVEL FILL:** As above, Brown Silty SAND AND GRAVEL, some Cobble fragments, wet, grades at bottom of sample to Grey medium to fine SAND and fine to medium GRAVEL, wet, stained, strong gasoline odor	S-4	12-16	2.0	7.1 4.6 4.6 223.0 193.0	P 538 S 475	SAND AND GRAVEL FILL	*0.010-inch slot* *2" dia. PVC screen*
16	MC	**SAND AND GRAVEL:** Brown cf SAND and fc GRAVEL, rounded to subrounded, slight to no odor, no visual staining, loose to soft	S-5	~~16-20~~ 16.2	0.3	106 96 73	P 232 S 100		Refusal at 16.2 with MC, switch to 4.25" HSAs and auger to 17' WL in HSAs = 14.6' bgs (HSAs at 15', sampled to 18')
17	MC	Same as above, PID screening up to ~30 ppm, may be due to water and slough in augers.	S-6	~~17-21~~ 18.3		0.9 1.3 6.1 3.4	P 13.9 S 9.6		WL = 14.3' (HSAs at 17.3')
19	MC	Same as above, PID screening up to ~30 ppm, may be due to water and slough in augers.	S-7	~~19-23~~ 20.5		~30	P 117 S ~75	SAND AND GRAVEL	*0.010-inch slot* *2" dia. PVC screen*
21	MC <ANALYTICAL SAMPLE COLLECTED>	Brown fine to medium GRAVEL and coarse to fine SAND, loose to firm, saturated, no odor or visual staining, trace Silt, Gravel is rounded to subrounded	S-8	~~21-25~~ 22.9	2.5	1.5 2.3 1.7 1.7	4.6		MC bullet installed for discrete sample *Bottom of screen 21.5'* *Cave-in 21.5'-23.0'*
23		**END OF SOIL BORING**							
24									
25									
26									
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **MW-02**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve LeFevre				or 2"-3" dia. split-spoons (where indicated). Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/18/2009			**Borehole Diam:**	2"	**Total Depth:**	21'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125308.58	**Ground Elevation:**	437.70	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	1169657.13	**TOC Elevation:**	437.28	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-02

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / Well Construction
1	MC	**SAND AND GRAVEL FILL:** Black Asphalt grades to COBBLE and coarse GRAVEL with brick fragments	S-1	0-4	2.8	0.2	2.3	SAND AND GRAVEL FILL	*4" flush-mount protective casing*; *Portland concrete surface seal*
2						0.3			*Top of cement-bentonite grout ~1.5'*
3						0.5			
4		Bottom 1' or sample is Brown Silty fine to medium SAND, little fine to medium Gravel, soft, moist, o odor, minor Black staining				0.1			
	MC	Brown fine to medium SAND, some fine to medium Gravel and Cobble fragments, soft, moist, no odor, little staining in upper portion of sample	S-2	4-~~8~~ 4.4	0.4	0.5			MC refusal at 4.4', Lyon switches to 4.25" HSAs and augers to 5' to resume sampling; *Top of choker sandpack 4.5'*
5						0.6	3.8		
6	MC	Brown fine to coarse SAND AND GRAVEL, some Cobble fragments, loose to soft, dry to slightly moist, no odor or visual staining or sheen (fill)	S-3	5-8	2.0	0.4	4.0		*Top of bentonite seal - 5.1'*; Harry notes increase of Cobbles at ~5'
7						0.3			
8						0.2			
9	MC	Same as above, fill with Cobble fragments, moist	S-4	8-12	1.3	0.4	3.6		*Top of choker sandpack 8.1'*; *Top of filter sandpack - 8.8'*
10									
11		**GRAVEL AND SAND:** Bottom 4" of sample is Brown coarse to medium SAND and fine to medium GRAVEL (rounded to subrounded), loose, wet, no odor or visual staining or sheen				1.6		GRAVEL & SAND	*Top of screen - 11.0'*
12									

COMPOSITE ANALYTICAL SAMPLE COLLECTED>

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-02

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC <COMPOSITE ANALYTICAL SAMPLE COLLECTED	**GRAVEL AND SAND:** Same as above with little Silt, firm, wet to saturated, some Grey staining, no odor	S-5	12-~~16~~ 13.9	0.9	0.3 0.4 1.3	3.6	GRAVEL AND SAND	
14									
15	MC	Brown fine to coarse GRAVEL AND SAND (Gravel is subrounded), little Silt, dense, saturated, no odor or visual staining or sheen	S-6	14.5-~~18.5~~ 15.5	0.6	0.2 0.3	3.4		
16									MC refusal at 15.5', HSAs advanced to 16.5'
17	MC	Brown fine to coarse GRAVEL AND SAND (Gravel is subrounded), little Silt, dense, saturated, no odor or visual staining or sheen	S-7	16.5-~~20.5~~ 17.9	1.5	0.3	3.2		
18									*0.010-inch slot* *2" dia. PVC screen* *Sand filter pack*
19	MC	Same as above, PID hits may be impacted by above contamination in drill string	S-8	19-~~23~~ 21	0.8	0.3 0.4 0.3	3.4		Lyon pushed well to depth after cleaning out HSAs with 3" SS and RB due to heaving S&G, approx. 19.5-21' is natural pack
20									
21									*Bottom of screen - 21.0'* MC refusal at 21'
22									
23									
24									
25									
26									
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **MW-03**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve LeFevre				or 2"-3" dia. split-spoons (where indicated). Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Josh Haugh/Robin VerSchneider			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/13/2009, 11/20/2009			**Borehole Diam:**	2"	**Total Depth:**	18.5
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125234.71	**Ground Elevation:**	435.90	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	1169595.95	**TOC Elevation:**	438.36	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-03

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	**SAND AND GRAVEL FILL:** Dark Brown fine to medium SAND, some fine to coarse Gravel, little Silt, no odor or visual staining, Gravel/Cobble fragments cause low recovery	S-1	0-4	0.1	0.1		SAND AND GRAVEL FILL	*Surface completion - 4" protective riser 2.5' above the ground surface*; *Portland concrete surface seal*
2									*Top of choker sandpack 2.0'*
3									*Top of bentonite chips grout 2.5'*
4	MC	Brown to Black Silty fine to medium SAND, little fine to medium Gravel, moist, soft, some staining, no odor (fill)	S-2	4-8	0.8	0.1			*Top of choker sandpack 4.6'*
5									*Top of filter sandpack 5.1'*
6									
7									
8	MC	Same as above, no odor	S-3	8-12	0.2				*Top of screen - 8.0'*
9									Jeff Lyon says that sampler drove "like butter"
10						0.1			
11									
12									

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-03

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC <COMPOSITE ANALYTICAL SAMPLE COLLECTED>	**SAND AND GRAVEL:** Brown to Tan coarse to fine SAND and fine to medium GRAVEL, loose, wet, grades to Brown medium SAND, trace fine to medium Gravel (sub rounded), well-sorted,	S-4	12-~~16~~ 15.9	2.5			**SAND AND GRAVEL**	
13									
14		Sample becomes saturated				0.1			*0.010-inch slot* *2" dia. PVC screen* *Sand filter pack*
15									Refusal at 15.9', second attempt made in new boring ~2 ft away - refusal was encountered at 15.5'.
16		Above grades to Brown medium fine SAND AND GRAVEL, sub rounded to angular, loose, no odor or visual staining							
17	SS Blows w/ 3" dia SS 32-12-8-14	Brown fine to coarse SAND and fine to medium GRAVEL, rounded, no staining, no sheen, no odor	S-1	16-18	2.0	0.0	0.0		Split spoon sampling and well installation on 11/20/09
18		**END OF SOIL BORING**							*Bottom of screen 18.0'* *Bottom of hole 18.5'*
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **MW-04**

Project No. 245.005

PROJECT INFORMATION			**DRILLING INFORMATION**		
Project:	City of Rome Environmental Restoration Project		**Drilling Co:**	Lyon Drilling	
Client:	City of Rome		**Driller:**	Harry Lyon	
Site Location:	1030 East Dominick Street		**Rig Type:**	CME-45, Trailer-mounted	
Job No:	245.005		**Drilling Method(s):**	Continuous soil sampling with 2"-3" dia. split-spoons as indicated	
Project Manager:	Steve LeFevre			Wells installed with 4 1/4" H.S.A.'s.	
Logged By:	Josh Haugh		**Hammer Type, Weight/Drop:**	N/A	
Dates Drilled	11/19/2009		**Borehole Diam:**	2" **Total Depth:**	23.7'
LOCATION INFORMATION (NYSP)			**WELL INFORMATION**		
Horiz. Datum:	NAD83 **Easting:**	1125341.55	**Ground Elevation:**	436.00 **Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A **Northing:**	1169556.95	**TOC Elevation:**	439.06 **Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-04

Depth (ft)	Sample Type Blows	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	SS 2-2-2-1	**SAND AND GRAVEL FILL:** Dark Brown medium to coarse SAND, some fine Gravel, moist, loose, no odor (fill)	S-1	0-2	0.1	0.3 (BG)	2.1	SAND AND GRAVEL FILL	*Surface completion - 4" protective riser 2.5' above the ground surface* *Portland concrete surface seal*
2									
3	SS 3-2-1-WOH	Above grades to Brown fin to medium SAND and (-) GRAVEL (angular to subrounded), trace Silt	S-2	2-4	0.5	0.3	3.6		*Top of bentonite seal - 2.5'*
4									
5	SS 3-4-5-7	Above with wood fragments, wet, gas odor, slight sheen (?)	S-3	4-6	0.2	1.3	P 17.1 S ~13		*Top of choker sandpack 5.7'* Harry notes increase of Cobbles at ~5'
6	SS 12-7-4-4	Brown fine to medium SAND and (-) GRAVEL, trace Silt, wood fragments, slight gas odor	S-4	6-8	0.3	1.4	6.4		*Top of filter sandpack - 8.8'*
7						0.6			*Top of filter sandpack - 8.8'*
8	SS 3-4-5-5	Same as above, slight gas odor, slight wood odor, moist to wet	S-5A	8-10	0.3	1.6	8.4		S-5B - Overdrive 8'-10' interval with 3" SS due to low recovery - 3" spoon has no recovery *Top of screen 8.5'*
9	3" SS 15-18-12-25		S-5B	8-10	NR				
10						1.0			*0.010-inch slot* *2" dia. PVC screen* *Sand filter pack*
11	3" SS 10-9-15-25	Brown to Grey medium to coarse SAND and large concrete and Cobble fragments, some coarse to fine Gravel (subangular to angular), loose to soft, moderate gas odor, moist	S-6	10-12		19.4	P 12.5 S 9.5		
12						6.4			

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-04

Depth (ft)	Sample Type Blows	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	3" SS 50/0.4'	**SAND AND GRAVEL:** Brown to Grey fine to coarse GRAVEL AND SAND, loose, moist, strong gas odor, Grey staining	S-7	12-14	0.5	290 395 310	P 570 S 270	SAND AND GRAVEL	SS refusal at 12.4', Lyon augers through obstruction and resumes sampling
13	3" SS 9-12-12-15	Grey fine to coarse GRAVEL (rounded), some coarse to medium Sand and Cobble, product observed on soil from approximately 13.2'-14.0', very strong gas odor and sheen, saturated	S-8	13-15	1.8	494 190 65 1041	P 1220 S ~770		*0.010-inch slot* *2" dia. PVC screen* *Sand filter pack*
14		Above grades to Brown color with some Grey staining and sheen, strong odor							
15	3" SS 16-10-24-43	Brown to Grey coarse to medium SAND AND GRAVEL, some Cobble, loose, saturated, gas odor	S-9	15-17	1.3	83 190 65 1041	P 238 S 150		
16		Above grades to coarse to medium GRAVEL and (-) SAND, little Cobble (all grains rounded), moderate gas odor, possible sheen							
17	3" SS 18-50/0.1'	Same as above, gas odor, saturated, loose, sample recovery may be slough	S-10	17-~~19~~ 17.6	0.6	18 30	P 238 S 150		SS refusal at 17.6'
18									*Bottom of screen 18.5'*
19	3" SS 9-9-11-50/0.3	Greyish Brown fine to coarse GRAVEL, rounded to subangular, loose, moderate gas odor - possibly smeared	S-11	19-21		190.0 P 106 S 70 P 122 S 25 P 108 S ~60	P 186 S 115		
20									
21	3" SS 50/0.4'	Red Sandstone COBBLE fragments and slough, sligh odor, saturated	S-12	21-~~23~~ 21.4	<0.1				MC refusal at 21', WL in HSAs ~14' bgs
22	3" SS 42/4"	Rock fragments and slough	S-13	22.3-~~24~~ 22.7	<0.1				*Cave-in and filter sand*
23	3" SS 50-50/0.2'	Brown fine to medium GRAVEL AND SAND, loose, slight odor, no staining or sheen, generally lower PID readings in middle of core, sample is probably smeared and impacted by above contamination in drill string	S-14	23-~~25~~ 23.7	<0.1	P 30 S ~18 11.3 13.7 3.9	2.9		WL in HSAs after ~30 min = 12.5' bgs
24									
25									
26									
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **MW-05**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve LeFevre				or 2"-3" dia. split-spoons (where indicated). Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Josh Haugh/Robin VerSchneider			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/12/2009, 11/20/2009			**Borehole Diam:**	2"	**Total Depth:**	18.5
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125478.44	**Ground Elevation:**	435.60	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	1169535.90	**TOC Elevation:**	438.00	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-05

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / Well Construction
1	MC	**SAND AND GRAVEL FILL:** Brown medium to fine SAND, some fine to medium Gravel, loose grades to concrete frags and asphalt, last 4" of spoon is Brown Silty fine to medium Sand and Gravel, no odor or visual staining (Fill)	S-1	0-4	2.0	0.2	16	SAND AND GRAVEL FILL	*Surface completion - 4" protective riser 2.5' above the ground surface*
2						0.2			*Portland concrete surface seal*
3						0.2			Well position ~20 ft north of stake due to site grade
4						0.2			*Top of choker sandpack 2.0'*
5	MC	Same as above with Brown Silty fine to medium SAND and coarse to fine GRAVEL (sub-round to sub-angular), loose to soft, moist, no odor or visual staining	S-2	4-8	1.2	0.3 (BG)	17		*Top of bentonite chips grout 2.5'*
6						0.3			*Top of choker sandpack 4.8'*
7						0.3			*Top of filter sandpack 5.3'*
8						0.3			
9	MC <COMPOSITE ANALYTICAL SAMPLE COLLECTED>	Same as above with increase of coarse Sand, little Cobble frags, moist, loose to soft, Brown fine (-) medium Sand at 11.7', wet no odor or visual staining	S-3	8-12	2.0	0.5	12		*Top of screen 8.2'*
10						0.5			
11						0.6			
12						0.7			

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-05

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC	**SAND AND GRAVEL:** Brown Silty fine SAND and fine to coarse GRAVEL (sub-round to sub-angular), loose, saturated, no odor or staining, firm to soft	S-4	12-~~16~~ 15	2.0	0.7 (BG)	1.5	SAND AND GRAVEL	Refusal at 15', moved ~3' west and advanced to 15' to resume sampling
13									*Top of filter sandpack 13'*
14									*Top of choker sandpack 13.5'*
15						1.2			
	MC	Same as above, medium dense, saturated, no odor or visual staining	S-5	15-~~19~~ 18.5	2.6	0.3 (BG)	1.4		*0.010-inch slot 2" dia. PVC screen*
16									
17		Above grades to Brown fine to medium SAND, trace fine to coarse Gravel, subrounded, faceted, loose, saturated							
18		Above grades to Brown Silty fine SAND and fine to coarse GRAVEL (angular to subrounded), dense, saturated, weathered pebbles, matrix supported(?)				0.4			*Bottom of screen 18.2'*
19		**END OF SOIL BORING**							*Cave-in 18.2'-19'*
20									
21									
22									
23									
24									
25									
26									
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **MW-06**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve Le Fevre				or 2"-3" dia. split-spoons (where indicated). Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/11/2009, 11/23/2009			**Borehole Diam:**	2"	**Total Depth:**	22.4
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125492.20	**Ground Elevation:**	437.90	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	1169651.79	**TOC Elevation:**	437.64	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-06

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	**SAND AND GRAVEL FILL:** Brown to Black coarse to medium SAND and fine to medium GRAVEL, loose, slightly moist, no odor, minor staining, (Fill)	S-1	0-4	~0.5	0.9		SAND AND GRAVEL FILL	*4" flush-mount protective casing*; *Portland concrete surface seal*; Macro Core failure - sample S-1 hammered out of sampler
2									*Top of cement-bentonite grout*
3						1.3			
4	MC	Same as above, mixed fill, becomes wet at ~7.7' no odor or visual staining	S-2	4-8	0.1	0.0			
5									*Top of choker sandpack 5.0'*
6						0.0	1.8		*Top of bentonite chip seal 5.5'*
7						0.0			
8						0.1			
9	MC	Same as above, coarse Gravel and Cobble fragments cause poor recovery, moist, loose, no odor or visual staining	S-3	8-12	0.5				*Top of choker sandpack 9.5'*
10						0.0	2.1		*Top of filter sandpack 9.9'*
11		Railroad nails observed in cuttings at 11' (Fill)							
12									

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-06

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC <COMPOSITE ANALYTICAL SAMPLE COLLECTED>	**SAND AND GRAVEL:** Brown fine to coarse GRAVEL and coarse to fine SAND (sub-round to angular), dense advancement, but sample is loose, moist, no odor or visual staining, saturated at 15.5'	S-4	12-16	2.0	0.0	2.5	SAND AND GRAVEL	*Top of screen 12.0'*
13									
14									
15									
16	MC	Brown coarse to medium SAND and fine to medium GRAVEL (subrounded to subangular), trace Silt, saturated, medium dense, ~2" seam of Reddish Brown SILT, no odor or visual staining	S-5	16-20	2.1	0.0	1.5		*0.010-inch slot* *2" dia. PVC screen*
17						0.0			
18						0.1			
19						0.2			
20	MC	Same as above, no odor or visual staining	S-6	20-24	2.0	0.0	1.5		*Bottom of screen 22'*
21									
22		**END OF SOIL BORING**							Refusal at 22.4 ft
23									
24									
25									
26									
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-01**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve Le Fevre				or 2"-3" dia. split-spoons (where indicated).		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/11/2009			**Borehole Diam:**	2"	**Total Depth:**	20.0'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125470.62 (Approx.)	**Ground Elevation:**	UNK	**Screen Type/Diam:**	
Vert. Datum:	N/A	**Northing:**	1169656.311 (Approx.)	**TOC Elevation:**	UNK	**Slot Size:**	

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-01

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	**SAND AND GRAVEL FILL:** Asphalt and Black fine to medium GRAVEL, sub base is loose, low recovery, soft, sampler nearly free fell ~2'-4'	S-1	0-4	0.5	0.2		SAND AND GRAVEL FILL	
2						0.1	10		
3									
4						0.1			
4	MC	Brown fiine to medium SAND, some coarse to fine Gravel (round to angular), brick frags, asphalt, minor staining, no odor, little Silt, (Fill)	S-2	4-8	1.9	0.1			
5									
6						0.2	23		
7						0.1			
8						0.1			
8	MC	Same as above, Brown Silty medium to fine SAND and coarse to fine GRAVEL (rounded to angular), loose to soft, moist, trace brick fragments, no odor or visual staining	S-3	8-12	1.8	0.2			
9									
10						0.2	31		
11						0.3			
12		Last 0.1' of sample is wet				0.2			

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-01

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC <COMPOSITE ANALYTICAL SAMPLE COLLECTED>	**SAND AND GRAVEL:** Brown Silty fine to medium SAND and medium to fine GRAVEL (angular to rounded), firm to dense, moist	S-4	12-16	1.6	0.1			
13						0.2			
14							3.4		
15						0.1			
16		Sample becomes saturated at ~15.5' , no odor or visual staining				0.2			
	MC	Brown medium to fine SAND and fine to medium (-) coarse GRAVEL (sub-rounded) firm, saturated, faint stratification (?), no odor or visual stainng	S-5	16-20	3.0			SAND AND GRAVEL	
17						0.0			
18							3.0		
19						0.1			
20		**END OF SOIL BORING**							
21									
22									
23									
24									
25									
26									
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-02**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve Le Fevre				or 2"-3" dia. split-spoons (where indicated).		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/17/2009			**Borehole Diam:**	2"	**Total Depth:**	18.7'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125235.081 (Approx.)	**Ground Elevation:**	UNK	**Screen Type/Diam:**	
Vert. Datum:	N/A	**Northing:**	1169670.571 (Approx.)	**TOC Elevation:**	UNK	**Slot Size:**	

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-02

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	**SAND AND GRAVEL FILL:** Brown, Silty fine to medium SAND and GRAVEL, soft, moist, little coarse GRAVEL and Cobbles frags, slight fule odor and little staining	S-1	0-4	2.5	0.7	14	SAND AND GRAVEL FILL	
2						0.7			
3						0.9			
4		Brown/Black Silty fine (-) medium SAND, little fine to medium GRAVEL, moist to wet, fuel odor, stained				0.7			
5	MC	Brown Silty medium to coarse SAND, some fine to medium GRAVEL, little coarse GRAVEL and Cobble frags, moist to wet, slight gas and fuel odor throughout, no major visual staining	S-2	4-8	1.4	4.0	79		
6						3.5			
7						2.7			
8						2.6			
9	MC	Same as above, moist, loose	S-3	8-12	2.0	0.5	12		
10						2.5			
11		**SAND AND GRAVEL:** Grades to Brown medium SAND, little medium to fine GRAVEL, trace, coarse Sand, loose to soft, moist, no odor or visual staining				1.0		SAND AND GRAVEL	
12						4.1			Advanced HSAs to 12' then continue sampling

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-02

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC <COMPOSITE ANALYTICAL SAMPLE COLLECTED>	**SAND AND GRAVEL:** Same as above, moist to wet	S-4	12-15	2.0	0.3		SAND AND GRAVEL	
13						0.4	0.9		
14		Grades to Brown Silty SAND and GRAVEL, wet no odor or visual staining				0.3			
15									
16									Harry advanced HSAs to 16.5' because of cobbles
	MC	Same as above, Brown fine to medium SAND and GRAVEL (angular to sub-angular), firm to dense, saturated, no odor or visual staining	S-5	16.5-~~20.5~~ 18.7		0.3			
17						0.4	0.6		
18									
19		**END OF SOIL BORING**				0.3			
20									
21									
22									
23									
24									
25									
26									
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-03**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve Le Fevre				or 2"-3" dia. split-spoons (where indicated).		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/13/2009			**Borehole Diam:**	2"	**Total Depth:**	18.9
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125267.043 (Approx.)	**Ground Elevation:**	UNK	**Screen Type/Diam:**	
Vert. Datum:	N/A	**Northing:**	1169623.856 (Approx.)	**TOC Elevation:**	UNK	**Slot Size:**	

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-03

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	**SAND AND GRAVEL FILL:** 4" of Brown SILT and fine SAND (trace Sand) Brown/Black fine SABD, some fine to coarse Gravel (angular to rounded), little Silt, moist to dry, firm to soft, some staining 0-2', no odor	S-1	0-4	2.9	0.2 (BG)	0.5	SAND AND GRAVEL FILL	
2						0.2			
3						0.3			
4						0.2			
5	MC	Brown coarse to fine SAND and fine to coarse Gravel, loose, moist, no odor, little minor staining at **top** of sample	S-2	4-8	1.5	0.2	0.8		
6									
7									
8						0.3			
9	MC	Same as above, no odor or visual staining	S-3	8-12	0.2		0.8		Low recovery
10									
11									
12									

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-03

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC <COMPOSITE ANALYTICAL SAMPLE COLLECTED>	**SAND AND GRAVEL:**	S-4	12-16	0.7				
		Above grades at ~12-13' to Brown medium SAND, trace fine gravel, saturated, loose, no odor or visual staining				1.4			
13									
						1.2			
14							0.7		
						0.9			
15									
		Brown fine (-) medium SAND, loose, saturated				3.3			
16	MC	Same as above	S-5	16-20	3.0			SAND AND GRAVEL	
						0.8			
17									
							0.6		
18		Above grades to Brown Silty fine to coarse SAND and fine to medium GRAVEL, little coarse Gravel, firm to medium dense, saturated, no odor or visual staining				0.5			
19									Refusal at 18.9'
		END OF SOIL BORING							
20									
21									
22									
23									
24									
25									
26									
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-04**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve Le Fevre				or 2"-3" dia. split-spoons (where indicated).		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/13/2009			**Borehole Diam:**	2"	**Total Depth:**	18.6'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125348.671 (Approx.)	**Ground Elevation:**	UNK	**Screen Type/Diam:**	
Vert. Datum:	N/A	**Northing:**	1169623.365 (Approx.)	**TOC Elevation:**	UNK	**Slot Size:**	

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-04

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	**SAND AND GRAVEL FILL:** Brown to Black fine to medium SAND and fine to coarse GRAVEL, little Silt, loose, dry to slightly moist, slight odor in first 1' of sample, asphalt, some Black staining	S-1	0-4	1.5	0.5	10	SAND AND GRAVEL FILL	
2									
3						0.6			
4	MC	Same as above with Cobble fragments and little asphalt debris, loose, moist grades to dry, no odor, minor staining in top 2" of sample	S-2	4-8	1.2	0.5	07		
5									
6						0.6			
7						0.4			
8	MC	Same as above, Brown coarse to fine SAND and fine to coarse GRAVEL, little (-) Silt, moist, last 2" of sample are wet, no odor or visual staining, soft	S-3	8-12	0.8	0.6	07		
9									
10						0.5			
11						0.6			
12									

Barton & Loguidice, P.C. | City of Rome Environmental Restoration Project | BORING NO: SB-04

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC	**SAND AND GRAVEL:** Brown fine to medium SAND, little fine to medium Gravel (rounded to subrounded), saturated	S-4	12-~~16~~ 12.7	0.7	0.8 1.0 7.8	0.7	SAND AND GRAVEL	Refusal at 12.7', rig repositioned ~3 ft south and resume sampling at 12' (Sampler cuttings from 0-12 are similar to above with slight sweet odor)
13	MC	Same as above , strong gasoline odor	SB-4B S-2	12-~~16~~ over-driven to 17'	2.7	148	1160		
14									
15						310			
16		Above grades in last 1' of sample to Grey fine SAND and fine GRAVEL (rounded), stratified (?), dense/firm, wet, strong gasoline odor				1500			
17		Black stained coarse to medium SAND and fine to medium GRAVEL, petroleum odor, saturated, loose, grades to Brown fine to medium GRAVEL and coarse to medium SAND, saturated, loose, some staining, less odor (slight to moderate)	SB-4B S-3	16-~~20~~ 18.6	2.5	~30	P 202 S 80		Photo taken
18						~25 4.5	P 12.3 S ~8		Refusal at 18.6'
		END OF SOIL BORING							
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									

<COMPOSITE ANALYTICAL SAMPLE COLLECTED>

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-05**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve Le Fevre				or 2"-3" dia. split-spoons (where indicated).		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/16/2009			**Borehole Diam:**	2"	**Total Depth:**	22.0'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125391.451 (Approx.)	**Ground Elevation:**	UNK	**Screen Type/Diam:**	
Vert. Datum:	N/A	**Northing:**	1169599.762 (Approx.)	**TOC Elevation:**	UNK	**Slot Size:**	

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-05

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	SAND AND GRAVEL FILL: Asphalt debris grades to Brown Silty fine SAND, little fine to medium Gravel, wood fragments, soft moist, no odor or visual staining	S-1	0-4	1.5	0.0	10	SAND AND GRAVEL FILL	
2									
3						0.1			
4	MC	Same as above, no odor or visual staining	S-2	4-8	1.6				H.S.A. to 4'
5									
6						0.1	13		
7									
8	MC	Same as above with coarse Gravel and Cobble fragments, dry, loose, bony , increase of medium to coarse Sand at ~11.5', sample becomes moist to wet	S-3	8-12	1.8				HSAs to 8' - hard advancement
9						0.0			
10							10		
11						0.1			
12									HSAs to 12'

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-05

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC	**SAND AND GRAVEL:** Same as above with Cobble/Gravel frags and dark Grey stained medium to fine Sand, loose	S-4	12-~~16~~ 14.2	0.7	340.0		SAND AND GRAVEL FILL	
13						450			
						980	793 650		
14		Sample becomes wet at 13.8', strong gas odor				360			HSAs to 15'
15	MC	Black coarse to fine GRAVEL AND SAND, loose, wet to saturated, strong fuel/gas odor, grossly impacted, possible slough	S-5	15-~~19~~ 16.9	0.7	133.0			
16		<COMPOSITE ANALYTICAL SAMPLE COLLECTED>				148.0	P 400 S 350		
17						135			
18	MC	Brown fine to coarse GRAVEL, loose, wet, probably slough	S-6	18-~~22~~ 18.3	<0.1	5.3	82.5		
19									
20	MC	Brown fine to medium GRAVEL and Silty SAND, dense, saturated, slight to moderate gas odor	S-7	19.5-~~23.5~~ 19.8	0.3	18.1 13.5	P 38.9 S ~30		Refusal at 19.8'
21	MC	Same as above, slight to no odor, saturated, dense	S-8	20.5-~~24.5~~ 22.0	1.5	28.6			
						9.9	7.4		
						3.6 3.1			
22		**END OF SOIL BORING**							MC refusal at 22.0
23									
24									
25									
26									
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-06**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve Le Fevre				or 2"-3" dia. split-spoons (where indicated).		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/11/2009			**Borehole Diam:**	2"	**Total Depth:**	20
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125498.157 (Approx.)	**Ground Elevation:**	UNK	**Screen Type/Diam:**	
Vert. Datum:	N/A	**Northing:**	1169583.043 (Approx.)	**TOC Elevation:**	UNK	**Slot Size:**	

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-06

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	**SAND AND GRAVEL FILL:** Brown Silty fine to medium SAND AND GRAVEL, loose, slightly moist, no odor or visual staining	S-1	0-4	0.3	0.0		SAND AND GRAVEL FILL	
2									
3									
4	MC	Brown to Tan Silty fine to medium SAND and medium to fine GRAVEL, little Cobble fragments, firm to loose, no odor or visual staining (Fill)	S-2	4-8	1.8	0.0			
5						0.1			
6							10		
7						0.2 (BG)			
8	MC	Same as above with increase of Cobble/coarse Gravel fragments, loose to medium dense, slightly moist, no odor or visual staining	S-3	8-12	1.9	0.2			
9						(BG)			
10						0.2			
11						0.3	14		
12						0.4			

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-06

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC <COMPOSITE ANALYTICAL SAMPLE COLLECTED>	**SAND AND GRAVEL:** Brown fine to medium GRAVEL and coarse to medium SAND, medium dense, wet	S-4	12-16	2.5	0.7		SAND AND GRAVEL	
13						0.9			
14		Sample becomes saturated				1.0			
15		Above grades to Brown medium to fine SAND, trace (+) fine Gravel (subrounded), loose, saturated, no odor or visual staining				1.3			
16	MC	Same as above, Brown GRAVEL AND SAND, saturated	S-5	16-~~20~~ 16.8	0.8	0.1			Refusal at 16.8'
17		**END OF SOIL BORING**							
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-07**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve Le Fevre				or 2"-3" dia. split-spoons (where indicated).		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/13/2009			**Borehole Diam:**	2"	**Total Depth:**	16'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125284.746 (Approx.)	**Ground Elevation:**	UNK	**Screen Type/Diam:**	
Vert. Datum:	N/A	**Northing:**	1169580.584 (Approx.)	**TOC Elevation:**	UNK	**Slot Size:**	

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-07

Depth (ft)	Sample Type		Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC		**SAND AND GRAVEL FILL:** Brown to Black Silty fine to medium SAND and fine to coarse GRAVEL, loose, slightly moist, wood fragments, no odor, some Black staining (Fill)	S-1	0-4	1.3	0.4	0.5	SAND AND GRAVEL FILL	
2										
3										
4	MC		Same as above, Brown to Black Silty SAND AND GRAVEL, no odor, moist to wet	S-2	4-8	0.1	0.3	1.1		
5										
6										
7										
8	MC	<COMPOSITE ANALYTICAL SAMPLE COLLECTED>	**BROWN SAND:** Above grades to Brown fine SAND, trace fine Gravel, loose, moist, no odor or visual staining	S-3	8-12	1.5	0.4	0.8	BROWN SAND	
9										
10										
11										
12										

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-07

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC	**BROWN SAND:** Brown fine to medium SAND, little fine to medium Gravel (rounded to subrounded), saturated	S-4	12-16		0.8		BROWN SAND	
13						0.5			
14		Above grades to Brown fine to medium SAND, trace fine Gravel (rounded to subrounded), saturated, loose, no odor or visual staining				0.4	0.5		
15									
16						0.5			
		END OF SOIL BORING							
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
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SUBSURFACE INVESTIGATION LOG

Boring No. **SB-08**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve Le Fevre				or 2"-3" dia. split-spoons (where indicated).		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/13,16/2009			**Borehole Diam:**	2"	**Total Depth:**	26.5
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125413.579 (Approx.)	**Ground Elevation:**	UNK	**Screen Type/Diam:**	
Vert. Datum:	N/A	**Northing:**	1169531.903 (Approx.)	**TOC Elevation:**	UNK	**Slot Size:**	

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-08

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	**SAND AND GRAVEL FILL:** Brown Silty fine to medium SAND, some fine to coarse Gravel and Cobble frags, moist firm, no odor, possible minor staining	S-1	0-4	1.8	0.4		SAND AND GRAVEL FILL	
2						0.5	36		
3									
4						0.4			
5	MC	Same as above fill with Cobble, coarse Gravel, odor moderate at 6" from the top of the sample (sweet), no visual staining, loose, dry to moist	S-2	4-8	1.5	24.1			
6						3.0	80		
7						4.5			
8						7.0			
9	MC	Same as above, Brown medium to coarse SAND and fine to medium GRAVEL with Cobble, loose to firm, moist, no odor or visual staining (fill)	S-3	8-12	1.5	0.9			
10						0.7	13		
11						1.1			
12						0.5			

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-08

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC	**SAND AND GRAVEL:** Brown coarse to fine Silty SAND and fine to coarse GRAVEL, dense, wet, no visual staining	SB-8B S-1	12-~~16~~ 14.2	0.9	0.3		**SAND AND GRAVEL FILL**	Macro-core sampler broke of the rods and was not retrived, no analytical sample was submitted. Returned on 11/16/09 3' to the SE with HSAs to complete the boring (SB-08B) to depth.
13						0.3			
						0.4	0.6		
14		Color grades to Greyish Brown at ~14', slight gas odor				1.0			MC refusal at 14.2
15	MC <COMPOSITE ANALYTICAL SAMPLE COLLECTED>	Same as above, moderate gas odor, wet	SB-8B S-2	14.5-~~20.5~~ 16.4	0.8	2.2			
						3.5	P 227 S 75		
16						4.0			
						7.6			MC refusal at 16.4', HSAs to 17' for next sample
17		Brownish-Grey coarse to fine GRAVEL and coarse to medium Silty SAND, loose, saturated, moderate gas odor, no sheen	SB-8B S-3	17-~~21~~ 17.7	0.8	12 10 P 100, S 60 75	P 223 S 65		MC refusal at 17.7', Harry says very Cobbly from 17.7'-18.8-, HSAs to 19' for next sample
18									
19	MC	Brown fine to coarse GRAVEL, some Silty Sand, loose, saturated, washed sample (may be more fines), no odor or visual staining	SB-8B S-4	19-~~23~~ 19.4	0.2	0.8	2.0		
20									MC refusal at 19.4', HSAs to 20.5' for next sample, bony HSA advancement
	MC	Same as above, saturated, no visual staining, very slight odor	SB-8B S-5	20.5-~~24.5~~ 20.6	0.1	1.1	5.8		MC refusal at 20.6', HSAs to 22.5' for next sample, very bony HSA advancement
21		Cobbles noted during auger advancement							
22									
23	MC <COMPOSITE ANALYTICAL SAMPLE COLLECTED>	Brown Silty SAND and fine to coarse GRAVEL (subangular)	SB-8B S-6	22.5-26.5	2.9	1.7			
24						1.8			
							4.5		
25						1.4			
26		**FLUVIAL SAND AND GRAVEL:** Above grades to Grey medium to fine SAND and fine to coarse GRAVEL (rounded to subrounded), possibly fluvial, loose to firm, saturated, no odor or visual staining				1.4		**FLUVIAL S & G**	
		END OF SOIL BORING							
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-09**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve Le Fevre				or 2"-3" dia. split-spoons (where indicated).		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/12/2009			**Borehole Diam:**	2"	**Total Depth:**	9.5'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125385.059 (Approx.)	**Ground Elevation:**	UNK	**Screen Type/Diam:**	
Vert. Datum:	N/A	**Northing:**	1169628.282 (Approx.)	**TOC Elevation:**	UNK	**Slot Size:**	

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-09

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	**SAND AND GRAVEL FILL:** Grey GRAVEL AND SAND subbase, concrete fragments	S-1	0-4	1.2	3.2	6.0	SAND AND GRAVEL FILL	
2						2.3			
3		Above grades in last 3" of sample to Brown/Black fine SAND, some fine Gravel, some staining, no odor, loose, dry to slightly moist				1.4			
4	MC	Same as above, loose SAND AND GRAVEL fill, no odor minor staining on some of the fill, material (i.e. asphalt and concrete debris), dry, loose	S-2	4-8	0.5	0.6	2.1		
5									
6									
7						0.5			
8	MC <COMPOSITE ANALYTICAL SAMPLE COLLECTED>	Brown Silty fine to medium SAND, some fine to medium Gravel (angular to sub-rounded), soft to loose, no odor, minor staining at ~8', slightly moist to dry	S-3	8-~~12~~ 9.5	2.0	0.3	1.4		
9						0.6			
10		**END OF SOIL BORING**							
11									
12									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-10**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve Le Fevre				or 2"-3" dia. split-spoons (where indicated).		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/12/2009			**Borehole Diam:**	2"	**Total Depth:**	9.5
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1,125,398.335 (Approx.)	**Ground Elevation:**	UNK	**Screen Type/Diam:**	
Vert. Datum:	N/A	**Northing:**	1169628.774 (Approx.)	**TOC Elevation:**	UNK	**Slot Size:**	

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-10

Depth (ft)	Sample Type		Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC		**SAND AND GRAVEL FILL:** Brown fine to medium SAND, some fine to coarse Gravel (angular to subrounded), some minor staining (old?), no odor, loose, slightly moist	S-1	0-4	1.3	0.1	0.9	SAND AND GRAVEL FILL	
2										
3										
4	MC		Same as above, Silty Brown fine to medium SAND, some fine to medium Gravel, minor staining, no odor, soft, slightly moist	S-2	4-~~8~~ 6.2	2.0	0.3	0.9		
5										
6	MC	<COMPOSITE ANALYTICAL SAMPLE COLLECTED>	Same as above with increased cobble and gravel rags, loose to medium dense, slightly moist, no odor or visual staining	S-3	6-10	2.9	0.4			Refusal at 6.2', move over ~15" west and resume sampling at 6'
7										
8							0.4	2.0		
9							0.5			
10	MC		Same as above, slightly moist, no odor or visual staining	S-4	10-~~14~~ 11.2	0.6	0.3	2.1		
11										
12			**END OF SOIL BORING**							Refusal at 11.2'

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-12**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve Le Fevre				or 2"-3" dia. split-spoons (where indicated).		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/12/2009			**Borehole Diam:**	2"	**Total Depth:**	14.2'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	1125433.74 (Approx.)	**Ground Elevation:**	UNK	**Screen Type/Diam:**	
Vert. Datum:	N/A	**Northing:**	1169625.332 (Approx.)	**TOC Elevation:**	UNK	**Slot Size:**	

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-12

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	**CONCRETE SLABS:** ~4" Concrete slab underlain by fill material Original ~4" thick concrete slab, reinforced with rebar	S-1	0-4	1.2	0.7	3.5	CONCRETE SLABS	
2		**SAND AND GRAVEL FILL:** Brown to Black medium to fine SAND and fine to coarse Gravel (fill), some Black staining, no odor, loose, dry to slightly most				1.0		SAND AND GRAVEL FILL	
3						0.4			
4	MC	Same as above	S-2A	4-~~8~~ 4.5'	0.4		2.7		S-2A - Refusal at 4.5', second attempt to advance further
5	MC	Same as above, Brown/Red to Grey/Black SAND AND GRAVEL, some Cobble fragments, loose, slightly moist, minor staining, no odor (fill)	S-2B	4.5-8	1.5	0.6 (BG)	2.6		
6						0.6			
7						0.7			
8						0.7			
9	MC	Same as above, SAND AND GRAVEL, some Cobble fragments, loose, dry, no odor or visual staining	S-3	8-12	1.9	0.4	2.5		
10						0.4			
11						0.5			
12		Sample becomes slightly moist				0.5			

<SAMPLE FOR ANALYTICAL SAMPLE COLLECTED>

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-12

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	MC <COMPOSI	**SAND AND GRAVEL FILL:** Same as above with mostly coarse Gravel and Cobble fragments, loose, dry, no odor or visual staining	S-4	12-~~16~~ 14.2	0.8	0.4	2.9	S & G FILL	
13									
14		**END OF SOIL BORING**							Refusal at 14.2'
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-13**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Lyon Drilling		
Client:	City of Rome			**Driller:**	Harry Lyon		
Site Location:	1030 East Dominick Street			**Rig Type:**	CME-45, Trailer-mounted		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (4' macro-core)		
Project Manager:	Steve LeFevre				or 2"-3" dia. split-spoons (where indicated). Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Josh Haugh			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	11/23/2010			**Borehole Diam:**	2"	**Total Depth:**	16.0'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	UNK	**Ground Elevation:**	UNK	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	UNK	**TOC Elevation:**	UNK	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-13

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	**CONCRETE SLAB (FORMER PUMP ISLAND):** ~4" thickness	S-1	0-4	0.5	0.0		CONC	
		SAND AND GRAVEL FILL: Concrete debris grades to Brown to dark Brown coarse to fine SAND and fine to medium GRAVEL, loose, dry, no odor (fill)							
2							1.0		
3						0.1			
4	MC	Brown fine to coarse SAND and fine to medium GRAVEL, some Cobble, loose, moist to slightly moist, no odor or visual staining (fill)	S-2	4-8	2.0	0.0		SAND AND GRAVEL FILL	
5									
6							2.3		
7						0.1			
8	MC	Same as above	S-3	~~8-12~~ 11.6	1.8	0.2			
9						0.3			
10							2.6		
11						0.6			
12		Little Grey staining observed at ~11.2' (PID = 0.6 ppm), no odor, loose to firm, moist to wet at 11.5'				0.2			MC refusal at 11.6', second attempt and subsequent refusal at 11.8'

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-13

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
12	SS 15-33-31-28	**SAND AND GRAVEL FILL:** Same as above with Red Sandstone Cobble fragments, moist to wet, no odor or visual staining	SS-1	12-14	0.5	0.0	2.2	SAND AND GRAVEL FILL	Switch to 2" split spoon and 140 lb hammer, open hole
13									
14	SS 12-9-14-50	As above, little Silt, dense (fill), moderate gas odor and Grey staining, saturated	SS-2	14-16	0.7	P - 30	15.9		
15									
16		**END OF SOIL BORING**							
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-14**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Zebra Environmental		
Client:	City of Rome			**Driller:**	Joe Hutchins		
Site Location:	1030 East Dominick Street			**Rig Type:**	Geoprobe DT6620		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (5' macro-core)		
Project Manager:	Steve LeFevre				Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Leandra Keefe			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	5/14/2014			**Borehole Diam:**	2"	**Total Depth:**	18.0'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	UNK	**Ground Elevation:**	UNK	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	UNK	**TOC Elevation:**	UNK	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-14

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	Asphalt fill 0-8". Turns to Brown SAND and GRAVEL with black bits throughout. At 2.5-3.0ft Grey GRAVEL/Concrete.	1	0-5	3.0	0.0			
5	MC	Similar as above (SAA). Brown medium GRAVEL with some fine to medium Sand, slightly moist near bottom. Gravel turns reddish, flat-lying.	2	5-10	2.0	0.0			
10	MC	SAA with coarse Sand, trace black specs. At 10" turns wet to saturated. Rounded to angular gravel and fine-medium-coarse Sand.	3	10-15	2.0	0.0			
15									

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-14

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
15	MC	0-18ft Brown saturated SAND and GRAVEL (PID 94.4 ~18"). Turns to saturated medium to coarse SAND and fine to medium GRAVEL (rounded to subangular) to bottom.	4	15-20	3.8				
16							249.0		
17						94.4			
18		Refusal @ 18ft.							
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-15**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Zebra Environmental		
Client:	City of Rome			**Driller:**	Joe Hutchins		
Site Location:	1030 East Dominick Street			**Rig Type:**	Geoprobe DT6620		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (5' macro-core)		
Project Manager:	Steve LeFevre				Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Leandra Keefe			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	5/14/2014			**Borehole Diam:**	2"	**Total Depth:**	18.0'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	UNK	**Ground Elevation:**	UNK	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	UNK	**TOC Elevation:**	UNK	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-15

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	Topsoil then Brown fine to medium SAND, moist. At 8" turns to Grey/Brown SAND and medium GRAVEL (subangular), dry, loose.	1	0-5	1.5	0.1			
5	MC	Tpo 6" is Brown/Black medium GRAVEL (rounded to angular) with some fine to medium Sand. At 6"-10" crumbled concrete. Turns back to as above, dry, loose.	2	5-10	1.5	0.0			
10	MC	0-2ft Red/Grey/Brown SAND and medium GRAVEL, dry, loose. At 2ft becomes reddish/brown SAND and GRAVEL, saturated.	3	10-15	4.0	0.0	0.0		
15									

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-15

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
15	MC	Saturated Brown fine to medium SAND and medium GRAVEL (subrounded to angular).	4	15-20	3.5				
16									
17						0.0			
18		Refusal @ 18ft							
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-16**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Zebra Environmental		
Client:	City of Rome			**Driller:**	Joe Hutchins		
Site Location:	1030 East Dominick Street			**Rig Type:**	Geoprobe DT6620		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (5' macro-core)		
Project Manager:	Steve LeFevre				Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Leandra Keefe			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	5/14/2014			**Borehole Diam:**	2"	**Total Depth:**	18.0'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	UNK	**Ground Elevation:**	UNK	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	UNK	**TOC Elevation:**	UNK	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-16

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	0-6" Asphalt fill material. Black cinders underneath. Turns to Brown SAND and GRAVEL fill material. At 1.8ft loose, dry, tan SAND then back to SAND and GRAVEL.	1	0-5	2.5	0.0			
5	MC	Similar as above (SAA), loose, dry. Bottom 2" is Grey GRAVEL (subangular), flat-lying.	2	5-10	1.7	0.0			
10	MC	Grey/Red medium GRAVEL (angular) with some fine to medium Brown Sand. Saturated at 1.0ft. Sand turns reddish/brown. Some smears of black noted in portion above saturated zone.	3	10-15	1.6	0.0			
15									

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-16

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
15	MC	Saturated with sheen on water. Medium GRAVEL (subrounded) turns to medium SAND, petro odor.	4	15-20	3.0		408.0		
16									
17						31.1			
18		Refusal @ 18ft							
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-17**

Project No. 245.005

PROJECT INFORMATION		**DRILLING INFORMATION**	
Project:	City of Rome Environmental Restoration Project	**Drilling Co:**	Zebra Environmental
Client:	City of Rome	**Driller:**	Joe Hutchins
Site Location:	1030 East Dominick Street	**Rig Type:**	Geoprobe DT6620
Job No:	245.005	**Drilling Method(s):**	Continuous soil sampling, direct push methods (5' macro-core)
Project Manager:	Steve LeFevre		Wells installed with 4 1/4" H.S.A.'s.
Logged By:	Leandra Keefe	**Hammer Type, Weight/Drop:**	N/A
Dates Drilled	5/14/2014	**Borehole Diam:** 2"	**Total Depth:** 16.0'
LOCATION INFORMATION (NYSP)		**WELL INFORMATION**	
Horiz. Datum:	NAD83 **Easting:** UNK	**Ground Elevation:**	UNK **Screen Type/Diam:** PVC/2"
Vert. Datum:	N/A **Northing:** UNK	**TOC Elevation:**	UNK **Slot Size:** 0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-17

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	Topsoil grades to Brown SAND and GRAVEL fill material. Dark brown/red/gravel. Dry, some woodchips. Bottom 3" is dry crushed concrete.	1	0-5	2.4	0.0			
5	MC	SAA. SAND and GRAVEL fill material, loose, dry. Medium to coarse Gravel (angular to subangular) throughout.	2	5-10	2.2	0.0			
10	MC	SAA. Bottom 6" is moist/wet SAND and GRAVEL turning to black fine GRAVEL, petro odor. PID ~95 ppm.	3	10-15	2.8	95.0	351		
15									

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-17

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
15	MC	Saturated Brown fine to medium SAND. Changes to black fine to medium SAND at 1.5ft to bottom. Petro odor. Refusal @ 16ft	4	15-20	2.5	23.0	351		
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-18**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Zebra Environmental		
Client:	City of Rome			**Driller:**	Joe Hutchins		
Site Location:	1030 East Dominick Street			**Rig Type:**	Geoprobe DT6620		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (5' macro-core)		
Project Manager:	Steve LeFevre				Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Leandra Keefe			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	5/14/2014			**Borehole Diam:**	2"	**Total Depth:**	16.0'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	UNK	**Ground Elevation:**	UNK	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	UNK	**TOC Elevation:**	UNK	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-18

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	Topsoil then Brown SAND and GRAVEL fill material. Slight petro odor. Bottom 6" turns to black Silty SAND with little red Gravel.	1	0-5	2.2	0.0	0.2		
2									
3									
4									
5									
6	MC	0.0-1.0' is fill material. Turns to Brown fine to medium SAND with little medium Gravel, slightly moist.	2	5-10	2.2	0.0			
7									
8									
9									
10									
11	MC	SAA. At 6" becomes saturated.	3	10-15	1.7	0.0			
12									
13									
14									
15									

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-18

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
15	MC	SAA. Saturated.	4	15-20	2.0	0 0			
16		Refusal @ 16ft							
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-19**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Zebra Environmental		
Client:	City of Rome			**Driller:**	Joe Hutchins		
Site Location:	1030 East Dominick Street			**Rig Type:**	Geoprobe DT6620		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (5' macro-core)		
Project Manager:	Steve LeFevre				Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Leandra Keefe			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	5/14/2014			**Borehole Diam:**	2"	**Total Depth:**	18.0'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	UNK	**Ground Elevation:**	UNK	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	UNK	**TOC Elevation:**	UNK	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-19

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	2" of topsoil. Turns to Brown fine SAND with some Gravel and sections of black Sand mixed throughout, fill, loose, dry.	1	0-5	2.0	0.0			
5	MC	Red/Grey/Brown SAND and GRAVEL fill material with sections of tan flat-lying Gravel, lose, dry.	2	5-10	2.0	0.0			
10	MC	Top 6" SAA. Becomes wet/moist from 6" to 2.5' turns to Brown mised SAND and GRAVEL with orange staining and sections of black and tan Sand. Bottom 3" is Grey wet SAND, slight petro odor noted.	3	10-15	3.5	15.4	71.1		

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-19

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
15	MC	Top is Brown SAND and GRAVEL. Grades to dark brown fine to medium SAND, saturated. Bottom 2" is back GRAVEL.	4	15-20	2.0				
16									
17						3.8			
18		Refusal @ 18ft							
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-20**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Zebra Environmental		
Client:	City of Rome			**Driller:**	Joe Hutchins		
Site Location:	1030 East Dominick Street			**Rig Type:**	Geoprobe DT6620		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (5' macro-core)		
Project Manager:	Steve LeFevre				Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Leandra Keefe			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	5/14/2014			**Borehole Diam:**	2"	**Total Depth:**	15.5'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	UNK	**Ground Elevation:**	UNK	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	UNK	**TOC Elevation:**	UNK	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-20

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	Top 4" is topsoil. 4"-20" is concrete and fill material then ~3" of wood and black fine SAND. Bottom 1.0ft is brown/grey/black fine SAND and fine to medium GRAVEL, dry.	1	0-5	3.0	0.0			
5	MC	Similar as above (SAA). Fine SAND and fine to medium GRAVEL fill material. Bottom 1.0ft is tan/grey flat-lying GRAVEL, dry, loose.	2	5-10	2.8	0.0			
10	MC	SAA. SAND and GRAVEL fill material. Wet from 2-3ft then back to dry.	3	10-15	5.0	0.0	0.0		
15									

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-20

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
15	MC	Mostly cave-in in sleeve. Saturated Brown GRAVEL at top then turns to medium SAND from 1-0ft to bottom. Refusal at 15.5ft	4	15-20	3.0	0 0			
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

SUBSURFACE INVESTIGATION LOG

Boring No. **SB-21**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Zebra Environmental		
Client:	City of Rome			**Driller:**	Joe Hutchins		
Site Location:	1030 East Dominick Street			**Rig Type:**	Geoprobe DT6620		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (5' macro-core)		
Project Manager:	Steve LeFevre				Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Leandra Keefe			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	5/15/2014			**Borehole Diam:**	2"	**Total Depth:**	15.0'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	UNK	**Ground Elevation:**	UNK	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	UNK	**TOC Elevation:**	UNK	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: SB-21

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	0.0-2.0' SAND and GRAVEL fill material, turns to fine Brown SAND, moist at bottom.	1	0-5	2.9	0.0			
5	MC	SAA, grades to medium to coarse SAND, layer of dark grey material with trace woodchips. Bottom 1" is wet to saturated.	2	5-10	2.3	0.0			
10	MC	Top 4" is Grey medium GRAVEL (rounded to subrounded), light petro odor, no PID hits. Grades to angular GRAVEL and fine-medium-coarse SAND. Length of sleeve staurated.	3	10-15	3.0	0.0	0.2		
15		Refusal @ 15ft							

SUBSURFACE INVESTIGATION LOG

Boring No. **MW-7**

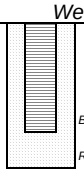
Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Zebra Environmental		
Client:	City of Rome			**Driller:**	Joe Hutchins		
Site Location:	1030 East Dominick Street			**Rig Type:**	Geoprobe DT6620		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (5' macro-core)		
Project Manager:	Steve LeFevre				Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Leandra Keefe			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	5/14/2014			**Borehole Diam:**	2"	**Total Depth:**	17.0'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	UNK	**Ground Elevation:**	UNK	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	UNK	**TOC Elevation:**	UNK	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-7

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	Brown/Black/Grey/Red SAND and GRAVEL fill material, dry, loose.	1	0-5	2.1	0.0			*Concrete surface seal with ~2ft stickup* *Top of bentonite seal*
5	MC	Similar to above (SAA), slightly moist as bottom.	2	5-10	3.8	0.0			*Top of sandpack 8.0ft*
10	MC	SAA. At bottom 6" strong petro odor. PID 720 ppm. Moist from 2.0-3.0ft.	3	10-15	4.5	720.0			*Top of Screen 11.5ft* *0.010-inch slot 2" dia. PVC screen*
15									

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-7

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
15	MC	Brown SAND and GRAVEL, saturated. At 2.5ft turns to dark grey medium to coarse SAND on top of flat-lying weathered rock.	4	15-20	4.0				 *Bottom of Screen 16.5ft* *Refusal @ 17ft*
16									
17		Refusal @ 17ft				64.0			
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

SUBSURFACE INVESTIGATION LOG

Boring No. **MW-8**

Project No. 245.005

PROJECT INFORMATION				DRILLING INFORMATION			
Project:	City of Rome Environmental Restoration Project			**Drilling Co:**	Zebra Environmental		
Client:	City of Rome			**Driller:**	Joe Hutchins		
Site Location:	1030 East Dominick Street			**Rig Type:**	Geoprobe DT6620		
Job No:	245.005			**Drilling Method(s):**	Continuous soil sampling, direct push methods (5' macro-core)		
Project Manager:	Steve LeFevre				Wells installed with 4 1/4" H.S.A.'s.		
Logged By:	Leandra Keefe			**Hammer Type, Weight/Drop:**	N/A		
Dates Drilled	5/15/2014			**Borehole Diam:**	2"	**Total Depth:**	15.5'
LOCATION INFORMATION (NYSP)				**WELL INFORMATION**			
Horiz. Datum:	NAD83	**Easting:**	UNK	**Ground Elevation:**	UNK	**Screen Type/Diam:**	PVC/2"
Vert. Datum:	N/A	**Northing:**	UNK	**TOC Elevation:**	UNK	**Slot Size:**	0.010"

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-8

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
1	MC	Topsoil mixed with fine SAND and fine GRAVEL (angular), dry, loose.	1	0-5	0.5	0.0			*Concrete surface seal with flushmount* *Top of bentonite seal*
2									
3									
4									
5	MC	Brown/dark Grey Silty SAND, moist, at bottom 2" saturated, coarse SAND with little fine Gravel (angular).	2	5-10	0.5	0.8			*Top of sandpack 8.0ft*
6									
7									
8									
9									
10	MC	Saturated. Coarse SAND and fine GRAVEL, slight petro odor in upper 1.5ft, darker soils, PID ~24ppm	3	10-15	3.0	24.7			*Top of Screen 10.5ft*
11									
12									
13									*0.010-inch slot* *2" dia. PVC screen*
14									
15									

Barton & Loguidice, P.C. City of Rome Environmental Restoration Project BORING NO: MW-8

Depth (ft)	Sample Type	Description	Sample No./	interval (ft bgs)	Recovery (ft)	PID (ppm)	Headspace	Lithology	Notes / *Well Construction*
15	MC	SAA, petro odor, saturated, GRAVEL (rounded to sub rounded) and corase SAND.	4	15-20	3.0				 *Bottom of Screen 15.5ft*
16		Refusal @ 15.5ft							
17						92			
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

Barton & Loguidice, P.C.

Engineers • Environmental Scientists • Planners • Landscape Architects

WELL DEVELPOMENT LOG

Project: 1030 East Dominick Street

Job Number: 245.005.001

Monitoring location: MW-1

Development method(s):

Date of activity: 2/10/2010

Well information:	Static Water Level	Total Depth	Depth to top of screen (ft)	Screen length (ft)	Well Diameter (in)	Other (Specify)	Other (Specify)
	14.08	19.62					
MP/Notes:							

Date	Time	Turbidity (NTU)	Temp. (F)	Sp. Cond. (US/cm)	ORP (mV)	pH	Water removed/ interval (gal)	Visual/ Olfactory Notes
2/10/2010	12:20	86.47 (?)	50.4	1960	122	7.5	32	Brown w/ fines, pet. odor, sheen
2/10/2010	12:46	249.1	49	2000	137	7.6	8	Brown/fines; heavy silt/sed; pet. odor; sheen
2/10/2010	13:07	722.8	48.7	2000	143	7.6	10	SAA

Notes:

Total Volume Purged: 50 gal

Samplers:

Barton & Loguidice, P.C.

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WELL DEVELPOMENT LOG

Project: 1030 East Dominick Street

Job Number: 245.005.001

Monitoring location: MW-2

Development method(s):

Date of activity: 2/10/2010

Well information:	Static Water Level	Total Depth	Depth to top of screen (ft)	Screen length (ft)	Well Diameter (in)	Other (Specify)	Other (Specify)
	13.34	19.7					
MP/Notes:							

Date	Time	Turbidity (NTU)	Temp. (F)	Sp. Cond. (US/cm)	ORP (mV)	pH	Water removed/ interval (gal)	Visual/ Olfactory Notes
2/10/2010	11:20	1012	48.8	1000	244	7.9	15	Dark brown w/ fines to light brown w/ some fines; no odor
2/10/2010	11:40	462	50.3	1010	203	7.9	10	Light brown tint; little fines; no odor
2/10/2010	12:15	362.9	48.9	1040	115	7.9	5	Brown tint-clear; no odor

Notes:

Total Volume Purged: 30 gal

Samplers:

Barton & Loguidice, P.C.

Engineers • Environmental Scientists • Planners • Landscape Architects

WELL DEVELPOMENT LOG

Project: 1030 East Dominick Street

Job Number: 245.005.001

Monitoring location: MW-3

Development method(s):

Date of activity: 2/10/2010

Well information:	Static Water Level	Total Depth	Depth to top of screen (ft)	Screen length (ft)	Well Diameter (in)	Other (Specify)	Other (Specify)
	14.56	19.95					
MP/Notes:							

Date	Time	Turbidity (NTU)	Temp. (F)	Sp. Cond. (US/cm)	ORP (mV)	pH	Water removed/ interval (gal)	Visual/ Olfactory Notes
2/10/2010	13:15	416.7 (?)	45.3 (?)	1060	153	7.3	20	Brown-Dark brown
2/10/2010	15:15	480.5	44.7	1070	219	7.5	15	Brown; less sediment; no odor
2/10/2010	15:36	1001	45.6	1130	209	7.4	15	SAA

Notes:

Total Volume Purged: 50 gal

Samplers:

Barton & Loguidice, P.C.

Engineers • Environmental Scientists • Planners • Landscape Architects

WELL DEVELPOMENT LOG

Project: 1030 East Dominick Street

Job Number: 245.005.001

Monitoring location: MW-4

Development method(s):

Date of activity: 2/10/2010

Well information:	Static Water Level	Total Depth	Depth to top of screen (ft)	Screen length (ft)	Well Diameter (in)	Other (Specify)	Other (Specify)
	15.33	20.03					
MP/Notes:							

Date	Time	Turbidity (NTU)	Temp. (F)	Sp. Cond. (US/cm)	ORP (mV)	pH	Water removed/ interval (gal)	Visual/ Olfactory Notes
2/10/2010	15:55	0 (?)	47.2	1360	162	7.6	7	Heavy fines; dark grey; pet. odor; sheen
2/10/2010	16:25	1082	45.6	1380	59	7.6	5	Grey tint; less sediment; strong odor, slight sheen
2/10/2010	16:50	345.1	44.1	1520	56	7.7	3	Cloudy, not much sed; clear; strong odor w/ slight sheen

Notes:

Total Volume Purged: 13 gal

Samplers:

Barton & Loguidice, P.C.

Engineers • Environmental Scientists • Planners • Landscape Architects

WELL DEVELPOMENT LOG

Project: 1030 East Dominick Street

Job Number: 245.005.001

Monitoring location: MW-5

Development method(s):

Date of activity: 2/10/2010

Well information:	Static Water Level	Total Depth	Depth to top of screen (ft)	Screen length (ft)	Well Diameter (in)	Other (Specify)	Other (Specify)
	14.31	19.45					
MP/Notes:							

Date	Time	Turbidity (NTU)	Temp. (F)	Sp. Cond. (US/cm)	ORP (mV)	pH	Water removed/ interval (gal)	Visual/ Olfactory Notes
2/10/2010	16:00	72.06 (?)	48.5	1000	136	7.6	20	Dark brown; heavy fines and sediment; no odor
2/10/2010	16:30	342.2	45.5	1040	116	7.7	25	Brown w/ less sediment; no odor
2/10/2010	17:00	495.8	45.2	1120	113	7.6	10	SAA

Notes:

Total Volume Purged: 55 gal

Samplers:

Appendix D

Chain of Custody Records

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client: BARTON & LOGUIDICE	Project Manager: STEVE LEFEVRE SLEFEVRE@BARTONANDLOGUIDICE.COM	Date: 11/11/09	Chain of Custody Number: 395641
Address: 2 CORPORATE PLAZA, 264 WASHINGTON AVE EXT	Telephone Number (Area Code)/Fax Number: 518-218-1801 / 518-218-1805	Lab Number:	Page 1 of 1
City: ALBANY	State: NY	Zip Code: 12203	Site Contact: JUSTIN HAMEL	Lab Contact: PAUL MORROW
Project Name and Location (State): 1030 E. DOMINICK ST, ROME NY	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 215.005			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs (8260)	SVOCs (8270)	Metals (6010)	PCBs (8082)	Special Instructions/ Conditions of Receipt
1030ED-SS-02	11/11/09	10:05				X	5						X	X	X	X	
1030ED-MS/MSD (SS-02)	11/11/09	10:05				X	10										
1030ED-SS-04	11/11/09	11:10				X	5										
1030ED-SS-03	11/11/09	11:30				X	5										
1030ED-SS-01	11/11/09	11:45				X	5										
1030ED-SB-01 (12'-16')	11/11/09	14:50				X	5										
1030ED-MW-06 (12'-16')	11/11/09	15:55				X	5										
1030ED-SB-06 (12'-16')	11/11/09	16:55				X	5										
FIELD BLANK 8	11/11/09	16:20		X			4		1	3							
1030ED-BLIND DUPLICATE	11/11/09	—				X	5										
TRIP BLANK				X						1			X				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☒ Archive For 1 Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☒ Other STANDARD

QC Requirements (Specify): NYS ASP CAT B

	Date	Time		Date	Time
1. Relinquished By	11-11-09	17:24	1. Received By: R. English, Syr	11-11-09	17:24
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client	Project Manager	Date	Chain of Custody Number
BARTON & LOGUIDICE	STEVE LEFEVRE SLEFEVRE@BARTONANDLOGUIDICE.COM	11/12/09	395640
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
2 CORPORATE PLAZA, 264 WASHINGTON AVE EXT	518-218-1801		

City	State	Zip Code	Site Contact	Lab Contact
ALBANY	NY	12203	JOSH HAUGH	PAUL MARROW

Project Name and Location (State)	Carrier/Waybill Number
1030 E. DOMINICK ST, ROME NY	

Contract/Purchase Order/Quote No.: 245.005

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs (8260)	SVOCs (8270)	METALS (6010)	PCBs (8082)	Special Instructions/ Conditions of Receipt
1030ED-MW-05 (8'-12')	11/12/09	09:45				X	5						X	X	X	X	
1030ED-SB-09 (8'-9.5')	11/12/09	11:45				X	5										
1030ED-SB-10 (6'-11.2')	11/12/09	14:00				X	5										
1030ED-SB-12 (8'-14.2')	11/12/09	16:15				X	5										
FIELD BLANK 9	11/12/09	16:50		X			4		1	3							
TRIP BLANK	—	—		X						1			X				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☒ Archive For 1 Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)
NYS ASP CAT B

	Date	Time		Date	Time
1. Relinquished By	11/12/09	17:04	1. Received By: R. English, Syr	11/12/09	17:04
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client	Project Manager	Date	Chain of Custody Number
Barton & Loguidice	Steve Lefevre slefevre@bartonandloguidice.com	11/13/09	395639
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
2 Corporate Plaza, 264 Washington Ave Ext	518-218-1801 / 518-218-1805		

City	State	Zip Code	Site Contact	Lab Contact
Albany	NY	12203	Josh Haight	Paul Morrow

Project Name and Location (State)	Carrier/Waybill Number
1030 E. Dominick St, Rome, NY	

Contract/Purchase Order/Quote No.: 245.005

Analysis (Attach list if more space is needed): VOCs (8260), SVOCs (8270), Metals (6010), PCBs (8082)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	VOCs (8260)	SVOCs (8270)	Metals (6010)	PCBs (8082)
1030 ED-MW-03 (12'-15.9')	11/13/09	09:40				X	5						X	X	X	X
1030 ED-SB-03 (12'-16')	11/13/09	11:00				X	5									
1030 ED-SB-07 (8'-12')	11/13/09	11:50				X	5									
1030 ED-SB-04 (12'-17')	11/13/09	15:15				X	5									
Field Blank 10	11/13/09	12:40		X			4		1	3						
Trip Blank	—	—		X						1			X			

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☒ Archive For 1 Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☒ Other STANDARD

QC Requirements (Specify): NYS ASP CAT B

	Date	Time		Date	Time
1. Relinquished By	11/13/09	16:48	1. Received By: English, Syr	11/13/09	16:48
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client	Project Manager	Date	Chain of Custody Number
BARTON & LOGUIDICE	STEVE LEFEVRE SLEFEVRE@BARTONLOGUIDICE.COM	11/16/09	395642
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 **of**
2 CORPORATE PLAZA 261 WASHINGTON AVE EXT	518-218-1801 / 518-218-1805		

City	State	Zip Code	Site Contact	Lab Contact
ALBANY	NY	12203	JOSH HANCH	PAUL MORROW

Project Name and Location (State)	Carrier/Waybill Number
1030 E. DOMINICK ST, ROME NY	

Contract/Purchase Order/Quote No.: 245.005

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs (8260)	SVOCs (8270)	Metals (6010)	PCBs (8082)	Special Instructions/ Conditions of Receipt
1030ED-SB-08 (14.5'-17.7')	11/16/09	10:30				X	5						X	X	X	X	
1030ED-SB-06 (22.5'-26.5')	11/16/09	11:30				X	5										
1030ED-SB-05 (12'-16.8')	11/16/09	16:15				X	5										
FIELD BLANK 11	11/16/09	17:15		X			4		1	3							
TRIP BLANK	—	—		X						1			X				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☒ Archive For 1 Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☒ Other STANDARD

QC Requirements (Specify)
NYS ASP CAT B

	Date	Time		Date	Time
1. Relinquished By	11/16/09	17:15	1. Received By: RECEIVED, SYR	11/16/09	17:15
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client: Barton & Loguidice	Project Manager: Steve LeFevre SLefevre@BartonandLoguidice.com	Date: 11/17/09	Chain of Custody Number: 395643
Address: 2 Computate Plaza, 284 Washington Ave Ext	Telephone Number (Area Code)/Fax Number: 518-218-1801 / 218-218-1805	Lab Number:	Page 1 of 1
City: Albany	State: NY	Zip Code: 12203	Site Contact: Josh Haugh	Lab Contact: Paul Morrow
Project Name and Location (State): 1030 E. Dominick St, Rome NY	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 245.005			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs (8260)	SVOCs (8270)	Metals (6010)	PCBs (8082)	Special Instructions/ Conditions of Receipt
1030ED-SB-02 (12'-15')	11/17/09	10:30				X	5						X	X	X	X	
1030ED-MW-01 (12'-16.2')		13:30				X	5										
1030ED-MW-01 (21'-22.9')		15:50				X	5										
FIELD BLANK 12		9:15		X			4		1	3							
TRIP BLANK	—	—		X						1			X				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☒ Archive For 1 Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☒ Other STANDARD

QC Requirements (Specify): NYS ASP CAT B

	Date	Time		Date	Time
1. Relinquished By	11-17-09	17:03	1. Received By: R. English, Sym	11/17/09	17:03
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client	Project Manager	Date	Chain of Custody Number
BARTON & LOGUIDICE	STEVE LEFEVRE SLEFEVRE@BARTONANDLOGUIDICE.COM	11/18/09	395644
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
2 CORPORATE PLAZA, 264 WASHINGTON AVE EXT	518-218-1801 / 518-218-1805		

City	State	Zip Code	Site Contact	Lab Contact
ALBANY	NY	12203	JOSH HAUGH	PAUL MORRAW

Project Name and Location (State)	Carrier/Waybill Number
1030 E. DOMINICK ST, ROME NY	

Contract/Purchase Order/Quote No.: 2415.005

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs (8260)	SVOCs (8270)	Metals (6010)	PCBs (8082)	Special Instructions/ Conditions of Receipt
1030ED-MW-02(8'-13.9')	11/18/09	12:30				X	5						X	X	X	X	
FIELD BLANK 13	11/18/09	13:45		X			4		1	3			X	X	X	X	
TRIP BLANK	—	—		X						1			X				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☒ Archive For 1 Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)
NYS ASP CAT B

	Date	Time		Date	Time
1. Relinquished By	11/18/09	15:27	1. Received By: Rutgers, Syr	11/18/09	15:27
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client	Project Manager	Date	Chain of Custody Number
BARTON & LOGUIDICE	STEVE LE FEVRE SLEFEVRE@BARTONANDLOGUIDICE.COM	11/19/09	395645
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
2 CORPORATE PLAZA, 276 WASHINGTON AVE EXT			

City	State	Zip Code	Site Contact	Lab Contact
ALBANY	NY	12203	JOSH HAUGH	PAUL MORROW

Project Name and Location (State)	Carrier/Waybill Number
1050 E. DOMINICK ST, ROME NY	

Contract/Purchase Order/Quote No.: 245.005

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOCs (8260)	SVOCs (8270)	Metals (6010)	PCBs (8082)	Special Instructions/ Conditions of Receipt
1030 ED-MW-04 (13'-15')	11/19/09	11:45				X	5						X	X	X	X	
FIELD BLANK 14	11/19/09	16:25		X			4		1	3			X	X	X	X	
TRIP BLANK	—	—		X						1			X				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☒ Archive For 1 Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify): NYS ASP CAT B

	Date	Time		Date	Time
1. Relinquished By	11/19/09	16:47	1. Received By SYR	11/19/09	16:47
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brian T. McGrath Dunk Tested	Lab PM: Paul Morrow	Carrier Tracking No(s):	COC No: 1
Client Contact: Steve Le Fevre	Phone: (319) 492-5200	E-Mail: Paul.Morrow@testamericainc.com		Page: 1
Company: Barton & Loguidice - Albany, NY				Job #:
Address: 2 Corp. Pza. 264 Washington Av	Due Date Requested:			
City: Albany	TAT Requested (days): 28			
State, Zip: NY, 12203				
Phone: (518) 218-1801	PO #:			
Email: slefevre@bartonandloguidice.com	WO #: RTB0774			
Project Name: City Of Rome ERP - IRM 3, 1030 East Dominick St.	Project #: 245-005.001 ET03			
Site:	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PCBs EPA 8082	:SVOA + TIC's EPA 8270	TAL Metals EPA 6010 B	Voa+ TIC's EPA 8260 + MTBE	Total Number of containers	Special Instructions/Note:
			Preservation Code:				I	I	D	A		
MW-1 MS/MSD	2/23/10	11:47	G	W		X	4	9	3	9	21	
MW-2	2/23/10	~~13:00~~	G	W			1	2	1	3	7	
MW-3	2/23/10	14:00	G	W			1	2	1	3	7	
MW-4	2/23/10	13:35	G	W			1	2	1	3	7	
MW-5	2/23/10	13:25	G	W			1	2	1	3	7	
Trip Blank				W			~~2~~	~~2~~	~~1~~	3	7	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	2/24/10 16:38		[signature]	2-26-10 16:38	STL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of 3752

480-60100 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES

Client Contact	Project Manager: Steve Lefevre	Site:	COC No:
Company Name: Barton & Loguidice DPC	Tel/Fax:	Lab Contact:	Carrier:	1 of 2 COCs
Address: 10 Airline Dr	Analysis Turnaround Time			Sampler: Leandra Keefe
City/State/Zip: Albany NY 12205	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 518-218-1801	TAT if different from Below Standard			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: City of Rome	☐ 1 week			
Site: 1030 East Dominick St	☐ 2 days			Job / SDG No.:
PO# 245.005.001	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOC 8260	SVOC 8270	PCB	Metals	Sample Specific Notes:
SB-14 (15.5-16.5)	5/14/14	9:10	G	Soil	3			X	X			
SB-16 (15-16)		9:35						X	X			
SB-15 (11-12)		10:00						X	X			
SB-20 (14-15)		10:35						X	X			
SB-19 (14-15)		11:05						X	X			
SB-17 (14-16)		11:40						X	X			
SB-18 (4-5)		11:55						X	X			
SS-05 (0-1)	5/15/14	9:25	G	Soil	1				X			
SS-06 (0-1)		9:35							X			
SS-07 (0-1)		9:38							X			
SS-08 (0-1)		9:48							X			
SB-21 (10-12)					5			X	X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

3.2 #1

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

	Company	Date/Time		Company	Date/Time
Relinquished by:	B&L	5/16/14 8:35	Received by:	TA	5/16/14 8:35
Relinquished by:	TA	5/16/14 18:00	Received by:		
Relinquished by:			Received in Laboratory by:	TAL	5:17-14 0200

Page 1633 of 1635

05/30/2014

TestAmerica Albany
25 Kraft Road
Albany, NY 12205

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Leandra Keefe	Lab PM: Deyo, Melissa L	Carrier Tracking No(s):	COC No: 480-49973-13328.2
Client Contact: Ms. Leandra Keefe	Phone: 518-218-1801	E-Mail: melissa.deyo@testamericainc.com		Page: Page 2 of 2
Company: Barton & Loguidice, D.P.C.				Job #: 245.005.001
Address: 10 Airline Drive Suite 200	Due Date Requested:			
City: Albany	TAT Requested (days): Standard			
State, Zip: NY, 12205				
Phone: 518-218-1801(Tel)	PO #: Purchase Order not required			
Email: lkeefe@bartonandloguidice.com	WO #:			
Project Name: City of Rome- 1030 East Dominick	Project #: 48009667			
Site: 1030 East Dominick St	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D - TCL Semivolatiles	8260B - STARS VOC	8082 PCB	6010B / 7471 Metals/Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N				
MW-07	5/22/14	12:56	G	~~Solid~~ W			X	X	X	X	6	
MW-08	5/22/14	12:25	G	~~Solid~~ W			X	X	X	X	6	
				~~Solid~~								
				~~Solid~~								

5/23/14

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 5/23/14 9:35	Company	Received by:	Date/Time: 5/23/14 09:55	Company TA
Relinquished by:	Date/Time: 5/23/14 15:00	Company TA	Received by:	Date/Time: 5-24-14 0130	Company TL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.1, 3.2 #1

6/9/2014

Appendix E

Hydraulic Conductivity Analyses

Appendix F

Groundwater Field Sampling Data Sheets

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE: *1030 East Dominick Street* **SAMPLE LOCATION:** *MW-1 (MS/MSD)*
CLIENT: *City of Rome* **JOB NO.:** *245.005.001*

Weather conditions: *Overcast, 30F*

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify):_____
Sediment [ ] Leachate [ ] _____

WATER LEVEL DATA

Static Water Level (feet)*:	*14.37*
Measured Well Depth (feet)*:	*19.62*
Well Casing Diameter (inches):	*2*
Volume in Well Casing (gallons):	*0.84*

*depth from measuring point

Measuring Pt: Top of Riser: [X] Other:
Measured by: *BJM/DMJ*
Date: *2/23/2010*
Time: *11:40*

PURGING METHOD
Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [ ] Non-dedicated [X]

Calc Vol Water to be Purged (gal): 2.52
Volume of Water Purged (gal):

Did well purge dry? No [ ] Yes [ ] Vol before dry:
Did well recover? No [ ] Yes [ ] Recovery time:

SAMPLING METHOD
Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [ ] *Non-dedicated* [X]

Sampled by: *BJM/DMJ* **Time:** *11:47* **Date:** *2/23/2010*

SAMPLING DATA
Sample Appearance:
Color: *Cloudy light brown* Sediment: *Lots of fines, elevated turbidity*
Odor: *Slight petroleum odor* Other:

Field Measured Parameters:

pH (Standard Units)	7.6	Sp. Conductivity (mS/cm)	1690
Temperature (C)	45.6	Eh-Redox Potential (mV)	236
Turbidity (NTUs)	824.1	Dissolved Oxygen (mg/L)	

Samples Collected: *3 Amber SVOC,PCB, Extra; 3 VOA-VOCs; 1 Plastic Metals*

Samples Delivered: *TestAmerica* **Time:** **Date:**

COMMENTS:
MS/MSD Location

FIELD SAMPLING DATA SHEET

Barton & Loguidice, P.C.
Consulting Engineers

SITE: *1030 East Dominick Street* **SAMPLE LOCATION:** *MW-2*
CLIENT: *City of Rome* **JOB NO.:** *245.005.001*

Weather conditions: *Overcast, light snow, 30F*

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify):_____
Sediment [ ] Leachate [ ] _____

WATER LEVEL DATA

Static Water Level (feet)*:	*13.65*
Measured Well Depth (feet)*:	*19.70*
Well Casing Diameter (inches):	
Volume in Well Casing (gallons):	*0.97*

*depth from measuring point

Measuring Pt: Top of Riser: [X] Other:
Measured by: *BJM/DMJ*
Date: *2/23/2010*
Time: *12:51*

PURGING METHOD
Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [ ] Non-dedicated [X]

Calc Vol Water to be Purged (gal): 2.9
Volume of Water Purged (gal): *3.0*

Did well purge dry? No [X] Yes [ ] Vol before dry: _____
Did well recover? No [ ] Yes [X] Recovery time: _____

SAMPLING METHOD
Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [ ] *Non-dedicated* [X]

Sampled by: *BJM/DMJ* **Time:** *13:00* **Date:** *2/23/2010*

SAMPLING DATA
Sample Appearance:
Color: *Cloudy brown* Sediment: *Heavy silt- half bail sed. upon purging*
Odor: *None* Other:

Field Measured Parameters:

pH (Standard Units)	7.6	Sp. Conductivity (mS/cm)	1190
Temperature (C)	46.6	Eh-Redox Potential (mV)	259
Turbidity (NTUs)	465.6	Dissolved Oxygen (mg/L)	

Samples Collected: *3 Amber SVOC,PCB, Extra; 3 VOA-VOCs; 1 Plastic Metals*

Samples Delivered: *TestAmerica* **Time:** _____ **Date:** *2/24/10*

COMMENTS:

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE: 1030 East Dominick Street **SAMPLE LOCATION:** MW-3
CLIENT: City of Rome **JOB NO.:** 245.005.001

Weather conditions: Light snow, wind, upper 20s F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify):_____
Sediment [ ] Leachate [ ] _____

WATER LEVEL DATA

Static Water Level (feet)*:	14.85
Measured Well Depth (feet)*:	19.95
Well Casing Diameter (inches):	
Volume in Well Casing (gallons):	0.816

*depth from measuring point

Measuring Pt: Top of Riser: [X] Other:
Measured by: BJM/DMJ
Date: 2/23/2010
Time: 13:47

PURGING METHOD
Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [ ] Non-dedicated [X]

Calc Vol Water to be Purged (gal): 2.45
Volume of Water Purged (gal):
Did well purge dry? No [ ] Yes [ ] Vol before dry:
Did well recover? No [ ] Yes [ ] Recovery time:

SAMPLING METHOD
Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [ ] *Non-dedicated* [X]

Sampled by: BJM/DMJ **Time:** 14:00 **Date:** 2/23/2010

SAMPLING DATA
Sample Appearance:
Color: Cloudy tan Sediment: Lots of fines
Odor: None Other:

Field Measured Parameters:

pH (Standard Units)	7.3	Sp. Conductivity (mS/cm)	1340
Temperature (C)	45.8	Eh-Redox Potential (mV)	158
Turbidity (NTUs)	943	Dissolved Oxygen (mg/L)	

Samples Collected: 3 Amber SVOC,PCB, Extra; 3 VOA-VOCs; 1 Plastic Metals

Samples Delivered: TestAmerica **Time:** _____ **Date:** 2/23/10

COMMENTS:

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Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE: *1030 East Dominick Street* **SAMPLE LOCATION:** *MW-4*
CLIENT: *City of Rome* **JOB NO.:** *245.005.001*

Weather conditions: *Light snow, upper 20s F*

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify):_____
Sediment [ ] Leachate [ ] _____

WATER LEVEL DATA

Static Water Level (feet)*:	*15.64*
Measured Well Depth (feet)*:	*20.03*
Well Casing Diameter (inches):	
Volume in Well Casing (gallons):	*0.70*

*depth from measuring point

Measuring Pt: Top of Riser: [X] Other:
Measured by: *BJM/DMJ*
Date: *2/23/2010*
Time: *13:27*

PURGING METHOD
Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [ ] Non-dedicated [X]

Calc Vol Water to be Purged (gal): 2.1
Volume of Water Purged (gal):

Did well purge dry? No [ ] Yes [ ] Vol before dry:
Did well recover? No [ ] Yes [ ] Recovery time:

SAMPLING METHOD
Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [ ] *Non-dedicated* [X]

Sampled by: *BJM/DMJ* **Time:** *13:35* **Date:** *2/23/2010*

SAMPLING DATA
Sample Appearance:
Color: *Cloudy brownish/white* Sediment: *Lots of fines*
Odor: *Petroleum odor* Other:

Field Measured Parameters:

pH (Standard Units)	7.5	Sp. Conductivity (mS/cm)	1390
Temperature (C)	45.8	Eh-Redox Potential (mV)	-20
Turbidity (NTUs)	572.5	Dissolved Oxygen (mg/L)	

Samples Collected: *3 Amber SVOC,PCB, Extra; 3 VOA-VOCs; 1 Plastic Metals*

Samples Delivered: *TestAmerica* **Time:** **Date:** *2/24/10*

COMMENTS:

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Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE: *1030 East Dominick Street* **SAMPLE LOCATION:** *MW-5*
CLIENT: *City of Rome* **JOB NO.:** *245.005.001*

Weather conditions: *Light snow, 30F*

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify):_____
Sediment [ ] Leachate [ ] _____

WATER LEVEL DATA

Static Water Level (feet)*:	*14.6*
Measured Well Depth (feet)*:	*19.45*
Well Casing Diameter (inches):	
Volume in Well Casing (gallons):	*0.78*

*depth from measuring point

Measuring Pt: Top of Riser: [X] Other:
Measured by: *BJM/DMJ*
Date: *2/23/2010*
Time: *13:10*

PURGING METHOD
Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [ ] Non-dedicated [X]

Calc Vol Water to be Purged (gal): 2.33
Volume of Water Purged (gal):

Did well purge dry? No [X] Yes [ ] Vol before dry:
Did well recover? No [ ] Yes [X] Recovery time:

SAMPLING METHOD
Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [ ] *Non-dedicated* [X]

Sampled by: *BJM/DMJ* **Time:** *13:25* **Date:** *2/23/2010*

SAMPLING DATA
Sample Appearance:
Color: *Cloudy brown* Sediment: *Heavy silt*
Odor: *None* Other:

Field Measured Parameters:

pH (Standard Units)	7.5	Sp. Conductivity (mS/cm)	1050
Temperature (C)	45.1	Eh-Redox Potential (mV)	252
Turbidity (NTUs)	991	Dissolved Oxygen (mg/L)	

Samples Collected: *3 Amber SVOC,PCB, Extra; 3 VOA-VOCs; 1 Plastic Metals*

Samples Delivered: *TestAmerica* **Time:** **Date:** *2/24/10*

COMMENTS:
Very heavy silt, time did not matter for settlement

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FIELD SAMPLING DATA SHEET

SITE:	1030 East Dominick Street	**SAMPLE LOCATION:**	MW-7
CLIENT:	City of Rome	**JOB #:**	245.005.001
Weather Conditions:	Partly Cloudy	Temperature:	65

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): _____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	14.11
Measured Well Depth (feet)*:	19.3
Well Casing Diameter (inches):	2
Calculated Volume in Well Casing (gallons):	0.83

*depth from measuring point

Measuring Point: Top of Riser
Measured by: LJK
Date: 05/22/14
Time:

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[ ]	*Non-dedicated*	[X]		

Calculated Volume Of Water To Be Purged (gallons): 2.5

Actual Volume of Water Purged (gallons): 50

Did well purge dry? No [X] Yes [ ]

Did well recover? No [ ] Yes [ ] Recovery Time: _____

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[ ]	*Non-dedicated*	[X]		

Sampled by: LJK/MJK Time: 12:56 Date: 05/22/14

SAMPLING DATA

Sample Appearance

Color: Hazy Sediment: Some fines
Odor: Slight petroluem odor

Field Measured Parameters

pH (Standard Units)	7.28	Sp. Conductivity (umhos/cm)	1.37
Temperature (°C/°F)	14.1	Eh-Redox Potential (mV)	22.8
Turbidity (NTUs)	151	Dissolved Oxygen (mg/L)	

Samples Collected (Number/Type):
8 bottles- VOC,SVOC, PCB, Metals

Samples Delivered to: _____ Time: _____ Date: _____

COMMENTS:

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FIELD SAMPLING DATA SHEET

SITE:	1030 East Dominick Street	**SAMPLE LOCATION:**	MW-8
CLIENT:	City of Rome	**JOB #:**	245.005.001
Weather Conditions:	Partly Cloudy	Temperature:	65

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): _____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	3.1
Measured Well Depth (feet)*:	14
Well Casing Diameter (inches):	2
Calculated Volume in Well Casing (gallons):	1.74

*depth from measuring point

Measuring Point: Top of Riser
Measured by: LJK
Date: 05/22/14
Time: _____

PURGING METHOD

Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [ ] *Non-dedicated* [X]

Calculated Volume Of Water To Be Purged (gallons): 5.23
Actual Volume of Water Purged (gallons): 50
Did well purge dry? No [X] Yes [ ]
Did well recover? No [ ] Yes [ ] Recovery Time: _____

SAMPLING METHOD

Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [ ] *Non-dedicated* [X]

Sampled by: LJK/MJK Time: 12:25 Date: 05/22/14

SAMPLING DATA

Sample Appearance
Color: Grey/Brown sheen Sediment: Fines
Odor: Petroleum Odor

Field Measured Parameters

pH (Standard Units)	7.57	Sp. Conductivity (umhos/cm)	1.4
Temperature (°C/°F)	16.2	Eh-Redox Potential (mV)	32.1
Turbidity (NTUs)	452	Dissolved Oxygen (mg/L)	

Samples Collected (Number/Type):
8 bottles- VOC,SVOC, PCB, Metals

Samples Delivered to: _____ Time: _____ Date: _____

COMMENTS:

Rev. 4/09 (MPS)

Appendix G

Laboratory Analytical Summary Reports
(Electronic)

Appendix H

Data Validation Report

Data Usability Summary Report

1030 East Dominick Street Site
Rome, New York

Samples Collected
November 2009 – February 2010

November 2011

EnviroAnalytics
Data Management and Validation Service

2117 Rowley Road #1
Ballston Spa, New York 12020

Data Usability Summary Report

Samples Collected
November 2009 – February 2010

1030 East Dominick Street Site
Rome, New York

Prepared By:

EnviroAnalytics, LLC
Data Management and Validation Service
2117 Rowley Road # 1
Ballston Spa, New York 12020

EXECUTIVE SUMMARY

This report addresses data quality for soil and water samples collected at the 1030 East Dominick Street site located in Rome, New York. The samples were analyzed for volatile organics (VOCs), semivolatile organics (SVOCs), polychlorinated biphenyls (PCBs), and inorganics (Metals) following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) methodologies. Sample collection was performed by Barton and Loguidice, P.C. of Albany, New York. Analytical services were provided by TestAmerica Laboratories, Inc. located in Amherst, New York.

The inorganics analyses data have been determined to be usable for qualitative and quantitative purposes with minor qualification. Sample results for several analytes were qualified based on deviations from ICP serial dilution and matrix spike recovery criteria.

The volatile organics analyses data were determined to be usable for qualitative and quantitative purposes with minor qualification. Sample results for several compounds were qualified based on deviations from method blank, matrix spike recovery, and continuing calibration criteria.

The semivolatile organics analyses data were determined to be usable for qualitative and quantitative purposes with minor qualification. Sample results for several compounds were qualified based on deviations from method blank, matrix spike recovery, and continuing calibration criteria.

The PCBs data were determined to be usable for qualitative and quantitative purposes with minor qualification. Sample results for several samples were qualified based on deviations from PCB identification criteria.

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Appendices

SECTION 1 - INTRODUCTION

1.1 Introduction

This report addresses data quality for soil and water samples collected at the 1030 East Dominick Street site located in Rome, New York. The samples were analyzed for volatile organics (VOCs), semivolatile organics (SVOCs), polychlorinated biphenyls (PCBs), and inorganics (Metals) following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) methodologies. Sample collection was performed by Barton and Loguidice, P.C. of Albany, New York. Analytical services were provided by TestAmerica Laboratories, Inc. located in Amherst, New York. The quantity and types of samples submitted for data validation are tabulated below.

Table 1: Introduction - Sample Summary Table

SDG#	Date Collected	Matrix	Sample Identification	
			Client ID	Laboratory ID
RSK0600	11/11/2009	Soil	1030ED-BLIND DUPLICATE	RSK0600-10
	11/12/2009		1030ED-MW-03 (12-15.9)	RSK0726-01
	11/13/2009		1030ED(MW-05 (8-12)	RSK0681-01
			1030ED-MW-06 (12-16)	RSK0600-08
			1030ED-SB-01 (12-16)	RSK0600-07
			1030ED-SB-03 (12-16)	RSK0726-06
			1030ED-SB-04 (12-17)	RSK0726-04
			1030ED-SB-06 (12-16)	RSK0600-09
			1030ED-SB-07 (8-12)	RSK0726-03
			1030ED-SB-09 (8-9.5)	RSK0681-03
			1030ED-SB-10 (6-11.2)	RSK0681-04
			1030ED-SB-12 (8-14.2)	RSK0681-05
			1030ED-SS-01	RSK0600-06
			1030ED-SS-02	RSK0600-01
			1030ED-SS-03	RSK0600-05
			1030ED-SS-04	RSK0600-04
RSK0600	11/11/2009	Water	FIELD BLANK 10	RSK0726-02
	11/12/2009		FIELD BLANK 8	RSK0600-11
	11/13/2009		FIELD BLANK 9	RSK0681-02
			TRIP BLANK (11/11/2009)	RSK0600-12
			TRIP BLANK (11/12/2009)	RSK0681-06
			TRIP BLANK (11/13/2009)	RSK0726-05
RSK0786	11/16/2009	Soil	1030ED-MW-01 (12-16.2)	RSK0845-02
	11/17/2009		1030ED-MW-01 (21-22.9)	RSK0845-03
	11/18/2009		1030ED-MW-02 (8-13.9)	RSK0893-01
	11/19/2009		1030ED-MW-04 (13-15)	RSK0953-01
			1030ED-SB-02 (12-15)	RSK0845-01
			1030ED-SB-05 (12-16.8)	RSK0786-03
			1030ED-SB-08 (14-17.7)	RSK0786-01
			1030ED-SB-08 (22.5-26.5)	RSK0786-02
RSK0786	11/16/2009	Water	FIELD BLANK 11	RSK0786-04
	11/17/2009		FIELD BLANK 12	RSK0845-04
	11/18/2009		FIELD BLANK 13	RSK0893-02
	11/19/2009		FIELD BLANK 14	RSK0953-02
			TRIP BLANK (11/16/2009)	RSK0786-05
			TRIP BLANK (11/17/2009)	RSK0845-05
			TRIP BLANK (11/18/2009)	RSK0893-03
			TRIP BLANK (11/19/2009)	RSK0953-03
RTB1060	2/23/2010	Water	MW-1	RTB1060-01
			MW-2	RTB1060-04
			MW-3	RTB1060-05
			MW-4	RTB1060-06
			MW-5	RTB1060-07
			TRIP BLANK	RTB1060-08

1.2 Analytical Methods

The samples were analyzed for volatile organics (VOCs), semivolatile organics (SVOCs), polychlorinated biphenyls (PCBs), and inorganics (Metals) following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) methodologies (2005 update). Laboratory analyses were provided by TestAmerica Laboratories, Inc. located in Amherst, New York.

1.3 Validation Protocols

Data validation is a process that involves the evaluation of analytical data against prescribed quality control criteria to determine the usefulness of the data. The analytical data addressed in this report were evaluated utilizing the quality control criteria presented in the following documents:

- *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, USEPA-540-R-08-01, June 2008.
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, USEPA-540-R-10-011, January 2010.
- *CLP Organics Data Review and Preliminary Review*, SOP No. HW-6 Revision #14, USEPA Region II, September 2006.
- *Validation of Metals for the Contract Laboratory Program (CLP) based on SOW ILMO5.3*, SOP No. HW-2, Revision #13, USEPA Region II, September 2006.
- *Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-846 Method 8260B*, SOP No. HW-24 Revision #2, USEPA Hazardous Waste Support Branch, August 2008.
- *Validating Semivolatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-846 Method 8270D*, SOP No. HW-22 Revision #4, USEPA Hazardous Waste Support Branch, August 2008.
- *Validating PCB Compounds by Gas Chromatography SW-846 Method 8082A*, SOP No. HW-45 Revision #1, USEPA Hazardous Waste Support Branch, October 2006.
- *Exhibit E of New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC ASP)*, NYSDEC June 2005.

1.3.1 Inorganic Parameters

The validation of inorganics for this project followed the requirements presented in the analytical methodology and the data validation guidelines presented above. The following QA/QC parameters were evaluated:

1. Holding Times
2. Calibration
    a. Initial Calibration Verification

b. Continuing Calibration Verification
3. Blank Analysis
4. ICP Interference Check Sample Analysis (ICP only)
5. Matrix Spike Analysis
6. Laboratory Duplicate Analysis
7. Laboratory Control Sample Analysis
8. ICP Serial Dilution Analysis (ICP only)
9. Furnace Atomic Absorption Analysis
10. Method of Standard Addition Results
11. Field Blanks
12. Element Quantification and Reported Detection Limits
13. Document Completeness
14. Overall Data Assessment

1.3.2 Organic Parameters

The validation of organic parameters for this project followed the requirements presented in the analytical methodology and the data validation guidelines presented above. The following QA/QC parameters were evaluated:

Volatile and Semivolatile Organics Analyses

1. Holding Times
2. GC/MS Instrument Tuning Criteria
3. Calibration
   a. Initial Calibration
   b. Continuing Calibration
4. Blank Analysis
5. Surrogate Recovery
6. Matrix Spike / Matrix Spike Duplicate Analysis
7. Reference Standard Analysis
8. Internal Standards Recovery
9. Compound Identification and Quantification
10. Field Duplicate Analysis
11. System Performance
12. Documentation Completeness
13. Overall Data Assessment

PCBs Analyses

1. Holding Times
2. Instrument Performance
   a. Standards Retention Time Windows
   b. DCBP Retention Time Shift
   c. Baseline Stability
   d. Chromatographic Resolution
3. Calibration
   a. Initial Calibration
   b. Analytical Sequence Verification
   c. Continuing Calibration Verification

4. Blank Analysis
5. Surrogate Recovery
6. Matrix Spike/Matrix Spike Duplicate Analysis
7. Reference Standard Analysis
8. Compound Identification and Quantification
9. Documentation Completeness
10. Overall Data Assessment

1.4 Data Qualifiers

The following qualifiers as specified in the guidance documents presented in Section 1.3 of this report have been used for this data validation.

U — Indicates that the compound was analyzed for, but was not detected. The sample quantification limit is presented and adjusted for dilution. This qualifier is also used to signify that the detection limit of an analyte was raised due to blank contamination.

J — Indicates that the result should be considered approximate. This qualifier is used when the data validation procedure identifies a deficiency in the data generation process.

UJ — Indicates that the detection limit for the analyte in this sample should be considered approximate. This qualifier is used when the data validation process identifies a deficiency in the data generation process.

R — Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data are considered to be unusable for both qualitative and quantitative purposes.

The following sections of this document present a summary of the data validation process. Section 2 discusses data compliance with established QA/QC criteria and qualifications performed on the sample data. A discussion of the Precision, Accuracy, Representativeness, Comparability, and Completeness (PARCC) of the data and data usability are discussed in Section 3. The USEPA Region II Data Validation Checklists are presented in Appendix A.

SECTION 2 - DATA VALIDATION SUMMARY

This section presents a discussion of QA/QC parameter compliance with established criteria and the qualification of data performed when QA/QC parameter deviations were identified. When several deviations from established QA/QC criteria were observed, the final qualifier assigned to the data was based on the cumulative effect of the deviations.

2.1 Inorganics Analysis

Data validation was performed for twenty-four soil samples, five water samples, and seven field blank samples for total inorganic parameters. The QA/QC parameters presented in Section 1.3.1 of this report were found to be within specified limits with the exception of the following:

Matrix Spike Analysis

Matrix spike (MS) recovery criteria requiring spike recoveries to be between 75 and 125 percent were exceeded for several analytes. Qualification of sample results included the approximation of results when spike recoveries were greater than the upper limit, but less than 200 percent or less than the lower limit, but greater than 10 percent. Qualification of sample data was not required when the non-spiked sample concentration was greater than four-times the spike solution concentration. Samples qualified due to MS recovery deviations are tabulated below.

Table 2: Inorganics Analyses - Matrix Spike Deviations

MS/MSD Sample ID	Inorganic	Percent Recovery (MS/MSD)	Qualifier	Affected Samples
1030ED-SS-02	Mercury	69/70 %	J, UJ	1030ED-BLIND DUPLICATE 1030ED-MW-03 (12-15.9) 1030ED(MW-05 (8-12) 1030ED-MW-06 (12-16) 1030ED-SB-01 (12-16) 1030ED-SB-03 (12-16) 1030ED-SB-04 (12-17) 1030ED-SB-06 (12-16) 1030ED-SB-07 (8-12) 1030ED-SB-09 (8-9.5) 1030ED-SB-10 (6-11.2) 1030ED-SB-12 (8-14.2) 1030ED-SS-01 1030ED-SS-02 1030ED-SS-03 1030ED-SS-04
1030ED-SS-02	Aluminum Barium Antimony Lead Magnesium	136/173 % 106/474 % 45/41 % 147/355 % 0/0 %	J J J, UJ J J	1030ED-SS-01 1030ED-SS-02 1030ED-SS-03 1030ED-SS-04

MS/MSD Sample ID	Inorganic	Percent Recovery (MS/MSD)	Qualifier	Affected Samples
1030ED-MW-05 (8-12)	Aluminum	101/52 %	J	1030ED-BLIND DUPLICATE
	Antimony	54/55 %	UJ	1030ED-MW-03 (12-15.9)
	Lead	81/174 %	J	1030ED(MW-05 (8-12)
	Potassium	73/68 %	J	1030ED-MW-06 (12-16)
				1030ED-SB-01 (12-16)
				1030ED-SB-03 (12-16)
				1030ED-SB-04 (12-17)
				1030ED-SB-06 (12-16)
				1030ED-SB-07 (8-12)
				1030ED-SB-09 (8-9.5)
				1030ED-SB-10 (6-11.2)
				1030ED-SB-12 (8-14.2)

Method Blank Analysis

The preparation blanks associated with SDG# RSK0600 had detectable concentrations of copper, iron, lead, magnesium, manganese, and zinc. The concentrations of these analytes in the associated samples were greater than five-times the preparation blank concentration. Qualification of the associated samples was not required due to these deviations.

The preparation blanks associated with SDG# RSK0786 had detectable concentrations of copper, magnesium, manganese, and zinc. The concentrations of these analytes in the associated samples were greater than five-times the preparation blank concentration. Qualification of the associated samples was not required due to these deviations.

The preparation blanks associated with SDG# RTB1060 had detectable concentrations of manganese. The concentrations of these analytes in the associated samples were greater than five-times the preparation blank concentration. Qualification of the associated samples was not required due to these deviations.

ICP Serial Dilution Analysis

ICP serial dilution criteria require the %D between results of a non-diluted analysis and a four-fold dilution analysis to be less than 10 percent for analytes with a non-diluted concentration greater than 50 times the instrument detection limit (IDL). Analytes with %D values greater than 10 percent are qualified as approximated for samples with concentrations greater than 50 times the IDL. Analytes that exceeded ICP serial dilution criteria and the samples that required qualification are presented below.

Table 3: Inorganics Analyses – ICP Serial Dilution Deviations

Serial Dilution Sample ID	Inorganic	%D	Qualifier	Affected Samples
1030ED-SS-02	Aluminum	12 %	J	1030ED-SS-01
	Iron	11 %	J	1030ED-SS-02
	Lead	13 %	J	1030ED-SS-03
	Manganese	11 %	J	1030ED-SS-04
	Zinc	13 %	J	

Serial Dilution Sample ID	Inorganic	%D	Qualifier	Affected Samples
1030ED-MW-05 (8-12)	Aluminum	11 %	J	1030ED-BLIND DUPLICATE
	Barium	11 %	J	1030ED-MW-03 (12-15.9)
	Calcium	12 %	J	1030ED(MW-05 (8-12)
	Iron	11 %	J	1030ED-MW-06 (12-16)
	Magnesium	11 %	J	1030ED-SB-01 (12-16)
	Manganese	11 %	J	1030ED-SB-03 (12-16)
				1030ED-SB-04 (12-17)
				1030ED-SB-06 (12-16)
				1030ED-SB-07 (8-12)
				1030ED-SB-09 (8-9.5)
				1030ED-SB-10 (6-11.2)
				1030ED-SB-12 (8-14.2)

Overall Data Assessment

Overall, the laboratory performed inorganics analyses in accordance with the requirements specified in the methods listed in Section 1.2 of this report. These data have been determined to be usable for qualitative and quantitative purposes with minor qualification. Sample results for several analytes were qualified based on deviations from ICP serial dilution and matrix spike recovery criteria.

2.2 Volatiles Analysis

Data validation was performed for twenty-four soil samples, five water samples, seven field blank samples, and eight trip blank samples. The QA/QC parameters presented in Section 1.3.2 of this report were found to be within specified limits with the exception of the following:

Blank Analysis

The method blanks contained detectable concentrations of target compounds. Blank action levels were calculated as ten times the blank concentration for common laboratory contaminants and as five times the blank concentration for all other compounds. Detected sample results, which were less than the blank action levels were qualified with a "U" in the associated samples. Results that were detected below the contract required detection limit (CRDL) were raised to the CRDL and qualified with a "U" qualifier. The "U" qualifier indicates that the volatile organic was analyzed for but was not detected above the CRDL. Samples qualified for blank contamination are tabulated below.

Table 4: Volatile Organics Analyses - Blank Analysis Deviations

Date Analyzed	Blank Matrix	Compound	Blank Action Level	Associated Samples	Qualified Sample Result
11/20/2009 22:42	Soil	Methylene Chloride	12 µg/Kg	1030ED-SB-03 (12-16)	5.8 U µg/Kg
11/20/2009 12:55	Soil	Methylene Chloride	15 µg/Kg	1030EB-SB-07 (8-12)	5.5 U µg/Kg
11/20/2009 12:55	Water	Methylene Chloride	15 µg/L	FIELD BLANK 10 TRIP BLANK (11/13/2009)	3.9 U µg/L 2.7 U µg/L

Date Analyzed	Blank Matrix	Compound	Blank Action Level	Associated Samples	Qualified Sample Result
11/19/2009	Soil	Methylene Chloride	15 µg/Kg	1030ED-MW-05 (8-12) 1030ED-SB-09 (8-9.5) 1030ED-SB-10 (6-11.2) 1030ED-SB-12 (8-14.2) 1030ED-MW-03 (12-15.9)	5.2 U µg/Kg 6.2 U µg/Kg 6.8 U µg/Kg 9.3 U µg/Kg 6.9 U µg/Kg
11/19/2009	Water	Methylene Chloride	15 µg/L	FIELD BLANK 9 TRIP BLANK (11/12/2009)	3.7 U µg/L 3.3 U µg/L
11/17/2009	Water	Toluene	10.5 µg/L	FIELD BLANK 8 TRIP BLANK (11/11/2009)	2.4 U µg/L 2.6 U µg/L
		Cyclohexane	7.0 5 µg/L	FIELD BLANK 8 TRIP BLANK (11/11/2009)	1.0 U µg/L 1.3 U µg/L
11/13/2009	Soil	Methylene Chloride	30 µg/Kg	1030ED-SS-04 1030ED-SS-03 1030ED-SS-01 1030ED-SB-01 (12-16) 1030ED-MW-06 (12-16) 1030ED-SB-06 (12-16) 1030ED-BLIND DUPLICATE	6.6 U µg/Kg 13 U µg/Kg 8.7 U µg/Kg 6.8 U µg/Kg 10 U µg/Kg 10 U µg/Kg 13 U µg/Kg
11/25/2009	Water	Methylene Chloride	14 µg/L	FIELD BLANK 11 TRIP BLANK (11/16/2009) FIELD BLANK 12 TRIP BLANK (11/17/2009) FIELD BLANK 13 TRIP BLANK (11/18/2009) FIELD BLANK 14 TRIP BLANK (11/19/2009)	2.3 U µg/L 2.2 U µg/L 2.7 U µg/L 2.6 U µg/L 2.6 U µg/L 2.1 U µg/L 2.8 U µg/L 2.4 U µg/L
11/27/2009	Soil	Acetone	34 µg/Kg	1030ED-SB-08 (14.5-17.7) 1030ED-SB-08 (22.5-26.5) 1030ED-MW-02 (8-13.9)	23 U µg/Kg 23 U µg/Kg 26 U µg/Kg
		Methylene Chloride	10 µg/Kg	1030ED-SB-08 (14.5-17.7) 1030ED-SB-08 (22.5-26.5) 1030ED-MW-02 (8-13.9)	6.2 U µg/Kg 4.5 U µg/Kg 6.9 U µg/Kg
11/27/2009	Soil	Methylene Chloride	690 µg/Kg	1030ED-MW-01 (21-22.9)	17 U µg/Kg

Matrix Spike Recovery

Matrix spike/matrix spike duplicate (MS/MSD) compounds are added to select samples prior to sample preparation to evaluate the efficiency of the sample preparation procedures and sample matrix effects. The matrix spike compounds are required to have percent recovery values within specific prescribed limits. When these compounds exceed the prescribed recovery limits the associated sample data require qualification. The following samples required qualification for matrix spike recovery deficiencies.

Table 5: Volatile Organics Analyses - Matrix Spike Analysis Deviations

MS Sample ID	Compound	Percent Recovery (MS/MSD)	Control Limits	Qualifier	Affected Samples
1030ED-SS-02	1,1,2,2-Tetrachloroethane	68/72 %	80 to 120 %	UJ	1030ED-BLIND DUPLICATE
	1,1,2-Trichloroethane	61/78 %	78 to 122 %	UJ	1030ED-MW-03 (12-15.9)
	1,2,4-Trichlorobenzene	41/54 %	74 to 120 %	UJ	1030ED(MW-05 (8-12)
	1,2-Dibromo-3-chloropropane	50/55 %	66 to 122 %	UJ	1030ED-MW-06 (12-16)
	1,2-Dibromoethane	61/71 %	78 to 120 %	UJ	1030ED-SB-01 (12-16)
	1,2-Dichlorobenzene	62/71 %	82 to 114 %	UJ	1030ED-SB-03 (12-16)
	1,3-Dichlorobenzene	63/72 %	82 to 114 %	UJ	1030ED-SB-04 (12-17)
	1,4-Dichlorobenzene	63/72 %	82 to 113 %	UJ	1030ED-SB-06 (12-16)
	2-Butanone	54/61 %	70 to 134 %	UJ	1030ED-SB-07 (8-12)
	2-Hexanone	44/53 %	72 to 130 %	UJ	1030ED-SB-09 (8-9.5)
	4-Methyl-2-pentanone	49/62 %	74 to 128 %	UJ	1030ED-SB-10 (6-11.2)
	Acetone	52/60 %	61 to 137 %	J, UJ	1030ED-SB-12 (8-14.2)
	Chlorodibromomethane	68/76 %	76 to 125 %	UJ	1030ED-SS-01
	Methylcyclohexane	60/75 %	74 to 125 %	J, UJ	1030ED-SS-02
	Tetrachloroethene	64/80 %	77 to 120 %	J, UJ	1030ED-SS-03
	Toluene	70/86 %	74 to 128 %	UJ	1030ED-SS-04
	trans-1,3-Dichloropropene	61/76 %	80 to 119 %	UJ	

Continuing Calibration

The continuing calibration percent difference (%D) limit, which requires the %D to be less than 25 percent, was exceeded for several compounds. Sample qualification included the approximation (J, UJ) of results when %D criteria were exceeded, but were less than 90 percent. Samples requiring qualification due to these deviations are tabulated below.

Table 6: Volatile Organics Analyses - Continuing Calibration Deviations

Date Analyzed	Compound	%D	Result Qualifier	Affected Samples
11/12/2009	Bromoform	35.7 %	UJ	1030ED-SS-04
	Chloroethane	65.0 %	UJ	1030ED-SS-03
				1030ED-SS-01
				1030ED-SB-01 (12-16)
				1030ED-MW-06 (12-16)
				1030ED-SB-06 (12-16)
				1030ED-BLIND DUPLICATE
11/16/2009	2-Butanone	30.6 %	UJ	1030ED-SS-02
	Bromomethane	36.6 %	UJ	
	Chloroethane	73.6 %	UJ	
11/17/2009	Bromomethane	25.2 %	UJ	FIELD BLANK 8
	Chloromethane	37.2 %	UJ	TRIP BLANK (11/11/2009)
11/24/2009	Bromoform	35.3 %	UJ	1030ED-SB-04 (12-17) -
	Dichlorodifluoromethane	32.5 %	UJ	(Diluted Analysis)
11/25/2009	1,1,2-Trichlorotrifluoroethane	41.1 %	UJ	1030ED-SB-05 (12-16.8) -
	1,2-Dibromo-3-chloropropane	29.8 %	UJ	(Diluted Analysis)
	Bromoform	41.3 %	UJ	
	Carbon Disulfide	42.3 %	UJ	
	Cyclohexane	38.1 %	UJ	
	Methylcyclohexane	38.3 %	J	
11/27/2009	Carbon Disulfide	36.5 %	J, UJ	1030ED-SB-08 (14.5-17.7)
				1030ED-SB-08 (22.5-26.5)
				1030ED-MW-01 (21-22.9)
				1030ED-MW-02 (8-13.9)
				1030ED-MW-04 (13-15) -
				(Undiluted Analysis)

Date Analyzed	Compound	%D	Result Qualifier	Affected Samples
11/28/2009	1,1,2-Trichlorotrifluoroethane 2-Butanone Acetone Bromoform Carbon Disulfide Methyl Acetate Methyl tert-Butyl Ether Methylcyclohexane	27.1 % 28.3 % 35.6 % 25.7 % 39.9 % 26.0 % 37.4 % 26.2 %	UJ UJ UJ UJ UJ UJ UJ J	1030ED-MW-04 (13-15) - (Diluted Analysis)
3/03/2010	Bromomethane Trichlorofluoromethane	28.1 % 53.2 %	UJ UJ	MW-1 MW-2 MW-3 MW-4 – (Undiluted Analysis)
3/03/2010	Bromomethane	29.0 %	UJ	MW-4 – (Diluted Analysis) MW-5

Overall Data Assessment

Overall, the laboratory performed volatile organics analyses in accordance with the requirements specified in the method listed in Section 1.2. These data were determined to be usable for qualitative and quantitative purposes with minor qualification. Sample results for several compounds were qualified based on deviations from method blank, matrix spike recovery, and continuing calibration criteria.

2.3 Semivolatiles Analysis

Data validation was performed for twenty-four soil samples, five water samples, and seven field blank samples. The QA/QC parameters presented in Section 1.3.2 of this report were found to be within specified limits with the exception of the following:

Blank Analysis

The method blanks contained detectable concentrations of target compounds. Blank action levels were calculated as ten times the blank concentration for common laboratory contaminants and as five times the blank concentration for all other compounds. Detected sample results, which were less than the blank action levels were qualified with a "U" in the associated samples. Results that were detected below the contract required detection limit (CRDL) were raised to the CRDL and qualified with a "U" qualifier. The "U" qualifier indicates that the volatile organic was analyzed for but was not detected above the CRDL. Samples qualified for blank contamination are tabulated below.

Table 7: Semivolatile Organics Analyses - Blank Analysis Deviations

Date Analyzed	Blank Matrix	Compound	Blank Action Level	Associated Samples	Qualified Sample Result
11/16/2009	Water	di-n-Butyl phthalate	4.8 µg/L	FIELD BLANK 9	5.4 µg/L
3/01/2010	Water	di-n-Butyl phthalate	9.0 µg/L	MW-1 MW-2 MW-3 MW-4 MW-5	5.0 U µg/L 4.8 U µg/L 4.7 U µg/L 4.8 U µg/L 4.8 U µg/L

Continuing Calibration

The continuing calibration percent difference (%D) limit, which requires the %D to be less than 25 percent, was exceeded for several compounds. Sample qualification included the approximation (J, UJ) of results when %D criteria were exceeded, but were less than 90 percent. Samples requiring qualification due to these deviations are tabulated below.

Table 8: Semivolatile Organics Analyses - Continuing Calibration Deviations

Date Analyzed	Compound	%D	Result Qualifier	Affected Samples
11/20/2009	4-Methylphenol Bis(2-chloroisopropyl) ether	25.6 % 43.7 %	UJ UJ	1030ED-SS-02 1030ED-SS-04 1030ED-SS-03 1030ED-SS-01 1030ED-SB-01 (12-16) 1030ED-MW-06 (12-16) 1030ED-SB-06 (12-16) 1030ED-BLIND DUPLICATE
11/19/2009	4-Methylphenol bis(2-chloroisopropyl) ether	25.6 % 45.8 %	UJ UJ	1030ED-SB-08 (14.5-17.7) 1030ED-SB-08 (22.5-26.5) 1030ED-SB-05 (12-16.8)
12/02/2009	4-Methylphenol	30.8 %	UJ UJ	1030ED-MW-02 (8-13.9) 1030ED-MW-04 (13-15)
3/02/2010	bis(2-ethylhexyl) phthalate Diethyl phthalate di-n-butyl phthalate	28.8 % 34.4 % 32.6 %	J, UJ UJ UJ	MW-1 MW-2 MW-3
3/03/2010	2-Nitroaniline bis(2-ethylhexyl) phthalate	30.9 % 26.4 %	UJ J, UJ	MW-4 MW-5

Matrix Spike Recovery

Matrix spike/matrix spike duplicate (MS/MSD) compounds are added to select samples prior to sample preparation to evaluate the efficiency of the sample preparation procedures and sample matrix effects. The matrix spike compounds are required to have percent recovery values within specific prescribed limits. When these compounds exceed the prescribed recovery limits the associated sample data require qualification. The following samples required qualification for matrix spike recovery deficiencies.

Table 9: Semivolatile Organics Analyses - Matrix Spike Analysis Deviations

MS Sample ID	Compound	Percent Recovery (MS/MSD)	Control Limits	Qualifier	Affected Samples
1030ED-MW-04 (13-15)	2,4-Dimethylphenol 2-Methylnaphthalene	28/41 % 164/97 %	36 to 120 % 47 to 120 %	UJ J	1030ED-MW-01 (12-16.2) 1030ED-MW-01 (21-22.9) 1030ED-MW-02 (8-13.9) 1030ED-MW-04 (13-15) 1030ED-SB-02 (12-15) 1030ED-SB-05 (12-16.8) 1030ED-SB-08 (14-17.7) 1030ED-SB-08 (22.5-26.5)

The matrix spike compounds for the analysis of 1030ED-SS-02 exhibited no recovery due to dilution of the sample extract prior to analysis. The sample extract was diluted based on the analyst's experience and the goal of avoiding damage to the analytical instrumentation. The sample reporting limits were elevated to adjust for the required sample dilution. Additional qualification of the sample data was not required.

Overall Data Assessment

Overall, the laboratory performed semivolatile organics analyses in accordance with the requirements specified in the method listed in Section 1.2. These data were determined to be usable for qualitative and quantitative purposes with minor qualification. Sample results for several compounds were qualified based on deviations from method blank, matrix spike recovery, and continuing calibration criteria.

2.4 PCBs Analyses

Data validation was performed for twenty-four soil samples, five water samples, and seven field blank samples. The QA/QC parameters presented in Section 1.3.2 of this report were found to be within specified limits with the exception of the following:

Continuing Calibration

The continuing calibration standards exceeded the percent difference control limit of 15 percent for several chromatographic peaks for Aroclors 1016 and 1260 on the primary and confirmation columns. Qualification of the associated sample data was not required because Aroclor 1016 was not detected in the associated samples. The detected Aroclor 1260 results were calculated as the average value from the individual chromatographic peaks. The average calibration factors determined from the individual chromatographic peaks were within the continuing calibration criteria limits.

PCB Identification

Detected PCB results are required to have sample concentrations calculated from the primary and secondary (confirmation) chromatographic columns differ by less than 25 percent. Detected sample results that have a confirmation column percent difference greater than 25 percent require qualification. Samples qualified due to confirmation column percent difference deviations are tabulated below.

Table 10: PCBs Analyses – PCB Identification Deviations

Sample ID	Aroclor	%D	Qualifier
1030ED-SS-02	1262	33 %	J
1030ED-SS-04	1262	39 %	J
1030ED-SS-03	1262	47 %	J
1030ED-MW-05 (8-12)	1254	49 %	J
1030ED-SB-05 (12-16.8)	1242	26 %	J

Overall Data Assessment

Overall, the laboratory performed PCB analyses in accordance with the requirements specified in the method listed in Section 1.2. These data were determined to be usable for qualitative and quantitative purposes with minor qualification. Sample results for several samples were qualified based on deviations from PCB identification criteria.

SECTION 3 - DATA USABILITY and PARCC EVALUATION

3.1 Data Usability

This section presents a summary of the usability of the analytical data and an evaluation of the PARCC parameters. Data usability was calculated as the percentage of data that was not qualified as rejected based on a significant deviation from established QA/QC criteria. Data usability, which was calculated separately for each type of analysis, is tabulated below.

Table 11: Data Usability and PARCC Evaluation - Data Usability

Parameter	Usability	Deviations
Inorganic Parameters	100 %	None resulting in the rejection of data.
Volatile Organics	100 %	None resulting in the rejection of data.
Semivolatile Organics	100 %	None resulting in the rejection of data.
PCBs	100 %	None resulting in the rejection of data.

3.2 PARCC Evaluation

The following sections provide an evaluation of the analytical data with respect to the precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters.

3.2.1 Precision

Precision is measured through field duplicate samples, split samples, and laboratory duplicate samples. For this sampling program, none of the data were qualified for field or laboratory duplicate criteria deviations.

3.2.2 Accuracy

Matrix spike sample, surrogate recovery, internal standard recovery, laboratory control samples, and calibration criteria indicate the accuracy of the data. For this sampling program, 6.68 percent of the analytical data were qualified for deviations from matrix spike recovery criteria; none of the data were qualified for surrogate recovery criteria deviations; none of the data were qualified for internal standard recovery criteria deviations; none of the data were qualified for laboratory control sample deviations; and 3.34 percent of the data were qualified for calibration criteria deviations.

3.2.3 Representativeness

Holding times, sample preservation, and blank analysis are indicators of the representativeness of the analytical data. For this investigation, none of the analytical data required qualification for holding time deviations and 0.77 percent of the analytical data required qualification for blank analysis deviations.

3.2.4 Comparability

Comparability is not compromised provided that the analytical methods did not change over time. A major component of comparability is the use of standard reference materials for calibration and QC. These standards are compared to other unknowns to verify their concentrations. Since standard analytical methods and reporting procedures were consistently used by the laboratory, the comparability criteria for the analytical data were met.

3.2.5 Completeness

The overall percent usability or completeness of the data was 100 percent.

APPENDIX A

DATA VALIDATION CHECKLISTS

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Data Validation Checklist - Part A: VOA Analyses

No:	Parameter	YES	NO	N/A
1.0	**Traffic Reports and Laboratory Narrative**			
1.1	Are the traffic Report Forms present for all samples?	X		
1.2	Do the Traffic Reports or Lab Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?		X	
2.0	**Holding Times**			
2.1	Have any VOA technical holding times, determined from date of collection to date of analysis, been exceeded?		X	
3.0	**System Monitoring Compound (SMC) Recovery (Form II)**			
3.1	Are the VOA SMC Recovery Summaries (FORM II) present for each of the following matrices:			
	a. Low Water	X		
	b. Low Soil	X		
	c. Air			X
3.2	Are all the VOA samples listed on the appropriate System Monitoring Compound Recovery Summary for each of the following matrices:			
	a. Low Water	X		
	b. Low Soil	X		
	c. Air			X
3.3	Were outliers marked correctly with an asterisk?	X		
3.4	Was one or more VOA system monitoring compound recovery outside of contract specifications for any sample or method blank?	X		
	If yes, were samples re-analyzed?		X	
	Were method blanks re-analyzed?			X
3.5	Are there any transcription/calculation errors between raw data and Form II?		X	
4.0	**Matrix Spikes (Form III)**			
4.1	Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present?	X		
4.2	Were matrix spikes analyzed at the required frequency for each of the following matrices?			
	a. Low Water	X		
	b. Low Soil	X		
	c. Air			X
4.3	How many VOA spike recoveries are outside QC limits?			
	Water 0 out of 48 Soils 17 out of 48			
4.4	How many RPD's for matrix spike and matrix spike duplicate recoveries are outside QC limits?			
	Water 0 out of 48 Soils 0 out of 48			

Data Validation Checklist - Part A: VOA Analyses

No:	Parameter	YES	NO	N/A
5.0	**Blanks (Form IV)**			
5.1	Is the Method Blank Summary (Form IV) present?	X		
5.2	Frequency of Analysis: for the analysis of VOA TCL compounds, has a reagent/method blank been analyzed for each SDG or every 20 samples of similar matrix (low water, low soil, medium soil), whichever is more frequent?	X		
5.3	Has a VOA method/instrument blank been analyzed at least once every twelve hours for each concentration level and GC/MS system used?	X		
5.4	Is the chromatographic performance (baseline stability) for each instrument acceptable for VOAs?	X		
6.0	**Contamination**			
6.1	Do any method/instrument/reagent blanks have positive results (TCL and/or TIC) for VOAs?	X		
6.2	Do any field/trip/rinse blanks have positive VOA results (TCL and/or TIC)?	X		
6.3	Are there field/rinse/equipment blanks associated with every sample?	X		
7.0	**GC/MS Instrument Performance Check (Form V)**			
7.1	Are the GC/MS Instrument Performance Check Forms (Form V) present for Bromofluorobenzene (BFB)?	X		
7.2	Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the BFB provided for each twelve hour shift?	X		
7.3	Has an instrument performance compound been analyzed for every twelve hours of sample analysis per instrument?	X		
7.4	Have the ion abundances been normalized to m/z 95?	X		
7.5	Have the ion abundance criteria been met for each instrument used?	X		
7.6	Are there any transcription/calculation errors between mass lists and Form V's?		X	
7.7	Have the appropriate number of significant figures (two) been reported?	X		
7.8	Are the spectra of the mass calibration compound acceptable?	X		
8.0	**Target Compound List (TCL) Analytes**			
8.1	Are the Organic Analysis Data Sheets (Form I VOA) present with required header information on each page, for each of the following:			
	a. Sample and/or fractions as appropriate?	X		
	b. Matrix spikes and matrix spike duplicates?	X		
	c. Blanks?	X		
8.2	Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following?			
	a. Samples and/or fractions as appropriate?	X		
	b. Matrix spikes and matrix spike duplicates (Mass spectra not required)?	X		
	c. Blanks?	X		
8.3	Are the response factors shown in the Quant Report?	X		

Data Validation Checklist - Part A: VOA Analyses

No:	Parameter	YES	NO	N/A
8.4	Is the chromatographic performance acceptable with respect to:			
	Baseline stability?	X		
	Resolution?	X		
	Peak shape?	X		
	Full-scale graph (attenuation)?	X		
	Other:			X
8.5	Are the lab-generated standard mass spectra of the identified VOA compounds present for each sample?	X		
8.6	Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	X		
8.7	Are all ions in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum?	X		
8.8	Do sample and standard relative ion intensities agree within 20%?	X		
9.0	**Tentatively Identified Compounds (TIC)**			
9.1	Are all Tentatively Identified Compound Forms (Form I Part B) present; and do listed TICs include scan number or retention time, estimated concentration and "JN" qualifier?		X	
9.2	Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following:			
	a. Samples and/or fractions as appropriate?			X
	b. Blanks?			X
9.3	Are any TCL compounds (from any fraction) listed as TIC compounds?		X	
9.4	Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?			X
9.5	Do TIC and "best match" standard relative ion intensities agree within 20%?			X
10.0	**Compound Quantitation and Reported Detection Limits**			
10.1	Are there any transcription/calculation errors in Form I results?		X	
10.2	Are the CRQLs adjusted to reflect sample dilutions and, for soils, sample moisture?	X		
11.0	**Standards Data (GC/MS)**			
11.1	Are the Reconstructed Ion Chromatograms, and data system printouts present for initial and continuing calibration?	X		
12.0	**GC/MS Initial Calibration (Form VI)**			
12.1	Are the Initial Calibration Forms (Form VI) present and complete for the volatile fraction at concentrations of 10, 20, 50, 100, 200 ug/L? Are there separate calibrations for low/med soils and low soil samples?	X		
12.2	Were all low level soil standards, blanks, and samples analyzed by heated purge?	X		
12.3	Are the response factors stable for VOA's over the concentration range of the calibration (%Relative Standard Deviation (%RSD) <30%)	X		
12.4	Are the RRFs above 0.01?	X		
12.5	Are there any transcription/calculation errors in the reporting of average response factors (RRF) or %RSD?		X	

Data Validation Checklist - Part A: VOA Analyses

No:	Parameter	YES	NO	N/A
13.0	**GC/MS Continuing Calibration (Form VII)**			
13.1	Are the Continuing Calibration Forms (Form VII) present and complete for the volatile fraction?	X		
13.2	Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument?	X		
13.3	Do any volatile compounds have a %Difference (%D) between the initial and continuing RRF which exceeds the +/- 25% criteria?	X		
13.4	Do any volatile compounds have a RRF <0.01?		X	
13.5	Are there any transcription/calculation errors in the reporting of average response factor (RRF) or %difference (%D) between initial and continuing RRFs?		X	
14.0	**Internal Standard (Form VIII)**			
14.1	Are the internal standard areas (Form VIII) of every sample and blank within the upper and lower limits (-50% to +100%) for each continuing calibration?	X		
14.2	Are the retention times of the internal standards within 30 seconds of the associated calibration standard?	X		
15.0	**Field Duplicates**			
15.1	Were any field duplicates submitted for VOA analysis?	X		

Data Validation Checklist - Part B: BNA Analyses

No:	Parameter	YES	NO	N/A
1.0	**Traffic Reports and Laboratory Narrative**			
1.1	Are the traffic Report Forms present for all samples?	X		
1.2	Do the Traffic Reports or Lab Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?		X	
2.0	**Holding Times**			
2.1	Have any BNA technical holding times, determined from date of collection to date of extraction, been exceeded?		X	
3.0	**System Monitoring Compound (SMC) Recovery (Form II)**			
3.1	Are the BNA Surrogate Recovery Summaries (FORM II) present for each of the following matrices:			
	a. Low Water	X		
	b. Low Soil	X		
	c. Med Soil	X		
3.2	Are all the BNA samples listed on the appropriate System Monitoring Compound Recovery Summary for each of the following matrices:			
	a. Low Water	X		
	b. Low Soil	X		
	c. Med Soil	X		
3.3	Were outliers marked correctly with an asterisk?	X		
3.4	Were two or more base neutral or acid surrogate compound recoveries out of specification for any sample or method blank?	X		
	If yes, were samples re-analyzed?	X		
	Were method blanks re-analyzed?	X		
3.5	Are there any transcription/calculation errors between raw data and Form II?		X	
4.0	**Matrix Spikes (Form III)**			
4.1	Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present?	X		
4.2	Were matrix spikes analyzed at the required frequency for each of the following matrices?	X		
	a. Low Water	X		
	b. Low Soil	X		
	c. Med Soil	X		
4.3	How many BNA spike recoveries are outside QC limits?			
	Water 0 out of 65 Soils 2 out of 65			

Data Validation Checklist - Part B: BNA Analyses

No:	Parameter	YES	NO	N/A
4.4	How many RPD's for matrix spike and matrix spike duplicate recoveries are outside QC limits?			
	Water 0 out of 65 Soils 0 out of 65			
5.0	**Blanks (Form IV)**			
5.1	Is the Method Blank Summary (Form IV) present?	X		
5.2	Frequency of Analysis: Has a reagent/method blank analysis been reported per 20 samples of a similar matrix, or concentration level, for each extraction batch?	X		
5.3	Has a BNA method blank been analyzed for each GC/MS system used?	X		
5.4	Is the chromatographic performance (baseline stability) for each instrument acceptable for BNAs?	X		
6.0	**Contamination**			
6.1	Do any method/instrument/reagent blanks have positive results (TCL and/or TIC) for BNAs?	X		
6.2	Do any field/rinse blanks have positive BNA results (TCL and/or TIC)?	X		
6.3	Are there field/rinse/equipment blanks associated with every sample?	X		
7.0	**GC/MS Instrument Performance Check (Form V)**			
7.1	Are the GC/MS Instrument Performance Check Forms (Form V) present for Decafluorotriphenylphosphine (DFTPP)?	X		
7.2	Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the DFTPP provided for each twelve-hour shift?	X		
7.3	Has an instrument performance check solution been analyzed for every twelve hours of sample analysis per instrument?	X		
7.4	Have the ion abundances been normalized to m/z 198?	X		
7.5	Have the ion abundance criteria been met for each instrument used?	X		
7.6	Are there any transcription/calculation errors between mass lists and Form V's?		X	
7.7	Have the appropriate number of significant figures (two) been reported?	X		
7.8	Are the spectra of the mass calibration compound acceptable?	X		
8.0	**Target Compound List (TCL) Analytes**			
8.1	Are the Organic Analysis Data Sheets (Form I BNA) present with required header information on each page, for each of the following:			
	a. Sample and/or fractions as appropriate?	X		
	b. Matrix spikes and matrix spike duplicates?	X		
	c. Blanks?	X		
8.2	Has GPC cleanup been performed on all soil/sediment sample extracts?		X	
8.3	Are the BNA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following?			

Data Validation Checklist - Part B: BNA Analyses

No:	Parameter	YES	NO	N/A
	a. Samples and/or fractions as appropriate?	X		
	b. Matrix spikes and matrix spike duplicates (Mass spectra not required)?	X		
	c. Blanks?	X		
8.4	Are the response factors shown in the Quant Report?	X		
8.5	Is the chromatographic performance acceptable with respect to:			
	Baseline stability?	X		
	Resolution	X		
	Peak shape?	X		
	Full-scale graph (attenuation)?	X		
	Other:			
8.6	Are the lab-generated standard mass spectra of identified BNA compounds present for each sample?	X		
8.7	Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	X		
8.8	Are all ions in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum?	X		
8.9	Do sample and standard relative ion intensities agree within 20%?	X		
9.0	**Tentatively Identified Compounds (TIC)**			
9.1	Are all Tentatively Identified Compound Forms (Form I, Part B) present; and do listed TICs include scan number or retention time, estimated concentration and "JN" qualifier?			X
9.2	Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following:			
	a. Samples and/or fractions as appropriate?			X
	b. Blanks?			X
9.3	Are any TCL compounds (from any fraction) listed as TIC compounds?		X	
9.4	Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?			X
9.5	Do TIC and "best match" standard relative ion intensities agree within 20%?			X
10.0	**Compound Quantitation and Reported Detection Limits**			
10.1	Are there any transcription/calculation errors in Form I results?		X	
10.2	Are the CRQLs adjusted to reflect sample dilutions and, for soils, sample moisture?	X		
11.0	**Standards Data (GC/MS)**			
11.1	Are the Reconstructed Ion Chromatograms, and data system printouts present for initial and continuing calibration?	X		
12.0	**GC/MS Initial Calibration (Form VI)**			

Data Validation Checklist - Part B: BNA Analyses

No:	Parameter	YES	NO	N/A
12.1	Are the Initial Calibration Forms (Form VI) present and complete for the BNA fraction ?	X		
12.2	Are response factors stable for BNA's over the concentration range of the calibration (%Relative Standard Deviation (%RSD) <30%)	X		
12.3	Are all BNA compound RRFs > 0.01?	X		
12.4	Are there any transcription/calculation errors in the reporting of average response factors (RRF) or %RSD?		X	
13.0	**GC/MS Continuing Calibration (Form VII)**			
13.1	Are the Continuing Calibration Forms (Form VII) present and complete for the BNA fraction?	X		
13.2	Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument?	X		
13.3	Do any semivolatile compounds have a %Difference (%D) between the initial and continuing RRF which exceeds the +/- 25% criteria?	X		
13.4	Do any semivolatile compounds have a RRF <0.01?		X	
13.5	Are there any transcription/calculation errors in the reporting of average response factor (RRF) or %difference (%D) between initial and continuing RRFs?		X	
14.0	**Internal Standard (Form VIII)**			
14.1	Are the internal standard areas (Form VIII) of every sample and blank within the upper and lower limits (-50% to +100%) for each continuing calibration?	X		
14.2	Are the retention times of the internal standards within 30 seconds of the associated calibration standard?	X		
15.0	**Field Duplicates**			
15.1	Were any field duplicates submitted for BNA analysis?	X		

Data Validation Checklist - Part C: PCB Analysis

No:	Parameter	YES	NO	N/A
1.0	**Traffic Reports and Laboratory Narrative**			
1.1	Are the traffic Report Forms present for all samples?	X		
1.2	Do the Traffic Reports or SDG Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	X		
2.0	**Holding Times**			
2.1	Have any PEST/PCB technical holding times, determined from date of collection to date of extraction, been exceeded?		X	
3.0	**System Monitoring Compound (SMC) Recovery (Form II)**			
3.1	Are the PEST/PCB Surrogate Recovery Summaries (FORM II) present for each of the following matrices:			
	a. Low Water	X		
	b. Soil	X		
3.2	Are all the PEST/PCB samples listed on the appropriate Surrogate Recovery Summary for each of the following matrices:			
	a. Low Water	X		
	b. Soil	X		
3.3	Were outliers marked correctly with an asterisk?	X		
3.4	Were surrogate recoveries of TCX or DCB outside of the contract specifications for any sample or method blank? (60-150%)	X		
3.5	Were surrogate retention times (RT) within the windows established during the initial 3-point analysis of Individual Standard Mixture A?	X		
3.6	Are there any transcription/calculation errors between raw data and Form II?		X	
4.0	**Matrix Spikes (Form III)**			
4.1	Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present?	X		
4.2	Were matrix spikes analyzed at the required frequency for each of the following matrices?	X		
	a. Low Water	X		
	b. Soil	X		
4.3	How many PEST/PCB spike recoveries are outside QC limits?			
	Water 0 out of 9 Soils 0 out of 9			
4.4	How many RPD's for matrix spike and matrix spike duplicate recoveries are outside QC limits?			
	Water 0 out of 9 Soils 0 out of 9			
5.0	**Blanks (Form IV)**			
5.1	Is the Method Blank Summary (Form IV) present?	X		

Data Validation Checklist - Part C: PCB Analysis

No:	Parameter	YES	NO	N/A
5.2	Frequency of Analysis: For the analysis of Pesticide/PCB TCL compounds, has a reagent/method blank been analyzed for each SDG or every 20 samples of similar matrix or concentration or each extraction batch, whichever is more frequent?	X		
5.3	Has a PEST/PCB instrument blank been analyzed at the beginning of every 12 hr. period following the initial calibration sequence?	X		
5.4	Is the chromatographic performance (baseline stability) for each instrument acceptable for PEST/PCBs?	X		
6.0	**Contamination**			
6.1	Do any method/instrument/reagent blanks have positive results PEST/PCBs?		X	
6.2	Do any field/rinse blanks have positive PEST/PCB results?		X	
6.3	Are there field/rinse/equipment blanks associated with every sample?	X		
7.0	**Calibration and GC Performance**			
7.1	Are the following Gas Chromatograms and Data Systems Printouts for both columns present for all samples, blanks, MS/MSD?			
	a. Peak resolution check			X
	b. Performance evaluation mixtures			X
	c. Aroclor 1016/1260	X		
	d. Aroclors 1221, 1232, 1242, 1248, 1254	X		
	e. Toxaphene			X
	f. Low points individual mixtures A & B			X
	g. Med points individual mixtures A & B			X
	h. High points individual mixtures A & B			X
	I. Instrument blanks	X		
7.2	Are Forms VI - PEST 1-4 present and complete for each column and each analytical sequence?	X		
7.3	Are there any transcription/calculation errors between raw data and Forms VI?		X	
7.4	Do all standard retention times, including each pesticide in each level of Individual Mixtures A & B, fall within the windows established during the initial calibration analytical sequence?			X
7.5	Are the linearity criteria for the initial analyses of Individual Standards A & B within limits for both columns?			X
7.6	Is the resolution between any two adjacent peaks in the Resolution Check Mixture > 60.0% for both columns?			X
7.7	Is Form VII - Pest-1 present and complete for each Performance Evaluation Mixture analyzed during the analytical sequence for both columns?			X
7.8	Has the individual %breakdown exceeded 20.0% on either column?			X
	- for 4,4' - DDT?			X
	- for endrin?			X

Data Validation Checklist - Part C: PCB Analysis

No:	Parameter	YES	NO	N/A
	Has the combined %breakdown for 4,4' - DDT/Endrin exceeded 30.0% on either column?			X
7.9	Are the relative percent difference (RPD) values for all PEM analytes <25.0%?		X	
7.10	Have all samples been injected within a 12 hr. Period beginning with the injection of an Instrument Blank?	X		
7.11	Is Form VII - Pest-2 present and complete for each INDA and INDB Verification Calibration analyzed?			X
7.12	Are there any transcription/calculation errors between raw data and Form VII - Pest-2?		X	
7.13	Do all standard retention times for each INDA and INDB Verification Calibration fall within the windows established by the initial calibration sequence?			X
7.14	Are the RPD values for all verification calibration standard compounds <25.0%?	X		
8.0	**Analytical Sequence Check (Form VIII-PEST)**			
8.1	Is Form VIII present and complete for each column and each period of analyses?	X		
8.2	Was the proper analytical sequence followed for each initial calibration and subsequent analyses?	X		
9.0	**Cleanup Efficiency Verification (Form IX)**			
9.1	Is Form IX - Pest-1 present and complete for each lot of Florisil Cartridges used?			X
9.2	Are all samples listed on the Pesticide Florisil Cartridge Check Form?			X
9.3	If GPC Cleanup was performed, is Form IX - Pest-2 present?		X	
9.4	Are percent recoveries (%R) of the pesticide and surrogate compounds used to check the efficiency of the cleanup procedures within QC limits:			
	80-120% for florisil cartridge check?			X
	80-110% for GPC calibration?			X
10.0	**Pesticide/PCB Identification**			
10.1	Is Form X complete for every sample in which a pesticide or PCB was detected?	X		
10.2	Are there any transcription/calculation errors between raw data and Forms 6E, 6G, 7E, 7D, 8D, 9A, 9B, 10A?		X	
10.3	Are retention times (RT) of the sample compounds within the established windows for both analyses?	X		
10.4	Is the percent difference (%D) calculated for the positive sample results on the two GC columns < 25.0%?		X	
10.5	Check chromatograms for false negatives, especially the multiple peak compounds toxaphene and PCBs. Were there any false negatives?		X	
11.0	**Compound Quantitation and Reported Detection Limits**			
11.1	Are there any transcription/calculation errors in Form I results?		X	
11.2	Are the CRQLs adjusted to reflect sample dilutions and, for soils, %moisture?	X		
12.0	**Chromatogram Quality**			
12.1	Were baselines stable?	X		

Data Validation Checklist - Part C: PCB Analysis

No:	Parameter	YES	NO	N/A
12.2	Were any electropositive displacement (negative peaks) or unusual peaks seen?		X	
13.0	**Field Duplicates**			
13.1	Were any field duplicates submitted for PEST/PCB analysis?	X		

Data Validation Checklist - Part D: Metals Analyses

No:	Parameter	YES	NO	N/A
1.0	**Form I to IX**			
1.1	Are all the Form I through Form IX labeled with:			
	Laboratory Name?	X		
	Case/SAS No.?		X	
	EPA sample No.?		X	
	SDG No.?	X		
	Contract No.?	X		
	Correct units?	X		
	Matrix?	X		
1.2	Do any computer/transcription errors exceed 10% of reported values on Forms I-IX for:			
	A. All analytes analyzed by ICP?		X	
	B. All analytes analyzed by GFAA?			X
	C. All analytes analyzed by AA Flame?			X
	D. Mercury?	X		
	E. Cyanide?			X
2.0	**Raw Data**			
2.1	Digestion Log for flame AA/ICP (Form XIII) present?	X		
2.2	Digestion Log for furnace AA (Form XIII) present?			X
2.3	Distillation Log for mercury (Form XIII) present?	X		
2.4	Distillation Log for cyanides (Form XIII) present?			X
2.5	Are pH values (pH<2 for all metals, pH>12 for cyanide) present?	X		
2.6	Percent solids calculation dates present on sample preparation logs/bench sheets?	X		
2.7	Are preparation dates present on sample preparation logs/bench sheets?	X		
2.8	Measurement read out record present?			
	A. ICP	X		
	B. Flame AA			X
	C. Furnace AA			X
	D. Mercury	X		
	E. Cyanides			X
2.9	Are all raw data to support all sample analyses and QC operations present?	X		
3.0	**Holding Times**			
3.1	A. Mercury analysis (28 days) .....exceeded?		X	
	B. Cyanide distillation (14 days) .....exceeded?			X
	C. Other Metals analysis (6 months) .....exceeded?		X	
3.2	Is pH of aqueous samples for:			
	A. Metals Analysis >2?		X	

Data Validation Checklist - Part D: Metals Analyses

No:	Parameter	YES	NO	N/A
	B. Cyanides Analysis <12?			X
4.0	**Form I (Final Data)**			
4.1	Are all Forms I's present and complete?	X		
4.2	Are correct units (ug/l for waters and mg/kg for soils) indicated on Form I's?	X		
4.3	Are soil sample results for each parameter corrected for percent solids?	X		
4.4	Are all "less than IDL" values properly coded with "U"?	X		
4.5	Are the correct concentration qualifiers used with final data?	X		
4.6	Are EPA sample #s and corresponding laboratory sample ID #s the same as on the Cover Page, Form I's and in the raw data?	X		
4.7	Was a brief physical description of samples given on Form I's?	X		
4.8	Was the dilution of any sample diluted beyond the requirements of the contract noted on Form I or Form XIV?		X	
5.0	**Calibration**			
5.1	Is record of at least 2 point calibration present for ICP analysis?	X		
5.2	Is record of 5 point calibration present for Hg analysis?	X		
5.3	Is record of 4 point calibration present for:			X
	Flame AA?			X
	Furnace AA?			X
	Cyanides?			X
5.4	Is one calibration standard at the CRDL level for all AA (except Hg) and cyanides analyses?	X		
5.5	Is correlation coefficient less than 0.995 for:			
	Mercury Analysis?		X	
	Cyanide Analysis?			X
	Atomic Absorption Analysis?			X
5.6	In the instance where less than 4 standards are measured in absorbance (or peak area, peak height, etc.) Mode, are remaining standards analyzed in concentration mode immediately after calibration within +/- 10% of the true values?			X
6.0	**Form II A (Initial and Continuing Calibration Verification)**			
6.1	Present and complete for every metal and cyanide?	X		
6.2	Present and complete for AA ICP when both are used for the same analyte?			X
6.3	Are all calibration standards (initial and continuing) within control limits:			
	Metals - 90 - 110 %R	X		
	Hg - 80 - 120 %R	X		
	Cyanides - 85 - 115 %R			X
6.4	Was continuing calibration performed every 10 samples or every 2 hours?	X		
6.5	Was ICV for cyanides distilled?			X

Data Validation Checklist - Part D: Metals Analyses

No:	Parameter	YES	NO	N/A
7.0	**Form II B (CRDL Standards for AA and ICP)**			
7.1	Was a CRDL standard (CRA) analyzed after initial calibration for all AA metals (except Hg)?	X		
7.2	Was a mid range calibration verification standard distilled and analyzed for cyanide analysis?			X
7.3	Was a 2xCRDL (or 2xIDL when IDL>CRDL) analyzed (CRI) for each ICP run?	X		
7.4	Was CRI analyzed after ICV/ICB and before the final CCV/CCB, and twice every eight hours of ICP run?	X		
7.5	Are CRA and CRI standards within control limits: Metals 70 – 130 %R?	X		
7.6	Is mid-range standard within control limits: Cyanide 70 - 130 %R?			X
8.0	**Form III (Initial and Continuing Calibration Blanks)**			
8.1	Present and complete?	X		
8.2	For both AA and ICP when both are used for the same analyte?			X
8.3	Was an initial calibration blank analyzed?	X		
8.4	Was a continuing calibration blank analyzed after every 10 samples or every 2 hours (which ever is more frequent)?	X		
8.5	Are all calibration blanks (when IDL<CRDL) less than or equal to the Contract Required Detection Limits (CRDLs)?	X		
8.6	Are all calibration blanks less than two times Instrument Detection Limit (when IDL>CRDL)?			X
9.0	**Form III (Preparation Blank)**			
9.1	Was one preparation blank analyzed for:			
	each Sample Delivery Group?	X		
9.2	Is concentration of preparation blank value greater than the CRDL when IDL is less than or equal to CRDL?		X	
9.3	If yes, is the concentration of the sample with the least concentrated analyte less than 10 times the preparation blank?			X
9.4	Is concentration of preparation blank value (Form III) less than two times IDL, when IDL is greater than CRDL?			X
9.5	Is concentration of preparation blank below the negative CRDL?		X	
10.0	**Form IV (Interference Check Sample)**			
10.1	Present and Complete?	X		
10.2	Are all Interference Check Sample results inside the control limits (+/- 20%)?	X		
10.3	If no, is concentration of Al, Ca, Fe, or Mg lower than the respective concentration in ICS?			X
11.0	**Form V A (Spiked Sample recovery - Pre-Digestion/Pre-Distillation**			
11.1	Present and complete for:			
	each SDG?	X		
	each matrix type?	X		
	each concentration range (i.e., low, medium, high)?	X		

Data Validation Checklist - Part D: Metals Analyses

No:	Parameter	YES	NO	N/A
	For both AA and ICP when both are used for the same analyte?			X
11.2	Was field blank used for spiked sample?		X	
11.3	Are all recoveries within control limits?		X	
11.4	If no, is sample concentration greater than or equal to four times spike concentration?	X		
12.0	**Form VI (Lab Duplicates)**			
12.1	Present and complete for :			
	each SDG?	X		
	each matrix type?	X		
	each concentration range (i.e., low, medium, high)?	X		
	both AA and ICP when both are used for the same analyte?			X
12.2	Was field blank used for duplicate analysis?		X	
12.3	Are all values within control limits (RPD 20% or difference </= +/-CRDL)?		X	
12.4	If no, are all results outside the control limits flagged with an * on Form I's and VI?	X		
13.0	**Field Duplicates**			
13.1	Were field duplicates analyzed?	X		
13.2	**Aqueous**			
	Is any RPD greater than 50% where sample and duplicate are both greater than or equal to 5 times CRDL?		X	
	Is any difference between sample and duplicate greater than CRDL where sample and/or duplicate is less than 5 times CRDL?		X	
13.3	**Soil/Sediment**			
	Is any RPD (where sample and duplicate are both greater than 5 times CRDL): >100%?		X	
	Is any difference between sample and duplicate (where sample and/or duplicate is less than 5x CRDL): >2x CRDL?		X	
14.0	**Form VII (Laboratory Control Sample)**			
14.1	Was one LCS prepared and analyzed for:			
	each SDG?	X		
	each batch samples digested/distilled?	X		
	both AA and ICP when both are used for the same analyte?			X
14.2	**Aqueous LCS**			
	Is any LCS recovery:			
	less than 50%?		X	
	between 50% and 79%?		X	
	between 121% and 150%?		X	
	greater than 150%?		X	
14.3	**Solid LCS**			
	Is LCS "Found" value higher than the control limits on Form VII?		X	

Data Validation Checklist - Part D: Metals Analyses

No:	Parameter	YES	NO	N/A
	Is LCS "Found" value lower than the control limits on Form VII?		X	
15.0	**Form IX (ICP Serial Dilution)**			
15.1	Was serial dilution analysis performed for:			
	each SDG?	X		
	each matrix type?	X		
	each concentration range (i.e., low, medium, high)?	X		
15.2	Was field blank(s) used for Serial Dilution Analysis?		X	
15.3	Are results outside control limit flagged with an "E" on Form I's and Form IX when initial concentration on Form IX is equal to 50 times IDL or greater?			X
15.4	Are any %difference values:			
	>10%		X	
	>/=100%		X	
16.0	**Furnace Atomic Absorbtion (AA) QC Analysis**			
16.1	Are duplicate injections present in furnace raw data for each sample analyzed by GFAA?			X
16.2	Do the duplicate injection readings agree within 20% Relative Standard Deviation (RSD) or Coefficient of Variation (CV) for concentration greater than CRDL?			X
16.3	Was a dilution analyzed for sample with analytical spike recovery less than 40%?			X
16.4	Is analytical spike recovery outside the control limits (85 - 115%) for any sample?			X
17.0	**Form VIII (Method of Standard Addition Results)**			
17.1	Present?			X
17.2	If no, is any Form I result coded with "S" or a "+"?			X
17.3	Is coefficient of correlation for MSA less than 0.990 for any sample?			X
17.4	Was MSA required for any sample but not performed?			X
17.5	Is coefficient of correlation for MSA less than 0.995?			X
17.6	Are MSA calculations outside the linear range of the calibration curve generated at the beginning of the analytical run?			X
17.7	Was proper Quantitation procedure followed correctly as outlined in the SOW on page E-23?			X
18.0	**Dissolved/Total or Inorganic/Total Analytes**			
18.1	Were any analyses performed for dissolved as well as total analytes on the same sample(s)?		X	
18.2	Were any analyses performed for inorganic as well as total (organic and inorganic) analytes on the same sample(s)?	X		
18.3	Is the concentration of any dissolved (or inorganic) analyte greater than its total concentration by more than 10%?			X
18.4	Is the concentration of any dissolved (or inorganic) analyte greater than its total concentration by more than 50%?			X

Data Validation Checklist - Part D: Metals Analyses

No:	Parameter	YES	NO	N/A
19.0	**Form I (Field Blank)**			
19.1	Is field blank concentration less than CRDL (or 2 x IDL when IDL>CRDL) for all parameters of associated aqueous and soil samples?	X		
19.2	If no, was field blank value already rejected due to other QC criteria?		X	
20.0	**Form X, XI, XII (Verification of Instrumental Parameters)**			
20.1	Is verification report present for:			
	Instrument Detection Limits (quarterly)?	X		
	ICP Interelement Correction Factors (annually)?	X		
	ICP Linear Ranges (quarterly)?	X		
21.0	**Form X (Instrument Detection Limits)**			
21.1	Are IDLs present for:			
	all the analytes?	X		
	all the instruments used?	X		
	For both AA and ICP when both are used for the same analyte?			X
21.2	Is IDL greater than CRDL for any analytes?		X	
21.3	If yes, is the concentration on Form I of the sample analyzed on the instrument whose IDL exceeds CRDL, greater than 5 x IDL?			X
22.0	**Form XI (Linear Ranges)**			
22.1	Was any sample result higher than the high linear range of ICP?		X	
22.2	Was any sample result higher than the highest calibration standard for non-ICP parameters?		X	
22.3	If yes for any of the above, was the sample diluted to obtain the result on Form I?			X
23.0	**Percent Solids of Sediments**			
23.1	Are percent solids in sediment(s):			
	<50%?		X	
	<10%?		X	