Appendix D: Release Abatement Measure Completion Statement and Response Action Outcome Report, May 2011

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RELEASE ABATEMENT MEASURE COMPLETION STATEMENT and RESPONSE ACTION OUTCOME STATEMENT REPORT

for

U.S. DOT/Volpe Center TSC Playground
55 Broadway, Kendall Square
Cambridge, Massachusetts
RTN 3-26067

Prepared for

U.S.DOT/Volpe National Transportation Systems Center
55 Broadway, Kendall Square
Cambridge, MA

Prepared by

FS Engineers, Inc.
2 Clock Tower Place, Suite 630
Maynard, MA 01754

FSE Project # 11-1395

May 15, 2011

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May 15, 2011

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
Northeast Regional Office
205B Lowell Street
Wilmington, Massachusetts 01887

Re: RAM Completion Statement and RAO Report
55 Broadway, Cambridge, MA 02142
RTN 3-26067

Dear Sir/Madam:

FS Engineers, Inc. (FSE) is pleased to present this Release Abatement Measure (RAM) Completion Statement and Response Action Outcome (RAO) Statement Report for the above referenced site. FSE has been retained by the U.S. Department of Transportation (DOT) Volpe National Transportation Systems Center (Volpe Center), the property owner, to prepare the subject RAM Completion and RAO Report. The appropriate BWSC Transmittal Form is included with this report.

Please do not hesitate to contact us if you have any questions or need additional information.

Very truly yours,

FS ENGINEERS, INC.

Farooq Siddique, PE, LSP
Principal

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RESPONSE ACTION OUTCOME TRANSMITTAL FORM (BWSC 104)

RELEASE ABATEMENT MEASURE TRANSMITTAL FORM (BWSC 106)

RELEASE ABATEMENT MEASURE COMPLETION AND RESPONSE ACTION OUTCOME REPORT

RELEASE ABATEMENT MEASURE COMPLETION AND RESPONSE ACTION OUTCOME REPORT

1.0 INTRODUCTION

FS Engineers, Inc. (FSE) has been retained by the U.S. Department of Transportation (DOT) Volpe National Transportation Systems Center (Volpe Center), the property owner, to prepare a Release Abatement Measure (RAM) Completion and Response Action Outcome (RAO) Report for the TSC Playground located at 55 Broadway in Cambridge, Massachusetts ("the Site"). A Site Location Map is included as Figure 1. On July 18, 2006 what appeared to be coal tar was discovered by workers excavating post holes for new playground equipment. The MassDEP was notified on July 18, 2006, and RTN 3-26067 was assigned to the Site. Excavations of site soils were conducted at the Site in 2006 under Immediate Response Action (IRA) activities and in 2008 under RAM activities resulting in the removal of approximately 408 tons of impacted soil from the Site. Follow-up investigations in March 2011 found low levels of extractable petroleum hydrocarbons (EPH), polycyclic aromatic hydrocarbons (PAHs), and lead consistent with previous investigations in site soil. The purpose of the RAM Plan was to conduct remedial actions to reduce residual concentrations of EPH and PAHs in shallow soils within the playground area of the Site. The RAM Plan was prepared in accordance with 310 CMR 40.0440 of the Massachusetts Contingency Plan (MCP), which allows for the implementation of accelerated response actions to reduce risks at sites with certain conditions.

2.0 RESPONSIBILITY

The U.S. Department of Transportation (DOT) Volpe National Transportation Systems Center (Volpe Center), the property owner, is the potentially responsible party. Mr. David Duncan is the owner's representative for the Site and can be contacted as follows:

Mr. David Duncan
U.S. DOT Volpe Center
55 Broadway, RTV-6
Cambridge, MA 02142
617-494-1426

This RAM Completion and RAO Report is submitted by M. Farooq Siddique, the Licensed Site Professional whose signature and seal are provided on the RAM Transmittal Form (BWSC 106) and RAO Transmittal Form (BWSC 104).

3.0 SITE DESCRIPTION AND HISTORY

The disposal site is located at 55 Broadway in a commercial area of Cambridge. The property contains one multi-story office building and three other buildings owned and occupied by the U.S. DOT/Volpe Center. The TSC Child Care Center is located within Building #4 which is located next to the gated entrance from Potter Street along the northeast portion of the property. The Volpe Center property also contains parking lots, landscaped areas, and open grass lawns. The parking lot on the east side of the property has gated access from the property front on Broadway and also from the rear on Potter Street. A Site Plan is provided as Figure 2.

The TSC Child Care Center playground is located east of, and adjacent to, the gated driveway that enters the property from Potter Street. The driveway provides access to the parking lot located south of the playground. The playground is located at the western edge of an open grass field. The grass field is restricted from public use by chain link fences along Potter Street, 3rd Street, and Broadway. The playground is surrounded by a four foot high chain link fence with locking gates. A chain link fence also bisects the playground, separating the Preschool Playground to the north from the Toddler Playground to the south. A portion of the Toddler playground is covered by a rubber play mat, a portion by a gazebo, and the remainder is grass. The majority of the Preschool Playground is covered by a chipped rubber surface. The RAM Plan addressed the landscaped, northern portion of the Preschool Playground that was not covered by the chipped rubber. This landscaped portion of the Preschool Playground had not been used since the analytical results of two soil samples collected from this area on March 2, 2011 showed low levels of EPH and PAHs in the shallow soils. A temporary fence was erected to restrict access to this portion of the Preschool Playground until RAM activities were completed.

No surface water is visible in the immediate site area. Depth to groundwater is approximately 7 feet below ground surface. A Site Layout Plan is provided as Figure 2.

The official notification date for RTN 3-26067 was July 18, 2006 when a layer of coal tar was discovered by workers excavating post holes for new playground equipment. The Site was classified as a Tier II Disposal Site in a Phase I/Tier Classification report submitted to the MassDEP on July 18, 2007.

As part of Phase I activities, FSE reviewed information from available Sanborn Fire Insurance Maps dated 1900 through 1950 and from the Cambridge City Directories from 1954, 1965 and 1968. Based on this information, it appears that the western portion of the TSC Playground and the land to the west (including Building #4) were previously occupied Warren Bros. Roads Co. from the early 1900's through the mid 1960's. Warren Bros. Roads Co. was a manufacturer of road paving machinery. The eastern portion of the TSC Playground as well as the adjoining open grass field to the east were previously occupied by Seavay Manufacturing Company in 1900, Boston Blacking and Chemical Co. in 1934, University Sign Co./Neon Products Inc., in 1950 and 1954, and Badger Manufacturing in 1965 and 1968. Boston Blacking and Chemical Co. was a producer of tannery finished products and University Sign Co./Neon Products Inc. was an electric and neon sign factory. The former Cambridge Gas Light Company operated a Manufactured Gas Plant (MGP) from the early 1900's until the late 1960's just north of the Site, across Potter Street.

Prior to the redevelopment of the Site and surrounding areas, the Broad Canal ran approximately six tenths of a mile from the Charles River (east of the Site) to a railroad line located just west of what is now Galileo Galilei Way (west of the Site). The approximately 80-foot wide former canal ran through the Volpe Center property parallel to Broadway, roughly midway between Potter Street and Broadway. Thus, the southern portion of the grass field and northern portion of the Volpe Center parking lot are situated on the site of the former Broad Canal. The canal was filled when the site area was redeveloped and brought to its current grade beginning in 1966. Historical photographs of the Site show that by December 1966, all former buildings located at the Site had been demolished with the exception of the eastern building of the Badger Manufacturing Company located at the corner of Potter Street and Third Street. Also by December 1966, the Broad Canal had been filled from Third Street to just west of Building #1 of the Volpe Center. By 1968 the majority of the Site was regraded, the canal had been filled in west to the former 6th Street (now the pedestrian walkway, west of the U.S.DOT / Volpe Center property), and construction was underway on what are now Buildings #1, #2, and #4 of the Volpe Center. According to historical aerial photographs, the eastern building of the Badger Manufacturing Company was not removed until sometime between 1971 and 1978. This area was then redeveloped into its current use as the northeastern portion of the open grass field.

4.0 DESCRIPTION OF RELEASE

Information regarding the release was obtained from the *Immediate Response Action Completion Report* completed by Lord Associates, Inc. on October 10, 2006. On July 18, 2006

what appeared to be coal tar was discovered by workers excavating post holes for new playground equipment within the Preschool Playground. The MassDEP was notified on July 18, 2006 and RTN 3-26067 was assigned to the Site. An Imminent Hazard (IH) evaluation was performed by Lord Associates, Inc. and no IH condition was determined to exist. MassDEP gave verbal authorization for an IRA and 170.81 tons of impacted soil was subsequently excavated on August 15 and 16, 2006. Soil was removed to a depth of approximately 5 feet. The excavated area was backfilled with clean fill and the playground was reconstructed. The soil was transported offsite on August 28, 2006 under Bill of Lading to a thermal processing plant in New Hampshire. The IRA Completion Report indicated that some residual PAH-impacted soil remained beyond the horizontal and vertical limits of excavation.

The October 2006 *IRA Completion Report* concluded that the coal tar was related to the former Cambridge Gas Light Company's manufactured gas plant, located north of the Site across Potter Street. Coal tar, a by-product of the MGP process, was reportedly piped to barges in the Broad Canal - the canal that formerly bisected the Volpe Center property parallel to Potter Street and Broadway. Coal tar had been discovered in the shallow soil at several sites in the immediate area, including the discovery in July of 2005 by an NSTAR crew installing a new gas main in Potter Street. According to the IRA Completion Report, the NSTAR workers uncovered a historic pipe below grade in the street that was filled with coal tar.

A Phase I investigation was completed by FSE in May 2007 as a follow-up to the IRA Completion Report. The Phase I included the advancement of eleven soil borings within, and directly adjacent to, the fenced in playground. Boring locations are noted on Figure 2 as B-1 through B-11 with soil borings B-4 and B-6 through B-11 located within the Toddler Playground. Soil samples were submitted to Spectrum Analytical, Inc. (Spectrum) of Agawam, Massachusetts. All soil samples were analyzed for EPH with PAHs and select samples were submitted for analysis of Polychlorinated Biphenyls (PCBs), arsenic, lead, and/or Volatile Petroleum Hydrocarbons (VPH) via MassDEP methods. A summary of the soil analytical results from May 2007 and applicable MCP Method 1 Standards is provided as Table 1. Laboratory analytical results detected arsenic and lead, in addition to the coal tar components, at levels above the applicable Method 1 soil standards in the site soils.

Soil borings B-1 through B-3 were completed as groundwater monitoring wells. Groundwater samples were collected on June 7, 2007 and submitted to Spectrum for analysis of EPH with PAHs. No concentration of any analyzed compound was reported at or above applicable Method 1 groundwater cleanup standards. Groundwater analytical results are summarized in Table 2.

Soil and groundwater analytical results were presented in the *Phase I Initial Site Investigation Report and Tier Classification*, submitted to the MassDEP on July 18, 2007. Note that the shallow soil boring samples (up to 4 feet) located within the Toddler Playground are no longer representative of in situ conditions as soil was excavated from the Toddler Playground in October 2008 under RAM activities discussed below. Based upon the analytical results, FSE recommended that additional sampling be completed to further delineate the extent of the impacted soil at the Site.

On April 30, 2008 FSE collected thirteen surficial samples from the grass lawn, which is approximately one acre in size and contains the fenced in playground within its northwest corner. A summary of the soil analytical results from April 2008 and applicable MCP Method 1 Standards is provided as Table 3. Two of the soil samples exhibited concentrations of benzo (a) pyrene at or just above the MCP Method 1 Cleanup Level.

A RAM Plan was developed in September 2008 for the removal of soil from within the Toddler Playground. RAM activities were completed in October 2008 that included the excavation of the top 4 feet of soil from the Toddler Playground and the off-site disposal of approximately 237 tons of soil from the Site. Nine confirmatory soil samples (Conf-01, Conf-02, Conf-03, and Conf-05 through Conf-10) were collected from the limits of the excavation and were submitted for laboratory analysis of EPH with target PAHs, lead, and arsenic. The confirmatory soil sample locations are shown on Figure 4 and the analytical data is summarized in Table 4. Lead and/or PAHs were reported at concentrations above the applicable Method 1 soil standards in several of the confirmatory samples taken from 4 feet below surface grade.

A RAM Completion Statement and Response Action Outcome (RAO) Report was filed in January 30, 2009. An AUL for a portion of the Site was included as part of the RAO in order to restrict invasive subsurface activities in the areas of soil contamination. The MassDEP performed an audit of the Site in August 2010 and determined that additional information was necessary in support of the RAO and AUL as outlined in the Notice of Audit Findings dated October 13, 2010. A response to the Notice of Audit Findings is provided as Attachment A.

Supplemental soil and groundwater sampling were conducted at the Site following the Notice of Audit Findings. In March 2011 fourteen soil borings were advanced and six groundwater monitoring wells were installed at the Site. Boring logs for these samples (SB-101 through SB-114) are provided in Appendix B. Shallow soil samples (from 0 to 3 feet below grade) were collected from each soil boring and submitted to Spectrum for laboratory analysis of

volatile organic compounds (VOCs), EPH with PAHs, and metals. Deeper soil samples (from depths 3 to 12 feet below grade), were collected from nine of the fourteen borings and submitted for laboratory analysis of VOCs and EPH with PAHs. A summary of the soil analytical results and applicable MCP Method 1 Standards is provided as Table 5.

Concentrations of the PAHs benzo (a) pyrene and/or benzo (a) anthracene were detected at levels just above the applicable Method 1 soil standards in six of the fourteen shallow soil samples. Two of these shallow soil samples with low level PAH concentrations were collected from the landscaped area of the Preschool Playground. Concentrations of lead were detected at levels above the applicable Method 1 soil standard in five of the shallow soil samples collected outside the limits of the playground. No concentration of arsenic or of any VOC was found at level above the applicable Method 1 Soil standard in any of the shallow soil samples. Concentrations of several PAHs were detected at levels above the applicable Method 1 soil standards in five of the nine deeper soil samples.

Depth to groundwater was gauged in all existing monitoring wells at the Site on March 9, 2011 and March 17, 2011, prior to well development and prior to well sampling, respectively. Groundwater gauging data was combined with monitoring well survey data in order to calculate groundwater elevations. Groundwater elevation data is provided as Table 6. Based upon groundwater elevation data, groundwater appears to flow to the south and southwest. Groundwater contour plans are provided as Figure 5 and Figure 6. Groundwater samples were collected in March 2011 via low-flow methods from the eight monitoring wells at the Site. Purged groundwater from well development and low flow sampling was stored in secured 55-gallon drums at the Site. The drums were removed from the Site via Bill of Lading for offsite disposal on April 27, 2011. Bill of Lading documentation is provided in Appendix D. All groundwater samples were submitted for laboratory analysis of VOCs and EPH with PAHs. A summary of the groundwater analytical results and applicable MCP Method 1 Standards is provided as Table 7. No groundwater sample collected from the Site was found to have any contaminant of concern (COC) at a level above the applicable Method 1 groundwater standard.

5.0 SITE CONDITIONS AND SURROUNDING RECEPTORS

The area covered by this investigation is predominantly unpaved; therefore, soil less than 3 feet below grade at this location is defined as accessible (surficial) soil per 310 CMR 40.0993. Soils greater than 3 feet below grade in unpaved areas are considered to be potentially accessible per 310 CMR 40.0993. There are no public water supply wells on the Site.

Migration pathways identified include use as a playground, future utility trenches, natural groundwater, and stormwater runoff. No exposure through the food chain pathway is anticipated because the Site is not used for agricultural purposes.

The reasonably foreseeable use of the Site is as a commercial office complex including a daycare center playground. Human receptors for current and future use may include site users (adult and children), full-time workers, visitors, and construction workers. The potential human exposure pathways to soil include ingestion of soil or biota, inhalation of particulate matter, and dermal adsorption from soil. The exposure points are identified as soils from surface to 15 feet depth at the site.

Environmental receptors may include flora within the vegetated areas on and surrounding the Site. Wildlife is not present within the Site. There is no surface water body in the immediate vicinity of the Site.

The primary COCs at the Site are coal tar-derived EPH fractions, PAHs, and lead in the shallow soil to a depth of 12 feet. There is no evidence of significant substantial release migration or offsite migration through either soil or groundwater. Oil and/or hazardous material (OHM) detected at the Site is limited to subsurface soil and groundwater. Under the current site conditions there is no potential for direct exposure to the contaminated soils.

According to the 2000 US Census Map, the residential population within a ½ mile radius ranges from 1,000 to over 2,000 people. There are no institutions, other than the onsite day care center, within 500 feet of the Site.

The Site is not located within a current or potential drinking water source area, as delineated on the MassDEP Priority Resource Maps, and no private wells have been identified within 500 feet of the Site. There is no surface water on the Site and no freshwater wetlands are located within 500 feet of the Site.

6.0 REQUIREMENTS FOR RELEASE ABATEMENT MEASURES

In accordance with 310 CMR 40.0441, release abatement measures are intended to reduce risks at a disposal site and/or increase the cost effectiveness of response actions by allowing the implementation of certain accelerated remedial actions to stabilize, treat, control, minimize, or eliminate releases until such a time as a response action outcome is achieved. As summarized previously, concentrations of PAHs, lead, and arsenic in soil exceed the applicable

MCP Method 1 risk assessment cleanup levels. Based on known conditions, implementation of a RAM Plan was the most cost effective and beneficial means of reducing risks at the Site at this time. FSE on behalf of the Volpe Center prepared a RAM Plan to excavate site soils inside the Preschool Playground and dispose of the soils at an off-site location. The RAM Plan was submitted to MassDEP on April 22, 2011.

7.0 RELEASE ABATEMENT MEASURE PLAN

On April 25, 2011, under the supervision of FSE, the RAM activities were initiated by Dowling Corporation (Dowling) – the Site remediation contractor. Both the Preschool Playground as well as the Toddler Playground were closed to children and daycare workers during the RAM activities – from April 25, 2011 through May 9, 2011.

After the removal of a portion of the chain link fence surrounding the playground Dowling personnel utilized an excavator and a bobcat to remove the top three feet of soil within the landscaped, northern portion of the Preschool Playground that was not covered by chipped rubber. Ambient air monitoring was conducted during the excavation activities using a photoionization detector (PID) and soil headspace screening was also conducted on the material removed from the excavation. The soil was stockpiled on polyethylene sheeting on the lawn south of the playground. The location of the excavation and soil stockpile are shown on Figure 7. At the conclusion of site activities each day, temporary fencing was erected to replace the area of removed chain link fence. During the excavation, Dowling encountered a layer of coal ash, coal slag, and brick at a depth of 2 to 3 feet below grade, extending in a north to south direction in the center of the excavation. Two abandoned concrete footings extending in parallel with an approximate 1-foot space in between were located directly to the east of the ash/slag/brick layer. Minor amounts of coal tar were found adhering to the western abandoned foundation wall, but no significant amount of coal tar was found in any part of the excavation. The locations of the concrete footings were in line with those documented by Lord Associates during the excavation of parts of the Preschool Playground conducted under 2006 IRA activities. The concrete footings were assumed to be related to former historical buildings at the Site.

As the excavation progressed, Dowling backfilled the completed areas with approximately 2 ½ feet of 3” minus dense graded stone combined with 1 ½” dense graded crushed stone. The material is 100% quarry rock mined at the source and originated from the Aggregate Industries plant in Saugus, MA. A copy of the Aggregate Industries letter certifying the origin of the fill material is included in Appendix D. The material was compacted in 1 foot thick lifts during placement. A 6-inch layer of loam was placed on top of the stone, compacted,

and raked prior to placement of seed. The portion of chain link fence surrounding the playground was reinstalled.

Confirmatory soil samples were collected from the limits of the excavation and were submitted for laboratory analysis of EPH with target PAHs, and metals. The confirmatory soil sample locations are shown on Figure 4. The analytical data is summarized in Table 8 and the complete laboratory analytical report is provided in Appendix C. Lead, arsenic, and/or PAHs and nickel were reported at concentrations above the applicable Method 1 soil standards in the confirmatory samples collected from 3 to 3.5 feet below surface grade.

A composite characterization sample was collected from the stockpile and submitted for laboratory analysis of semi-volatile organic compounds (SVOCs), PCBs, total petroleum hydrocarbons (TPH), TCLP Lead, pH, reactivity and flashpoint. On May 9, 2011 the stockpiled material (approximately 100 yards) was transported under Bill of Lading documentation to the Titcomb Pit Landfill in Amesbury, Massachusetts. A copy of the Bill of Lading documentation in included in Appendix D.

8.0 DATA USABILITY ASSESSMENT

Soil and groundwater samples collected during the assessment were submitted to Spectrum Analytical, Inc., which is certified in Massachusetts for the analyses performed. FSE performed a data validation assessment of the soil and groundwater analytical results included in this report.

The analytical results were reviewed and evaluated by FSE and Spectrum Analytical for acceptable sample containers, sample preservation, sampling methods, and holding times, and complied with MassDEP and/or USEPA policies and procedures. Laboratory accuracy was determined by the use of surrogate recoveries for the VOC and EPH/PAH analyses.

The Spectrum QA/QC procedures included batch reporting, method blanks, lab duplicates, and lab control spike (LCS) duplicates. The reported QA/QC procedures for soil and groundwater samples were found to be acceptable and the results were certified by Spectrum to have Presumptive Certainty Status.

8.1 Data Representativeness Evaluation

Based on the results of this data validation assessment it is the opinion of FSE that the analytical results included in this report are of acceptable quality to support the conclusions contained in this RAO report. The soil and groundwater sampling plans were adequate, in terms of spatial and temporal distribution to support the conclusions reached in this report.

9.0 NATURE AND EXTENT OF CONTAMINATION

9.1 Soil and Groundwater Classifications

For the purpose of identifying the reportable concentrations of OHM, the selection of the groundwater reporting category of RCGW-2 for the Site, as defined in the Massachusetts Contingency Plan (MCP), 310 CMR 40.0362, was based upon the following criteria:

- The groundwater is not located within a Current Drinking Water Source Area.

The selection of a soil reporting category of RCS-1, as defined in the MCP, 310 CMR 40.0361, for the purpose of identifying the applicable reportable concentrations (RC's), was based upon the following:

- The soil is within 500 feet of a residential dwelling, a residentially-zoned property, school, playground, recreational area or park.

For the purpose of identifying the applicable Method 1 risk characterization clean-up standards, as defined in the MCP, 310 CMR 40.0930, for the present and future land uses of the Site relative to groundwater and soil, the groundwater category is designated as GW-2 based on the following:

- The groundwater is not within a Zone II,
- The groundwater is not within an Interim Wellhead Protection Area,
- The groundwater is not within a Potentially Productive Aquifer,
- The groundwater is not within the Zone A of a Class A Surface Water Body,
- The groundwater is located within 500 feet of a public water supply system distribution pipeline
- The groundwater is not within 500 feet of a private drinking water supply well,
- The groundwater is located within 30 feet of an existing or future occupied building,

and the average annual depth to groundwater is 15 feet or less from the ground surface.

In addition, the selection of a groundwater classification of GW-3 was based upon groundwater ultimately discharging into surface water.

Surficial soil to a depth of 3 feet is classified as S-1, due to the accessibility of the soil and the high frequency and high intensity of use by adults and children.

The soil at the Site from 3 to 15 feet below grade is classified as S-2, as follows:

- The soils at the Site are potentially accessible,
- The intensity of use by adults and children is considered to be low, and
- The frequency of use by adults and children is considered to be high.

The soil at a depth greater than 15 feet below grade is classified as S-3 for isolated subsurface soils.

9.2 Description of Released Materials

9.2.1 Materials Released to Soil

Subsurface excavations from within the TSC fenced-in playground found a layer of coal tar and coal tar-impacted soil at depths ranging from 2 to 4 feet, extending in a north to south direction along the center of the playground, parallel with north/south-trending subsurface abandoned former concrete footings. The north/south-trending layer of coal tar was observed in the southern ¾ of the Preschool Playground in 2006 by Lord Associates and in the Toddler Playground in 2008 by FSE. Although coal ash, coal slag, and the concrete footings were observed during RAM activities of April 2011 by FSE, no layer of coal tar was found in the northern ¼ of the Preschool Playground. Over the course of the subsurface investigations conducted at the Site, soil samples were collected by FSE for analysis of EPH, PAHs, VOCs, VPH, PCBs, PP13 metals, and Cyanide. Soil boring locations and post-excavation confirmatory soil sample locations are shown on Figure 3 and Figure 4, respectively. Analytical data from soil boring samples collected in May 2007, April 2008, and March 2011 are summarized in Table 1, Table 3, and Table 5, respectively. Post-excavation confirmatory soil sample analytical results from RAM activities conducted in 2008 and 2011 are summarized in Table 4 and Table 8, respectively.

Samples taken by FSE from the layer of coal-tar impacted soil include the soil boring samples of B-07 and B-10 collected in May 2007 and the confirmatory sample Conf-10 collected in October 2008. These soil samples exhibited concentrations of EPH ranges C11-C22 Aromatics and/or C9-C18 aliphatics at levels above the Method 1 Soil Cleanup Standards. These samples also showed concentrations of numerous PAHs above applicable Method 1 Standards. Note that the locations of soil sample B-07 1-3' and B-10 1-3' were removed in October 2008 when the top 4 feet of accessible soil was removed from the Toddler Playground. Analytical results from soil borings samples collected in 2007, 2008, and 2011 from locations at the Site beyond the observed limits of the coal tar-impacted soil found reduced concentrations of EPH constituents and PAHs. No EPH range was found at a level above the applicable Method 1 standard in any of these samples, but several PAHs were found at levels above standards in selected samples. Lead and arsenic were found to exceed applicable Method 1 Cleanup Standards in select samples, but the elevated concentrations did not directly correspond with areas of observed coal tar impacts.

The EPH, PAH, lead, and arsenic laboratory results for all surficial soil samples (from grade to 3 feet) collected at the Site from beyond the areas of the RAM excavations are presented as Table 9. These 29 soil samples collected from outside of the fenced-in playground include samples from 2007, 2008, and 2011. Soil boring samples B-04, B-06 through B-11, HA-11, SB-106, and SB-107 are not included in this data set as they were removed during the RAM activities of October 2008 and April 2011. The concentrations of COCs in these 29 samples are markedly reduced from those seen from the coal tar-impacted areas of the Site. The arithmetic mean of the detected concentrations of each COC has been calculated and provided on Table 9. Although several of these samples exhibited concentrations of one or more PAHs, lead, and/or arsenic at or above MCP Method 1 Standards, the average concentration of each COC in surficial soil met the applicable Method 1 Standards for S-1 soil with one exception. The average concentration of the PAH benzo (a) pyrene was 2.78 parts per million (ppm) – just above the Method 1 Standard for S-1 soil of 2.0 ppm.

Urban fill material including brick, coal slag, and/or coal ash were found at depths ranging from 6 inches to 8 feet below grade in all fourteen borings installed at the Site as part of the supplemental sampling activities of March 2011. Refer to the boring logs in Appendix B for further details. A layer of brick, coal slag, and coal ash was observed in during the April 2011 excavation of the northern ¼ of the Preschool Playground. Although the ranges of detected concentrations of PAHs in Site soils are consistent with background levels found in urban fill material, several samples have detected concentrations of PAHs above the MassDEP published

90th percentile "background" levels of PAHs and metals in soil with fill material containing coal or wood ash.

Laboratory analytical results from deeper (from 3 feet to 12 feet below grade) soil samples collected from outside of the limits of the TSC playground during the 2011 supplemental investigation are included on Table 5. The analytical results show concentrations of the PAHs benzo (a) pyrene and/or benzo (a) anthracene, above MCP Method 1 Standards in more than half of the collected samples. The post-excavation confirmatory soil sample CSB-02 collected from the northern portion of the Preschool Playground on April 26, 2011 shows concentrations of benzo (a) pyrene, benzo (a) anthracene, and benzo (b) fluoranthene above the Method 1 Standards for S-1 soil. Additionally, both confirmatory soil samples CSB-01 and CSB-02 show concentrations of lead, arsenic, and/or nickel above the Method 1 Standards for S-1 soil.

9.2.2 Materials Released to Groundwater

Three groundwater monitoring wells (MW-1 through MW-3) were installed adjacent to the TSC Playground in May 2007 and six groundwater monitoring wells (MW-4 through MW-9) were installed at the Site in March 2011. All monitoring wells were constructed with a 10-foot screened interval that spanned a depth range of 2 to 12 feet below grade. Monitoring well locations are shown on Figure 3. Groundwater samples were collected from MW-1 through MW-3 in June 2007 for analysis of EPH with PAHs. The analytical data is summarized in Table 2. No concentration of any analyte was detected above the applicable Method 1 groundwater cleanup standards in the June 2007 groundwater sampling event. Groundwater samples were collected in March 2011 from MW-1 and MW-3 through MW-9 for analysis of EPH with PAHs and VOCs via EPA method 8260. [MW-2 was not located and presumed destroyed.] The analytical data is summarized in Table 7. No concentration of any targeted compound was detected above the applicable Method 1 groundwater cleanup standards.

9.3 Horizontal and Vertical Extent of Contamination

Based on the soil sample results from this and previous subsurface investigations conducted at the Site, the lateral and vertical extent of contaminated fill was established. Historic fill containing coal ash, slag, and other debris (mainly brick) was observed throughout the site. Laboratory analysis of soil samples throughout the Site revealed the presence of EPH, PAHs, lead and other compounds associated with historic fill. Based upon visual observations and analytical results of the soil samples collected and upon the review of historic photographs

and maps, the filled area appears to extend horizontally to the limits of the property. The vertical extent of historic fill across the majority of the Site appears to be approximately 8 feet in depth overlying natural deposits. The extent of fill within the former canal is deeper and most likely extends to the canal bottom.

An area of subsurface coal tar was initially discovered within the limits of the playground in 2006. Following the excavation and removal of coal tar from the Preschool Playground in 2006 and the excavation and removal of coal tar from the Toddler Playground in 2008, none of the soil borings advanced within the grass field showed any significant evidence of the presence of coal tar. It should be noted that of the 31 subsurface samples collected from 3 to 12 feet depth across the site only 2 samples collected from within and immediately adjacent to the playground (B-10 and B-5, respectively) showed evidence of coal tar. Therefore, it our professional opinion that isolated pockets of coal tar may be present at depth in the subsurface.

10.0 RISK CHARACTERIZATION

FSE performed a Method 3 Risk Characterization to evaluate the risk of harm to health, safety, public welfare and the environment from the coal tar contamination at the Site. The Method 3 Risk Characterization was used to establish whether the site conditions present a level of No Significant Risk. The results of the Risk Characterization were used to establish the need for remedial actions and to select the appropriate RAO category for the disposal site.

The purpose of this risk characterization is to evaluate the site conditions relative to the present and future risk of harm to public health, public welfare, the environment, and public safety and to determine whether a condition of No Significant Risk exists at the disposal site, in accordance with 310 CMR 40.0942. The contamination at the Site is known to be present in soil. The Method 3 Risk Characterization presented herein has been completed using site specific information to support a Response Action Outcome for the Site.

A Method 3 risk characterization report was included in the RAM Completion Statement and RAO Report filed in on January 30, 2009. The report entitled *"Phase II Risk Assessment, Volpe National Transportation Systems Center, US Department of Transportation, 55 Broadway, Cambridge, MA"* was completed by Dr. Harlee Strauss of H. Strauss Associates, Inc. as a subcontractor to FSE. The complete report, referred to herein as the "Phase II Risk Assessment report," is provided in Appendix F.

The current conditions and uses of the Site and the identified contaminants of concern are described in Section 3.0 and Section 9.0 of this report, respectively. These site conditions and uses are consistent with those described in the Phase II Risk Assessment report. The additional information provided by the supplemental investigations conducted at the Site in 2011 including field observations, analytical results of soil and groundwater sampling, and results from historical research, in no way contradict the assumptions, observations, and data used for the Phase II Risk Assessment report. Rather, the Method 3 Risk Characterization performed by FSE for this submittal is used to further clarify the risk characterization between current and potential future uses of the Site. Amendments and additions to the Phase II Risk Assessment report are discussed below in Sections 10.1 through 10.5. Additional tables in support of the Method 3 Risk Characterization are provided in Appendix G.

10.1 Shallow Surface Soil and Deeper Surface Soil

In Section 2.0 of the Phase II Risk Assessment report, the accessible soil (from 0 to 3 feet below grade) was subdivided into "shallow surface soil" – from 0 to 4 inches below grade and "deeper surface soil" – from 4" to 3 feet below grade. The distinction was made since

> "activities that lead to exposure to shallow surface soil (first few inches) differ from those that lead to exposure to deeper surface soil (e.g., 4 inches to 3 feet). Because of this difference, and the different depths of soil sampled in various sampling campaigns at the Site, shallow and deeper surface soils are described and evaluated separately."

This distinction between shallow surface soil and deeper surface soil was also observed and documented during the soil boring installations of March 2011. As detailed in the Boring Logs provided in Appendix B, soil samples collected from the surface to a depth of at least 6 inches below grade were characterized as loam/topsoil. No visually apparent coal slag, brick, and/or coal ash was observed in the topsoil at the Site. These shallow surface soil samples were in contrast to the deeper surface soils (greater than 6 inches), in which coal slag, brick, and/or coal ash were observed in 13 of the 14 borings. Therefore the assumptions, methodology, calculations, and conclusions of the hazard evaluation of the shallow surface soil (Section 2.1 Table 2-1, and Table 2-2 of the Phase II Risk Assessment report) have not been contradicted by the findings of recent assessments.

Table 2-2 illustrates that both the arithmetic mean concentrations and the maximum concentrations of PAHs, arsenic and lead in the shallow surface soils do not exceed the

background concentrations of these COCs in soil containing fill materials. The conclusion that "PAHs, arsenic and lead are not contaminants of concern in shallow surface soil (0-4 inches)" is still valid.

10.2 Exposure Scenarios/Pathways

The Phase II Risk Assessment report identified six exposure scenarios were at the Site based upon current use or those uses in the foreseeable future. These scenarios were addressed in Section 5.1 and Table 5-1 of the Phase II Risk Assessment report. That table has been reproduced below as Table 10.1. In order to evaluate the Site for unrestricted residential use, one additional scenario was selected, that of the use of the Site as a residence. This seventh exposure scenario has been added as the last row of Table 10.1.

Table 10-1
Soil Exposure Scenarios

Scenario/Location	time-frame	Media	Activity	Receptors	Complete?	Comments
1) Recreation in the fenced playground	current future	shallow surface soil	playing while at center	young children (6 mo-5 yrs) adult day care workers	no	No contaminated surface soil remains on-site
2) Playing in the grassy area	current future	shallow surface soil	playing ball, tag, other games with no digging	children and adults	no	No contamination in the shallow surface soil (0-4")
3) Routine maintenance of grassy area	current future	shallow surface soil	mowing, seeding etc	adults	no	No contamination in the shallow surface soil (0-4")
4) Landscaping grassy area	current future	surface soil	planting, activities requiring digging	adults	yes	exposure duration will be short, 1-2 days
5) Utility installation/ maintenance, anywhere on site	future	surface soil, subsurface soil	digging trench	adult workers	yes	exposure duration will be short, less than 2 weeks
6) Construction of new building	future	surface soil, subsurface soil	digging foundation	adult workers	yes	evaluated
7) Residence	future	surface soil, subsurface soil	activities involving digging	adults and children	yes	evaluated

10.3 Exposure Pathways and Dose Calculations

The exposure and risk from soil were calculated for the two exposure scenarios identified above using the MassDEP shortform for Construction Workers and the MassDEP shortform for Residents available on website (http://www.mass.gov/dep/service/compliance/riskasmt.htm). The contaminants of concern were identified in Section 9.2 of this report. They are the three EPH fractions: aliphatics C9-C18, aliphatics C19-C36, and aromatics C11-C22, 17 target PAHs, arsenic, and lead. The Exposure Point Concentrations (EPCs) are the arithmetic means (average) of the accessible soil (from grade to 3 feet) shown in Table 9. As discussed previously in Section 9.2.1 of this report, Table 9 includes the 29 shallow soil samples (from grade to 3 feet) collected at the Site from outside of the limits of the fenced-in TSC Child Care Center playground. Soil from grade to 3 feet within the fenced-in playground was excavated and transported off-site for reuse/disposal. The excavated area was backfilled with clean fill and loam and restored for use as a playground. As such, conservatively, no sample from the playground for 0 feet to 3 feet depth was used in EPC calculations.

10.4 Hazard Index

Table CW-1 provided in Appendix G is the output of the Construction Worker soil shortform using the EPCs from Table 9. As described in 310 CMR 40.0993 (6), Cumulative Receptor Non-cancer Risks shall be compared to a Cumulative Non-cancer Risk Limit which is a Hazard Index (HI) equal to one. Table CW-1 shows that the HI (all chemicals) is 0.49 - which is less than 1. Thus, there is no significant non-cancer risk associated with exposure to accessible soils (0 feet to 3 feet depth) at this Site for adults based on any worker scenario: construction, utility, landscaper.

Table RS-1 provided in Appendix G, which is the output of the Resident short form, shows that the sub-chronic and chronic HI (all chemicals) are greater than 1 using the EPCs calculated in Table 9. Thus, there is the potential risk associated with future residential use of the Site with exposure to the accessible soils (0 feet to 3 feet depth).

10.5 ELCR

Cancer risk is characterized in terms of excess lifetime cancer risk (ELCR), which is the probability that over a lifetime, exposure from the Site will produce an excess case of cancer over the background level of cancer. For each contaminant, each route of exposure, each exposure scenario, and for appropriately combined exposure scenarios calculated cancer risks are

compared to the MCP benchmark excess lifetime cancer risk of 1 x 10^{-5}. Table CW-1, which is the output of the Construction Worker soil shortform, shows that the ELCR (all chemicals) is 3 x 10^{-7}, which is less than the MCP benchmark of 1 x 10^{-5} as defined in 310 CMR 40.0993 (6). Thus, there is no significant cancer risk associated with exposure to accessible soils (0 feet to 3 feet depth) at this Site for adults based on any worker scenario: construction, utility, landscaper.

Table RS-1, which is the output of the resident soil short form (RS-1), shows that the ELCR (all chemicals) is 2 x 10^{-4}, which is greater than the MCP benchmark of 1 x 10^{-5}. Thus, there is the potential risk associated with future residential use of the Site associated with exposure to accessible soils (0 feet to 3 feet depth).

10.6 Summary and Conclusions

The risk characterization identified the potential exposure scenarios and pathways at the Site based on current or foreseeable future use of the property. Based on the completed Method 3 risk characterization, the Site poses No Significant Risk to public health, welfare or the environment for current and foreseeable future activities and uses of the property as an office complex based upon the existing Site conditions.

Current and Future Recreational Activities and Uses

As outlined in Table 10-1, the first three current and foreseeable future activities and uses of the Site include:

- the use of the TSC Child Care Center playground by children and adults;
- recreational activities in the field by children and adults; and
- routine maintenance of the landscaping.

A condition of No Significant Risk is maintained for the above current and foreseeable site uses due to the incomplete pathway for these exposure scenarios.

Current and Future Construction Worker Activities and Uses

As outlined in Table 10-1, the 4th, 5th, and 6th activities and uses of the Site for current and foreseeable activities and uses include:

- short duration digging into the deeper surface soils (0 feet to 3 feet depth) by adult workers during landscaping activities;
- short duration digging into the deeper surface soils (0 feet to 3 feet depth) by adult worker during trenching activities; and
- long duration digging by adult workers into the deeper surface soils (0 feet to 3 feet depth) at the Site.

These exposure scenarios were evaluated via the MassDEP Construction Worker shortform using all in-situ soil data collected through 2011. The output of the short form demonstrates that there is No Significant Risk associated with the accessible surface soils (0 feet to 3 feet depth) at this Site based on any adult worker exposure scenario.

Future Residential Activities and Uses

In order to evaluate risk of unrestricted future activities and uses of the property as a residence, a seventh exposure scenario was added to the risk assessment and to Table 10.1. This exposure scenario was evaluated via the MassDEP Resident shortform by incorporating all in-situ soil data collected through 2011. The output of the Resident shortform indicates that there is the potential risk associated with future residential use of the Site relative to exposure to accessible soils. This outcome was the result of the existing Site conditions which include residual levels of EPH with target PAHs, lead, and arsenic in certain soils at depths greater than 6 inches below ground surface.

Potentially Accessible Soil (3 feet to 15 feet Depth)

The Phase II Risk Characterization report also evaluated potentially-accessible soil from 3 to 15 feet below grade in order to characterize the risk to public health, welfare or the environment for current and foreseeable future activities and uses of the property based upon the existing Site conditions of the subsurface soils. Because existing Site conditions include residual levels of historic fill and coal tar-derived contaminants in certain soils at depths greater than 3 feet below ground surface, there is a potential for future risk if unrestricted future activities and uses of the property were to result in exposure to the contaminated soils or change in location of those soils to render them more accessible.

Activity and Use Limitations

Therefore, in order to ensure that the condition of No Significant Risk is maintained for current and foreseeable future Site activities and uses, an AUL is necessary to specify the limiting site conditions and restrictions of the Risk Characterization regarding future Site activities and uses. The stated restrictions and limitations of the Method 3 Risk Characterization have become the obligations and conditions of the AUL. The AUL restricts invasive activities in the areas of soil contamination that are located at depths greater than 3 feet below ground surface so that the soils do not become accessible for direct contact or exposure. The AUL also restricts the future residential use of the Site given the current site conditions. In addition, the AUL allows recreational activities in the playground and the surrounding field, and pedestrian and/or vehicular activities that do not disturb soils 6 inches below ground surface.

The AUL was recorded at the Middlesex County Registry of Deeds (Southern District) on May 13, 2011. A certified copy of the recorded AUL is provided in Appendix H.

11.0 RAM COMPLETION STATEMENT

All active remedial actions related to the RAM were terminated with the completion of contaminated soil removal in May 2011. The objectives of the RAM were to remediate EPH, PAH, arsenic and lead contaminated soil within the limits of the fenced playground. The RAM objectives have been completed.

FSE was retained by the USDOT Volpe Center, the current owner, to prepare the RAM Completion Report and serve as the LSP of Record for the Site. According to the RAM Plan prepared by FSE, the RAM was conducted by FSE in accordance with the requirements of 310 CMR 40.0440.

12.0 RESPONSE ACTION OUTCOME STATEMENT

Site assessment activities have been performed to characterize soil and groundwater at the Site. Based upon our investigations and research, FSE therefore, is of the professional opinion that a condition of No Significant Risk of harm to public health, public welfare, the environment, or public safety exists at the Site. FSE is also of the professional opinion that a Class A-3 Response Action Outcome Statement as defined under the MCP can be filed for this Site at this time.

The requirements of a Class A-3 Response Action Outcome have been achieved in accordance with 310 CMR 40.1036(3) as follows:

- *A permanent solution has been achieved;*
- *the level of oil and hazardous material in the environment has not been reduced to background;*
- *one or more Activity and Use Limitations has been implemented pursuant to 310 CMR 40.1012 to maintain a level of No Significant Risk; and*
- *oil or hazardous material at the disposal site do not exceed an applicable Upper Concentration Limit in Soil or Groundwater listed at 310 CMR 40.0996(7).*

The exposure point concentrations of EPH with target PAH, lead, and arsenic in soil have not been reduced to below S-1/GW-2 and S-1/GW-3 cleanup standards. The feasibility of reducing soil EPH, arsenic, and lead concentrations to background levels was evaluated using the criteria described in 310 CMR 40.0860. Although technologically feasible, the impacts and costs associated with the removal of all detectable levels of EPH, arsenic, and lead in soil would be substantial and disproportionate to the incremental benefit of risk reduction, environmental restoration and monetary and non-pecuniary values.

The relatively low levels of EPH and VPH represented in soil excavation endpoint samples present no significant environmental risk and no significant environmental benefit would be achieved by additional remedial response actions within the disposal site area.

To achieve background levels of EPH, PAHs and metals in soil at this Site would require an extensive site assessment to delineate the lateral and vertical extent of all residual PAH, lead and arsenic impacted subsurface soil. Following the assessment, a soil excavation program would likely be required under the paved parking lots, access roads, and landscaped areas. The soil excavation would require careful work around the various buried site utilities. The cost of this work is conservatively estimated at $2,000,000 dollars; this cost far exceeds 20% of the approximately $160,000 cost that was incurred to remediate the Site to the condition of no significant risk.

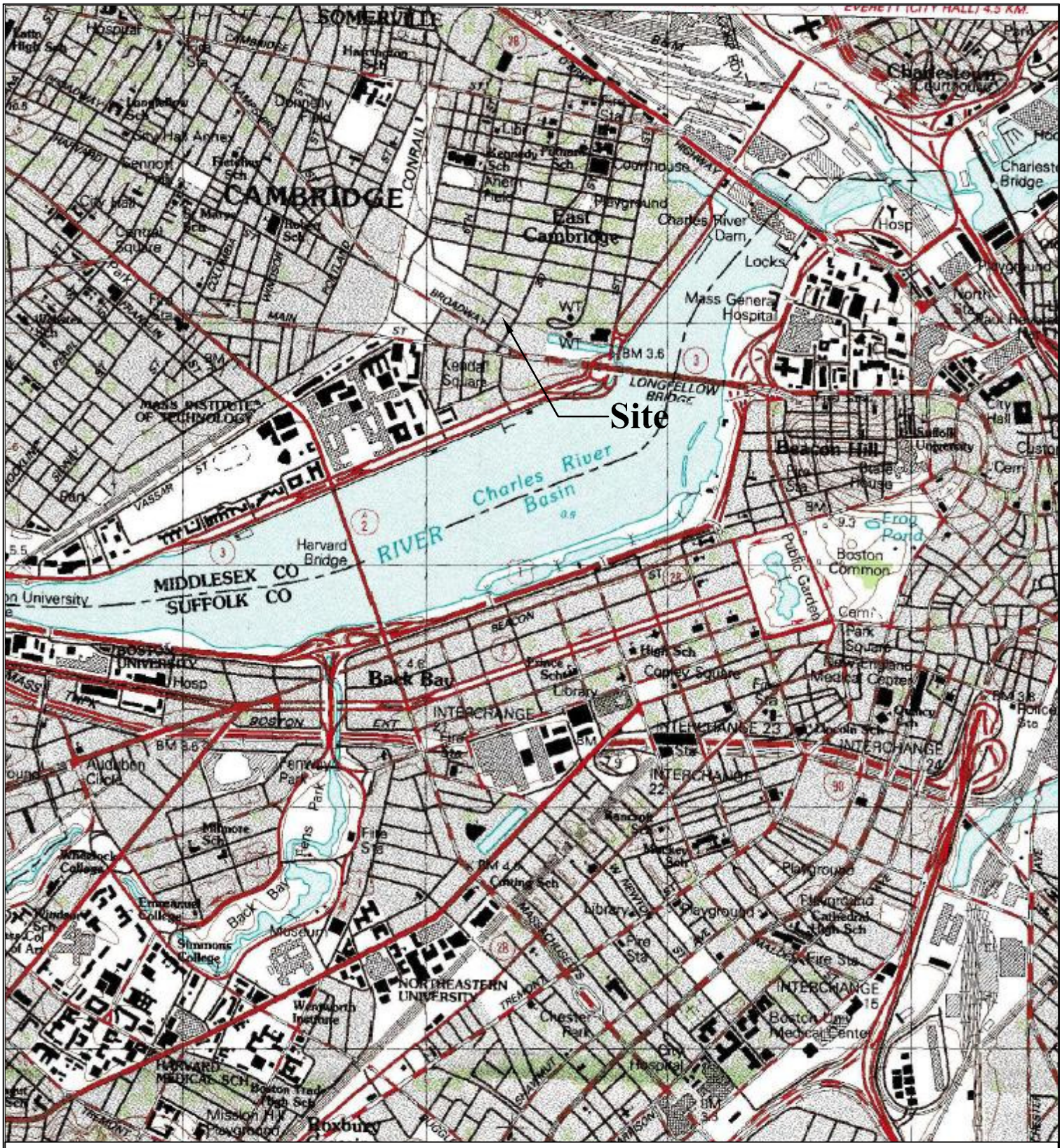
The RAO Transmittal Form (BWSC 104) is included with this report and contains the LSP certification.

13.0 LIMITATIONS

The conclusion is limited to the information available at the time of the investigation and the scope of services as defined. No other conclusions, interpretations, or recommendations are contained or implied in this report other than those expressed. Also, FSE makes no warranty, expressed or implied, on the accuracy of the work and information completed by others and upon which FSE has relied to prepare this report. No other use of this report is warranted without the written consent of FS Engineers, Inc.

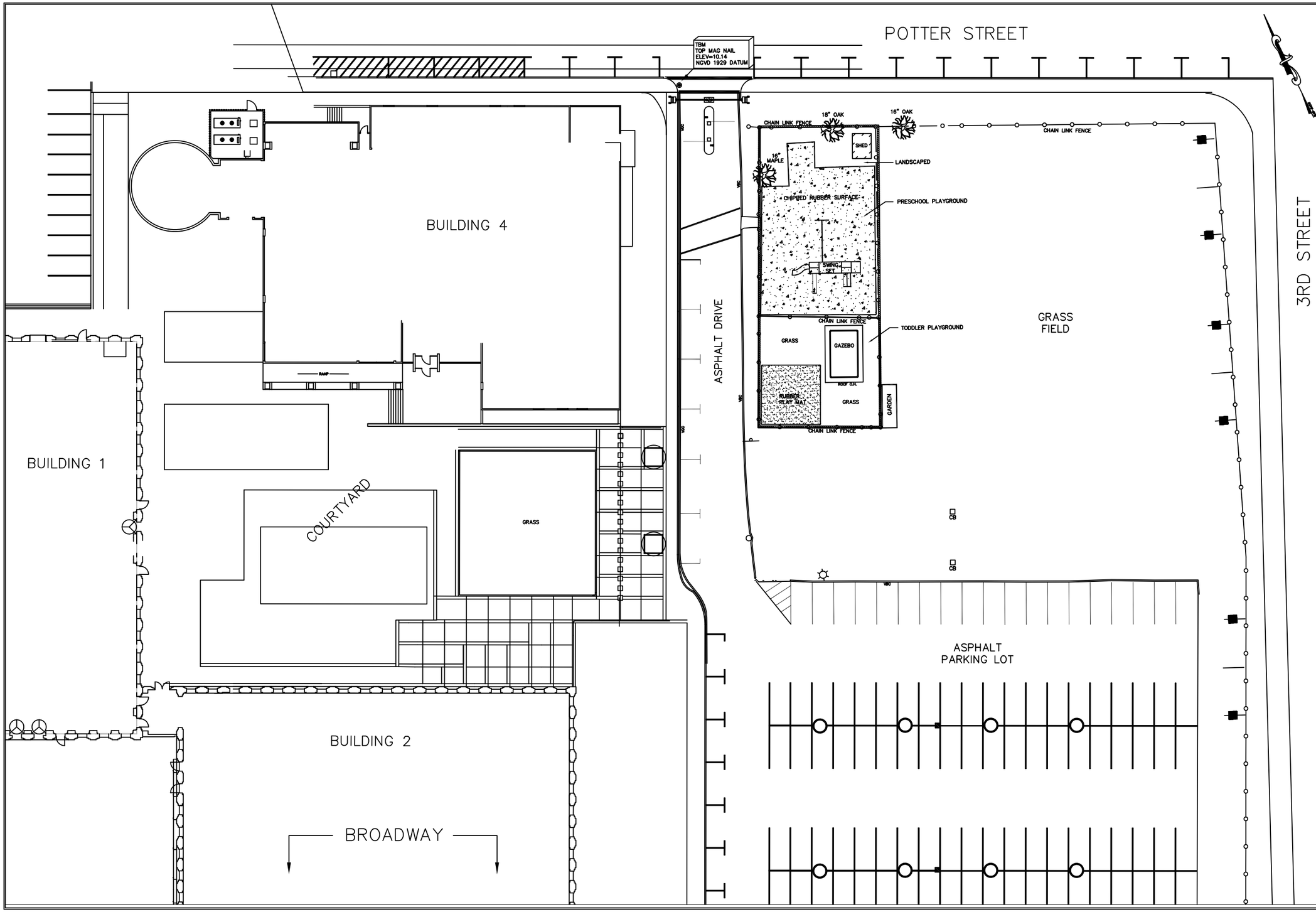
FIGURES

Figure 1. **Site Location Map**
Figure 2. **Site Layout Plan**
Figure 3. **Monitoring Well and Soil Boring Location Plan**
Figure 4. **Confirmatory Soil Sample Location Plan**
Figure 5. **Groundwater Contour Plan: 3/9/2011**
Figure 6. **Groundwater Contour Plan: 3/17/2011**
Figure 7. **RAM Excavation Plan**



SOURCE: USGS 1:25,000-scale metric topographic map: Boston South, Massachusetts (7.5 X 15 Minute Quadrangle) 1987.

SITE LOCATION MAP FIGURE 1 NOT TO SCALE	FS ENGINEERS, INC. 2 CLOCK TOWER PLACE, SUITE 630 MAYNARD, MA 01754 TEL. (978) 298 - 5956 FAX. (978) 298 - 5104	U.S. DOT VOLPE CENTER TSC CHILD CARE CENTER PLAYGROUND CAMBRIDGE, MASSACHUSETTS	NO DATE REVISION DATE: 02/07/2011 DRAWN BY: PAB



GRAPHIC SCALE: 1 INCH = 40 FEET

BASE MAP SOURCE:
GLM ENGINEERING
CONSULTANTS, INC.
"EXISTING CONDITIONS"
PLAN DATED JULY 10, 2007

NO	DATE	REVISION

DATE: 06/15/2011
DRAWN BY: PAB

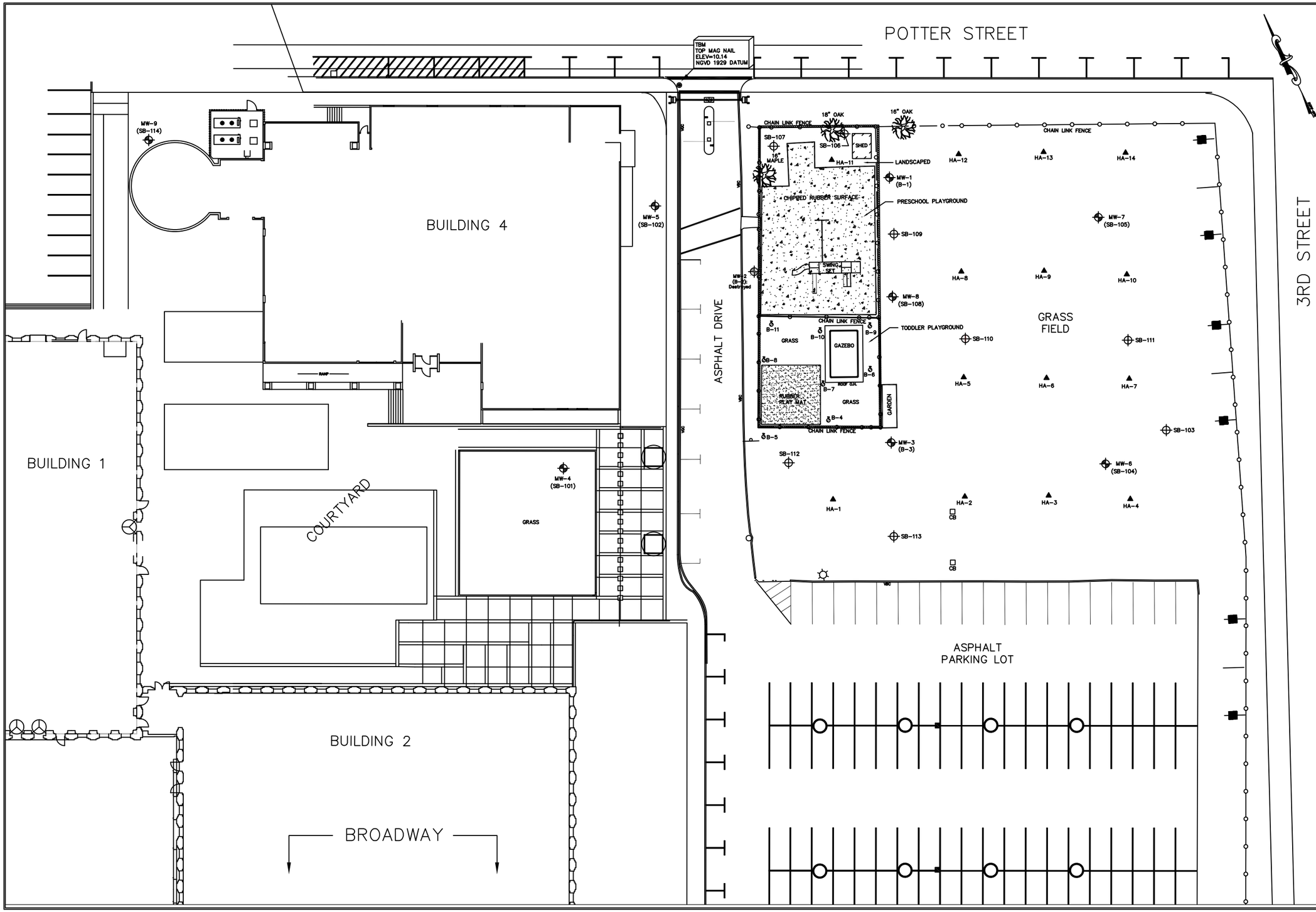
U.S.DOT / VOLPE CENTER
TSC CHILD CARE CENTER PLAYGROUND
55 BROADWAY
CAMBRIDGE, MASSACHUSETTS

FS ENGINEERS, INC.
2 CLOCK TOWER PLACE, SUITE 630
MAYNARD, MA 01754
TEL. (978) 298 - 5956
FAX. (978) 298 - 5104

SITE LAYOUT PLAN

FIGURE 2

SCALE: 1" = 40' (11" X 17")


POTTER STREET
TBM
TOP MAG NAIL
ELEV=10.14
NGVD 1929 DATUM
BUILDING 4
BUILDING 1
COURTYARD
BUILDING 2
BROADWAY
ASPHALT DRIVE
ASPHALT
PARKING LOT
GRASS
FIELD
3RD STREET
CHAIN LINK FENCE
CHIPPED RUBBER SURFACE
PRESCHOOL PLAYGROUND
TODDLER PLAYGROUND
LANDSCAPED
SWING SET
GAZEBO
RUBBER PLAY MAT
GARDEN
SHED
18" OAK
16" OAK
16" MAPLE
MW-9 (SB-114)
MW-5 (SB-102)
MW-2 (B-2) Destroyed
MW-1 (B-1)
MW-8 (SB-108)
MW-3 (B-3)
MW-4 (SB-101)
MW-7 (SB-105)
MW-6 (SB-104)
SB-107
SB-106
SB-109
SB-110
SB-111
SB-103
SB-112
SB-113
HA-1
HA-2
HA-3
HA-4
HA-5
HA-6
HA-7
HA-8
HA-9
HA-10
HA-11
HA-12
HA-13
HA-14
B-4
B-5
B-6
B-7
B-8
B-9
B-10
B-11
GRAPHIC SCALE: 1 INCH = 40 FEET
BASE MAP SOURCE:
GLM ENGINEERING
CONSULTANTS, INC.
"EXISTING CONDITIONS"
PLAN DATED JULY 10, 2007
DESTROYED GROUNDWATER MONITORING WELL
SOIL BORING COLLECTED MARCH 2011
GROUNDWATER MONITORING WELL
SOIL BORING COLLECTED MAY 2007
SURFACIAL SOIL SAMPLE COLLECTED APRIL 2008
LEGEND
NO. DATE REVISION
DATE: 06/15/2011
DRAWN BY: PAB
U.S.DOT / VOLPE CENTER
TSC CHILD CARE CENTER PLAYGROUND
55 BROADWAY
CAMBRIDGE, MASSACHUSETTS
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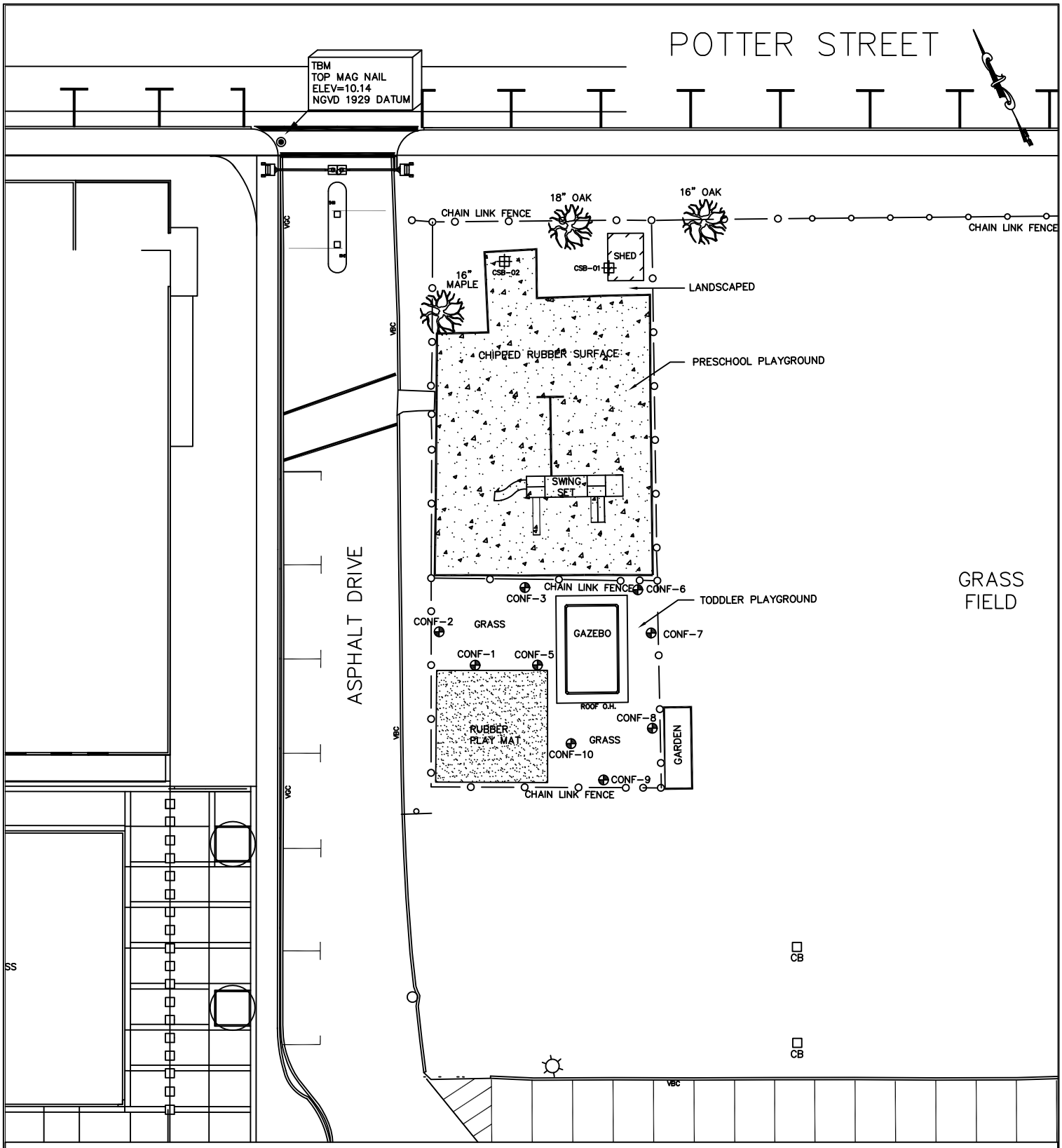
MAYNARD, MA 01754
TEL. (978) 298 - 5956
FAX. (978) 298 - 5104
MONITORING WELL & SOIL BORING LOCATION PLAN
FIGURE 3
SCALE: 1" = 40' (11" X 17")



LEGEND

CONF-1 CONFIRMATORY SAMPLE COLLECTED OCTOBER 2008

CSB-01 CONFIRMATORY SAMPLE COLLECTED APRIL 2011

BASE MAP SOURCE:
GLM ENGINEERING
CONSULTANTS, INC.
"EXISTING CONDITIONS"
PLAN DATED JULY 10, 2007

30 20 10 0 15 30 60

GRAPHIC SCALE: 1 INCH = 30 FEET

CONFIRMATORY SOIL SAMPLE LOCATION PLAN

FIGURE 4

SCALE: 1" = 30' (8.5" X 11")

FS ENGINEERS, INC.
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CAMBRIDGE, MASSACHUSETTS

NO	DATE	REVISION

DATE: 05/02/2011

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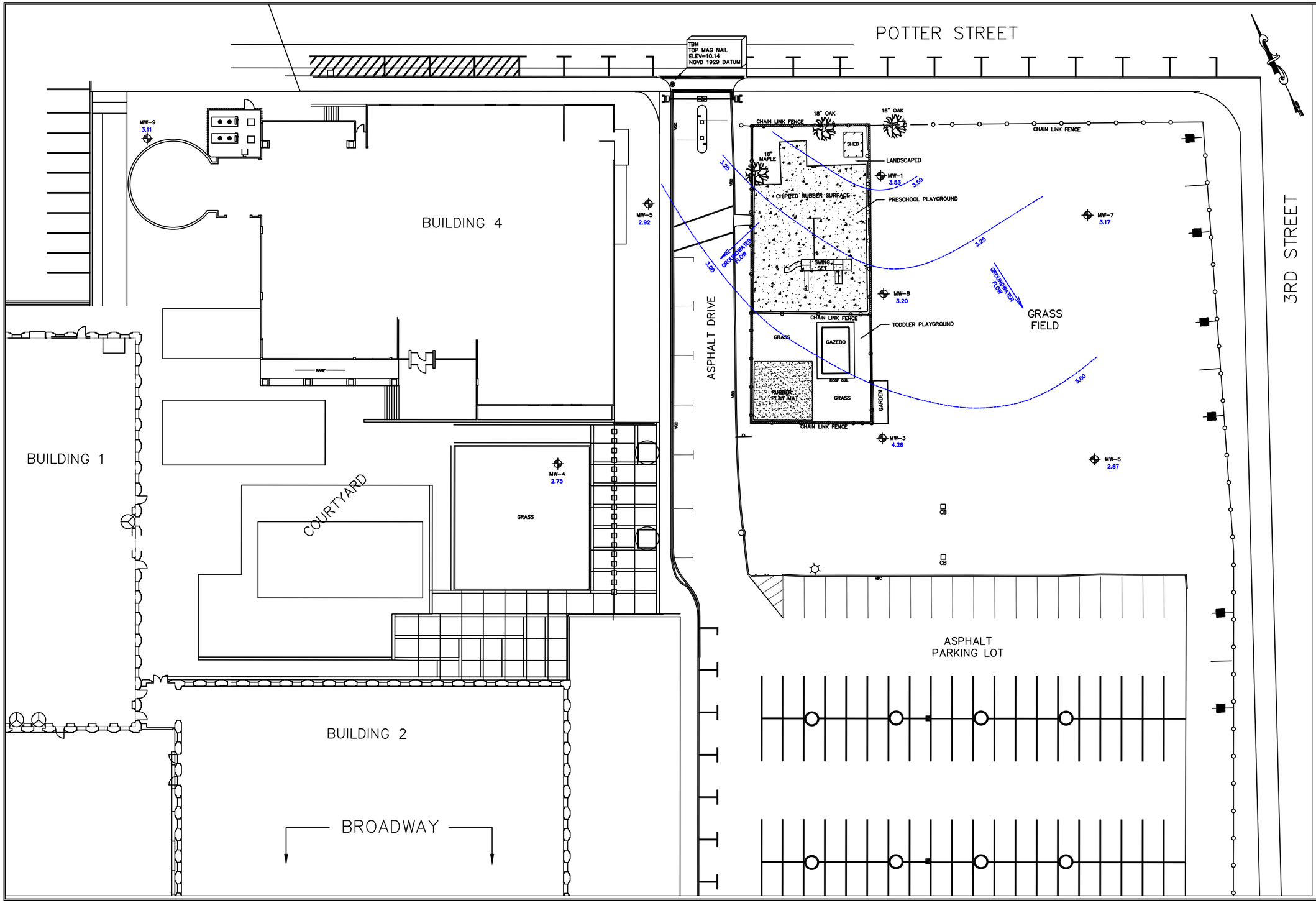
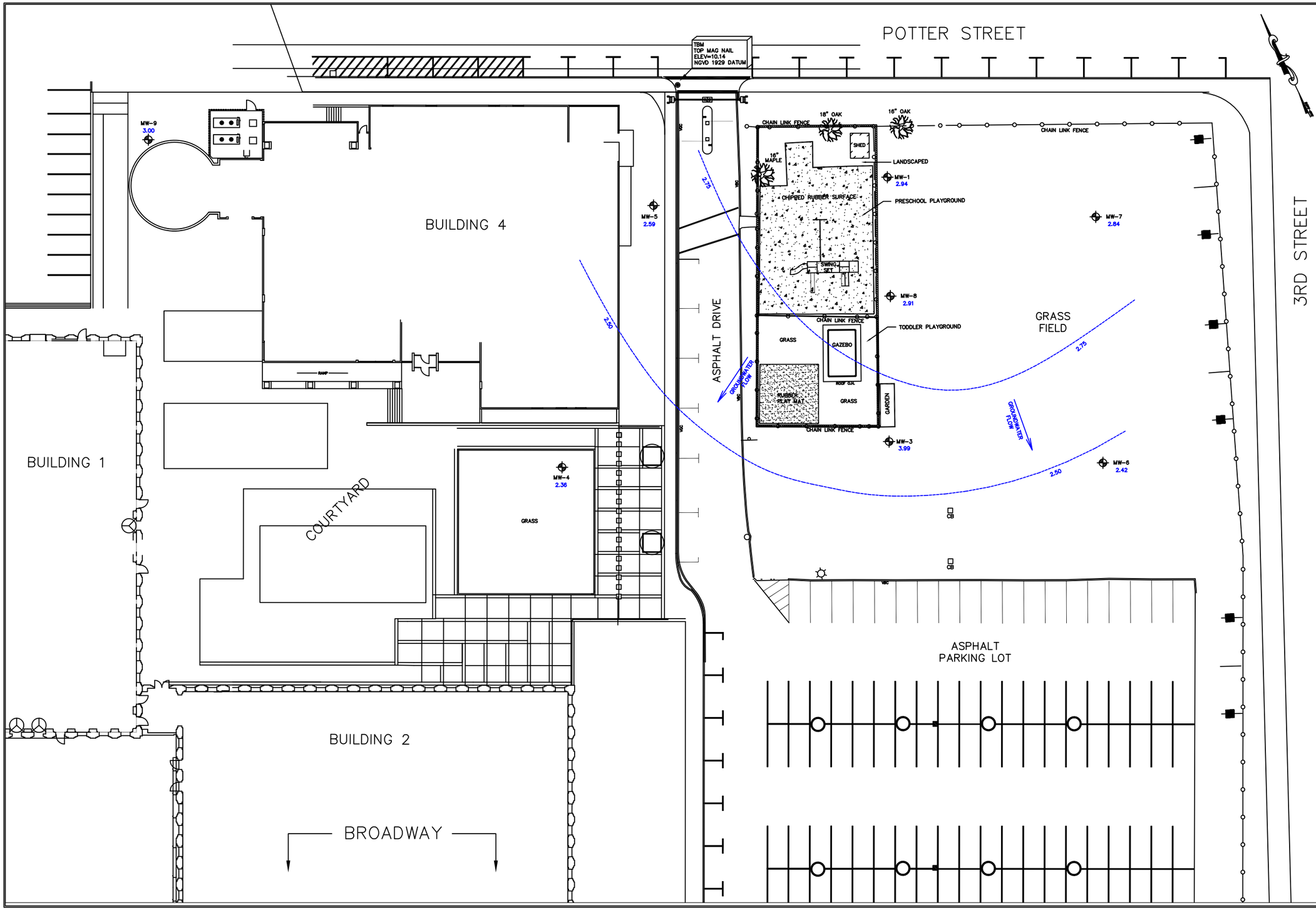

POTTER STREET
TBM
TOP MAG NAIL
ELEV=10.14
NGVD 1929 DATUM
BUILDING 4
BUILDING 1
BUILDING 2
COURTYARD
RAMP
GRASS
ASPHALT DRIVE
ASPHALT
PARKING LOT
BROADWAY
3RD STREET
GRASS
FIELD
CHAIN LINK FENCE
18" OAK
16" OAK
16" MAPLE
SHED
LANDSCAPED
CHIPPED RUBBER SURFACE
PRESCHOOL PLAYGROUND
SWING SET
TODDLER PLAYGROUND
GAZEBO
ROOF O.H.
RUBBER PLAY MAT
GARDEN
GROUNDWATER FLOW
MW-1
3.53
MW-3
4.26
MW-4
2.75
MW-5
2.92
MW-6
2.87
MW-7
3.17
MW-8
3.20
MW-9
3.11
3.25
3.50
3.00
LEGEND
MW-1
3.53
MONITORING WELL WITH GROUNDWATER ELEVATION MEASURED 03/09/2011
3.50
GROUNDWATER CONTOUR LINE
NOTE: MW-3 & MW-9 NOT USED FOR GROUNDWATER CONTOURING
BASE MAP SOURCE:
GLM ENGINEERING CONSULTANTS, INC.
"EXISTING CONDITIONS"
PLAN DATED JULY 10, 2007
GRAPHIC SCALE: 1 INCH = 40 FEET
80
40
20
0
10
20
30
40
NO. DATE REVISION
DATE: 04/15/2011
DRAWN BY: PAB
U.S.DOT / VOLPE CENTER
TSC CHILD CARE CENTER PLAYGROUND
55 BROADWAY
CAMBRIDGE, MASSACHUSETTS
FS ENGINEERS, INC.
2 CLOCK TOWER PLACE, SUITE 630
MAYNARD, MA 01754
TEL. (978) 298 - 5956
FAX. (978) 298 - 5104
GROUNDWATER
CONTOUR PLAN: 3/9/2011
FIGURE 5
SCALE: 1" = 40' (11" X 17")



GRAPHIC SCALE: 1 INCH = 40 FEET

BASE MAP SOURCE:
GLM ENGINEERING
CONSULTANTS, INC.
"EXISTING CONDITIONS"
PLAN DATED JULY 10, 2007

LEGEND

MW-1 2.94 MONITORING WELL WITH GROUNDWATER ELEVATION MEASURED 03/17/2011

2.75 GROUNDWATER CONTOUR LINE

NOTE: MW-3 & MW-9 NOT USED FOR GROUNDWATER CONTOURING

No.	DATE	REVISION

DATE: 06/15/2011
DRAWN BY: PAB

U.S.DOT / VOLPE CENTER
TSC CHILD CARE CENTER PLAYGROUND
55 BROADWAY
CAMBRIDGE, MASSACHUSETTS

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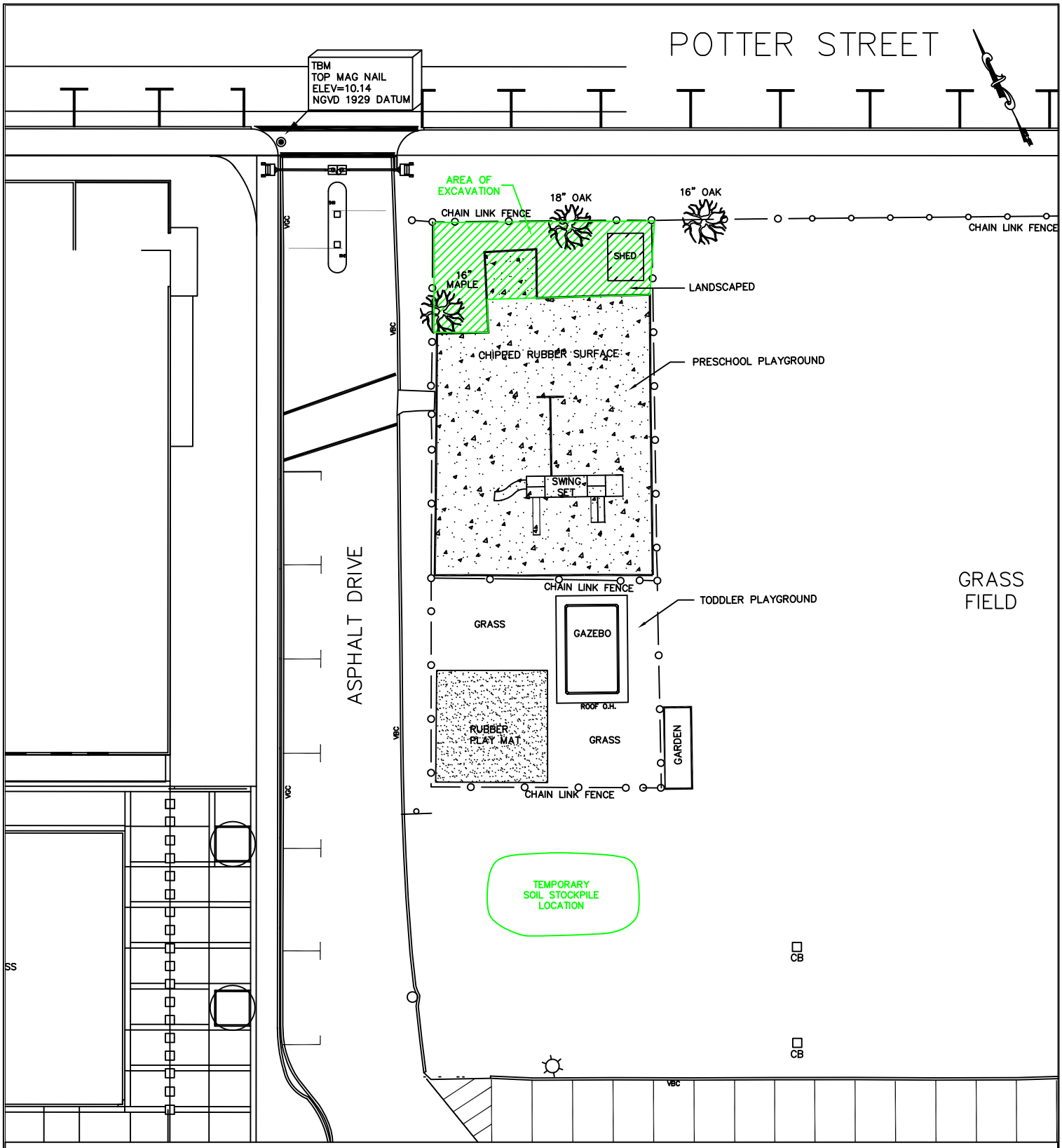
FAX. (978) 298 - 5104

GROUNDWATER CONTOUR PLAN: 3/17/2011

FIGURE 6

SCALE: 1" = 40' (11" X 17")



BASE MAP SOURCE:
GLM ENGINEERING
CONSULTANTS, INC.
"EXISTING CONDITIONS"
PLAN DATED JULY 10, 2007

30 20 10 0 15 30 60

GRAPHIC SCALE: 1 INCH = 30 FEET

RAM EXCAVATION PLAN FIGURE 7 SCALE: 1" = 30' (8.5" X 11")	FS ENGINEERS, INC. 2 CLOCK TOWER PLACE, SUITE 630 MAYNARD, MA 01754 TEL. (978) 298 - 5956 FAX. (978) 298 - 5104	U.S.DOT / VOLPE CENTER TSC CHILD CARE CENTER PLAYGROUND 55 BROADWAY CAMBRIDGE, MASSACHUSETTS	NO DATE REVISION DATE: 05/02/2011 DRAWN BY: PAB

TABLES

Table 1. **Soil Analytical Results – May 2007**
Table 2. **Groundwater Analytical Results – June 2007**
Table 3. **Surficial Soil Analytical Results – April 2008**
Table 4. **Soil Analytical Results – October 2008**
Table 5. **Soil Analytical Results – March 2011**
Table 6. **Groundwater Elevation Data – March 2011**
Table 7. **Groundwater Analytical Results – March 2011**
Table 8. **Soil Analytical Results – April 2011**
Table 9. **Shallow Soil Analytical – In Situ Soil 0 - 3 Feet**

TABLE 1
SOIL ANALYTICAL RESULTS - MAY 2007
TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D. (-053107):	B-01-2	B-01-7	B-02-2	B-02-7	B-03-2	B-03-7	B-04-2	B-04-7	B-05-2	B-05-7	B-06-2	MCP Method 1
Soil Sample Depth (ft.):	1 - 3	6 - 8	1 - 3	6 - 8	1 - 3	6 - 8	1 - 3	6 - 8	1 - 3	6 - 8	1 - 3	Cleanup Standards S-1/GW-2
Extractable Petroleum Hydrocarbons (mg/kg)												
	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	1,000
C9 - C18 Aliphatics	BRL	BRL	800	BRL	42.6	BRL	BRL	BRL	252	BRL	BRL	3,000
C19 - C36 Aliphatics	68.0	72.0	913	81.2	161	80.2	130	BRL	571	61.5	84.3	1,000
C11 - C22 Aromatics												
EPH Target PAH Analytes (mg/kg)												
Naphthalene	BRL	BRL	1.80	BRL	0.343	BRL	0.434	BRL	BRL	0.224	BRL	40
2-Methylnaphthalene	BRL	BRL	BRL	BRL	BRL	BRL	0.246	BRL	BRL	BRL	BRL	80
Acenaphthylene	BRL	BRL	BRL	BRL	0.201	BRL	BRL	BRL	BRL	BRL	BRL	600
Acenaphthene	BRL	BRL	0.966	BRL	1.39	BRL	0.347	BRL	2.16	0.251	0.238	1,000
Fluorene	BRL	BRL	1.09	BRL	1.85	BRL	0.418	BRL	3.52	0.242	0.360	1,000
Phenanthrene	0.878	1.57	15.6	0.684	15.1	0.591	5.15	BRL	36.0	1.65	3.06	500
Anthracene	0.398	0.478	4.18	0.345	3.52	0.332	1.57	BRL	12.6	0.591	0.885	1,000
Fluoranthene	1.96	2.82	18.4	1.18	15.6	1.11	7.41	0.282	43.0	2.11	3.71	1,000
Pyrene	1.84	2.57	19.9	1.03	13.5	1.01	6.61	0.280	36.4	1.91	3.28	1,000
Benzo (a) anthracene	0.444	1.09	**7.30**	0.349	6.70	0.443	3.39	BRL	**16.4**	0.871	1.42	7
Chrysene	1.19	1.67	10.9	0.556	7.04	0.642	3.79	BRL	20.2	0.963	1.83	70
Benzo (b) fluoranthene	0.380	0.713	6.13	0.302	3.79	0.342	2.67	BRL	**13.1**	0.552	0.901	7
Benzo (k) fluoranthene	0.498	0.934	6.38	0.207	5.80	0.342	2.90	BRL	14.7	0.734	1.25	70
Benzo (a) pyrene	0.680	1.15	**8.64**	0.359	**5.76**	0.466	**3.53**	BRL	**17.6**	0.785	1.30	2
Indeno (1,2,3-cd) pyrene	0.224	0.523	4.26	BRL	2.52	BRL	1.96	BRL	**10.2**	0.358	0.723	7
Dibenzo (a,h) anthracene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.7
Benzo (g,h,i) perylene	0.282	0.658	5.85	BRL	3.29	BRL	2.27	BRL	11.4	0.367	0.629	1,000
Volatile Petroleum Hydrocarbons (mg/kg)												
	BRL	NA	1.51	NA	0.983	NA	NA	NA	NA	NA	NA	100
C5 - C8 Aliphatics	BRL	NA	BRL	NA	BRL	NA	NA	NA	NA	NA	NA	1,000
C9 - C12 Aliphatics	0.509	NA	0.332	NA	0.427	NA	NA	NA	NA	NA	NA	100
C9 - C10 Aromatics												
VPH Target Analytes (mg/kg)												
	BRL	NA	0.188	NA	BRL	NA	NA	NA	NA	NA	NA	30
Benzene	0.097	NA	1.44	NA	0.078	NA	NA	NA	NA	NA	NA	40
Naphthalene	BRL	NA	0.143	NA	BRL	NA	NA	NA	NA	NA	NA	500
Toluene	BRL	NA	0.174	NA	BRL	NA	NA	NA	NA	NA	NA	300
m,p-Xylene												
Total Metals (mg/kg)												
Arsenic	**25.7**	NA	**31.4**	NA	NA	NA	NA	NA	17.8	NA	NA	20
Lead	**933**	NA	131	NA	NA	NA	NA	NA	**358**	NA	NA	300

mg/kg - milligram per kilogram (ppm)
BRL - Below Reporting Limit
NA - Not Analyzed
Bold/Red = Exceeds Method 1 S-1/GW-2 Cleanup Standard (ppm)

TABLE 1
SOIL ANALYTICAL RESULTS - MAY 2007
TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D. (-053107):	B-06-7	B-07-2	B-07-7	B-08-2	B-08-7	B-09-2	B-09-7	B-10-2	B-10-7	B-11-2	B-11-7	MCP Method 1
Soil Sample Depth (ft.):	6 - 8	1 - 3	6 - 8	1 - 3	6 - 8	1 - 3	6 - 8	1 - 3	6 - 8	1 - 3	6 - 8	Cleanup Standards S-1/GW-2
Extractable Petroleum Hydrocarbons (mg/kg)												
	BRL	BRL	832	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	1,000
C9 - C18 Aliphatics	BRL	64.3	2,870	BRL	BRL	BRL	BRL	**13,200**	2,600	BRL	BRL	3,000
C19 - C36 Aliphatics	105	268	**2,270**	80.9	83.1	71.3	259	**56,200**	**28,500**	310	79.9	1,000
C11 - C22 Aromatics												
EPH Target PAH Analytes (mg/kg)												
Naphthalene	BRL	0.549	BRL	BRL	BRL	BRL	1.84	**3,370**	**2,900**	6.52	BRL	40
2-Methylnaphthalene	BRL	0.572	BRL	BRL	BRL	BRL	2.17	**1,330**	**1,180**	3.78	BRL	80
Acenaphthylene	BRL	BRL	BRL	BRL	BRL	BRL	0.261	BRL	BRL	BRL	BRL	600
Acenaphthene	BRL	1.74	BRL	BRL	BRL	BRL	3.27	**1,010**	699	3.54	BRL	1,000
Fluorene	BRL	1.98	BRL	BRL	BRL	BRL	5.14	**1,870**	**1,270**	7.24	BRL	1,000
Phenanthrene	0.261	19.9	10.7	0.569	BRL	0.731	37.6	**7,980**	**4,800**	50.0	0.708	500
Anthracene	BRL	4.69	2.91	BRL	BRL	0.332	13.2	**2,720**	**1,940**	17.8	0.288	1,000
Fluoranthene	0.763	19.6	9.49	1.06	BRL	1.28	35.8	**5,690**	**3,230**	42.7	1.96	1,000
Pyrene	0.821	19.2	10.1	1.03	BRL	1.26	29.2	**4,640**	**2,580**	34.7	1.91	1,000
Benzo (a) anthracene	0.457	**9.32**	6.72	0.626	BRL	0.913	**15.5**	**2,190**	**1,160**	**18.8**	1.02	7
Chrysene	0.647	**10.4**	**9.90**	0.828	BRL	0.943	**14.6**	**1,930**	**1,090**	**16.7**	1.15	70
Benzo (b) fluoranthene	0.414	**6.22**	**3.22**	0.581	BRL	0.611	**9.39**	**1,280**	**696**	**10.8**	0.677	7
Benzo (k) fluoranthene	0.496	6.69	BRL	0.516	BRL	0.743	10.0	**1,350**	**709**	9.71	1.01	70
Benzo (a) pyrene	0.491	**8.18**	**2.49**	0.764	BRL	0.786	**12.1**	**1,790**	**962**	**12.9**	1.15	2
Indeno (1,2,3-cd) pyrene	0.332	4.02	BRL	0.359	BRL	0.300	**6.03**	**900**	**478**	6.41	0.463	7
Dibenzo (a,h) anthracene	BRL	BRL	BRL	BRL	BRL	BRL	**0.727**	**136**	**79.7**	**0.865**	BRL	0.7
Benzo (g,h,i) perylene	0.237	5.15	BRL	0.422	BRL	0.343	5.92	967	494	6.58	0.559	1,000
Volatile Petroleum Hydrocarbons (mg/kg)												
	NA	1.42	NA	NA	NA	NA	NA	NA	NA	NA	NA	100
C5 - C8 Aliphatics	NA	1.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,000
C9 - C12 Aliphatics	NA	1.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	100
C9 - C10 Aromatics												
VPH Target Analytes (mg/kg)												
	NA	0.246	NA	NA	NA	NA	NA	NA	NA	NA	NA	300
m,p-Xylene	NA	0.098	NA	NA	NA	NA	NA	NA	NA	NA	NA	300
o-Xylene												
Total Metals (mg/kg)												
Arsenic	NA	**35.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	20
Lead	NA	**2,900**	NA	NA	NA	NA	NA	NA	NA	NA	NA	300

mg/kg - milligram per kilogram (ppm)
BRL - Below Reportin Limit

NA - Not Analyzed
Bold/Red = Exceeds Method 1 S-1/GW-2 Cleanup Standard

TABLE 2
GROUNDWATER ANALYTICAL RESULTS - JUNE 2007
TSC CHILD CARE CENTER PLAYGROUND

Monitoring Well I.D.: **Well Screen Interval (ft.):**	**MW-1** **2 - 12**	**MW-2** **2 - 12**	**MW-3** **2 - 12**	**MCP Method 1 Groundwater Standards**	
				GW-2	**GW-3**
Extractable Petroleum Hydrocarbons (ug/l)					
	BRL	BRL	BRL	5,000	50,000
C9 - C18 Aliphatics	BRL	BRL	BRL	NA	50,000
C19 - C36 Aliphatics	BRL	BRL	BRL	50,000	5,000
C11 - C22 Aromatics					
EPH Target PAH Analytes (ug/l)					
	BRL	BRL	BRL	1,000	20,000
Naphthalene	BRL	BRL	BRL	2,000	20,000
2-Methylnaphthalene	10.4	BRL	1.24	NA	6,000
Acenaphthene	BRL	BRL	BRL	NA	40
Fluorene	BRL	BRL	BRL	NA	10,000
Phenanthrene	BRL	BRL	BRL	NA	30
Anthracene	BRL	BRL	BRL	NA	20
Pyrene					

ug/l - microgram per liter (ppb)
BRL - Below Reporting Limit
NA - Not Applicable
Bold/Red - Exceeds Method 1 GW-2/GW-3 Cleanup Standard

TABLE 3
SOIL ANALYTICAL RESULTS - APRIL 2008
TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D.:	HA-1-043008	HA-2-043008	HA-3-043008	HA-4-043008	HA-5-043008	HA-6-043008	HA-7-043008	HA-8-043008	MCP Method 1
Soil Sample Depth (in.):	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	Cleanup Standards S-1/GW-2
Extractable Petroleum Hydrocarbons (mg/kg)									
	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	1,000
C9 - C18 Aliphatics	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	3,000
C19 - C36 Aliphatics	56.7	65.2	66.6	61.3	60.3	57.9	55.1	51.1	1,000
C11 - C22 Aromatics									
EPH Target PAH Analytes (mg/kg)									
Naphthalene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	40
2-Methylnaphthalene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	80
Acenaphthylene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	600
Acenaphthene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	1,000
Fluorene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	1,000
Phenanthrene	2.31	1.74	1.44	1.54	1.26	1.38	0.925	0.695	500
Anthracene	0.682	0.562	0.473	0.448	0.404	0.468	0.349	0.300	1,000
Fluoranthene	4.42	3.80	3.90	3.43	2.54	2.39	1.82	1.48	1,000
Pyrene	3.75	3.47	3.41	3.23	2.21	2.22	1.61	1.37	1,000
Benzo (a) anthracene	1.67	1.79	1.99	1.69	1.06	1.21	0.785	0.652	7
Chrysene	1.92	1.92	2.24	1.97	1.22	1.23	1.00	0.768	70
Benzo (b) fluoranthene	1.50	2.82	2.63	2.44	0.831	0.914	0.660	0.466	7
Benzo (k) fluoranthene	1.78	0.880	1.78	1.59	1.10	1.18	0.916	0.553	70
Benzo (a) pyrene	1.84	1.96	**2.17**	**2.00**	1.14	1.26	0.941	0.720	2
Indeno (1,2,3-cd) pyrene	1.06	1.17	1.42	1.34	0.655	0.743	0.566	0.389	7
Dibenzo (a,h) anthracene	BRL	0.197	0.205	BRL	BRL	BRL	BRL	BRL	0.7
Benzo (g,h,i) perylene	1.23	1.38	1.68	1.62	0.727	0.858	0.624	0.442	1,000
Total Metals (mg/kg)									
Arsenic	13.1	6.37	5.72	6.80	7.29	6.93	6.43	9.85	20
Lead	73.6	148	113	104	240	189	157	229	300
Cyanide	BRL	NA	NA	NA	NA	BRL	NA	BRL	100

mg/kg - milligram per kilogram (ppm)
BRL - Below Reporting Limit
NA - Not Analyzed
Bold/Red = Exceeds Method 1 S-1/GW-2 Cleanup Standard

TABLE 3
SOIL ANALYTICAL RESULTS - APRIL 2008
TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D.: Soil Sample Depth (in.):	HA-9-043008 3-4	HA-10-043008 3-4	FD-043008 3-4	HA-11-043008 3-4	HA-12-043008 3-4	HA-13-043008 3-4	HA-14-043008 3-4	MCP Method 1 Cleanup Standards S-1/GW-2
Extractable Petroleum Hydrocarbons (mg/kg)								
	BRL	BRL	BRL	BRL	BRL	BRL	BRL	1,000
C9 - C18 Aliphatics	BRL	BRL	BRL	BRL	BRL	BRL	BRL	3,000
C19 - C36 Aliphatics	72.9	50.0	51.4	BRL	53.1	43.1	46.9	1,000
C11 - C22 Aromatics								
EPH Target PAH Analytes (mg/kg)								
Naphthalene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	40
2-Methylnaphthalene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	80
Acenaphthylene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	600
Acenaphthene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	1,000
Fluorene	BRL	BRL	0.186	BRL	BRL	BRL	BRL	1,000
Phenanthrene	2.06	0.358	1.61	0.240	1.21	0.465	0.303	500
Anthracene	0.655	BRL	0.668	BRL	0.381	0.223	BRL	1,000
Fluoranthene	2.97	0.894	1.85	0.398	2.66	1.38	0.929	1,000
Pyrene	2.53	0.764	1.55	0.348	2.60	1.22	0.810	1,000
Benzo (a) anthracene	1.30	0.310	0.691	0.162	1.39	0.521	0.378	7
Chrysene	1.32	0.452	0.785	0.183	1.39	0.670	0.493	70
Benzo (b) fluoranthene	0.960	0.211	0.360	BRL	1.10	0.852	0.258	7
Benzo (k) fluoranthene	1.01	0.438	0.615	0.178	1.30	0.302	0.499	70
Benzo (a) pyrene	1.18	0.376	0.615	0.159	1.44	0.623	0.438	2
Indeno (1,2,3-cd) pyrene	0.607	0.211	0.312	BRL	0.835	0.363	0.254	7
Dibenzo (a,h) anthracene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.7
Benzo (g,h,i) perylene	0.637	0.233	0.318	BRL	0.966	0.379	0.279	1,000
Total Metals (mg/kg)								
Arsenic	7.38	5.06	4.60	2.82	8.99	10.2	10.7	20
Lead	195	138	112	11.0	142	68.6	109	300
Cyanide	NA	NA	NA	BRL	NA	NA	BRL	100

mg/kg - milligram per kilogram (ppm)
BRL - Below Reporting Limit
NA - Not Analyzed
Bold/Red = Exceeds Method 1 S-1/GW-2 Cleanup Standard

TABLE 4
SOIL ANALYTICAL RESULTS - OCTOBER 2008
TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D.:	CONF-1	CONF-2	CONF-3	CONF-5	CONF-6	CONF-7	CONF-8	CONF-9	CONF-10	CONF-10	MCP Method 1 Cleanup Standards	
Soil Sample Depth (ft):	4	4	4	4	4	4	4	4	4	4	S-1/GW-2	S-1/GW-3
Extractable Petroleum Hydrocarbons (mg/kg)												
C9-C18 Aliphatic	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	1,000	1,000
C19-C36 Aliphatic	BRL	BRL	BRL	BRL	BRL	BRL	BRL	38.9	51.9	45.5	3,000	3,000
C11-C22 Aromatic	47.1	54.0	49.2	BRL	51.8	67.1	81.5	146	192	423	1,000	1,000
EPH Target PAH Analytes (mg/kg)												
Naphthalene	BRL	BRL	BRL	BRL	0.332	BRL	0.147	BRL	0.653	3.67	40	500
2-Methylnaphthalene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	0.489	1.96	80	300
Acenaphthylene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	600	10
Acenaphthene	BRL	BRL	BRL	BRL	0.470	0.191	0.182	BRL	1.31	5.48	1,000	1,000
Fluorene	BRL	BRL	BRL	BRL	0.704	0.165	0.150	BRL	1.39	5.50	1,000	1,000
Phenanthrene	0.931	2.67	2.02	BRL	7.34	2.91	2.65	1.34	13.2	48.7	500	500
Anthracene	0.364	0.696	0.546	BRL	2.14	0.766	0.632	0.330	3.80	12.0	1,000	1,000
Fluoranthene	2.49	4.74	2.66	0.205	8.59	4.47	3.67	1.96	13.3	40.9	1,000	1,000
Pyrene	2.26	4.24	2.24	BRL	7.16	3.89	3.25	1.63	11.4	35.4	1,000	1,000
Benzo (a) anthracene	1.35	2.94	1.19	BRL	4.42	2.42	1.63	0.679	6.35	**18.1**	7	7
Chrysene	1.44	2.70	1.22	BRL	3.71	2.06	1.76	1.11	5.19	14.9	70	70
Benzo (b) fluoranthene	1.76	2.12	1.82	BRL	4.21	2.43	2.77	1.07	4.61	**20.8**	7	7
Benzo (k) fluoranthene	0.744	1.29	0.641	BRL	2.06	1.22	1.13	0.993	3.82	13.1	70	70
Benzo (a) pyrene	1.16	1.99	0.940	BRL	**3.14**	1.74	1.75	0.816	**5.78**	**17.6**	2	2
Indeo (1,2,3-cd) pyrene	0.555	0.865	0.509	BRL	1.71	0.984	1.19	0.810	3.52	**10.7**	7	7
Dibenzo (a,h) anthracene	BRL	BRL	BRL	BRL	BRL	BRL	0.231	BRL	**0.85**	**2.43**	0.7	0.7
Benzo (g,h,i) perylene	0.505	0.625	0.52	BRL	1.32	0.921	1.20	0.782	3.34	10.1	1,000	1,000
Total Metals (mg/kg)												
Arsenic	NA	6.33	NA	NA	NA	NA	NA	19	NA	NA	20	20
Lead	NA	**480**	NA	NA	NA	NA	NA	**313**	NA	NA	300	300

mg/kg - milligram per kilogram (ppm)
BRL - Below Reporting Limit
Bold/Red - Exceeds Method 1 S-1/GW-2 Cleanup Standard
NA - Not Analyzed

TABLE 5
ALL SOIL ANALYTICAL RESULTS - MARCH 2011
TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D.:	SB-101	SB-101	SB-102	SB-102	SB-103	SB-104	SB-104	Method 1	Method 1
Sample Date:	3/2/2011	3/2/2011	3/2/2011	3/2/2011	3/2/2011	3/2/2011	3/2/2011	S-1/GW-2	S-1/GW-3
Sample Depth:	0-3'	3-8'	0-3'	4-7'	0-3'	0-3'	3-8'	mg/kg (ppm)	mg/kg (ppm)
Extractable Petroleum Hydrocarbons (mg/kg) [1]									
C9-C18 Aliphatics	BDL	BDL	BDL	356	BDL	BDL	BDL	*1,000*	*1,000*
C19-C36 Aliphatics	BDL	BDL	23.5	571	BDL	BDL	75.4	*3,000*	*3,000*
C11-C22 Aromatics	24.2	24.8	138	443	44.3	43.7	100	*1,000*	*1,000*
Acenaphthene	BDL	BDL	2.06	3.09	BDL	BDL	BDL	*1,000*	*1,000*
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*600*	*10*
Anthracene	BDL	0.380	8.91	7.67	BDL	0.415	0.583	*1,000*	*1,000*
Benzo (a) anthracene	0.896	0.880	**9.28**	**8.55**	0.926	1.46	1.51	*7*	*7*
Benzo (a) pyrene	0.827	0.921	**8.25**	**7.39**	0.945	1.60	1.54	*2*	*2*
Benzo (b) fluoranthene	0.624	0.551	5.92	5.47	0.701	1.34	1.19	*7*	*7*
Benzo (g,h,i) perylene	0.429	0.507	4.02	3.37	0.620	1.10	1.02	*1,000*	*1,000*
Benzo (k) fluoranthene	0.720	0.807	6.20	5.62	0.816	1.24	1.24	*70*	*70*
Chrysene	0.985	0.829	8.64	7.89	0.938	1.54	1.53	*70*	*70*
Dibenzo (a,h) anthracene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*0.7*	*0.7*
Fluoranthene	2.03	2.07	24.7	20.5	1.97	3.04	3.52	*1,000*	*1,000*
Fluorene	BDL	BDL	3.89	4.80	BDL	BDL	BDL	*1,000*	*1,000*
Indeno (1,2,3-cd) pyrene	BDL	0.484	3.78	3.35	0.515	0.913	0.898	*7*	*7*
2-Methylnaphthalene	BDL	BDL	0.873	1.79	BDL	BDL	BDL	*80*	*300*
Naphthalene	BDL	BDL	1.19	2.42	BDL	BDL	BDL	*40*	*500*
Phenanthrene	0.926	1.35	28.7	25.6	1.47	1.83	2.72	*500*	*500*
Pyrene	1.84	1.84	20.3	17.3	1.78	2.73	2.94	*1,000*	*1,000*
Volatile Organic Compounds (mg/kg) [2]									
Acetone	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*50*	*400*
Benzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*30*	*30*
n-Butylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*N/A*	*N/A*
Chloroform	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*0.3*	*400*
Ethylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*500*	*500*
Isopropylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*N/A*	*N/A*
4-Isopropyltoluene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*N/A*	*N/A*
Naphthalene	BDL	BDL	0.0539	9.05	BDL	0.337	BDL	*40*	*500*
n-Propylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*N/A*	*N/A*
Toluene	BDL	BDL	BDL	0.216	BDL	BDL	0.0954	*500*	*500*
Trichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	0.262	*2*	*90*
1,2,4-Trimethylbenzene	BDL	BDL	BDL	0.145	BDL	BDL	BDL	*N/A*	*N/A*
1,3,5-Trimethylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*N/A*	*N/A*
Xylenes (Total)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*300*	*500*
Total Metals (mg/kg)									
Silver	BDL	NS	BDL	NS	BDL	BDL	NS	*100*	*100*
Arsenic	5.04	NS	6.99	NS	10.9	8.57	NS	*20*	*20*
Beryllium	BDL	NS	BDL	NS	BDL	BDL	NS	*100*	*100*
Cadmium	BDL	NS	BDL	NS	0.741	0.589	NS	*2*	*2*
Chromium	11.2	NS	15.6	NS	20.7	17.4	NS	*30*	*30*
Copper	26.9	NS	55.0	NS	340	88.2	NS	*1,000*	*1,000*
Mercury	0.0748	NS	1.15	NS	3.51	0.727	NS	*20*	*20*
Nickel	9.63	NS	11.7	NS	19.8	14.0	NS	*20*	*20*
Lead	60.5	NS	151	NS	**640**	202	NS	*300*	*300*
Antimony	BDL	NS	BDL	NS	BDL	BDL	NS	*20*	*20*
Selenium	BDL	NS	BDL	NS	BDL	BDL	NS	*400*	*400*
Thallium	BDL	NS	BDL	NS	BDL	BDL	NS	*8*	*8*
Zinc	71.8	NS	113	NS	520	144	NS	*2,500*	*2,500*
Cyanide Total (mg/kg)	BDL	NS	BDL	NS	BDL	BDL	NS	*100*	*100*

BDL = Below Detection Limit NS = Not Sampled

mg/kg (ppm) = miligrams per kilogram (parts per million)

BOLD/RED = concentrations above MassDEP Method 1 Soil Standards. N/A = No Applicable Method 1 Soil Standard

[1] = Extractable Petroleum Hydrocarbons (ranges and targets) analyzed via MAEPH Method.

[2] = Volatile Organic Compounds (VOCs) analyzed via 8260 full list. Only VOCs with concentrations above Detection Limits in one or more samples are listed here.

TABLE 5
ALL SOIL ANALYTICAL RESULTS - MARCH 2011
TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D.:	SB-105	SB-105	SB-106	SB-107	SB-108	SB-108	SB-109	SB-110	SB-110	Method 1	Method 1
Sample Date:	3/2/2011	3/2/2011	3/2/2011	3/2/2011	3/2/2011	3/2/2011	3/2/2011	3/3/2011	3/3/2011	S-1/GW-2	S-1/GW-3
Sample Depth:	0-3'	8-12'	0-3'	0-3'	0-3'	3-7'	0-3'	0-3'	3-6'	mg/kg (ppm)	mg/kg (ppm)
Extractable Petroleum Hydrocarbons (mg/kg) [1]											
C9-C18 Aliphatics	26.9	29.9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*1,000*	*1,000*
C19-C36 Aliphatics	32.9	11.9	19.6	84.4	BDL	BDL	BDL	BDL	BDL	*3,000*	*3,000*
C11-C22 Aromatics	276	376	275	326	121	99.6	65.9	26.8	84.5	*1,000*	*1,000*
Acenaphthene	BDL	14.6	BDL	BDL	2.04	BDL	BDL	BDL	0.774	*1,000*	*1,000*
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*600*	*10*
Anthracene	BDL	8.55	BDL	5.51	4.61	1.04	0.479	BDL	2.40	*1,000*	*1,000*
Benzo (a) anthracene	BDL	6.22	4.25	**7.70**	5.88	2.98	1.11	0.823	4.49	*7*	*7*
Benzo (a) pyrene	BDL	**5.33**	**5.53**	**9.04**	**5.62**	**2.95**	1.15	0.787	**3.59**	*2*	*2*
Benzo (b) fluoranthene	BDL	2.38	3.82	6.45	3.86	2.42	0.828	0.584	2.38	*7*	*7*
Benzo (g,h,i) perylene	BDL	2.08	3.82	5.79	3.14	1.82	0.667	0.424	1.62	*1,000*	*1,000*
Benzo (k) fluoranthene	BDL	2.69	4.22	6.40	4.37	2.17	0.858	0.696	3.33	*70*	*70*
Chrysene	BDL	5.85	4.40	7.12	5.28	2.79	1.09	0.886	4.44	*70*	*70*
Dibenzo (a,h) anthracene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*0.7*	*0.7*
Fluoranthene	2.90	9.53	8.40	18.1	13.2	6.04	2.09	1.90	9.64	*1,000*	*1,000*
Fluorene	BDL	11.3	BDL	2.74	2.22	BDL	BDL	BDL	0.928	*1,000*	*1,000*
Indeno (1,2,3-cd) pyrene	BDL	1.63	3.25	5.08	2.91	1.70	0.607	BDL	1.59	*7*	*7*
2-Methylnaphthalene	BDL	13.9	BDL	1.91	0.726	BDL	BDL	BDL	BDL	*80*	*300*
Naphthalene	BDL	28.8	BDL	3.18	1.11	BDL	BDL	BDL	BDL	*40*	*500*
Phenanthrene	2.27	23.6	4.44	17.6	15.5	3.84	1.83	1.29	9.27	*500*	*500*
Pyrene	2.63	13.4	7.93	15.8	11.4	5.18	1.89	1.70	9.21	*1,000*	*1,000*
Volatile Organic Compounds (mg/kg) [2]											
Acetone	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*50*	*400*
Benzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*30*	*30*
n-Butylbenzene	BDL	0.961	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*N/A*	*N/A*
Chloroform	BDL	BDL	BDL	BDL	BDL	0.173	BDL	BDL	BDL	*0.3*	*400*
Ethylbenzene	BDL	9.19	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*500*	*500*
Isopropylbenzene	BDL	2.03	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*N/A*	*N/A*
4-Isopropyltoluene	BDL	1.21	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*N/A*	*N/A*
Naphthalene	BDL	**182**	0.0078	2.28	BDL	BDL	BDL	BDL	BDL	*40*	*500*
n-Propylbenzene	BDL	1.49	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*N/A*	*N/A*
Toluene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*500*	*500*
Trichloroethene	BDL	BDL	BDL	BDL	BDL	0.648	BDL	BDL	BDL	*2*	*90*
1,2,4-Trimethylbenzene	BDL	12.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*N/A*	*N/A*
1,3,5-Trimethylbenzene	BDL	4.29	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*N/A*	*N/A*
Xylenes (Total)	BDL	2.93	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*300*	*500*
Total Metals (mg/kg)											
Silver	BDL	NS	BDL	BDL	BDL	NS	BDL	BDL	NS	*100*	*100*
Arsenic	8.40	NS	8.10	8.22	13.2	NS	18.5	16.1	NS	*20*	*20*
Beryllium	BDL	NS	BDL	BDL	BDL	NS	BDL	BDL	NS	*100*	*100*
Cadmium	0.725	NS	0.706	BDL	0.669	NS	0.680	0.710	NS	*2*	*2*
Chromium	19.5	NS	18.7	17.0	15.0	NS	19.2	**32.6**	NS	*30*	*30*
Copper	115	NS	50.2	42.2	125	NS	217	171	NS	*1,000*	*1,000*
Mercury	2.16	NS	0.331	0.441	2.10	NS	8.84	7.10	NS	*20*	*20*
Nickel	14.1	NS	13.4	16.2	13.3	NS	13.8	**24.9**	NS	*20*	*20*
Lead	269	NS	114	112	**710**	NS	**901**	**651**	NS	*300*	*300*
Antimony	BDL	NS	BDL	BDL	BDL	NS	BDL	BDL	NS	*20*	*20*
Selenium	BDL	NS	BDL	BDL	BDL	NS	BDL	BDL	NS	*400*	*400*
Thallium	BDL	NS	BDL	BDL	BDL	NS	BDL	BDL	NS	*8*	*8*
Zinc	259	NS	120	140	462	NS	245	313	NS	*2,500*	*2,500*
Cyanide Total (mg/kg)	1.55	NS	BDL	BDL	BDL	NS	BDL	BDL	NS	*100*	*100*

BDL = Below Detection Limit NS = Not Sampled

mg/kg (ppm) = miligrams per kilogram (parts per million)

BOLD/RED = concentrations above MassDEP Method 1 Soil Standards. N/A = No Applicable Method 1 Soil Standard

[1] = Extractable Petroleum Hydrocarbons (ranges and targets) analyzed via MAEPH Method.

[2] = Volatile Organic Compounds (VOCs) analyzed via 8260 full list. Only VOCs with concentrations above Detection Limits in one or more samples are listed here.

TABLE 5

ALL SOIL ANALYTICAL RESULTS - MARCH 2011

TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D.:	SB-111	SB-111	SB-112	SB-113	SB-113	SB-114	SB-114	Method 1	Method 1
Sample Date:	3/3/2011	3/3/2011	3/3/2011	3/3/2011	3/3/2011	3/3/2011	3/3/2011	S-1/GW-2	S-1/GW-3
Sample Depth:	0-3'	10-12'	0-3'	0-3'	4-8'	0-3'	8-12'	mg/kg (ppm)	mg/kg (ppm)
Extractable Petroleum Hydrocarbons (mg/kg) [1]									
C9-C18 Aliphatics	BDL	BDL	BDL	BDL	BDL	BDL	43.6	*1,000*	*1,000*
C19-C36 Aliphatics	BDL	BDL	53.1	17.7	BDL	BDL	21.1	*3,000*	*3,000*
C11-C22 Aromatics	37.7	87.3	189	56.8	24.4	BDL	356	*1,000*	*1,000*
Acenaphthene	BDL	3.70	BDL	BDL	BDL	BDL	8.50	*1,000*	*1,000*
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*600*	*10*
Anthracene	0.642	1.92	5.48	0.859	BDL	BDL	16.4	*1,000*	*1,000*
Benzo (a) anthracene	1.31	1.35	**8.04**	3.26	BDL	BDL	**17.6**	*7*	*7*
Benzo (a) pyrene	1.12	1.09	**6.98**	**3.46**	BDL	BDL	**13.8**	*2*	*2*
Benzo (b) fluoranthene	0.875	BDL	4.25	2.76	BDL	BDL	**9.54**	*7*	*7*
Benzo (g,h,i) perylene	0.517	BDL	3.37	2.13	BDL	BDL	5.27	*1,000*	*1,000*
Benzo (k) fluoranthene	0.929	0.638	6.60	3.27	BDL	BDL	11.1	*70*	*70*
Chrysene	1.31	1.39	7.47	3.67	BDL	BDL	15.6	*70*	*70*
Dibenzo (a,h) anthracene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*0.7*	*0.7*
Fluoranthene	3.00	2.31	18.8	7.77	BDL	BDL	43.2	*1,000*	*1,000*
Fluorene	BDL	2.55	2.53	BDL	BDL	BDL	12.4	*1,000*	*1,000*
Indeno (1,2,3-cd) pyrene	0.508	BDL	3.17	1.89	BDL	BDL	5.17	*7*	*7*
2-Methylnaphthalene	BDL	2.71	BDL	BDL	BDL	BDL	BDL	*80*	*300*
Naphthalene	BDL	5.44	BDL	BDL	BDL	BDL	3.64	*40*	*500*
Phenanthrene	2.61	7.84	17.7	4.36	BDL	BDL	43.8	*500*	*500*
Pyrene	2.56	3.24	16.1	6.61	BDL	BDL	36.9	*1,000*	*1,000*
Volatile Organic Compounds (mg/kg) [2]									
Acetone	BDL	BDL	BDL	BDL	BDL	BDL	0.222	*50*	*400*
Benzene	BDL	BDL	BDL	BDL	BDL	BDL	0.0994	*30*	*30*
n-Butylbenzene	BDL	0.0142	BDL	BDL	BDL	BDL	0.0197	*N/A*	*N/A*
Chloroform	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*0.3*	*400*
Ethylbenzene	BDL	0.123	BDL	BDL	BDL	BDL	0.0240	*500*	*500*
Isopropylbenzene	BDL	0.0447	BDL	BDL	BDL	BDL	0.113	*N/A*	*N/A*
4-Isopropyltoluene	BDL	0.0118	BDL	BDL	BDL	BDL	0.0368	*N/A*	*N/A*
Naphthalene	BDL	4.34	2.30	0.111	0.0714	BDL	9.25	*40*	*500*
n-Propylbenzene	BDL	0.0288	BDL	BDL	BDL	BDL	0.0469	*N/A*	*N/A*
Toluene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*500*	*500*
Trichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*2*	*90*
1,2,4-Trimethylbenzene	BDL	0.205	BDL	BDL	BDL	BDL	0.0925	*N/A*	*N/A*
1,3,5-Trimethylbenzene	BDL	0.0731	BDL	BDL	BDL	BDL	0.0595	*N/A*	*N/A*
Xylenes (Total)	BDL	0.0856	BDL	BDL	BDL	BDL	0.0634	*300*	*500*
Total Metals (mg/kg)									
Silver	BDL	NS	BDL	BDL	NS	BDL	NS	*100*	*100*
Arsenic	8.51	NS	8.30	7.26	NS	8.74	NS	*20*	*20*
Beryllium	BDL	NS	BDL	BDL	NS	BDL	NS	*100*	*100*
Cadmium	BDL	NS	0.797	0.723	NS	BDL	NS	*2*	*2*
Chromium	16.5	NS	19.5	16.6	NS	15.3	NS	*30*	*30*
Copper	91.2	NS	59.2	47.8	NS	16.2	NS	*1,000*	*1,000*
Mercury	1.66	NS	0.498	0.449	NS	0.0376	NS	*20*	*20*
Nickel	15.0	NS	14.0	11.4	NS	9.32	NS	*20*	*20*
Lead	**572**	NS	203	178	NS	20.5	NS	*300*	*300*
Antimony	BDL	NS	BDL	BDL	NS	BDL	NS	*20*	*20*
Selenium	BDL	NS	BDL	BDL	NS	BDL	NS	*400*	*400*
Thallium	BDL	NS	BDL	BDL	NS	BDL	NS	*8*	*8*
Zinc	182	NS	188	118	NS	38.1	NS	*2,500*	*2,500*
Cyanide Total (mg/kg)	1.65	NS	6.08	1.04	NS	2.83	NS	*100*	*100*

BDL = Below Detection Limit NS = Not Sampled

mg/kg (ppm) = milligrams per kilogram (parts per million)

BOLD RED = concentrations above MassDEP Method 1 Soil Standards. N/A = No Applicable Method 1 Soil Standard

[1] = Extractable Petroleum Hydrocarbons (ranges and targets) analyzed via MAEPH Method.

[2] = Volatile Organic Compounds (VOCs) analyzed via 8260 full list. Only VOCs with concentrations above Detection Limits in one or more samples are listed here.

TABLE 6

GROUNDWATER ELEVATION DATA - MARCH 2011

TSC CHILD CARE CENTER PLAYGROUND

Monitoring Well I.D.	Top of Casing Elevation	Date	Depth to Ground Water	Groundwater Elevation
MW-1	10.59	03/09/11	7.06	3.53
		03/17/11	7.65	2.94
MW-3	9.63	03/09/11	5.37	4.26
		03/17/11	5.64	3.99
MW-4	11.08	03/09/11	8.33	2.75
		03/17/11	8.72	2.36
MW-5	10.82	03/09/11	7.90	2.92
		03/17/11	8.23	2.59
MW-6	9.69	03/09/11	6.82	2.87
		03/17/11	7.27	2.42
MW-7	9.92	03/09/11	6.75	3.17
		03/17/11	7.08	2.84
MW-8	9.94	03/09/11	6.74	3.20
		03/17/11	7.03	2.91
MW-9	10.39	03/09/11	7.28	3.11
		03/17/11	7.39	3.00

Datum is a temporary surveyed benchmark on Potter Street with an elevation of 10.14 feet above sea level.

TABLE 7
GROUNDWATER ANALYTICAL RESULTS - MARCH 2011
TSC CHILD CARE CENTER PLAYGROUND

Groundwater Sample I.D.:	MW-1	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MCP Method 1 Groundwater Standards (ug/L)	
Well Location Groundwater Category	GW-3	GW-3	GW-2/GW-3	GW-2/GW-3	GW-3	GW-3	GW-3	GW-2/GW-3		
Sample Date:	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011		
Sample Depth (ft.):	2 - 11	2 - 10	2 - 12	2 - 12	2 - 12	2 - 12	2 - 12	2 - 12	GW-2	GW-3
Extractable Petroleum Hydrocarbons (ug/L) [1]										
C9-C18 Aliphatics	BRL	BRL	BRL	BRL	BRL	300	BRL	BRL	*5,000*	*50,000*
C19-C36 Aliphatics	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	*NA*	*50,000*
C11-C22 Aromatics	BRL	BRL	BRL	BRL	200	BRL	BRL	200	*50,000*	*5,000*
Polycyclic Aromatic Hydrocarbons (ug/L) [1]										
Naphthalene	BRL	BRL	3.76	BRL	126	1,740	1.37	6.44	*1,000*	*20,000*
2-Methylnaphthalene	BRL	BRL	BRL	BRL	11.1	133	BRL	2.12	*2,000*	*20,000*
Acenaphthylene	BRL	BRL	BRL	BRL	BRL	BRL	2.08	BRL	*10,000*	*40*
Acenaphthene	BRL	BRL	BRL	12.1	40.3	26.5	6.22	26.3	*NA*	*6,000*
Fluorene	BRL	BRL	BRL	BRL	7.09	12.3	1.12	24.5	*NA*	*40*
Phenanthrene	BRL	BRL	1.05	BRL	6.21	19.8	BRL	22.0	*NA*	*10,000*
Anthracene	BRL	BRL	BRL	BRL	1.17	BRL	BRL	6.91	*NA*	*30*
Fluoranthene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	8.98	*NA*	*200*
Pyrene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	6.47	*NA*	*20*
Benzo (a) anthracene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	1.05	*NA*	*1,000*
Chrysene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	2.56	*NA*	*70*
Benzo (b) fluoranthene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	*NA*	*400*
Benzo (k) fluoranthene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	*NA*	*100*
Benzo (a) pyrene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	*NA*	*500*
Indeno (1,2,3-cd) pyrene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	*NA*	*100*
Dibenzo (a,h) anthracene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	*NA*	*40*
Benzo (g,h,i) perylene	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	*NA*	*20*
Volatile Organic Compounds (ug/L) [2]										
Benzene	BRL	BRL	BRL	3.0	55.7	373	20.3	16.9	*2,000*	*10,000*
n-Butylbenzene	BRL	BRL	BRL	1.6	BRL	BRL	BRL	BRL	*NA*	*NA*
Ethylbenzene	BRL	BRL	BRL	BRL	174	4,400	6.4	BRL	*20,000*	*5,000*
Isopropylbenzene	BRL	BRL	BRL	1.9	56.0	126	2.2	1.6	*NA*	*NA*
Methyl tert-butyl ether	BRL	BRL	BRL	1.6	BRL	BRL	BRL	BRL	*50,000*	*50,000*
Naphthalene	BRL	BRL	9.0	1.8	486	4,820	BRL	25.7	*1,000*	*20,000*
n-Propylbenzene	BRL	BRL	BRL	BRL	20.1	BRL	BRL	BRL	*NA*	*NA*
Toluene	BRL	BRL	BRL	BRL	BRL	1,160	BRL	BRL	*50,000*	*40,000*
1,2,4-Trimethylbenzene	BRL	BRL	BRL	BRL	69.7	488	BRL	1.2	*NA*	*NA*
1,3,5-Trimethylbenzene	BRL	BRL	BRL	BRL	BRL	132	BRL	BRL	*NA*	*NA*
Xylenes (Total)	BRL	BRL	BRL	BRL	56.0	3,890	BRL	BRL	*9,000*	*5,000*

ug/L = micrograms per liter

BRL = Below Reporting Limit

NA = not applicable

[1] = Extractable Petroleum Hydrocarbon ranges and Polycyclic Aromatic Hydrocarbons analyzed via MAEPH Method.

[2] = Volatile Organic Compounds (VOCs) analyzed via 8260 full list. Only VOCs with concentrations above Detection Limits in one or more samples are listed here.

BOLD/RED = Exceeds MCP Method 1 Groundwater Cleanup Standards

Note: The detected concentrations of naphthalene exceeds GW-2 Standards in the MW-7 sample. However, MW-7 is located approximately 200' from nearest Site building and approximately 100' from the nearest off-site occupied structure.

TABLE 8
SOIL ANALYTICAL RESULTS - APRIL 2011
TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D.: Sample Date: Sample Depth:	CSB-01 4/26/2011 3-3.5'	CSB-02 4/26/2011 3-3.5'	Method 1 S-1/GW-2 mg/kg (ppm)	Method 1 S-1/GW-3 mg/kg (ppm)
Extractable Petroleum Hydrocarbons (mg/kg) [1]				
C9-C18 Aliphatics	BDL	BDL	*1,000*	*1,000*
C19-C36 Aliphatics	BDL	BDL	*3,000*	*3,000*
C11-C22 Aromatics	32.7	798	*1,000*	*1,000*
Acenaphthene	BDL	BDL	*1,000*	*1,000*
Acenaphthylene	BDL	BDL	*600*	*10*
Anthracene	0.429	20.4	*1,000*	*1,000*
Benzo (a) anthracene	0.770	**23.4**	*7*	*7*
Benzo (a) pyrene	0.727	**17.0**	*2*	*2*
Benzo (b) fluoranthene	0.399	**12.5**	*7*	*7*
Benzo (g,h,i) perylene	BDL	BDL	*1,000*	*1,000*
Benzo (k) fluoranthene	0.628	14.0	*70*	*70*
Chrysene	0.960	22.6	*70*	*70*
Dibenzo (a,h) anthracene	BDL	BDL	*0.7*	*0.7*
Fluoranthene	1.69	63.5	*1,000*	*1,000*
Fluorene	BDL	BDL	*1,000*	*1,000*
Indeno (1,2,3-cd) pyrene	BDL	BDL	*7*	*7*
2-Methylnaphthalene	BDL	BDL	*80*	*300*
Naphthalene	BDL	BDL	*40*	*500*
Phenanthrene	1.72	85.6	*500*	*500*
Pyrene	1.64	53.9	*1,000*	*1,000*
Total Metals (mg/kg)				
Silver	BDL	BDL	*100*	*100*
Arsenic	**20.1**	**29.5**	*20*	*20*
Beryllium	BDL	BDL	*100*	*100*
Cadmium	0.697	1.65	*2*	*2*
Chromium	15.5	16.1	*30*	*30*
Copper	217	486	*1,000*	*1,000*
Mercury	5.11	6.96	*20*	*20*
Nickel	17.2	**21.8**	*20*	*20*
Lead	**1,110**	**466**	*300*	*300*
Antimony	BDL	BDL	*20*	*20*
Selenium	BDL	BDL	*400*	*400*
Thallium	BDL	BDL	*8*	*8*
Zinc	331	202	*2,500*	*2,500*

mg/kg (ppm) = miligrams per kilogram (parts per million) BDL = Below Detection Limit

BOLD/RED = concentrations above MassDEP Method 1 Soil Standards.

[1] = Extractable Petroleum Hydrocarbons (ranges and targets) analyzed via MAEPH Method.

TABLE 9

SOIL ANALYTICAL DATA - IN SITU SOIL 0 - 3 FEET

TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D.:	SB-101	1/2 the	SB-102	1/2 the	SB-103	1/2 the	SB-104	1/2 the	SB-105	1/2 the	SB-108	1/2 the	All Samples	Method 1	Method 1	UCLs	Urban Fill
Sample Date:	3/2/2011	detection	3/2/2011	detection	3/2/2011	detection	3/2/2011	detection	3/2/2011	detection	3/2/2011	detection	Averaged [2*]	S-1/GW-2	S-1/GW-3	in Soil	Background
Sample Depth:	0-3'	limit	0-3'	limit	0-3'	limit	0-3'	limit	0-3'	limit	0-3'	limit	0-3'	mg/kg (ppm)	mg/kg (ppm)	mg/kg (ppm)	mg/kg (ppm)
Extractable Petroleum Hydrocarbons (mg/kg) [1]																	
C9-C18 Aliphatics	BDL	5.6	BDL	5.25	BDL	5.8	BDL	5.35	26.9		BDL	5.75	28.9	1,000	1,000	20,000	N/A
C19-C36 Aliphatics	BDL	5.6	23.5		BDL	5.8	BDL	5.35	32.9		BDL	5.75	53.7	3,000	3,000	20,000	N/A
C11-C22 Aromatics	24.2		138		44.3		43.7		276		121		70.8	1,000	1,000	10,000	N/A
Acenaphthene	BDL	0.186	2.06		BDL	0.1935	BDL	0.1785	BDL	0.940	2.04		0.465	1,000	1,000	10,000	2
Acenaphthylene	BDL	0.186	BDL	0.1715	BDL	0.1935	BDL	0.1785	BDL	0.940	BDL	0.191	0.214	600	10	10,000	1
Anthracene	BDL	0.186	8.91		BDL	0.1935	0.415		BDL	0.940	4.61		1.69	1,000	1,000	10,000	4
Benzo (a) anthracene	0.896		**9.28**		0.926		1.46		BDL	0.940	5.88		2.75	7	7	3,000	9
Benzo (a) pyrene	0.827		**8.25**		0.945		1.60		BDL	0.940	**5.62**		**2.78**	2	2	300	7
Benzo (b) fluoranthene	0.624		5.92		0.701		1.34		BDL	0.940	3.86		2.14	7	7	3,000	8
Benzo (g,h,i) perylene	0.429		4.02		0.620		1.10		BDL	0.940	3.14		1.70	1,000	1,000	10,000	3
Benzo (k) fluoranthene	0.720		6.20		0.816		1.24		BDL	0.940	4.37		2.33	70	70	10,000	4
Chrysene	0.985		8.64		0.938		1.54		BDL	0.940	5.28		3.06	70	70	400	7
Dibenzo (a,h) anthracene	BDL	0.186	BDL	0.1715	BDL	0.1935	BDL	0.1785	BDL	0.940	BDL	0.191	0.27	0.7	0.7	300	1
Fluoranthene	2.03		24.7		1.97		3.04		2.90		13.2		6.66	1,000	1,000	10,000	10
Fluorene	BDL	0.186	3.89		BDL	0.1935	BDL	0.1785	BDL	0.940	2.22		0.66	1,000	1,000	10,000	2
Indeno (1,2,3-cd) pyrene	BDL	0.186	3.78		0.515		0.913		BDL	0.940	2.91		1.47	7	7	3,000	3
2-Methylnaphthalene	BDL	0.186	0.873		BDL	0.1935	BDL	0.1785	BDL	0.940	0.726		0.30	80	300	10,000	1
Naphthalene	BDL	0.186	1.19		BDL	0.1935	BDL	0.1785	BDL	0.940	1.11		0.36	40	500	10,000	1
Phenanthrene	0.926		28.7		1.47		1.83		2.27		15.5		5.58	500	500	10,000	20
Pyrene	1.84		20.3		1.78		2.73		2.63		11.4		5.88	1,000	1,000	10,000	20
Total Metals (mg/kg)																	
Arsenic	5.04		6.99		10.9		8.57		8.40		13.2		10.7	20	20	200	20
Lead	60.5		151		**640**		202		269		**710**		282	300	300	3,000	600

BDL = Below Detection Limit NS = Not Sampled

mg/kg (ppm) = miligrams per kilogram (parts per million) N/A = No Applicable Method 1 Soil Standard

BOLD/RED = concentrations above MassDEP Method 1 Soil Standards.

[1] = Extractable Petroleum Hydrocarbons (ranges and targets) analyzed via MAEPH Method.

[2] = For the calculation of the average concentration of a detected analyte where one or more concentration was reported as BDL, 1/2 the reporting limit is used for each BDL value.

Note: The average concentration value for a particular analyte are for all samples in the worksheet, not just from each page.

If there were no detected concentrations of an analyte in all samples, the result is reported as BDL.

TABLE 9

SOIL ANALYTICAL DATA - IN SITU SOIL 0 - 3 FEET

TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D.:	SB-109	1/2 the	SB-110	1/2 the	SB-111	1/2 the	SB-112	1/2 the	SB-113	1/2 the	SB-114	1/2 the	All Samples	Method 1	Method 1	UCLs	Urban Fill
Sample Date:	3/2/2011	detection	3/3/2011	detection	3/3/2011	detection	3/3/2011	detection	3/3/2011	detection	3/3/2011	detection	Averaged [2*]	S-1/GW-2	S-1/GW-3	in Soil	Background
Sample Depth:	0-3'	limit	0-3'	limit	0-3'	limit	0-3'	limit	0-3'	limit	0-3'	limit	0-3'	mg/kg (ppm)	mg/kg (ppm)	mg/kg (ppm)	mg/kg (ppm)
Extractable Petroleum Hydrocarbons (mg/kg) [1]																	
C9-C18 Aliphatics	BDL	6.2	BDL	5.75	BDL	5.6	BDL	5.8	BDL	5.8	BDL	5.95	28.9	1,000	1,000	20,000	N/A
C19-C36 Aliphatics	BDL	6.2	BDL	5.75	BDL	5.6	53.1		17.7		BDL	5.95	53.7	3,000	3,000	20,000	N/A
C11-C22 Aromatics	65.9		26.8		37.7		189		56.8		BDL	5.95	70.8	1,000	1,000	10,000	N/A
Acenaphthene	BDL	0.206	BDL	0.192	BDL	0.186	BDL	0.965	BDL	0.1935	BDL	0.198	0.465	1,000	1,000	10,000	2
Acenaphthylene	BDL	0.206	BDL	-	BDL	0.186	BDL	0.965	BDL	0.1935	BDL	0.198	0.214	600	10	10,000	1
Anthracene	0.479		BDL	0.192	0.642		5.48		0.859		BDL	0.198	1.69	1,000	1,000	10,000	4
Benzo (a) anthracene	1.11		0.823		1.31		**8.04**		3.26		BDL	0.198	2.75	7	7	3,000	9
Benzo (a) pyrene	1.15		0.787		1.12		**6.98**		**3.46**		BDL	0.198	**2.78**	2	2	300	7
Benzo (b) fluoranthene	0.828		0.584		0.875		4.25		2.76		BDL	0.198	2.14	7	7	3,000	8
Benzo (g,h,i) perylene	0.667		0.424		0.517		3.37		2.13		BDL	0.198	1.70	1,000	1,000	10,000	3
Benzo (k) fluoranthene	0.858		0.696		0.929		6.60		3.27		BDL	0.198	2.33	70	70	10,000	4
Chrysene	1.09		0.886		1.31		7.47		3.67		BDL	0.198	3.06	70	70	400	7
Dibenzo (a,h) anthracene	BDL	0.206	BDL	0.192	BDL	0.186	BDL	0.965	BDL	0.1935	BDL	0.198	0.27	0.7	0.7	300	1
Fluoranthene	2.09		1.90		3.00		18.8		7.77		BDL	0.198	6.66	1,000	1,000	10,000	10
Fluorene	BDL	0.206	BDL	0.192	BDL	0.186	2.53		BDL	0.1935	BDL	0.198	0.66	1,000	1,000	10,000	2
Indeno (1,2,3-cd) pyrene	0.607		BDL	0.192	0.508		3.17		1.89		BDL	0.198	1.47	7	7	3,000	3
2-Methylnaphthalene	BDL	0.206	BDL	0.192	BDL	0.186	BDL	0.965	BDL	0.1935	BDL	0.198	0.30	80	300	10,000	1
Naphthalene	BDL	0.206	BDL	0.192	BDL	0.186	BDL	0.965	BDL	0.1935	BDL	0.198	0.36	40	500	10,000	1
Phenanthrene	1.83		1.29		2.61		17.7		4.36		BDL	0.198	5.58	500	500	10,000	20
Pyrene	1.89		1.70		2.56		16.1		6.61		BDL	0.198	5.88	1,000	1,000	10,000	20
Total Metals (mg/kg)																	
Arsenic	18.5		16.1		8.51		8.30		7.26		8.74		10.7	20	20	200	20
Lead	**901**		**651**		**572**		203		178		20.5		282	300	300	3,000	600

BDL = Below Detection Limit NS = Not Sampled

mg/kg (ppm) = miligrams per kilogram (parts per million) N/A = No Applicable Method 1 Soil Standard

BOLD/RED = concentrations above MassDEP Method 1 Soil Standards.

[1] = Extractable Petroleum Hydrocarbons (ranges and targets) analyzed via MAEPH Method.

[2] = For the calculation of the average concentration of a detected analyte where one or more concentration was reported as BDL, 1/2 the reporting limit is used for each BDL value.

The average concentration value for a particular analyte are for all samples in the worksheet, not just from each page.

If there were no detected concentrations of an analyte in all samples, the result is reported as BDL.

TABLE 9

SOIL ANALYTICAL DATA - IN SITU SOIL 0 - 3 FEET

TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D.: **Sample Date:** **Sample Depth:**	**HA-1** **4/30/2008** **3-4"**	*1/2 the detection limit*	**HA-2** **4/30/2008** **3-4"**	*1/2 the detection limit*	**HA-3** **4/30/2008** **3-4"**	*1/2 the detection limit*	**HA-4** **4/30/2008** **3-4"**	*1/2 the detection limit*	**HA-5** **4/30/2008** **3-4"**	*1/2 the detection limit*	**HA-6** **4/30/2008** **3-4"**	*1/2 the detection limit*	**All Samples Averaged [2*]** **0-3'**	**Method 1 S-1/GW-2 mg/kg (ppm)**	**Method 1 S-1/GW-3 mg/kg (ppm)**	**UCLs in Soil mg/kg (ppm)**	**Urban Fill Background mg/kg (ppm)**
Extractable Petroleum Hydrocarbons (mg/kg) [1]																	
C9-C18 Aliphatics	BDL	*19.75*	BDL	*19.35*	BDL	*19.15*	BDL	*20.65*	BDL	*19.35*	BDL	*19.45*	28.9	***1,000***	***1,000***	***20,000***	***N/A***
C19-C36 Aliphatics	BDL	*19.75*	BDL	*19.35*	BDL	*19.15*	BDL	*20.65*	BDL	*19.35*	BDL	*19.45*	53.7	***3,000***	***3,000***	***20,000***	***N/A***
C11-C22 Aromatics	56.7		65.2		66.6		61.3		60.3		57.9		70.8	***1,000***	***1,000***	***10,000***	***N/A***
Acenaphthene	BDL	*0.0985*	BDL	*0.0965*	BDL	*0.0955*	BDL	*0.103*	BDL	*0.0965*	BDL	*0.097*	0.465	***1,000***	***1,000***	***10,000***	***2***
Acenaphthylene	BDL	*0.0985*	BDL	*0.0965*	BDL	*0.0955*	BDL	*0.103*	BDL	*0.0965*	BDL	*0.097*	0.214	***600***	***10***	***10,000***	***1***
Anthracene	0.682		0.562		0.473		0.448		0.404		0.468		1.69	***1,000***	***1,000***	***10,000***	***4***
Benzo (a) anthracene	1.67		1.79		1.99		1.69		1.06		1.21		2.75	***7***	***7***	***3,000***	***9***
Benzo (a) pyrene	1.84		1.96		**2.17**		**2.00**		1.14		1.26		**2.78**	***2***	***2***	***300***	***7***
Benzo (b) fluoranthene	1.50		2.82		2.63		2.44		0.831		0.914		2.14	***7***	***7***	***3,000***	***8***
Benzo (g,h,i) perylene	1.23		1.38		1.68		1.62		0.727		0.858		1.70	***1,000***	***1,000***	***10,000***	***3***
Benzo (k) fluoranthene	1.78		0.880		1.78		1.59		1.10		1.18		2.33	***70***	***70***	***10,000***	***4***
Chrysene	1.92		1.92		2.24		1.97		1.22		1.23		3.06	***70***	***70***	***400***	***7***
Dibenzo (a,h) anthracene	BDL	*0.0985*	0.197		0.205		BDL	*0.103*	BDL	*0.0965*	BDL	*0.097*	0.27	***0.7***	***0.7***	***300***	***1***
Fluoranthene	4.42		3.80		3.90		3.43		2.54		2.39		6.66	***1,000***	***1,000***	***10,000***	***10***
Fluorene	BDL	*0.0985*	BDL	*0.0965*	BDL	*0.0955*	BDL	*0.103*	BDL	*0.0965*	BDL	*0.097*	0.66	***1,000***	***1,000***	***10,000***	***2***
Indeno (1,2,3-cd) pyrene	1.06		1.17		1.42		1.34		0.655		0.743		1.47	***7***	***7***	***3,000***	***3***
2-Methylnaphthalene	BDL	*0.0985*	BDL	*0.0965*	BDL	*0.0955*	BDL	*0.103*	BDL	*0.0965*	BDL	*0.097*	0.30	***80***	***300***	***10,000***	***1***
Naphthalene	BDL	*0.0985*	BDL	*0.0965*	BDL	*0.0955*	BDL	*0.103*	BDL	*0.0965*	BDL	*0.097*	0.36	***40***	***500***	***10,000***	***1***
Phenanthrene	2.31		1.74		1.44		1.54		1.26		1.38		5.58	***500***	***500***	***10,000***	***20***
Pyrene	3.75		3.47		3.41		3.23		2.21		2.22		5.88	***1,000***	***1,000***	***10,000***	***20***
Total Metals (mg/kg)																	
Arsenic	13.1		6.37		5.72		6.80		7.29		6.93		10.7	***20***	***20***	***200***	***20***
Lead	73.6		148		113		104		240		189		282	***300***	***300***	***3,000***	***600***

BDL = Below Detection Limit NS = Not Sampled

mg/kg (ppm) = miligrams per kilogram (parts per million) N/A = No Applicable Method 1 Soil Standard

BOLD/RED = concentrations above MassDEP Method 1 Soil Standards.

[1] = Extractable Petroleum Hydrocarbons (ranges and targets) analyzed via MAEPH Method.

[2] = For the calculation of the average concentration of a detected analyte where one or more concentration was reported as BDL, 1/2 the reporting limit is used for each BDL value.

The average concentration value for a particular analyte are for all samples in the worksheet, not just from each page.

If there were no detected concentrations of an analyte in all samples, the result is reported as BDL.

TABLE 9

SOIL ANALYTICAL DATA - IN SITU SOIL 0 - 3 FEET

TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D.: **Sample Date:** **Sample Depth:**	**HA-7** **4/30/2008** **3-4"**	*1/2 the detection limit*	**HA-8** **4/30/2008** **3-4"**	*1/2 the detection limit*	**HA-9** **4/30/2008** **3-4"**	*1/2 the detection limit*	**HA-10** **4/30/2008** **3-4"**	*1/2 the detection limit*	**HA-12** **4/30/2008** **3-4"**	*1/2 the detection limit*	**HA-13** **4/30/2008** **3-4"**	*1/2 the detection limit*	**All Samples Averaged [2*]** **0-3'**	**Method 1 S-1/GW-2 mg/kg (ppm)**	**Method 1 S-1/GW-3 mg/kg (ppm)**	**UCLs in Soil mg/kg (ppm)**	**Urban Fill Background mg/kg (ppm)**
Extractable Petroleum Hydrocarbons (mg/kg) [1]																	
C9-C18 Aliphatics	BDL	*19.20*	BDL	*18.45*	BDL	*20.05*	BDL	*20.1*	BDL	*15.9*	BDL	*16.15*	28.9	***1,000***	***1,000***	***20,000***	***N/A***
C19-C36 Aliphatics	BDL	*19.20*	BDL	*18.45*	BDL	*20.05*	BDL	*20.1*	BDL	*15.9*	BDL	*16.15*	53.7	***3,000***	***3,000***	***20,000***	***N/A***
C11-C22 Aromatics	55.1		51.1		72.9		50.0		53.1		43.1		70.8	***1,000***	***1,000***	***10,000***	***N/A***
Acenaphthene	BDL	*0.0955*	BDL	*0.0920*	BDL	*0.100*	BDL	*0.100*	BDL	*0.0795*	BDL	*0.0805*	0.465	***1,000***	***1,000***	***10,000***	***2***
Acenaphthylene	BDL	*0.0955*	BDL	*0.0920*	BDL	*0.100*	BDL	*0.100*	BDL	*0.0795*	BDL	*0.0805*	0.214	***600***	***10***	***10,000***	***1***
Anthracene	0.349		0.300		0.655		BDL	*0.100*	0.381		0.223		1.69	***1,000***	***1,000***	***10,000***	***4***
Benzo (a) anthracene	0.785		0.652		1.30		0.310		1.39		0.521		2.75	***7***	***7***	***3,000***	***9***
Benzo (a) pyrene	0.941		0.720		1.18		0.376		1.44		0.623		**2.78**	***2***	***2***	***300***	***7***
Benzo (b) fluoranthene	0.660		0.466		0.960		0.211		1.10		0.852		2.14	***7***	***7***	***3,000***	***8***
Benzo (g,h,i) perylene	0.624		0.442		0.637		0.233		0.966		0.379		1.70	***1,000***	***1,000***	***10,000***	***3***
Benzo (k) fluoranthene	0.916		0.553		1.01		0.438		1.30		0.302		2.33	***70***	***70***	***10,000***	***4***
Chrysene	1.00		0.768		1.32		0.452		1.39		0.670		3.06	***70***	***70***	***400***	***7***
Dibenzo (a,h) anthracene	BDL	*0.0955*	BDL	*0.0920*	BDL	*0.100*	BDL	*0.100*	BDL	*0.0795*	BDL	*0.0805*	0.27	***0.7***	***0.7***	***300***	***1***
Fluoranthene	1.82		1.480		2.97		0.894		2.66		1.38		6.66	***1,000***	***1,000***	***10,000***	***10***
Fluorene	BDL	*0.0955*	BDL	*0.0920*	BDL	*0.100*	BDL	*0.100*	BDL	*0.0795*	BDL	*0.0805*	0.66	***1,000***	***1,000***	***10,000***	***2***
Indeno (1,2,3-cd) pyrene	0.566		0.389		0.607		0.211		0.835		0.363		1.47	***7***	***7***	***3,000***	***3***
2-Methylnaphthalene	BDL	*0.0955*	BDL	*0.0920*	BDL	*0.100*	BDL	*0.100*	BDL	*0.0795*	BDL	*0.0805*	0.30	***80***	***300***	***10,000***	***1***
Naphthalene	BDL	*0.0955*	BDL	*0.0920*	BDL	*0.100*	BDL	*0.100*	BDL	*0.0795*	BDL	*0.0805*	0.36	***40***	***500***	***10,000***	***1***
Phenanthrene	0.925		0.695		2.06		0.358		1.21		0.465		5.58	***500***	***500***	***10,000***	***20***
Pyrene	1.61		1.37		2.53		0.764		2.60		1.22		5.88	***1,000***	***1,000***	***10,000***	***20***
Total Metals (mg/kg)																	
Arsenic	6.43		9.85		7.38		5.06		8.99		10.2		10.7	***20***	***20***	***200***	***20***
Lead	157		229		195		138		142		68.6		282	***300***	***300***	***3,000***	***600***

BDL = Below Detection Limit NS = Not Sampled

mg/kg (ppm) = miligrams per kilogram (parts per million) N/A = No Applicable Method 1 Soil Standard

BOLD/RED = concentrations above MassDEP Method 1 Soil Standards.

[1] = Extractable Petroleum Hydrocarbons (ranges and targets) analyzed via MAEPH Method.

[2] = For the calculation of the average concentration of a detected analyte where one or more concentration was reported as BDL, 1/2 the reporting limit is used for each BDL value.

The average concentration value for a particular analyte are for all samples in the worksheet, not just from each page.

If there were no detected concentrations of an analyte in all samples, the result is reported as BDL.

TABLE 9

SOIL ANALYTICAL DATA - IN SITU SOIL 0 - 3 FEET

TSC CHILD CARE CENTER PLAYGROUND

Soil Sample I.D.: **Sample Date:** **Sample Depth:**	**HA-14** **4/30/2008** **3-4"**	*1/2 the detection limit*	**B-01 (2)** **5/31/2007** **1-3'**	*1/2 the detection limit*	**B-02 (2)** **5/31/2007** **1-3'**	*1/2 the detection limit*	**B-03 (2)** **5/31/2007** **1-3'**	*1/2 the detection limit*	**B-05 (2)** **5/31/2007** **1-3'**	*1/2 the detection limit*	**All Samples Averaged [2*]** **0-3'**	**Method 1 S-1/GW-2 mg/kg (ppm)**	**Method 1 S-1/GW-3 mg/kg (ppm)**	**UCLs in Soil mg/kg (ppm)**	**Urban Fill Background mg/kg (ppm)**
Extractable Petroleum Hydrocarbons (mg/kg) [1]															
C9-C18 Aliphatics	BDL	*19.85*	BRL	41.5	BRL	193	BRL	37.3	BRL	228	28.9	***1,000***	***1,000***	***20,000***	***N/A***
C19-C36 Aliphatics	BDL	*19.85*	BRL	41.5	800		42.6		252		53.7	***3,000***	***3,000***	***20,000***	***N/A***
C11-C22 Aromatics	46.9		68.0		913		161		571		70.8	***1,000***	***1,000***	***10,000***	***N/A***
Acenaphthene	BDL	*0.0990*	BRL	0.207	0.966		1.39		2.16		0.465	***1,000***	***1,000***	***10,000***	***2***
Acenaphthylene	BDL	*0.0990*	BRL	0.207	BRL	0.964	0.201		BRL		0.214	***600***	***10***	***10,000***	***1***
Anthracene	BDL	*0.0990*	0.398		4.18		3.52		12.6		1.69	***1,000***	***1,000***	***10,000***	***4***
Benzo (a) anthracene	0.378		0.444		**7.30**		6.70		**16.4**		2.75	***7***	***7***	***3,000***	***9***
Benzo (a) pyrene	0.438		0.680		**8.64**		5.76		**17.6**		**2.78**	***2***	***2***	***300***	***7***
Benzo (b) fluoranthene	0.258		0.380		6.13		3.79		**13.1**		2.14	***7***	***7***	***3,000***	***8***
Benzo (g,h,i) perylene	0.279		0.282		5.85		3.29		11.4		1.70	***1,000***	***1,000***	***10,000***	***3***
Benzo (k) fluoranthene	0.499		0.498		6.38		5.80		14.7		2.33	***70***	***70***	***10,000***	***4***
Chrysene	0.493		1.19		10.9		7.04		20.2		3.06	***70***	***70***	***400***	***7***
Dibenzo (a,h) anthracene	BDL	*0.0990*	BRL	0.207	BRL	0.964	BRL	0.186	BRL	1.14	0.27	***0.7***	***0.7***	***300***	***1***
Fluoranthene	0.929		1.96		18.4		15.6		43.0		6.66	***1,000***	***1,000***	***10,000***	***10***
Fluorene	BDL	*0.0990*	BRL	0.207	1.09		1.85		3.52		0.66	***1,000***	***1,000***	***10,000***	***2***
Indeno (1,2,3-cd) pyrene	0.254		0.224		4.26		2.52		**10.2**		1.47	***7***	***7***	***3,000***	***3***
2-Methylnaphthalene	BDL	*0.0990*	BRL	0.207	BRL	0.964	BRL	0.186	BRL	1.14	0.30	***80***	***300***	***10,000***	***1***
Naphthalene	BDL	*0.0990*	BRL	0.207	1.80		0.343		BRL	1.14	0.36	***40***	***500***	***10,000***	***1***
Phenanthrene	0.303		0.878		15.6		15.1		36.0		5.58	***500***	***500***	***10,000***	***20***
Pyrene	0.810		1.84		19.9		13.5		36.4		5.88	***1,000***	***1,000***	***10,000***	***20***
Total Metals (mg/kg)															
Arsenic	10.7		**25.7**		**31.4**		NS		17.8		10.7	***20***	***20***	***200***	***20***
Lead	109		**933**		131		NS		**358**		282	***300***	***300***	***3,000***	***600***

BDL = Below Detection Limit NS = Not Sampled

mg/kg (ppm) = miligrams per kilogram (parts per million)

BOLD/RED = concentrations above MassDEP Method 1 Soil Standards. N/A = No Applicable Method 1 Soil Standard

[1] = Extractable Petroleum Hydrocarbons (ranges and targets) analyzed via MAEPH Method.

[2] = For the calculation of the average concentration of a detected analyte where one or more concentration was reported as BDL, 1/2 the reporting limit is used for each BDL value.

The average concentration value for a particular analyte are for all samples in the worksheet, not just from each page.

If there were no detected concentrations of an analyte in all samples, the result is reported as BDL.

APPENDIX A

RESPONSE TO NOTICE OF AUDIT FINDINGS

RESPONSE TO
NOTICE OF AUDIT FINDINGS
RTN 3-26067

This submittal is prepared in response to the MassDEP Notice of Audit Findings (NOAF) letter for RTN 3-26067 and Notice of Noncompliance NON-NE-10-3A080 dated October 13, 2010. The MassDEP audit included the review of the Release Abatement Measure Completion Statement and Response Action Outcome (RAO) Statement Report filed by FS Engineers, Inc. (FSE) for the site on January 30, 2009. FSE was retained by the property owner, the United States Department of Transportation (U.S. DOT) / John A. Volpe National Transportation Systems Center (Volpe Center) in 2007 to perform site investigations and submit reports in accordance with the requirements of the Massachusetts Contingency Plan (MCP).

The NOAF descriptions of activities in noncompliance are provided in bold text, followed by the response. Additional soil boring and monitoring wells were installed and soil and groundwater samples were analyzed in response to the items identified in the NOAF. Details of the soil boring and monitoring well installation and soil and groundwater analysis are presented in the Release Abatement Measure Completion Statement and Response Action Outcome Report ("the RAO report") dated May 15, 2011 and prepared by FSE. This document is intended to be used with the RAO report submitted concurrently with this Post Audit Completion Statement, as this document refers to text, tables, figures, and attachments of the RAO report.

1) Violation of 310 CMR 40.0904(2) (a) (Class II) – Failure to Define the Extent of Contamination

The documentation of a risk characterization must contain a description of the horizontal and vertical extent of contamination in all evaluated media. The horizontal and vertical extent of contamination in soil and groundwater was not evaluated. Specifically:

- ***All the soil samples collected from the unfenced grassy area were from a depth no greater than four inches below the ground surface. The shallow soil samples do not adequately characterize the nature and extent subsurface condition in the grassy area;***

Response:

Fourteen additional soil borings were completed at the Site in March 2011, including nine soil borings within the grassy area surrounding the playground. Shallow soil samples (0 to 3 feet

below grade) were collected from each soil boring and submitted for laboratory analysis of VOCs via EPA Method 8260, EPH via MassDEP Methods, and metals. Deeper soil samples (3 to 12 feet below grade), were collected from six of these nine borings and submitted for laboratory analysis of VOCs and EPH. Fourteen near-surface (3 to 4 inches depth) soil samples were collected in 2008 and submitted for EPH, selected metals, and/or cyanide. Thirteen of these were located from within the grassy area south and east of the playground. Eleven soil borings (0 to 12 feet depth) were completed in May 2007. Four of these were located in the grassy area outside of the fenced-in playground. One shallow soil sample (1 to 3 feet below grade) and one deeper soil sample (6 to 8 feet below grade) were collected from each of the soil boring locations and were submitted for laboratory analysis of EPH, metals, and/or VPH.

In total, 25 soil borings (up to 12 feet deep) and fourteen near-surface borings were installed at the site in 2007, 2008, and 2011. Of these, sixteen borings and thirteen near-surface borings were installed in the grassy area of site. Nine borings and one near-surface boring were installed within the limits of the playground. The installation of these borings resulted in a total of 59 soil samples being submitted for laboratory analysis. Thirty-six of these laboratory samples were used to characterize the nature and extent of subsurface conditions in the grassy areas beyond the limits of the fenced-in playground. Refer to the RAO report, Section 4.0 for further details, and to Figure 3 for soil boring locations. Tabulated analytical results from the March 2011 soil samples are provided in Table 5 of the RAO report, and tabulated analytical results from the May 2007 and April 2008 soil samples are provided in Table 1 and Table 3, respectively, of the RAO report.

- ***The number and locations of the monitoring wells were not adequate to characterize and define the extent of groundwater contamination at the site. Only three monitoring wells were installed at the site during the assessment activities. No monitoring wells were installed near the building which is used, in part, as a day care center. In addition, the groundwater samples collected from the wells were only analyzed for extractable petroleum hydrocarbons (EPH). It should be noted that coal tars, the main source of contamination beneath the property, may contain a number of volatile organic compounds.***

Response:

Of the fourteen additional soil borings completed at the Site in March 2011, six were completed as groundwater monitoring wells. Three of these wells were located around and within 25 feet of the building which contains the TSC Child Care Center on the ground floor. On March 17, 2011 groundwater samples were collected from the six newly-installed wells (including the three

monitoring wells located around the building mentioned above) as well as from two of the three previously installed monitoring wells. The third previously installed well has been destroyed. Groundwater samples from these eight on-site monitoring wells were submitted for laboratory analysis of EPH via DEP Methods and VOCs via EPA Method 8260. No analytical parameter in groundwater was detected above the applicable GW-2 and GW-3 standards in any of the monitoring wells around the TSC Childcare building. Refer to Section 4.0 of the RAO report for further details regarding installation and sampling of groundwater monitoring wells and to Figure 3 for groundwater monitoring well locations.

2) Violation of 310 CMR 40.0921 (Class II) – Failure to Identify the Human Receptors

The documentation of the risk characterization must identify the human receptors who are likely to be present at the disposal site and who may be exposed to the contaminated media. The risk characterization document identified construction workers as the only human receptor group and evaluated the potential risk to this group. The risk characterization document did not evaluate the risk to a potential future resident. It should be noted that the implemented Activity and Use Limitation (AUL) did not exclude the future use of the property as residential.

Response:

A Method 3 risk characterization identified the potential exposure scenarios and pathways at the site based on current or foreseeable future use of the property. The current use of the property is an office complex with a daycare playground and open spaces set aside for recreation. As noted in Section 10.1 of the RAO report, based upon the activities and uses of the site, the distinction was made between shallow surficial soil (from grade to 6 inches below grade) and deeper surficial soil (from 6 inches to 3 feet below grade). It had been demonstrated in the Method 3 risk characterization included in the RAO on January 30, 2009 (included as Appendix F of the RAO report) that soil encountered from 0 to 6 inches below grade at the site did not present a significant risk of harm to health, safety, public welfare, and the environment.

Table 10-1 in section 10.2 of the RAO report described seven exposure scenarios for current and future activities and uses of the site. The first three scenarios included the use of the TSC Child Care Center playground by children and adults, recreational activities in the field by children and adults, and routine maintenance of the landscaping. These three exposure pathways were not complete, as these activities do not disturb the fill-impacted materials located at depths below 6 inches. The next three exposure scenarios included the Current and Future Construction Worker Activities and Uses at the site. These exposure scenarios were evaluated via the MassDEP

Construction Worker shortform using all in-situ soil data collected through 2011. The output of the short form demonstrates that there is No Significant Risk associated with the accessible surface soils (0 feet to 3 feet depth) at this Site based on any adult worker exposure scenario. The Construction Worker shortform tables were included in Appendix G of the RAO report.

In order to evaluate risk of unrestricted future activities and uses of the property as a residence, a seventh exposure scenario was added to the risk assessment and to Table 10.1. This exposure scenario was evaluated via the MassDEP Resident shortform by incorporating all in-situ soil data collected through 2011. The output of the Resident shortform indicates that there is the potential risk associated with future residential use of the site relative to exposure to accessible soils. This outcome was the result of the existing site conditions which include residual levels of EPH with target PAHs, lead, and arsenic in certain soils at depths greater than 6 inches below ground surface. The Residential shortform tables were included in Appendix G of the RAO report. Therefore the AUL restricted future use of the site as a residence.

Because existing site conditions include residual levels of contaminants in certain soils at depths greater than 3 feet below ground surface derived from coal ash and slag containing historic fill, there is a potential for future risk if unrestricted future activities and uses of the property were to result in exposure to the contaminated soils or change in location of those soils to render them more accessible. Therefore, the AUL also restricts invasive activities in the areas of soil contamination that are located at depths greater than 3 feet below ground surface by adult workers so that the soils do not become accessible for direct contact or exposure. Refer to Appendix H of the RAO report for the AUL submittal.

3) Violation of 310 CMR 40.0006 (Class II) – Failure to Adequately Evaluate the Potential Presence of a Critical Exposure Pathway (CEP)

The detection of elevated levels of the C5-C8 petroleum fraction in indoor air samples collected from the Child Care Center (up to 210 ug/m3) meet the definition of a CEP, as stipulated in 310 CMR 40.0006 (a), unless it can be demonstrated that detected levels were not the result of vapor intrusion from soil and/or groundwater contamination beneath the Child Care Center Building. There was not sufficient assessment to rule out the presence of a CEP condition at the Child Care Center. Specifically:

- ***No monitoring wells were installed near the Child Care Center building to evaluate the potential for vapor intrusion;***

Response:

Six groundwater monitoring wells were completed at the Site in March 2011, three of which are located around and within 25 feet of the building that houses the TSC Child Care Center. No contaminant of concern (COC) in groundwater was found at a concentration above the applicable Method 1 GW-2 Standard in the wells around the childcare building. In addition, less than 10 parts per billion (ppb) total VOCs were detected in the groundwater samples from the two wells closest to the TSC Child Care Center – MW-4 to the south of the daycare center and MW-5 to the east of the daycare center. Less than 50 ppb total VOCs were detected in the groundwater sample from MW-9 – located by the northwestern corner of the building. Groundwater gauging data and groundwater analytical data are provided in Table 6 and Table 7, respectively, and groundwater analytical results are discussed in Section 9.2.2 of the RAO report.

- ***The extent of coal tar contamination from the playground area was not defined and there is no information regarding the soil quality beneath the building; and***

Response:

Prior to the assessments conducted by Lord Associates and FS Engineers beginning in 2006 and associated with RTN 3-26067, no other environmental assessment is known to have been conducted at the Site. According to the *IRA Completion Report* prepared by Lord Associates dated October 10, 2006, the coal tar was concluded to be related to the former Cambridge Gas Light Company's Manufactured Gas Plant that operated across the street from the early 1900's until the late 1960's. Coal tar residue from the MGP process was piped to barges in Broad Canal that formerly bisected the Volpe Center property parallel to Potter Street and Broadway. Coal tar had been discovered in the shallow soil at several properties in the immediate area, including the discovery in 2005 by workers installing a new gas main in Potter Street.

FSE reviewed information from available Sanborn Fire Insurance Maps dated 1900 through 1950, from the Cambridge City Directories from 1954, 1965 and 1968, and from historic photographs from the Volpe Center archives. A detailed account of the site history is provided in Section 3.0 of the RAO report. In summary: portions of the TSC playground and Building #4 are located on the site of the former Warren Bros. Roads Co. – a manufacturer of road paving machinery from the early 1900's through the mid 1960's, and portions of the TSC playground and the grassy field are located on the site of several different manufacturing enterprises from the 1900's through the 1960's, including a producer of tannery finished products and an electric and neon sign factory.

An area of subsurface coal tar at shallow depth was initially discovered within the limits of the Preschool Playground in 2006. During the subsequent IRA excavation within the Preschool Playground and the 2008 excavation of the Toddler Playground, a layer of coal tar was found to extend in a north to south direction beneath the center of the playground. The coal-tar layer appeared to be contained within the playground area and was located at shallow depths and in close proximity to north-south trending, abandoned concrete footings found beneath the center of the playground. Coal slag and ash as well as brick were found in subsurface soil throughout the entire property during the soil sampling activities and excavations conducted at the site. Additionally, a layer of scrap metal was also found during the excavation within the Toddler Playground. Following the excavation and removal of coal tar from the Preschool Playground in 2008, nine confirmatory samples at a depth of 4 feet below grade. Nine deep soil borings and 5 shallow soil borings were installed throughout the study area in 2011. None of the resulting 32 soil samples showed evidence of the presence of coal tar. One boring collected in 2007 from within the playground showed the presence of coal tar at about 4 feet depth. However, the borings surrounding the tar impacted boring did not indicate the presence of coal tar. Therefore, the presence of any significant coal tar within the subject property is not likely.

During the March 2011 installation of fourteen additional soil borings, varying amounts of coal ash and slag were observed in all borings located east of Building #4 (Borings SB-102 through SB-113). Refer to the boring logs included in Appendix B of the RAO report. Low levels of PAHs in soil were detected in almost every sample collected at the site during this and the previous investigations of 2007 and 2008. Laboratory analytical results have shown that some detected concentrations of lead and/or PAHs are above the applicable Method 1 soil standards in several of the samples. No “hot spot” for PAHs or Lead in soil has been identified at the site. The subsurface fill materials observed at the site that consist partly of coal ash and slag appear to be found ubiquitously across the study area. Refer to Tables 1, 3, 4, and 8 of the RAO report for a summary of soil analytical data and to Section 9.2.1 for further details on soil quality at the site.

- ***None of the three groundwater samples collected from the on-site monitoring wells were analyzed for (volatile organic compounds) VOCs or volatile petroleum hydrocarbons (VPH). Site investigations conducted in the vicinity of the subject site with similar site histories identified high concentrations of VOCs including benzene, in the groundwater***

Response:

Eight groundwater monitoring wells (2 existing and 6 newly installed) were sampled at the site on March 17, 2011. Three of the on-site wells (MW-4, MW-5, and MW-9) are located around and within 25 feet of the building that contains the TSC Child Care Center. All groundwater samples were submitted for analysis of EPH via DEP Methods and VOCs via EPA Method 8260. No VOC, PAH, or EPH range in groundwater was found at a concentration above the applicable Method 1 GW-2 Standards in MW-4, MW-5, and MW-9. No COCs were detected at concentrations above the Method 1 GW-2 or GW-3 Standards in any groundwater sample collected at the site with the exception of the groundwater sample from MW-7 which exceeded the Method 1 GW-2 Standard for naphthalene. MW-7 is located approximately 200 feet east of the TSC Child Care Center, cross gradient of the playground and daycare center, and is located more than 100 feet from any neighboring occupied structure. An AUL was implemented at the site to mitigate potential future vapor intrusion issues in future buildings at this location. Refer to Figures 5 and 6 of the RAO report for groundwater contour maps and to Tables 2 and 7 of the RAO report for groundwater analytical data.

4) Violation of 310 CMR 40.1074(2) (a) (Class II) – Failure to Provide a Clear Legal Description of the Area Subject to AUL

It appears that the AUL was intended for lots 2B and 10 which are detailed in deeds attached to the AUL as Exhibit A. The disposal site is located only on Parcel 10 which is a portion of the property. Form 1075 has been modified so that it is unclear whether the AUL applies to a portion or the entire property.

It should be noted that the AUL requires the development and implementation of a Soil Management Plan and a Health and Safety Plan prior to any excavation which is likely to disturb contaminated soil located at a depth greater than six inches below surface grade. It may not be feasible to meet that requirement for the entire property which includes approximately 14 acres, considering that even planting a shrub requires an excavation greater than six inches below grade. In addition, an AUL cannot be used in lieu of an adequate site assessment.

Response:

The deeds on file at the Middlesex South District Registry of Deeds in Cambridge for the parcels for which the AUL is applied are defined on the US Army Corps of Engineers *Tract Map: NASA Electronics Research Center* prepared on April 12, 1966. A copy of this map along with deeds defining metes and bounds of each parcel are included in the AUL submittal (Appendix H of the

RAO report). The disposal site subject to the AUL is parcel 2B and parcel 10 as defined on the plan. Parcel 10 is an approximately 0.63-acre, roughly square lot of land which contains the majority of the grass field east of the playground as well as the eastern half of the fenced-in TSC playground. Parcel 2B is an approximately 5.04-acre, irregularly shaped lot that extends from Potter Street to Broadway and includes Buildings #1, #2, and #4 as well as the remaining portions of the grassy field and playground. Parcel 2B also includes land that was previously the Broad Canal. The northeast-southwest trending dividing line between Parcel 10 to the east and Parcel 2B to the west runs through the TSC playground. For reference, the western fence of the playground is approximately 60 feet from the eastern wall of Building #4, whereas the boundary line between Parcel 2B and Parcel 10 is approximately 85 feet east of Building #4 – roughly the north-south center line of the playground.

As noted in Section 9.3 of the RAO report, historic fill containing coal ash, slag, and other debris (mainly brick) was observed throughout the site. Fill materials were found in the westernmost (SB-114/MW-9), northernmost (SB-106), easternmost (SB-103), and southernmost (SB-113) soil borings installed at the site. Laboratory analysis of soil samples throughout the site revealed the presence of EPH, PAHs, lead and other compounds associated with historic fill. Based upon visual observations and analytical results of the soil samples collected and upon the review of historic photographs and maps, the filled area appears to extend horizontally to the limits of the property. The vertical extent of historic fill across the majority of the Site appears to be approximately 8 feet in depth overlying natural deposits. Therefore, the AUL is applied to the disposal site, which is defined as Parcels 2B and 10.

APPENDIX B

BORING LOGS

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-101 / MW-4

Project:	**Volpe Center TSC Playground**		FSE project #: 11-1395
Location:	**Cambridge, MA**		
Client:	**U.S.DOT/Volpe Center**		
Date Started:	3/2/2011	Drilling Company:	New England Geotech
Date Completed:	3/2/2011	Drilling Method:	Geoprobe
Total Depth:	12'	Logged by:	Peter Buscemi
Well Casing Material:	PVC	Ground Surface Elevation:	N/A
Length of Well Screen:	10'	Depth to Groundwater:	~ 7'
Screen Slot Size:	0.01	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample: Depth Range (ft)	Sample: Type & No.	Sample: Blows per 6 in.	Sample: Recovery / Penetration	Strata	Sample Description		PID ppmv
1	0 - 3	S1	N/A	24" / 36"	**Topsoil**	S1 0 - 1.5':	Dry to damp, dark brown, fine SAND and GRAVEL, some organics. (Topsoil)	ND
2					**Unconsoli-dated Fill Material**	S1 1.5' - 3':	Dry, brown, fine to coarse SAND, some gravel.	ND
3	3 - 8	S2	N/A	24" / 60"		S2 3' - 6':	Dry to damp, brown, fine to medium SAND, trace of gravel.	ND
4								
5								
6						S2 6' - 6.25':	Damp, gray, CLAY.	ND
7					**Native Unconsoli-dated Materials**	S2 6.25' - 8':	Damp to wet, brown, fine to medium SAND, trace of gravel.	ND
8	8 - 12	S3	N/A	36" / 48"		S3 8' - 11':	Wet, brown, fine to medium SAND, trace of gravel.	ND
9								
10								
11						S3 11' - 12':	Wet, gray, fine SAND and SILT grading to gray SILT and CLAY.	ND
12						End of exploration at 12'		
13								
14								
15								
16								
17								
18								
19								
20								

Remarks: N/A = Not Applicable
ND = Not Detected

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-102 / MW-5

Project:	**Volpe Center TSC Playground**		FSE project #: 11-1395
Location:	**Cambridge, MA**		
Client:	**U.S.DOT/Volpe Center**		
Date Started:	3/2/2011	Drilling Company:	New England Geotech
Date Completed:	3/2/2011	Drilling Method:	Geoprobe
Total Depth:	12'	Logged by:	Peter Buscemi
Well Casing Material:	PVC	Ground Surface Elevation:	N/A
Length of Well Screen:	10'	Depth to Groundwater:	~ 7'
Screen Slot Size:	0.01	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample Depth Range (ft)	Sample Type & No.	Sample Blows per 6 in.	Sample Recovery / Penetration	Strata	Sample Description		PID ppmv
	0 - 3	S1	N/A	36" / 36"	**Topsoil**	S1 0 - 0.5':	Damp, dark brown, fine SAND, some organics including roots. (Topsoil)	0.8
1						S1 0.5' - 1.5':	Damp, brown, fine to medium SAND, trace of gravel.	0.8
2						S1 1.5 - 3':	Dry to damp, black to brown, fine SAND, some silt, little gravel, brick, and coal slag.	ND
3	3 - 8	S2	N/A	42" / 60"	**Unconsoli-dated Fill Material**	S2 3' - 4':	Dry, brown, fine to medium SAND, little gravel.	16.5
4						S2 4' - 5':	Dry, brown to black, fine to medium SAND and SILT, some clay, brick, and coal slag.	16.5
5						S2 5' - 7':	Damp to wet, gray to black, fine SAND and SILT, some brick and coal slag; Odor.	16.5
6								
7						S2 7' - 8':	Wet, brown to black, fine SAND, SILT and ORGANICS, trace of medium sand. (Peat)	16.5
8	8 - 12	S3	N/A	36" / 48"	**Native Unconsoli-dated Materials**	S3 8' - 12':	Same as above.	ND
9								
10								
11								
12						End of exploration at 12'		
13								
14								
15								
16								
17								
18								
19								
20								

Remarks: N/A = Not Applicable
ND = Not Detected

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-103

Project:	**Volpe Center TSC Playground**		FSE project #: 11-1395
Location:	**Cambridge, MA**		
Client:	**U.S.DOT/Volpe Center**		
Date Started:	3/2/2011	Drilling Company:	New England Geotech
Date Completed:	3/2/2011	Drilling Method:	Geoprobe
Total Depth:	3'	Logged by:	Peter Buscemi
Well Casing Material:	No Well Set	Ground Surface Elevation:	N/A
Length of Well Screen:	N/A	Depth to Groundwater:	Not Encountered
Screen Slot Size:	N/A	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample: Depth Range (ft)	Sample: Type & No.	Sample: Blows per 6 in.	Sample: Recovery / Penetration	Strata	Sample Description	PID ppmv
	0 - 3	S1	N/A	36" / 36"	**Topsoil**	S1 0 - 1': Damp, dark brown, fine SAND, some gravel and organics. (Topsoil)	ND
1					**Unconsoli-dated Fill Material**	S1 1' - 2.5': Dry, brown to black, fine to medium SAND, some gravel and coal slag (most at 2.5').	ND
2							
3						S1 2.5 - 3': Dry, brown, SILT and CLAY.	ND
4			**Native Unconsoli-dated Materials**			End of exploration at 3'	
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Remarks: N/A = Not Applicable
ND = Not Detected

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-104 / MW-6

Project:	**Volpe Center TSC Playground**		FSE project #: 11-1395
Location:	**Cambridge, MA**		
Client:	**U.S.DOT/Volpe Center**		
Date Started:	3/2/2011	Drilling Company:	New England Geotech
Date Completed:	3/2/2011	Drilling Method:	Geoprobe
Total Depth:	12'	Logged by:	Peter Buscemi
Well Casing Material:	PVC	Ground Surface Elevation:	N/A
Length of Well Screen:	10'	Depth to Groundwater:	~ 8'
Screen Slot Size:	0.01	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample Depth Range (ft)	Sample Type & No.	Sample Blows per 6 in.	Sample Recovery / Penetration	Strata	Sample Description		PID ppmv
	0 - 3	S1	N/A	36" / 36"	**Topsoil**	S1 0 - 0.5':	Damp, dark brown, fine SAND, some organics. (Topsoil)	ND
1						S1 0.5' - 2':	Dry, brown to black, fine to medium SAND, trace of gravel and coal slag.	ND
2						S1 2' - 2.5':	Dry, light brown, SILT and CLAY.	ND
3						S1 2.5 - 3':	Dry, brown, fine to coarse SAND, some little gravel.	ND
	3 - 8	S2	N/A	12" / 60"				
4					**Unconsoli-dated Fill Material**	S2 3' - 8':	Dry, brown, fine to coarse SAND, some gravel, rock, with little brick.	ND
5								
6								
7								
8								
	8 - 12	S3	N/A	24" / 48"		S3 8' - 12':	Wet, brown to gray, fine SAND and SILT grading to SILT and CLAY.	ND
9								
10					**Native Unconsoli-dated Materials**			
11								
12						End of exploration at 12'		
13								
14								
15								
16								
17								
18								
19								
20								

Remarks: N/A = Not Applicable
ND = Not Detected

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-105 / MW-7

Project:	**Volpe Center TSC Playground**		FSE project #: 11-1395
Location:	**Cambridge, MA**		
Client:	**U.S.DOT/Volpe Center**		
Date Started:	3/2/2011	Drilling Company:	New England Geotech
Date Completed:	3/2/2011	Drilling Method:	Geoprobe
Total Depth:	12'	Logged by:	Peter Buscemi
Well Casing Material:	PVC	Ground Surface Elevation:	N/A
Length of Well Screen:	10'	Depth to Groundwater:	~ 5'
Screen Slot Size:	0.01	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample Depth Range (ft)	Sample Type & No.	Sample Blows per 6 in.	Sample Recovery / Penetration	Strata	Sample Description		PID ppmv
1	0 - 3	S1	N/A	30" / 36"	**Topsoil**	S1 0 - 0.5':	Damp, dark brown, fine SAND and SILT, some organics. (Topsoil)	0.5
2					**Unconsoli-dated Fill Material**	S1 0.5' - 3':	Dry, brown, fine SAND, some gravel and brick, little coal slag, trace of rock.	
3	3 - 8	S2	N/A	36" / 60"		S2 3' - 5.5':	Dry, brown, fine SAND and SILT, some gravel grading to SAND and GRAVEL, some brick, coal slag and ash.	0.8
4								
5								
6						S2 5.5' - 8':	Wet, brown to black, SILT and ORGANICS, little fine sand. (Peat); Slight odor.	35.5
7								
8	8 - 12	S3	N/A	42" / 48"	**Native Unconsoli-dated Materials**	S3 8' - 12':	Wet, gray to brown, fine to coarse SAND, trace of gravel; Sheen and strong odor.	519
9								
10								
11								
12						End of exploration at 12'		
13								
14								
15								
16								
17								
18								
19								
20								

Remarks: N/A = Not Applicable
ND = Not Detected

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-106

Project:	**Volpe Center TSC Playground**		FSE project #: 11-1395
Location:	**Cambridge, MA**		
Client:	**U.S.DOT/Volpe Center**		
Date Started:	3/2/2011	Drilling Company:	New England Geotech
Date Completed:	3/2/2011	Drilling Method:	Geoprobe
Total Depth:	3'	Logged by:	Peter Buscemi
Well Casing Material:	No Well Set	Ground Surface Elevation:	N/A
Length of Well Screen:	N/A	Depth to Groundwater:	Not Encountered
Screen Slot Size:	N/A	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample: Depth Range (ft)	Sample: Type & No.	Sample: Blows per 6 in.	Sample: Recovery / Penetration	Strata	Sample Description	PID ppmv
	0 - 3	S1	N/A	36" / 36"	**Topsoil**	S1 0 - 1': Dry, dark brown, fine to medium SAND and SILT, some organics, little gravel. (Topsoil)	ND
1							
2					**Unconsoli-dated Fill Material**	S1 1' - 3': Dry, brown, fine to medium SAND, some gravel, brick, and coal slag.	ND
3							
4						End of exploration at 3'	
5							
6							
7							
8							
9							
10							
11							
12							
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16							
17							
18							
19							
20							

Remarks: N/A = Not Applicable
ND = Not Detected

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-107

Project:	**Volpe Center TSC Playground**		FSE project #: 11-1395
Location:	**Cambridge, MA**		
Client:	**U.S.DOT/Volpe Center**		
Date Started:	3/2/2011	Drilling Company:	New England Geotech
Date Completed:	3/2/2011	Drilling Method:	Geoprobe
Total Depth:	3'	Logged by:	Peter Buscemi
Well Casing Material:	No Well Set	Ground Surface Elevation:	N/A
Length of Well Screen:	N/A	Depth to Groundwater:	Not Encountered
Screen Slot Size:	N/A	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample: Depth Range (ft)	Sample: Type & No.	Sample: Blows per 6 in.	Sample: Recovery / Penetration	Strata	Sample Description	PID ppmv
	0 - 3	S1	N/A	36" / 36"	**Topsoil**	S1 0 - 0.5': Dry, brown, fine to coarse SAND.	ND
1					**Unconsoli-dated Fill Material**	S1 0.5' - 3': Dry, brown, fine to medium SAND, some coal slag and brick, little gravel.	ND
2							
3						End of exploration at 3'	
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Remarks: N/A = Not Applicable
ND = Not Detected

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-108 / MW-8

Project: **Volpe Center TSC Playground** FSE project #: 11-1395
Location: **Cambridge, MA**
Client: **U.S.DOT/Volpe Center**

Date Started:	3/2/2011	Drilling Company:	New England Geotech
Date Completed:	3/2/2011	Drilling Method:	Geoprobe
Total Depth:	12'	Logged by:	Peter Buscemi
Well Casing Material:	PVC	Ground Surface Elevation:	N/A
Length of Well Screen:	10'	Depth to Groundwater:	~ 7'
Screen Slot Size:	0.01	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample Depth Range (ft)	Sample Type & No.	Sample Blows per 6 in.	Sample Recovery / Penetration	Strata	Sample Description		PID ppmv
	0 - 3	S1	N/A	30" / 36"	**Topsoil**	S1 0 - 0.5':	Damp, dark brown, fine SAND and SILT, some organics. (Topsoil)	ND
1						S1 0.5' - 3':	Dry, brown, fine to coarse SAND, some gravel and rock, little coal slag, trace of silt.	ND
2								
3	3 - 8	S2	N/A	12" / 60"	**Unconsoli-dated Fill Material**	S2 3' - 7':	Damp to wet, brown to gray, fine SAND and SILT, some gravel and coal slag.	ND
4								
5								
6								
7						S2 7' - 8':	Wet, brown, fine SAND, SILT and ORGANICS, little clay. (Peat)	ND
8	8 - 12	S3	N/A	24" / 48"		S3 8' - 10':	Same as above.	0.5
9					**Native Unconsoli-dated Materials**			
10						S3 10' - 12':	Wet, gray, fine to medium SAND, little gravel.	0.5
11								
12						End of exploration at 12'		
13								
14								
15								
16								
17								
18								
19								
20								

Remarks: N/A = Not Applicable
ND = Not Detected

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-109

Project:	**Volpe Center TSC Playground**		FSE project #: 11-1395
Location:	**Cambridge, MA**		
Client:	**U.S.DOT/Volpe Center**		
Date Started:	3/2/2011	Drilling Company:	New England Geotech
Date Completed:	3/2/2011	Drilling Method:	Geoprobe
Total Depth:	3'	Logged by:	Peter Buscemi
Well Casing Material:	No Well Set	Ground Surface Elevation:	N/A
Length of Well Screen:	N/A	Depth to Groundwater:	Not Encountered
Screen Slot Size:	N/A	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample: Depth Range (ft)	Sample: Type & No.	Sample: Blows per 6 in.	Sample: Recovery / Penetration	Strata	Sample Description	PID ppmv
	0 - 3	S1	N/A	36" / 36"	**Topsoil**	S1 0 - 0.5': Damp, dark brown, fine SAND and SILT, some organics. (Topsoil)	ND
1					**Unconsoli-dated Fill Material**	S1 0.5' - 3': Dry, brown, fine to medium SAND, some gravel, rock, coal slag and ash.	ND
2							
3						End of exploration at 3'	
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Remarks: N/A = Not Applicable
ND = Not Detected

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-110

Project:	**Volpe Center TSC Playground**		FSE project #: 11-1395
Location:	**Cambridge, MA**		
Client:	**U.S.DOT/Volpe Center**		
Date Started:	3/3/2011	Drilling Company:	New England Geotech
Date Completed:	3/3/2011	Drilling Method:	Geoprobe
Total Depth:	12'	Logged by:	Peter Buscemi
Well Casing Material:	No Well Set	Ground Surface Elevation:	N/A
Length of Well Screen:	N/A	Depth to Groundwater:	~ 6'
Screen Slot Size:	N/A	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample: Depth Range (ft)	Sample: Type & No.	Sample: Blows per 6 in.	Sample: Recovery / Penetration	Strata	Sample Description		PID ppmv
	0 - 3	S1	N/A	36" / 36"	**Topsoil**	S1 0 - 0.5':	Dry, dark brown, fine SAND and SILT, some organics. (Topsoil)	ND
1								
						S1 0.5' - 3':	Damp, brown, fine to coarse SAND, some gravel, brick, and coal slag.	ND
2								
3					**Unconsoli-dated Fill Material**			
	3 - 8	S2	N/A	36" / 60"		S2 3' - 6':	Damp to wet, brown to black, fine to coarse SAND, some gravel, coal slag and ash.	1.4
4								
5								
6								
						S2 6' - 8':	Wet, brown to black, fine SAND and SILT, some organics, little clay. (Peat)	1.4
7								
8								
	8 - 12	S3	N/A	42" / 48"	**Native Unconsoli-dated Materials**	S3 8' - 12':	Wet, brown to black, fine SAND and SILT, some clay, medium to coarse sand, and organics. (Peat)	ND
9								
10								
11								
12						End of exploration at 12'		
13								
14								
15								
16								
17								
18								
19								
20								

Remarks: N/A = Not Applicable
ND = Not Detected

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-111

Project:	**Volpe Center TSC Playground**		FSE project #: 11-1395
Location:	**Cambridge, MA**		
Client:	**U.S.DOT/Volpe Center**		
Date Started:	3/3/2011	Drilling Company:	New England Geotech
Date Completed:	3/3/2011	Drilling Method:	Geoprobe
Total Depth:	12'	Logged by:	Peter Buscemi
Well Casing Material:	No Well Set	Ground Surface Elevation:	N/A
Length of Well Screen:	N/A	Depth to Groundwater:	~ 6'
Screen Slot Size:	N/A	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample: Depth Range (ft)	Sample: Type & No.	Sample: Blows per 6 in.	Sample: Recovery / Penetration	Strata	Sample Description		PID ppmv
	0 - 3	S1	N/A	36" / 36"	**Topsoil**	S1 0 - 0.5':	Dry, brown, fine SAND and SILT, some organics, trace gravel. (Topsoil)	ND
1					**Unconsoli-dated Fill Material**	S1 0.5' - 3':	Damp, brown, fine to medium SAND, some gravel, coal ash and slag.	ND
2								
3	3 - 8	S2	N/A	24" / 60"		S2 3' - 6':	Dry to damp, brown to black, medium to coarse SAND, some gravel, coal slag ash, and brick.	ND
4								
5								
6						S2 6' - 8':	Wet, yellowish brown to dark brown, fine SAND and SILT, some organics, little clay. (Peat)	ND
7					**Native Unconsoli-dated Materials**			
8	8 - 12	S3	N/A	48" / 48"		S3 8' - 10':	Same as above	215
9								
10						S3 10' - 12':	Wet, gray, medium to coarse SAND; Sheen and odor.	215
11								
12						End of exploration at 12'		
13								
14								
15								
16								
17								
18								
19								
20								

Remarks: N/A = Not Applicable
ND = Not Detected

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-112

Project:	**Volpe Center TSC Playground**		FSE project #: 11-1395
Location:	**Cambridge, MA**		
Client:	**U.S.DOT/Volpe Center**		
Date Started:	3/3/2011	Drilling Company:	New England Geotech
Date Completed:	3/3/2011	Drilling Method:	Geoprobe
Total Depth:	3'	Logged by:	Peter Buscemi
Well Casing Material:	No Well Set	Ground Surface Elevation:	N/A
Length of Well Screen:	N/A	Depth to Groundwater:	Not Encountered
Screen Slot Size:	N/A	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample: Depth Range (ft)	Sample: Type & No.	Sample: Blows per 6 in.	Sample: Recovery / Penetration	Strata	Sample Description	PID ppmv
	0 - 3	S1	N/A	36" / 36"	**Topsoil**	S1 0 - 1': Dry, brown, fine SAND and SILT, some organics, trace medium to coarse sand and gravel. (Topsoil)	ND
1							
2					**Unconsoli-dated Fill Material**	S1 1' - 3': Dry, brown to black, fine to medium SAND, some silt, clay, and coal slag, trace gravel.	ND
3							
4						End of exploration at 3'	
5							
6							
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17							
18							
19							
20							

Remarks: N/A = Not Applicable
ND = Not Detected

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-113

Project:	**Volpe Center TSC Playground**		FSE project #: 11-1395
Location:	**Cambridge, MA**		
Client:	**U.S.DOT/Volpe Center**		
Date Started:	3/3/2011	Drilling Company:	New England Geotech
Date Completed:	3/3/2011	Drilling Method:	Geoprobe
Total Depth:	12'	Logged by:	Peter Buscemi
Well Casing Material:	No Well Set	Ground Surface Elevation:	N/A
Length of Well Screen:	N/A	Depth to Groundwater:	~ 8'
Screen Slot Size:	N/A	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample: Depth Range (ft)	Sample: Type & No.	Sample: Blows per 6 in.	Sample: Recovery / Penetration	Strata	Sample Description		PID ppmv
	0 - 3	S1	N/A	36" / 36"	**Topsoil**	S1 0 - 0.5':	Dry, brown, fine SAND and SILT, some gravel and coarse sand. (Topsoil)	ND
1						S1 0.5' - 3':	Dry to damp, brown, fine to medium SAND, some gravel, little silt and coal ash.	ND
2								
3	3 - 8	S2	N/A	36" / 60"		S2 3' - 4':	Same as above.	ND
4						S2 4' - 8':	Dry to damp, light brown, fine to medium SAND, little gravel.	ND
5								
6					**Unconsoli-dated Fill Material**			
7								
8	8 - 12	S3	N/A	36" / 48"		S3 8' - 12':	Wet, light brown, fine to coarse SAND, little gravel.	ND
9								
10								
11								
12						End of exploration at 12'		
13								
14								
15								
16								
17								
18								
19								
20								

Remarks: N/A = Not Applicable
ND = Not Detected

F S ENGINEERS
CIVIL AND ENVIRONMENTAL ENGINEERING

TEST BORING LOG

BORING: SB-114 / MW-9

Project:	**Volpe Center TSC Playground**		FSE project #: 11-1395
Location:	**Cambridge, MA**		
Client:	**U.S.DOT/Volpe Center**		
Date Started:	3/3/2011	Drilling Company:	New England Geotech
Date Completed:	3/3/2011	Drilling Method:	Geoprobe
Total Depth:	12'	Logged by:	Peter Buscemi
Well Casing Material:	PVC	Ground Surface Elevation:	N/A
Length of Well Screen:	10'	Depth to Groundwater:	~ 6'
Screen Slot Size:	0.01	Boring Location:	See Figure 3 - Well Location Plan

Depth Scale (ft)	Sample Depth Range (ft)	Sample Type & No.	Sample Blows per 6 in.	Sample Recovery / Penetration	Strata	Sample Description		PID ppmv
	0 - 3	S1	N/A	24" / 36"	**Topsoil**	S1 0 - 1.0':	Dry to damp, brown, fine to medium SAND, some organics. (Topsoil)	ND
1						S1 1' - 3':	Dry to damp, brown, fine to medium SAND, some gravel.	ND
2								
3	3 - 8	S2	N/A	12" / 60"		S2 3' - 8':	Dry to wet, light brown to black, fine to medium SAND, little gravel and coal slag.	3.6
4					**Unconsoli-dated Fill Material**			
5								
6								
7								
8	8 - 12	S3	N/A	42" / 48"		S3 8' - 10':	Wet, brown to gray, fine to medium SAND, some gravel and clay.	11.6
9								
10					**Native Unconsoli-dated Materials**	S3 10' - 11':	Wet, gray, CLAY.	11.6
11						S3 11' - 12':	Wet, reddish brown, fine SAND and SILT, some organics. (Peat)	11.6
12						End of exploration at 12'		
13								
14								
15								
16								
17								
18								
19								
20								

Remarks: N/A = Not Applicable
ND = Not Detected

APPENDIX C

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

Report Date:
10-Mar-11 15:56

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

FS Engineers, Inc.
2 Clock Tower Place, Suite 630
Maynard, MA 01754
Attn: Farooq Siddique

Project: Volpe Center - Cambridge, MA
Project #: 11-1395

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB25218-01	SB-101-030211 0-3'	Soil	02-Mar-11 09:53	03-Mar-11 17:07
SB25218-02	SB-101-030211 3-8'	Soil	02-Mar-11 10:00	03-Mar-11 17:07
SB25218-03	SB-102-030211 0-3'	Soil	02-Mar-11 10:47	03-Mar-11 17:07
SB25218-04	SB-102-030211 4-7'	Soil	02-Mar-11 10:50	03-Mar-11 17:07
SB25218-05	SB-103-030211 0-3'	Soil	02-Mar-11 11:52	03-Mar-11 17:07
SB25218-06	SB-104-030211 0-3'	Soil	02-Mar-11 12:32	03-Mar-11 17:07
SB25218-07	SB-104-030211 3-8'	Soil	02-Mar-11 12:40	03-Mar-11 17:07
SB25218-08	SB-105-030211 0-3'	Soil	02-Mar-11 13:05	03-Mar-11 17:07
SB25218-09	SB-105-030211 8-12'	Soil	02-Mar-11 13:32	03-Mar-11 17:07
SB25218-10	SB-106-030211 0-3'	Soil	02-Mar-11 14:17	03-Mar-11 17:07
SB25218-11	SB-107-030211 0-3'	Soil	02-Mar-11 14:29	03-Mar-11 17:07
SB25218-12	SB-108-030211 0-3'	Soil	02-Mar-11 15:21	03-Mar-11 17:07
SB25218-13	SB-108-030211 3-7'	Soil	02-Mar-11 15:30	03-Mar-11 17:07
SB25218-14	SB-109-030211 0-3'	Soil	02-Mar-11 15:53	03-Mar-11 17:07
SB25218-15	FD-01-030211	Soil	02-Mar-11 10:30	03-Mar-11 17:07

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes.
Please note that this report contains 107 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

CASE NARRATIVE:

The sample temperature upon receipt by Spectrum Analytical courier was recorded as 4.2 degrees Celsius. The condition of these samples was further noted as received on ice. The samples were transported on ice to the laboratory facility and the temperature was recorded at 2.3 degrees Celsius upon receipt at the laboratory. Please refer to the Chain of Custody for details specific to sample receipt times.

An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

MADEP has published a list of analytical methods (CAM) which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of MCP decisions. "Presumptive Certainty" can be established only for those methods published by the MADEP in the MCP CAM. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

According to WSC-CAM 5/2009 Rev.1, Table 11 A-1, recovery for some VOC analytes have been deemed potentially difficult. Although they may still be within the recommended recovery range, a range has been set based on historical control limits.

Some target analytes which are not listed as exceptions in the Summary of CAM Reporting Limits may exceed the recommended RL based on sample initial volume or weight provided, % moisture content, or responsiveness of a particular analyte to purge and trap instrumentation.

All VOC soils samples submitted and analyzed in methanol will have a minimum dilution factor of 50. This is the minimum amount of solvent allowed on the instrumentation without causing interference. Additional dilution factors may be required to keep analyte concentration within instrument calibration.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

+MADEP EPH 5/2004 R

Samples:

SB25218-03 *SB-102-030211 0-3'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB25218-04 *SB-102-030211 4-7'*

The Reporting Limit has been raised to account for matrix interference.

SB25218-08 *SB-105-030211 0-3'*

The Reporting Limit has been raised to account for matrix interference.

SB25218-10 *SB-106-030211 0-3'*

The Reporting Limit has been raised to account for matrix interference.

SB25218-11 *SB-107-030211 0-3'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB25218-15 *FD-01-030211*

The Reporting Limit has been raised to account for matrix interference.

SW846 6010C

SW846 6010C

Laboratory Control Samples:

1103848 SRM/SRMD

Copper percent recoveries (114/122) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

FD-01-030211
SB-101-030211 0-3'
SB-102-030211 0-3'
SB-103-030211 0-3'
SB-104-030211 0-3'
SB-105-030211 0-3'
SB-106-030211 0-3'
SB-107-030211 0-3'
SB-108-030211 0-3'
SB-109-030211 0-3'

SW846 7471B

Samples:

SB25218-03 *SB-102-030211 0-3'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Mercury

SB25218-05 *SB-103-030211 0-3'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Mercury

SB25218-06 *SB-104-030211 0-3'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Mercury

SB25218-08 *SB-105-030211 0-3'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Mercury

SB25218-12 *SB-108-030211 0-3'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Mercury

SB25218-14 *SB-109-030211 0-3'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Mercury

SB25218-15 *FD-01-030211*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Mercury

SW846 8260C

Calibration:

1102034

SW846 8260C

Calibration:

1102034

Analyte quantified by quadratic equation type calibration.

1,1,1,2-Tetrachloroethane
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane (EDB)
2-Hexanone (MBK)
Bromodichloromethane
Bromoform
Carbon disulfide
Carbon tetrachloride
cis-1,3-Dichloropropene
Dibromochloromethane
trans-1,3-Dichloropropene

This affected the following samples:

S101398-ICV1

Laboratory Control Samples:

1104077 BS/BSD

2-Butanone (MEK) percent recoveries (62/76) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

SB-106-030211 0-3'

Ethanol percent recoveries (69/76) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

SB-106-030211 0-3'

1104178 BS/BSD

Chloromethane percent recoveries (131/95) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

SB-108-030211 0-3'

1104178 BSD

Chloromethane RPD 32% (25%) is outside individual acceptance criteria, but within overall method allowances.

1104178-BSD1

The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

Chloromethane

Spikes:

1103992-MS1 *Source: SB25218-10*

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Bromomethane
Carbon disulfide
Chloromethane
Hexachlorobutadiene
Tert-Butanol / butyl alcohol
Vinyl chloride

SW846 8260C

Spikes:

1103992-MSD1 *Source: SB25218-10*

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Bromomethane
Carbon disulfide
Chloromethane
Dichlorodifluoromethane (Freon12)
Tert-Butanol / butyl alcohol
Vinyl chloride

Samples:

S101634-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Chloromethane (-26.3%)

This affected the following samples:

1103905-BLK1
1103905-BS1
1103905-BSD1
SB-102-030211 4-7'
SB-105-030211 8-12'

S101642-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Ethanol (-23.0%)
trans-1,4-Dichloro-2-butene (20.1%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Acetone (-20.7%)

This affected the following samples:

1103831-BLK1
1103831-BS1
1103831-BSD1
FD-01-030211
SB-101-030211 0-3'
SB-101-030211 3-8'
SB-102-030211 0-3'
SB-103-030211 0-3'
SB-104-030211 0-3'
SB-105-030211 0-3'
SB-107-030211 0-3'

S101687-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Tetrahydrofuran (-20.7%)

SW846 8260C

Samples:

S101687-CCV1

This affected the following samples:

1104079-BLK1
1104079-BS1
1104079-BSD1
SB-104-030211 3-8'
SB-108-030211 3-7'
SB-109-030211 0-3'

S101701-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

2-Butanone (MEK) (-23.4%)
Bromoform (20.2%)
Chloromethane (-29.1%)
Ethanol (-33.1%)
Tert-amyl methyl ether (-20.9%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Acetone (-26.6%)

This affected the following samples:

1104077-BLK1
1104077-BS1
1104077-BSD1
SB-106-030211 0-3'

S101736-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Tetrahydrofuran (-23.2%)

This affected the following samples:

1104178-BLK1
1104178-BS1
1104178-BSD1
SB-108-030211 0-3'

SB25218-04 *SB-102-030211 4-7'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB25218-07 *SB-104-030211 3-8'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB25218-09 *SB-105-030211 8-12'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Naphthalene

SB25218-09RE1 *SB-105-030211 8-12'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SW846 8260C

Samples:

SB25218-11 *SB-107-030211 0-3'*

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Naphthalene

SB25218-11RE1 *SB-107-030211 0-3'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB25218-12 *SB-108-030211 0-3'*

Reporting limits reflect SW846 5030 extraction technique due to interference and/or QC issues using SW846 5035A extraction technique.

SB25218-13 *SB-108-030211 3-7'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB25218-14 *SB-109-030211 0-3'*

Reporting limits reflect SW846 5030 extraction technique due to interference and/or QC issues using SW846 5035A extraction technique.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-101-030211 0-3'	11-1395	Soil	02-Mar-11 09:53	03-Mar-11
SB25218-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.24 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	6.2	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
67-64-1	Acetone	BRL		µg/kg dry	61.7	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	12.3	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	61.7	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	12.3	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	12.3	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	12.3	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	12.3	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	12.3	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	61.7	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-101-030211 0-3'	11-1395	Soil	02-Mar-11 09:53	03-Mar-11
SB25218-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.24 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	6.2	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	61.7	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	12.3	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	12.3	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	12.3	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	6.2	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	61.7	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	123	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	30.9	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	2470	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*89*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*93*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*107*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*100*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.2	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-101-030211 0-3'	11-1395	Soil	02-Mar-11 09:53	03-Mar-11
SB25218-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	24.2		mg/kg dry	11.2	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	Unadjusted C11-C22 Aromatic Hydrocarbons	34.3		mg/kg dry	11.2	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	24.2		mg/kg dry	11.2	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	34.3		mg/kg dry	11.2	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	BRL		µg/kg dry	372	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	372	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	372	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	372	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	372	1	"	"	"	"	"	
85-01-8	Phenanthrene	926		µg/kg dry	372	1	"	"	"	"	"	
120-12-7	Anthracene	BRL		µg/kg dry	372	1	"	"	"	"	"	
206-44-0	Fluoranthene	2,030		µg/kg dry	372	1	"	"	"	"	"	
129-00-0	Pyrene	1,840		µg/kg dry	372	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	896		µg/kg dry	372	1	"	"	"	"	"	
218-01-9	Chrysene	985		µg/kg dry	372	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	625		µg/kg dry	372	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	720		µg/kg dry	372	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	827		µg/kg dry	372	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	372	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	372	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	429		µg/kg dry	372	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*64*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*59*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*60*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.43	1	SW846 6010C	07-Mar-11	09-Mar-11	LR	1103848	
7440-38-2	Arsenic	5.04		mg/kg dry	1.43	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.478	1	"	"	"	"	"	
7440-43-9	Cadmium	BRL		mg/kg dry	0.478	1	"	"	"	"	"	
7440-47-3	Chromium	11.2		mg/kg dry	0.956	1	"	"	"	"	"	
7440-50-8	Copper	26.9		mg/kg dry	0.956	1	"	"	"	"	"	
7439-97-6	Mercury	0.0748		mg/kg dry	0.0322	1	SW846 7471B	"	08-Mar-11	HB	1103849	
7440-02-0	Nickel	9.63		mg/kg dry	0.956	1	SW846 6010C	"	09-Mar-11	LR	1103848	
7439-92-1	Lead	60.5		mg/kg dry	1.43	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	4.78	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	1.43	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	2.87	1	"	"	"	"	"	
7440-66-6	Zinc	71.8		mg/kg dry	0.956	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	87.4		%		1	SM2540 G Mod.	04-Mar-11	07-Mar-11	BD	1103858	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-101-030211 0-3' SB25218-01	11-1395	Soil	02-Mar-11 09:53	03-Mar-11

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
57-12-5	Cyanide (total)	BRL		mg/kg dry	1.16	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103894	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-101-030211 3-8'	11-1395	Soil	02-Mar-11 10:00	03-Mar-11
SB25218-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.22 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	5.6	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
67-64-1	Acetone	BRL		µg/kg dry	56.0	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	11.2	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	56.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	11.2	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	11.2	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	11.2	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	11.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	11.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	56.0	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-101-030211 3-8'	11-1395	Soil	02-Mar-11 10:00	03-Mar-11
SB25218-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.22 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	5.6	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	56.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	11.2	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	11.2	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	11.2	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	5.6	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	56.0	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	112	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	28.0	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	2240	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*98*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*95*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*111*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	10.3	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg dry	10.3	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-101-030211 3-8'	11-1395	Soil	02-Mar-11 10:00	03-Mar-11
SB25218-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	24.8		mg/kg dry	10.3	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	Unadjusted C11-C22 Aromatic Hydrocarbons	35.8		mg/kg dry	10.3	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	24.8		mg/kg dry	10.3	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	35.8		mg/kg dry	10.3	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	BRL		µg/kg dry	343	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	343	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	343	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	343	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	343	1	"	"	"	"	"	
85-01-8	Phenanthrene	1,350		µg/kg dry	343	1	"	"	"	"	"	
120-12-7	Anthracene	380		µg/kg dry	343	1	"	"	"	"	"	
206-44-0	Fluoranthene	2,070		µg/kg dry	343	1	"	"	"	"	"	
129-00-0	Pyrene	1,840		µg/kg dry	343	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	880		µg/kg dry	343	1	"	"	"	"	"	
218-01-9	Chrysene	829		µg/kg dry	343	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	551		µg/kg dry	343	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	807		µg/kg dry	343	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	921		µg/kg dry	343	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	484		µg/kg dry	343	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	343	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	507		µg/kg dry	343	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*61*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*65*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*66*			*40-140 %*		"	"	"	"	"	
General Chemistry Parameters												
	% Solids	92.4		%		1	SM2540 G Mod.	04-Mar-11	07-Mar-11	BD	1103858	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-102-030211 0-3'	11-1395	Soil	02-Mar-11 10:47	03-Mar-11
SB25218-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.24 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	6.4	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
67-64-1	Acetone	BRL		µg/kg dry	63.7	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	63.7	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	63.7	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-102-030211 0-3'	11-1395	Soil	02-Mar-11 10:47	03-Mar-11
SB25218-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.24 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	6.4	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	63.7	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
91-20-3	Naphthalene	53.9		µg/kg dry	6.4	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	63.7	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	127	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	31.8	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	2550	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*91*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*95*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*110*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*101*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges			GS1									
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.5	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	23.5		mg/kg dry	11.5	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-102-030211 0-3'	11-1395	Soil	02-Mar-11 10:47	03-Mar-11
SB25218-03				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A			GS1									
	C11-C22 Aromatic Hydrocarbons	138		mg/kg dry	22.9	2	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	Unadjusted C11-C22 Aromatic Hydrocarbons	275		mg/kg dry	22.9	2	"	"	"	"	"	
	Total Petroleum Hydrocarbons	161		mg/kg dry	11.5	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	298		mg/kg dry	11.5	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A			GS1									
91-20-3	Naphthalene	1,190		µg/kg dry	763	2	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	873		µg/kg dry	763	2	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	763	2	"	"	"	"	"	
83-32-9	Acenaphthene	2,060		µg/kg dry	763	2	"	"	"	"	"	
86-73-7	Fluorene	3,890		µg/kg dry	763	2	"	"	"	"	"	
85-01-8	Phenanthrene	28,700		µg/kg dry	763	2	"	"	"	"	"	
120-12-7	Anthracene	8,910		µg/kg dry	763	2	"	"	"	"	"	
206-44-0	Fluoranthene	24,700		µg/kg dry	763	2	"	"	"	"	"	
129-00-0	Pyrene	20,300		µg/kg dry	763	2	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	9,280		µg/kg dry	763	2	"	"	"	"	"	
218-01-9	Chrysene	8,640		µg/kg dry	763	2	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	5,920		µg/kg dry	763	2	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	6,200		µg/kg dry	763	2	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	8,250		µg/kg dry	763	2	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	3,780		µg/kg dry	763	2	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	763	2	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	4,020		µg/kg dry	763	2	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*66*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*51*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*54*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.46	1	SW846 6010C	07-Mar-11	09-Mar-11	LR	1103848	
7440-38-2	Arsenic	6.99		mg/kg dry	1.46	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.487	1	"	"	"	"	"	
7440-43-9	Cadmium	BRL		mg/kg dry	0.487	1	"	"	"	"	"	
7440-47-3	Chromium	15.6		mg/kg dry	0.974	1	"	"	"	"	"	
7440-50-8	Copper	55.0		mg/kg dry	0.974	1	"	"	"	"	"	
7439-97-6	Mercury	1.15	GS1	mg/kg dry	0.154	5	SW846 7471B	"	09-Mar-11	HB	1103849	
7440-02-0	Nickel	11.7		mg/kg dry	0.974	1	SW846 6010C	"	09-Mar-11	LR	1103848	
7439-92-1	Lead	151		mg/kg dry	1.46	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	4.87	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	1.46	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	2.92	1	"	"	"	"	"	
7440-66-6	Zinc	113		mg/kg dry	0.974	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	86.0		%		1	SM2540 G Mod.	04-Mar-11	07-Mar-11	BD	1103858	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-102-030211 0-3'	11-1395	Soil	02-Mar-11 10:47	03-Mar-11
SB25218-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
57-12-5	Cyanide (total)	BRL		mg/kg dry	1.08	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103894	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-102-030211 4-7'	11-1395	Soil	02-Mar-11 10:50	03-Mar-11
SB25218-04				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.44 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	141	100	SW846 8260C	07-Mar-11	07-Mar-11	eq	1103905	
67-64-1	Acetone	BRL		µg/kg dry	1410	100	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	141	100	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	141	100	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	141	100	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	141	100	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	282	100	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	1410	100	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	282	100	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	141	100	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	282	100	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	141	100	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	282	100	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	141	100	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	141	100	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	282	100	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	141	100	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	141	100	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	141	100	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	282	100	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	141	100	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	141	100	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	141	100	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	141	100	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	141	100	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	141	100	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	141	100	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	141	100	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	141	100	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	141	100	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	141	100	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	141	100	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	1410	100	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-102-030211 4-7'	11-1395	Soil	02-Mar-11 10:50	03-Mar-11
SB25218-04				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)						Initial weight: 15.44 g						
98-82-8	Isopropylbenzene	BRL		µg/kg dry	141	100	SW846 8260C	07-Mar-11	07-Mar-11	eq	1103905	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	141	100	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	141	100	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	1410	100	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	282	100	"	"	"	"	"	
91-20-3	Naphthalene	9,050		µg/kg dry	141	100	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	141	100	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	141	100	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	141	100	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	141	100	"	"	"	"	"	
108-88-3	Toluene	216		µg/kg dry	141	100	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	141	100	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	141	100	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	141	100	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	141	100	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	141	100	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	145		µg/kg dry	141	100	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	141	100	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	141	100	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	282	100	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	141	100	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	282	100	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	141	100	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	141	100	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	141	100	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	141	100	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	1410	100	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	2820	100	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	705	100	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	56400	100	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*99*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*90*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*106*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges			R01									
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	356		mg/kg dry	12.2	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	571		mg/kg dry	12.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-102-030211 4-7'	11-1395	Soil	02-Mar-11 10:50	03-Mar-11
SB25218-04				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A			R01									
	C11-C22 Aromatic Hydrocarbons	443		mg/kg dry	24.4	2	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	Unadjusted C11-C22 Aromatic Hydrocarbons	569		mg/kg dry	24.4	2	"	"	"	"	"	
	Total Petroleum Hydrocarbons	1,370		mg/kg dry	12.2	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	1,500		mg/kg dry	12.2	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A			R01									
91-20-3	Naphthalene	2,420		µg/kg dry	812	2	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	1,790		µg/kg dry	812	2	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	812	2	"	"	"	"	"	
83-32-9	Acenaphthene	3,090		µg/kg dry	812	2	"	"	"	"	"	
86-73-7	Fluorene	4,800		µg/kg dry	812	2	"	"	"	"	"	
85-01-8	Phenanthrene	25,600		µg/kg dry	812	2	"	"	"	"	"	
120-12-7	Anthracene	7,670		µg/kg dry	812	2	"	"	"	"	"	
206-44-0	Fluoranthene	20,500		µg/kg dry	812	2	"	"	"	"	"	
129-00-0	Pyrene	17,300		µg/kg dry	812	2	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	8,550		µg/kg dry	812	2	"	"	"	"	"	
218-01-9	Chrysene	7,890		µg/kg dry	812	2	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	5,470		µg/kg dry	812	2	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	5,620		µg/kg dry	812	2	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	7,390		µg/kg dry	812	2	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	3,350		µg/kg dry	812	2	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	812	2	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	3,370		µg/kg dry	812	2	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*47*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*53*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*67*			*40-140 %*		"	"	"	"	"	
General Chemistry Parameters												
	% Solids	81.8		%		1	SM2540 G Mod.	04-Mar-11	07-Mar-11	BD	1103858	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-103-030211 0-3'	11-1395	Soil	02-Mar-11 11:52	03-Mar-11
SB25218-05				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.25 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	6.4	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
67-64-1	Acetone	BRL		µg/kg dry	63.6	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	63.6	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	63.6	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-103-030211 0-3'	11-1395	Soil	02-Mar-11 11:52	03-Mar-11
SB25218-05				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.25 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	6.4	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	63.6	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	12.7	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	6.4	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	63.6	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	127	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	31.8	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	2540	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*88*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*94*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*112*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*104*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.6	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.6	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-103-030211 0-3'	11-1395	Soil	02-Mar-11 11:52	03-Mar-11
SB25218-05				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	44.3		mg/kg dry	11.6	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	Unadjusted C11-C22 Aromatic Hydrocarbons	55.8		mg/kg dry	11.6	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	44.3		mg/kg dry	11.6	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	55.8		mg/kg dry	11.6	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	BRL		µg/kg dry	387	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	387	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	387	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	387	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	387	1	"	"	"	"	"	
85-01-8	Phenanthrene	1,470		µg/kg dry	387	1	"	"	"	"	"	
120-12-7	Anthracene	BRL		µg/kg dry	387	1	"	"	"	"	"	
206-44-0	Fluoranthene	1,970		µg/kg dry	387	1	"	"	"	"	"	
129-00-0	Pyrene	1,780		µg/kg dry	387	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	926		µg/kg dry	387	1	"	"	"	"	"	
218-01-9	Chrysene	938		µg/kg dry	387	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	701		µg/kg dry	387	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	816		µg/kg dry	387	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	945		µg/kg dry	387	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	515		µg/kg dry	387	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	387	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	620		µg/kg dry	387	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*64*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*66*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*68*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.67	1	SW846 6010C	07-Mar-11	09-Mar-11	LR	1103848	
7440-38-2	Arsenic	10.9		mg/kg dry	1.67	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.557	1	"	"	"	"	"	
7440-43-9	Cadmium	0.741		mg/kg dry	0.557	1	"	"	"	"	"	
7440-47-3	Chromium	20.7		mg/kg dry	1.11	1	"	"	"	"	"	
7440-50-8	Copper	340		mg/kg dry	1.11	1	"	"	"	"	"	
7439-97-6	Mercury	3.51	GS1	mg/kg dry	0.320	10	SW846 7471B	"	09-Mar-11	HB	1103849	
7440-02-0	Nickel	19.8		mg/kg dry	1.11	1	SW846 6010C	"	09-Mar-11	LR	1103848	
7439-92-1	Lead	640		mg/kg dry	1.67	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	5.57	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	1.78	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	3.34	1	"	"	"	"	"	
7440-66-6	Zinc	520		mg/kg dry	1.11	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	85.9		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103902	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-103-030211 0-3'	11-1395	Soil	02-Mar-11 11:52	03-Mar-11
SB25218-05				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
57-12-5	Cyanide (total)	BRL		mg/kg dry	1.12	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103894	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-104-030211 0-3'	11-1395	Soil	02-Mar-11 12:32	03-Mar-11
SB25218-06				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.33 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	5.9	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
67-64-1	Acetone	BRL		µg/kg dry	59.0	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	59.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	59.0	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-104-030211 0-3'	11-1395	Soil	02-Mar-11 12:32	03-Mar-11
SB25218-06				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.33 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	5.9	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	59.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	59.0	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	118	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	29.5	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	2360	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*86*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*94*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*109*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*104*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	10.7	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg dry	10.7	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-104-030211 0-3'	11-1395	Soil	02-Mar-11 12:32	03-Mar-11
SB25218-06				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	43.7		mg/kg dry	10.7	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	Unadjusted C11-C22 Aromatic Hydrocarbons	61.5		mg/kg dry	10.7	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	43.7		mg/kg dry	10.7	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	61.5		mg/kg dry	10.7	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	BRL		µg/kg dry	357	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	357	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	357	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	357	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	357	1	"	"	"	"	"	
85-01-8	Phenanthrene	1,830		µg/kg dry	357	1	"	"	"	"	"	
120-12-7	Anthracene	415		µg/kg dry	357	1	"	"	"	"	"	
206-44-0	Fluoranthene	3,040		µg/kg dry	357	1	"	"	"	"	"	
129-00-0	Pyrene	2,730		µg/kg dry	357	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	1,460		µg/kg dry	357	1	"	"	"	"	"	
218-01-9	Chrysene	1,540		µg/kg dry	357	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	1,340		µg/kg dry	357	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	1,240		µg/kg dry	357	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	1,600		µg/kg dry	357	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	913		µg/kg dry	357	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	357	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	1,100		µg/kg dry	357	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*62*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*68*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*76*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.56	1	SW846 6010C	07-Mar-11	09-Mar-11	LR	1103848	
7440-38-2	Arsenic	8.57		mg/kg dry	1.56	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.521	1	"	"	"	"	"	
7440-43-9	Cadmium	0.589		mg/kg dry	0.521	1	"	"	"	"	"	
7440-47-3	Chromium	17.4		mg/kg dry	1.04	1	"	"	"	"	"	
7440-50-8	Copper	88.2		mg/kg dry	1.04	1	"	"	"	"	"	
7439-97-6	Mercury	0.727	GS1	mg/kg dry	0.168	5	SW846 7471B	"	09-Mar-11	HB	1103849	
7440-02-0	Nickel	14.0		mg/kg dry	1.04	1	SW846 6010C	"	09-Mar-11	LR	1103848	
7439-92-1	Lead	202		mg/kg dry	1.56	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	5.21	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	1.56	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	3.12	1	"	"	"	"	"	
7440-66-6	Zinc	144		mg/kg dry	1.04	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	88.9		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-104-030211 0-3'	11-1395	Soil	02-Mar-11 12:32	03-Mar-11
SB25218-06				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
57-12-5	Cyanide (total)	2.02		mg/kg dry	1.05	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103894	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-104-030211 3-8'	11-1395	Soil	02-Mar-11 12:40	03-Mar-11
SB25218-07				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.09 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	68.1	50	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
67-64-1	Acetone	BRL		µg/kg dry	681	50	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	136	50	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	681	50	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	136	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	136	50	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	136	50	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	136	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	136	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	681	50	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-104-030211 3-8'	11-1395	Soil	02-Mar-11 12:40	03-Mar-11
SB25218-07				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.09 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	68.1	50	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	681	50	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	136	50	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
108-88-3	Toluene	95.4		µg/kg dry	68.1	50	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
79-01-6	Trichloroethene	262		µg/kg dry	68.1	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	136	50	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	136	50	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	68.1	50	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	681	50	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1360	50	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	341	50	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	27300	50	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*98*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*96*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*97*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.5	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	75.4		mg/kg dry	11.5	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-104-030211 3-8'	11-1395	Soil	02-Mar-11 12:40	03-Mar-11
SB25218-07				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	100		mg/kg dry	11.5	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	Unadjusted C11-C22 Aromatic Hydrocarbons	120		mg/kg dry	11.5	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	176		mg/kg dry	11.5	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	198		mg/kg dry	11.5	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	BRL		µg/kg dry	383	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	383	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	383	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	383	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	383	1	"	"	"	"	"	
85-01-8	Phenanthrene	2,720		µg/kg dry	383	1	"	"	"	"	"	
120-12-7	Anthracene	583		µg/kg dry	383	1	"	"	"	"	"	
206-44-0	Fluoranthene	3,520		µg/kg dry	383	1	"	"	"	"	"	
129-00-0	Pyrene	2,940		µg/kg dry	383	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	1,510		µg/kg dry	383	1	"	"	"	"	"	
218-01-9	Chrysene	1,530		µg/kg dry	383	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	1,190		µg/kg dry	383	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	1,240		µg/kg dry	383	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	1,540		µg/kg dry	383	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	898		µg/kg dry	383	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	383	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	1,020		µg/kg dry	383	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*62*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*63*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*67*			*40-140 %*		"	"	"	"	"	
General Chemistry Parameters												
	% Solids	84.4		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-105-030211 0-3'	11-1395	Soil	02-Mar-11 13:05	03-Mar-11
SB25218-08				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.37 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	6.1	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
67-64-1	Acetone	BRL		µg/kg dry	61.1	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	12.2	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	61.1	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	12.2	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	12.2	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	12.2	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	12.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	12.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	61.1	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-105-030211 0-3'	11-1395	Soil	02-Mar-11 13:05	03-Mar-11
SB25218-08				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.37 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	6.1	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	61.1	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	12.2	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	12.2	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	12.2	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	61.1	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	122	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	30.6	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	2440	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*88*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*91*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*117*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*103*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges			R01									
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	26.9		mg/kg dry	11.3	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	32.9		mg/kg dry	11.3	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-105-030211 0-3'	11-1395	Soil	02-Mar-11 13:05	03-Mar-11
SB25218-08				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A			R01									
	C11-C22 Aromatic Hydrocarbons	276		mg/kg dry	56.6	5	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	Unadjusted C11-C22 Aromatic Hydrocarbons	294		mg/kg dry	56.6	5	"	"	"	"	"	
	Total Petroleum Hydrocarbons	336		mg/kg dry	11.3	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	354		mg/kg dry	11.3	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A			R01									
91-20-3	Naphthalene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
85-01-8	Phenanthrene	2,270		µg/kg dry	1880	5	"	"	"	"	"	
120-12-7	Anthracene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
206-44-0	Fluoranthene	2,900		µg/kg dry	1880	5	"	"	"	"	"	
129-00-0	Pyrene	2,630		µg/kg dry	1880	5	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
218-01-9	Chrysene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	1880	5	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*61*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*65*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*67*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.58	1	SW846 6010C	07-Mar-11	09-Mar-11	LR	1103848	
7440-38-2	Arsenic	8.40		mg/kg dry	1.58	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.526	1	"	"	"	"	"	
7440-43-9	Cadmium	0.725		mg/kg dry	0.526	1	"	"	"	"	"	
7440-47-3	Chromium	19.5		mg/kg dry	1.05	1	"	"	"	"	"	
7440-50-8	Copper	115		mg/kg dry	1.05	1	"	"	"	"	"	
7439-97-6	Mercury	2.16	GS1	mg/kg dry	0.319	10	SW846 7471B	"	09-Mar-11	HB	1103849	
7440-02-0	Nickel	14.1		mg/kg dry	1.05	1	SW846 6010C	"	09-Mar-11	LR	1103848	
7439-92-1	Lead	269		mg/kg dry	1.58	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	5.26	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	1.89	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	3.15	1	"	"	"	"	"	
7440-66-6	Zinc	259		mg/kg dry	1.05	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	86.9		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-105-030211 0-3'	11-1395	Soil	02-Mar-11 13:05	03-Mar-11
SB25218-08				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
57-12-5	Cyanide (total)	1.55		mg/kg dry	1.12	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103894	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-105-030211 8-12'	11-1395	Soil	02-Mar-11 13:32	03-Mar-11
SB25218-09				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)						Initial weight: 14.96 g						
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	597	500	SW846 8260C	07-Mar-11	07-Mar-11	eq	1103905	
67-64-1	Acetone	BRL		µg/kg dry	5970	500	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	597	500	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	597	500	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	597	500	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	597	500	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	597	500	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	597	500	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	1190	500	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	5970	500	"	"	"	"	"	
104-51-8	n-Butylbenzene	961		µg/kg dry	597	500	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	597	500	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	597	500	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	1190	500	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	597	500	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	597	500	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	1190	500	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	597	500	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	1190	500	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	597	500	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	597	500	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	1190	500	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	597	500	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	597	500	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	597	500	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	597	500	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	597	500	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	597	500	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	1190	500	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	597	500	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	597	500	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	597	500	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	597	500	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	597	500	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	597	500	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	597	500	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	597	500	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	597	500	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	597	500	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	597	500	"	"	"	"	"	
100-41-4	Ethylbenzene	9,190		µg/kg dry	597	500	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	597	500	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	5970	500	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-105-030211 8-12'	11-1395	Soil	02-Mar-11 13:32	03-Mar-11
SB25218-09				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)						Initial weight: 14.96 g						
98-82-8	Isopropylbenzene	2,030		µg/kg dry	597	500	SW846 8260C	07-Mar-11	07-Mar-11	eq	1103905	
99-87-6	4-Isopropyltoluene	1,210		µg/kg dry	597	500	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	597	500	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	5970	500	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	1190	500	"	"	"	"	"	
91-20-3	Naphthalene	162,000	E	µg/kg dry	597	500	"	"	"	"	"	
103-65-1	n-Propylbenzene	1,490		µg/kg dry	597	500	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	597	500	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	597	500	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	597	500	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	597	500	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	597	500	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	597	500	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	597	500	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	597	500	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	597	500	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	597	500	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	597	500	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	597	500	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	597	500	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	12,600		µg/kg dry	597	500	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	4,290		µg/kg dry	597	500	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	597	500	"	"	"	"	"	
179601-23-1	m,p-Xylene	1,210		µg/kg dry	1190	500	"	"	"	"	"	
95-47-6	o-Xylene	1,720		µg/kg dry	597	500	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	1190	500	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	597	500	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	597	500	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	597	500	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	597	500	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	5970	500	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	11900	500	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	2980	500	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	239000	500	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*97*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*94*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*101*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*99*			*70-130 %*		"	"	"	"	"	
Re-analysis of Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	2980	2500	SW846 8260C	08-Mar-11	08-Mar-11	eq	1103992	
67-64-1	Acetone	BRL		µg/kg dry	29800	2500	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	2980	2500	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-105-030211 8-12'	11-1395	Soil	02-Mar-11 13:32	03-Mar-11
SB25218-09				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Re-analysis of Volatile Organic Compounds Prepared by method SW846 5030 Soil (high level)			GS1									
71-43-2	Benzene	BRL		µg/kg dry	2980	2500	SW846 8260C	08-Mar-11	08-Mar-11	eq	1103992	
108-86-1	Bromobenzene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	5970	2500	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	29800	2500	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	5970	2500	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	5970	2500	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	5970	2500	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	5970	2500	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	5970	2500	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
100-41-4	Ethylbenzene	9,400		µg/kg dry	2980	2500	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	29800	2500	"	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	29800	2500	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-105-030211 8-12'	11-1395	Soil	02-Mar-11 13:32	03-Mar-11
SB25218-09				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Re-analysis of Volatile Organic Compounds Prepared by method SW846 5030 Soil (high level)			GS1									
75-09-2	Methylene chloride	BRL		µg/kg dry	5970	2500	SW846 8260C	08-Mar-11	08-Mar-11	eq	1103992	
91-20-3	Naphthalene	182,000		µg/kg dry	2980	2500	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	12,100		µg/kg dry	2980	2500	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	3,910		µg/kg dry	2980	2500	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	5970	2500	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	5970	2500	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	2980	2500	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	29800	2500	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	59700	2500	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	14900	2500	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	1190000	2500	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*98*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*90*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	29.9		mg/kg dry	10.9	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	11.9		mg/kg dry	10.9	1	"	"	"	"	"	
	C11-C22 Aromatic Hydrocarbons	376		mg/kg dry	10.9	1	"	"	"	"	"	
	Unadjusted C11-C22 Aromatic Hydrocarbons	526		mg/kg dry	10.9	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	418		mg/kg dry	10.9	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-105-030211 8-12'	11-1395	Soil	02-Mar-11 13:32	03-Mar-11
SB25218-09				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	Unadjusted Total Petroleum Hydrocarbons	568		mg/kg dry	10.9	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	28,800		µg/kg dry	364	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	13,900		µg/kg dry	364	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	364	1	"	"	"	"	"	
83-32-9	Acenaphthene	14,600		µg/kg dry	364	1	"	"	"	"	"	
86-73-7	Fluorene	11,300		µg/kg dry	364	1	"	"	"	"	"	
85-01-8	Phenanthrene	23,600		µg/kg dry	364	1	"	"	"	"	"	
120-12-7	Anthracene	8,550		µg/kg dry	364	1	"	"	"	"	"	
206-44-0	Fluoranthene	9,530		µg/kg dry	364	1	"	"	"	"	"	
129-00-0	Pyrene	13,400		µg/kg dry	364	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	6,220		µg/kg dry	364	1	"	"	"	"	"	
218-01-9	Chrysene	5,850		µg/kg dry	364	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	2,380		µg/kg dry	364	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	2,690		µg/kg dry	364	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	5,330		µg/kg dry	364	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	1,630		µg/kg dry	364	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	364	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	2,080		µg/kg dry	364	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*76*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*70*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*67*			*40-140 %*		"	"	"	"	"	
General Chemistry Parameters												
	% Solids	91.3		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-106-030211 0-3'	11-1395	Soil	02-Mar-11 14:17	03-Mar-11
SB25218-10				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Re-analysis of Volatile Organic Compounds Prepared by method SW846 5035A Soil (low level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	6.1	1	SW846 8260C	09-Mar-11	09-Mar-11	JRO	1104077	
67-64-1	Acetone	BRL		µg/kg dry	60.6	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	60.6	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	60.6	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-106-030211 0-3'	11-1395	Soil	02-Mar-11 14:17	03-Mar-11
SB25218-10				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Re-analysis of Volatile Organic Compounds Prepared by method SW846 5035A Soil (low level)												
98-82-8	Isopropylbenzene	BRL		µg/kg dry	6.1	1	SW846 8260C	09-Mar-11	09-Mar-11	JRO	1104077	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	60.6	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
91-20-3	Naphthalene	7.8		µg/kg dry	6.1	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	6.1	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	60.6	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	121	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	30.3	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	2420	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*91*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*94*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*95*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A			R01									
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.2	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	19.6		mg/kg dry	11.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-106-030211 0-3'	11-1395	Soil	02-Mar-11 14:17	03-Mar-11
SB25218-10				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A			R01									
	C11-C22 Aromatic Hydrocarbons	275		mg/kg dry	55.8	5	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	Unadjusted C11-C22 Aromatic Hydrocarbons	327		mg/kg dry	55.8	5	"	"	"	"	"	
	Total Petroleum Hydrocarbons	294		mg/kg dry	11.2	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	347		mg/kg dry	11.2	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A			R01									
91-20-3	Naphthalene	BRL		µg/kg dry	1860	5	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	1860	5	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	1860	5	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	1860	5	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	1860	5	"	"	"	"	"	
85-01-8	Phenanthrene	4,440		µg/kg dry	1860	5	"	"	"	"	"	
120-12-7	Anthracene	BRL		µg/kg dry	1860	5	"	"	"	"	"	
206-44-0	Fluoranthene	8,400		µg/kg dry	1860	5	"	"	"	"	"	
129-00-0	Pyrene	7,930		µg/kg dry	1860	5	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	4,250		µg/kg dry	1860	5	"	"	"	"	"	
218-01-9	Chrysene	4,400		µg/kg dry	1860	5	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	3,820		µg/kg dry	1860	5	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	4,220		µg/kg dry	1860	5	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	5,530		µg/kg dry	1860	5	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	3,250		µg/kg dry	1860	5	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	1860	5	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	3,820		µg/kg dry	1860	5	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*59*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*76*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*72*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.48	1	SW846 6010C	07-Mar-11	09-Mar-11	LR	1103848	
7440-38-2	Arsenic	8.10		mg/kg dry	1.48	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.494	1	"	"	"	"	"	
7440-43-9	Cadmium	0.706		mg/kg dry	0.494	1	"	"	"	"	"	
7440-47-3	Chromium	18.7		mg/kg dry	0.988	1	"	"	"	"	"	
7440-50-8	Copper	50.2		mg/kg dry	0.988	1	"	"	"	"	"	
7439-97-6	Mercury	0.331		mg/kg dry	0.0328	1	SW846 7471B	"	08-Mar-11	HB	1103849	
7440-02-0	Nickel	13.4		mg/kg dry	0.988	1	SW846 6010C	"	09-Mar-11	LR	1103848	
7439-92-1	Lead	114		mg/kg dry	1.48	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	4.94	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	1.98	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	2.96	1	"	"	"	"	"	
7440-66-6	Zinc	120		mg/kg dry	0.988	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	89.2		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-106-030211 0-3'	11-1395	Soil	02-Mar-11 14:17	03-Mar-11
SB25218-10				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
57-12-5	Cyanide (total)	BRL		mg/kg dry	1.04	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103894	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-107-030211 0-3'	11-1395	Soil	02-Mar-11 14:29	03-Mar-11
SB25218-11				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.02 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	5.9	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
67-64-1	Acetone	BRL		µg/kg dry	59.0	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	59.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	59.0	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-107-030211 0-3'	11-1395	Soil	02-Mar-11 14:29	03-Mar-11
SB25218-11				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.02 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	5.9	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	59.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
91-20-3	Naphthalene	426	E	µg/kg dry	5.9	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	11.8	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	5.9	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	59.0	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	118	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	29.5	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	2360	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*87*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*92*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*110*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*			*70-130 %*		"	"	"	"	"	
Re-analysis of Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	118	100	SW846 8260C	08-Mar-11	08-Mar-11	eq	1103992	
67-64-1	Acetone	BRL		µg/kg dry	1180	100	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	118	100	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-107-030211 0-3'	11-1395	Soil	02-Mar-11 14:29	03-Mar-11
SB25218-11				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Re-analysis of Volatile Organic Compounds Prepared by method SW846 5030 Soil (high level)			GS1									
71-43-2	Benzene	BRL		µg/kg dry	118	100	SW846 8260C	08-Mar-11	08-Mar-11	eq	1103992	
108-86-1	Bromobenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	118	100	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	118	100	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	118	100	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	236	100	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	1180	100	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	236	100	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	118	100	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	236	100	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	118	100	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	236	100	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	118	100	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	118	100	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	236	100	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	118	100	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	118	100	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	118	100	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	236	100	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	118	100	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	118	100	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	118	100	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	118	100	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	118	100	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	118	100	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	118	100	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	118	100	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	118	100	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	118	100	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	118	100	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	118	100	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	1180	100	"	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	118	100	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	118	100	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	1180	100	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-107-030211 0-3'	11-1395	Soil	02-Mar-11 14:29	03-Mar-11
SB25218-11				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds												
Re-analysis of Volatile Organic Compounds Prepared by method SW846 5030 Soil (high level)			GS1									
75-09-2	Methylene chloride	BRL		µg/kg dry	236	100	SW846 8260C	08-Mar-11	08-Mar-11	eq	1103992	
91-20-3	Naphthalene	2,280		µg/kg dry	118	100	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	118	100	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	118	100	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	118	100	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	118	100	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	118	100	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	118	100	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	118	100	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	118	100	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	118	100	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	118	100	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	118	100	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	118	100	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	236	100	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	118	100	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	236	100	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	118	100	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	118	100	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	118	100	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	118	100	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	1180	100	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	2360	100	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	589	100	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	47100	100	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*99*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*93*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*101*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*91*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A			GS1									
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	10.5	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	84.4		mg/kg dry	10.5	1	"	"	"	"	"	
	C11-C22 Aromatic Hydrocarbons	326		mg/kg dry	52.5	5	"	"	"	"	"	
	Unadjusted C11-C22 Aromatic Hydrocarbons	441		mg/kg dry	52.5	5	"	"	"	"	"	
	Total Petroleum Hydrocarbons	410		mg/kg dry	10.5	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-107-030211 0-3'	11-1395	Soil	02-Mar-11 14:29	03-Mar-11
SB25218-11				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A			GS1									
	Unadjusted Total Petroleum Hydrocarbons	525		mg/kg dry	10.5	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
EPH Target PAH Analytes Prepared by method SW846 3545A			GS1									
91-20-3	Naphthalene	3,180		µg/kg dry	1750	5	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	1,910		µg/kg dry	1750	5	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	1750	5	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	1750	5	"	"	"	"	"	
86-73-7	Fluorene	2,740		µg/kg dry	1750	5	"	"	"	"	"	
85-01-8	Phenanthrene	17,600		µg/kg dry	1750	5	"	"	"	"	"	
120-12-7	Anthracene	5,510		µg/kg dry	1750	5	"	"	"	"	"	
206-44-0	Fluoranthene	18,100		µg/kg dry	1750	5	"	"	"	"	"	
129-00-0	Pyrene	15,800		µg/kg dry	1750	5	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	7,700		µg/kg dry	1750	5	"	"	"	"	"	
218-01-9	Chrysene	7,120		µg/kg dry	1750	5	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	6,450		µg/kg dry	1750	5	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	6,400		µg/kg dry	1750	5	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	9,040		µg/kg dry	1750	5	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	5,080		µg/kg dry	1750	5	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	1750	5	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	5,790		µg/kg dry	1750	5	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*48*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*54*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*56*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.37	1	SW846 6010C	07-Mar-11	09-Mar-11	LR	1103848	
7440-38-2	Arsenic	8.22		mg/kg dry	1.37	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.458	1	"	"	"	"	"	
7440-43-9	Cadmium	BRL		mg/kg dry	0.458	1	"	"	"	"	"	
7440-47-3	Chromium	17.0		mg/kg dry	0.916	1	"	"	"	"	"	
7440-50-8	Copper	42.2		mg/kg dry	0.916	1	"	"	"	"	"	
7439-97-6	Mercury	0.441		mg/kg dry	0.0310	1	SW846 7471B	"	08-Mar-11	HB	1103849	
7440-02-0	Nickel	16.2		mg/kg dry	0.916	1	SW846 6010C	"	09-Mar-11	LR	1103848	
7439-92-1	Lead	112		mg/kg dry	1.37	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	4.58	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	1.37	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	2.75	1	"	"	"	"	"	
7440-66-6	Zinc	140		mg/kg dry	0.916	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	91.6		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	
57-12-5	Cyanide (total)	3.97		mg/kg dry	1.03	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103894	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-108-030211 0-3'	11-1395	Soil	02-Mar-11 15:21	03-Mar-11
SB25218-12				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds			VOC8									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.07 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	70.9	50	SW846 8260C	10-Mar-11	10-Mar-11	eq	1104178	
67-64-1	Acetone	BRL		µg/kg dry	709	50	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	142	50	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	709	50	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	142	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	142	50	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	142	50	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	142	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	142	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	709	50	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-108-030211 0-3'	11-1395	Soil	02-Mar-11 15:21	03-Mar-11
SB25218-12				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds			VOC8									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.07 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	70.9	50	SW846 8260C	10-Mar-11	10-Mar-11	eq	1104178	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	709	50	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	142	50	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	142	50	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	142	50	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	70.9	50	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	709	50	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1420	50	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	355	50	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	28400	50	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*98*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*92*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*104*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*97*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.5	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.5	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-108-030211 0-3'	11-1395	Soil	02-Mar-11 15:21	03-Mar-11
SB25218-12				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	121		mg/kg dry	11.5	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	Unadjusted C11-C22 Aromatic Hydrocarbons	203		mg/kg dry	11.5	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	121		mg/kg dry	11.5	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	203		mg/kg dry	11.5	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	1,110		µg/kg dry	382	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	726		µg/kg dry	382	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	382	1	"	"	"	"	"	
83-32-9	Acenaphthene	2,040		µg/kg dry	382	1	"	"	"	"	"	
86-73-7	Fluorene	2,220		µg/kg dry	382	1	"	"	"	"	"	
85-01-8	Phenanthrene	15,500		µg/kg dry	382	1	"	"	"	"	"	
120-12-7	Anthracene	4,610		µg/kg dry	382	1	"	"	"	"	"	
206-44-0	Fluoranthene	13,200		µg/kg dry	382	1	"	"	"	"	"	
129-00-0	Pyrene	11,400		µg/kg dry	382	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	5,880		µg/kg dry	382	1	"	"	"	"	"	
218-01-9	Chrysene	5,280		µg/kg dry	382	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	3,860		µg/kg dry	382	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	4,370		µg/kg dry	382	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	5,620		µg/kg dry	382	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	2,910		µg/kg dry	382	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	382	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	3,140		µg/kg dry	382	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*59*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*71*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*77*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.72	1	SW846 6010C	07-Mar-11	09-Mar-11	LR	1103848	
7440-38-2	Arsenic	13.2		mg/kg dry	1.72	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.572	1	"	"	"	"	"	
7440-43-9	Cadmium	0.669		mg/kg dry	0.572	1	"	"	"	"	"	
7440-47-3	Chromium	15.0		mg/kg dry	1.14	1	"	"	"	"	"	
7440-50-8	Copper	125		mg/kg dry	1.14	1	"	"	"	"	"	
7439-97-6	Mercury	2.10	GS1	mg/kg dry	0.176	5	SW846 7471B	"	09-Mar-11	HB	1103849	
7440-02-0	Nickel	13.3		mg/kg dry	1.14	1	SW846 6010C	"	09-Mar-11	LR	1103848	
7439-92-1	Lead	710		mg/kg dry	1.72	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	5.72	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	1.83	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	3.43	1	"	"	"	"	"	
7440-66-6	Zinc	462		mg/kg dry	1.14	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	82.5		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-108-030211 0-3'	11-1395	Soil	02-Mar-11 15:21	03-Mar-11
SB25218-12				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
57-12-5	Cyanide (total)	BRL		mg/kg dry	1.14	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103894	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-108-030211 3-7'	11-1395	Soil	02-Mar-11 15:30	03-Mar-11
SB25218-13				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.05 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	99.5	50	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
67-64-1	Acetone	BRL		µg/kg dry	995	50	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	199	50	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	995	50	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	199	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	199	50	"	"	"	"	"	
67-66-3	Chloroform	173		µg/kg dry	99.5	50	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	199	50	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	199	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	199	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	995	50	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-108-030211 3-7'	11-1395	Soil	02-Mar-11 15:30	03-Mar-11
SB25218-13				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.05 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	99.5	50	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	995	50	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	199	50	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
79-01-6	Trichloroethene	648		µg/kg dry	99.5	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	199	50	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	199	50	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	99.5	50	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	995	50	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1990	50	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	498	50	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	39800	50	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*101*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*96*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*103*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*94*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	14.9	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg dry	14.9	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-108-030211 3-7'	11-1395	Soil	02-Mar-11 15:30	03-Mar-11
SB25218-13				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	99.6		mg/kg dry	14.9	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	Unadjusted C11-C22 Aromatic Hydrocarbons	133		mg/kg dry	14.9	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	99.6		mg/kg dry	14.9	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	133		mg/kg dry	14.9	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	BRL		µg/kg dry	498	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	498	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	498	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	498	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	498	1	"	"	"	"	"	
85-01-8	Phenanthrene	3,840		µg/kg dry	498	1	"	"	"	"	"	
120-12-7	Anthracene	1,040		µg/kg dry	498	1	"	"	"	"	"	
206-44-0	Fluoranthene	6,040		µg/kg dry	498	1	"	"	"	"	"	
129-00-0	Pyrene	5,180		µg/kg dry	498	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	2,980		µg/kg dry	498	1	"	"	"	"	"	
218-01-9	Chrysene	2,790		µg/kg dry	498	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	2,420		µg/kg dry	498	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	2,170		µg/kg dry	498	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	2,950		µg/kg dry	498	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	1,700		µg/kg dry	498	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	498	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	1,820		µg/kg dry	498	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*61*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*67*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*73*			*40-140 %*		"	"	"	"	"	
General Chemistry Parameters												
	% Solids	66.8		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-109-030211 0-3'	11-1395	Soil	02-Mar-11 15:53	03-Mar-11
SB25218-14				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds			VOC8									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.37 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	79.0	50	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
67-64-1	Acetone	BRL		µg/kg dry	790	50	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	158	50	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	790	50	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	158	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	158	50	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	158	50	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	158	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	158	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	790	50	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-109-030211 0-3'	11-1395	Soil	02-Mar-11 15:53	03-Mar-11
SB25218-14				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds			VOC8									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.37 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	79.0	50	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	790	50	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	158	50	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	158	50	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	158	50	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	79.0	50	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	790	50	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1580	50	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	395	50	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	31600	50	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*96*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*77*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*90*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*76*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	12.4	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg dry	12.4	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-109-030211 0-3'	11-1395	Soil	02-Mar-11 15:53	03-Mar-11
SB25218-14				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	65.9		mg/kg dry	12.4	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	Unadjusted C11-C22 Aromatic Hydrocarbons	79.2		mg/kg dry	12.4	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	65.9		mg/kg dry	12.4	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	79.2		mg/kg dry	12.4	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	BRL		µg/kg dry	412	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	412	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	412	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	412	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	412	1	"	"	"	"	"	
85-01-8	Phenanthrene	1,830		µg/kg dry	412	1	"	"	"	"	"	
120-12-7	Anthracene	479		µg/kg dry	412	1	"	"	"	"	"	
206-44-0	Fluoranthene	2,090		µg/kg dry	412	1	"	"	"	"	"	
129-00-0	Pyrene	1,890		µg/kg dry	412	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	1,110		µg/kg dry	412	1	"	"	"	"	"	
218-01-9	Chrysene	1,090		µg/kg dry	412	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	828		µg/kg dry	412	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	858		µg/kg dry	412	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	1,150		µg/kg dry	412	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	607		µg/kg dry	412	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	412	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	667		µg/kg dry	412	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*66*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*73*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*79*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	2.90	1	SW846 6010C	07-Mar-11	09-Mar-11	LR	1103848	
7440-38-2	Arsenic	18.5		mg/kg dry	1.89	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.680	1	"	"	"	"	"	
7440-43-9	Cadmium	0.680		mg/kg dry	0.630	1	"	"	"	"	"	
7440-47-3	Chromium	19.2		mg/kg dry	1.26	1	"	"	"	"	"	
7440-50-8	Copper	217		mg/kg dry	1.26	1	"	"	"	"	"	
7439-97-6	Mercury	8.84	GS1	mg/kg dry	0.727	20	SW846 7471B	"	09-Mar-11	HB	1103849	
7440-02-0	Nickel	13.8		mg/kg dry	1.26	1	SW846 6010C	"	09-Mar-11	LR	1103848	
7439-92-1	Lead	901		mg/kg dry	1.89	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	6.30	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	3.15	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	3.78	1	"	"	"	"	"	
7440-66-6	Zinc	245		mg/kg dry	1.26	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	76.6		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-109-030211 0-3'	11-1395	Soil	02-Mar-11 15:53	03-Mar-11
SB25218-14				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
57-12-5	Cyanide (total)	BRL		mg/kg dry	1.28	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103909	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
FD-01-030211	11-1395	Soil	02-Mar-11 10:30	03-Mar-11
SB25218-15				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103872	
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.5 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	5.7	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
67-64-1	Acetone	BRL		µg/kg dry	56.6	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	11.3	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	56.6	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	11.3	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	11.3	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	11.3	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	11.3	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	11.3	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	56.6	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
FD-01-030211	11-1395	Soil	02-Mar-11 10:30	03-Mar-11
SB25218-15				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.5 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	5.7	1	SW846 8260C	07-Mar-11	07-Mar-11	JRO	1103831	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	56.6	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	11.3	1	"	"	"	"	"	
91-20-3	Naphthalene	47.2		µg/kg dry	5.7	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	11.3	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	11.3	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	5.7	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	56.6	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	113	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	28.3	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	2260	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*87*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*94*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*110*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*103*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges			R01									
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.0	1	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	C19-C36 Aliphatic Hydrocarbons	30.4		mg/kg dry	11.0	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
FD-01-030211	11-1395	Soil	02-Mar-11 10:30	03-Mar-11
SB25218-15				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A			R01									
	C11-C22 Aromatic Hydrocarbons	156		mg/kg dry	21.9	2	+MADEP EPH 5/2004 R	07-Mar-11	09-Mar-11	MM	1103882	
	Unadjusted C11-C22 Aromatic Hydrocarbons	263		mg/kg dry	21.9	2	"	"	"	"	"	
	Total Petroleum Hydrocarbons	186		mg/kg dry	11.0	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	293		mg/kg dry	11.0	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A			R01									
91-20-3	Naphthalene	1,110		µg/kg dry	730	2	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	730	2	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	730	2	"	"	"	"	"	
83-32-9	Acenaphthene	1,150		µg/kg dry	730	2	"	"	"	"	"	
86-73-7	Fluorene	2,070		µg/kg dry	730	2	"	"	"	"	"	
85-01-8	Phenanthrene	17,900		µg/kg dry	730	2	"	"	"	"	"	
120-12-7	Anthracene	5,570		µg/kg dry	730	2	"	"	"	"	"	
206-44-0	Fluoranthene	18,700		µg/kg dry	730	2	"	"	"	"	"	
129-00-0	Pyrene	15,800		µg/kg dry	730	2	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	7,910		µg/kg dry	730	2	"	"	"	"	"	
218-01-9	Chrysene	7,130		µg/kg dry	730	2	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	5,520		µg/kg dry	730	2	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	6,330		µg/kg dry	730	2	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	7,940		µg/kg dry	730	2	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	4,500		µg/kg dry	730	2	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	730	2	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	4,740		µg/kg dry	730	2	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*51*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*51*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*55*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.49	1	SW846 6010C	07-Mar-11	09-Mar-11	LR	1103848	
7440-38-2	Arsenic	7.50		mg/kg dry	1.49	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.498	1	"	"	"	"	"	
7440-43-9	Cadmium	0.528		mg/kg dry	0.498	1	"	"	"	"	"	
7440-47-3	Chromium	18.4		mg/kg dry	0.996	1	"	"	"	"	"	
7440-50-8	Copper	60.4		mg/kg dry	0.996	1	"	"	"	"	"	
7439-97-6	Mercury	1.19	GS1	mg/kg dry	0.154	5	SW846 7471B	"	09-Mar-11	HB	1103849	
7440-02-0	Nickel	11.7		mg/kg dry	0.996	1	SW846 6010C	"	09-Mar-11	LR	1103848	
7439-92-1	Lead	209		mg/kg dry	1.49	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	4.98	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	1.49	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	2.99	1	"	"	"	"	"	
7440-66-6	Zinc	151		mg/kg dry	0.996	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	89.5		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103831 - SW846 5035A Soil (low level)										
Blank (1103831-BLK1)					Prepared: 04-Mar-11 Analyzed: 07-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg wet	5.0						
Acetone	BRL		µg/kg wet	50.0						
Acrylonitrile	BRL		µg/kg wet	5.0						
Benzene	BRL		µg/kg wet	5.0						
Bromobenzene	BRL		µg/kg wet	5.0						
Bromochloromethane	BRL		µg/kg wet	5.0						
Bromodichloromethane	BRL		µg/kg wet	5.0						
Bromoform	BRL		µg/kg wet	5.0						
Bromomethane	BRL		µg/kg wet	10.0						
2-Butanone (MEK)	BRL		µg/kg wet	50.0						
n-Butylbenzene	BRL		µg/kg wet	5.0						
sec-Butylbenzene	BRL		µg/kg wet	5.0						
tert-Butylbenzene	BRL		µg/kg wet	5.0						
Carbon disulfide	BRL		µg/kg wet	10.0						
Carbon tetrachloride	BRL		µg/kg wet	5.0						
Chlorobenzene	BRL		µg/kg wet	5.0						
Chloroethane	BRL		µg/kg wet	10.0						
Chloroform	BRL		µg/kg wet	5.0						
Chloromethane	BRL		µg/kg wet	10.0						
2-Chlorotoluene	BRL		µg/kg wet	5.0						
4-Chlorotoluene	BRL		µg/kg wet	5.0						
1,2-Dibromo-3-chloropropane	BRL		µg/kg wet	10.0						
Dibromochloromethane	BRL		µg/kg wet	5.0						
1,2-Dibromoethane (EDB)	BRL		µg/kg wet	5.0						
Dibromomethane	BRL		µg/kg wet	5.0						
1,2-Dichlorobenzene	BRL		µg/kg wet	5.0						
1,3-Dichlorobenzene	BRL		µg/kg wet	5.0						
1,4-Dichlorobenzene	BRL		µg/kg wet	5.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet	10.0						
1,1-Dichloroethane	BRL		µg/kg wet	5.0						
1,2-Dichloroethane	BRL		µg/kg wet	5.0						
1,1-Dichloroethene	BRL		µg/kg wet	5.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet	5.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet	5.0						
1,2-Dichloropropane	BRL		µg/kg wet	5.0						
1,3-Dichloropropane	BRL		µg/kg wet	5.0						
2,2-Dichloropropane	BRL		µg/kg wet	5.0						
1,1-Dichloropropene	BRL		µg/kg wet	5.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet	5.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet	5.0						
Ethylbenzene	BRL		µg/kg wet	5.0						
Hexachlorobutadiene	BRL		µg/kg wet	5.0						
2-Hexanone (MBK)	BRL		µg/kg wet	50.0						
Isopropylbenzene	BRL		µg/kg wet	5.0						
4-Isopropyltoluene	BRL		µg/kg wet	5.0						
Methyl tert-butyl ether	BRL		µg/kg wet	5.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg wet	50.0						
Methylene chloride	BRL		µg/kg wet	10.0						
Naphthalene	BRL		µg/kg wet	5.0						
n-Propylbenzene	BRL		µg/kg wet	5.0						
Styrene	BRL		µg/kg wet	5.0						
1,1,1,2-Tetrachloroethane	BRL		µg/kg wet	5.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103831 - SW846 5035A Soil (low level)										
Blank (1103831-BLK1)					Prepared: 04-Mar-11 Analyzed: 07-Mar-11					
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet	5.0						
Tetrachloroethene	BRL		µg/kg wet	5.0						
Toluene	BRL		µg/kg wet	5.0						
1,2,3-Trichlorobenzene	BRL		µg/kg wet	5.0						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	5.0						
1,3,5-Trichlorobenzene	BRL		µg/kg wet	5.0						
1,1,1-Trichloroethane	BRL		µg/kg wet	5.0						
1,1,2-Trichloroethane	BRL		µg/kg wet	5.0						
Trichloroethene	BRL		µg/kg wet	5.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet	5.0						
1,2,3-Trichloropropane	BRL		µg/kg wet	5.0						
1,2,4-Trimethylbenzene	BRL		µg/kg wet	5.0						
1,3,5-Trimethylbenzene	BRL		µg/kg wet	5.0						
Vinyl chloride	BRL		µg/kg wet	5.0						
m,p-Xylene	BRL		µg/kg wet	10.0						
o-Xylene	BRL		µg/kg wet	5.0						
Tetrahydrofuran	BRL		µg/kg wet	10.0						
Ethyl ether	BRL		µg/kg wet	5.0						
Tert-amyl methyl ether	BRL		µg/kg wet	5.0						
Ethyl tert-butyl ether	BRL		µg/kg wet	5.0						
Di-isopropyl ether	BRL		µg/kg wet	5.0						
Tert-Butanol / butyl alcohol	BRL		µg/kg wet	50.0						
1,4-Dioxane	BRL		µg/kg wet	100						
trans-1,4-Dichloro-2-butene	BRL		µg/kg wet	25.0						
Ethanol	BRL		µg/kg wet	2000						
Surrogate: 4-Bromofluorobenzene	*50.3*		µg/kg wet		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*47.5*		µg/kg wet		*50.0*		*95*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*57.8*		µg/kg wet		*50.0*		*116*	*70-130*		
Surrogate: Dibromofluoromethane	*52.2*		µg/kg wet		*50.0*		*104*	*70-130*		
LCS (1103831-BS1)					Prepared: 04-Mar-11 Analyzed: 07-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.0		µg/kg wet		20.0		90	70-130		
Acetone	15.5		µg/kg wet		20.0		77	70-130		
Acrylonitrile	20.4		µg/kg wet		20.0		102	70-130		
Benzene	17.5		µg/kg wet		20.0		87	70-130		
Bromobenzene	21.1		µg/kg wet		20.0		106	70-130		
Bromochloromethane	19.3		µg/kg wet		20.0		96	70-130		
Bromodichloromethane	18.0		µg/kg wet		20.0		90	70-130		
Bromoform	22.9		µg/kg wet		20.0		115	70-130		
Bromomethane	17.6		µg/kg wet		20.0		88	70-130		
2-Butanone (MEK)	17.2		µg/kg wet		20.0		86	70-130		
n-Butylbenzene	20.2		µg/kg wet		20.0		101	70-130		
sec-Butylbenzene	20.4		µg/kg wet		20.0		102	70-130		
tert-Butylbenzene	20.2		µg/kg wet		20.0		101	70-130		
Carbon disulfide	17.8		µg/kg wet		20.0		89	70-130		
Carbon tetrachloride	17.9		µg/kg wet		20.0		89	70-130		
Chlorobenzene	20.1		µg/kg wet		20.0		100	70-130		
Chloroethane	17.4		µg/kg wet		20.0		87	70-130		
Chloroform	16.8		µg/kg wet		20.0		84	70-130		
Chloromethane	16.0		µg/kg wet		20.0		80	70-130		
2-Chlorotoluene	19.7		µg/kg wet		20.0		98	70-130		
4-Chlorotoluene	20.5		µg/kg wet		20.0		103	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103831 - SW846 5035A Soil (low level)										
LCS (1103831-BS1)					Prepared: 04-Mar-11 Analyzed: 07-Mar-11					
1,2-Dibromo-3-chloropropane	24.0		µg/kg wet		20.0		120	70-130		
Dibromochloromethane	18.8		µg/kg wet		20.0		94	70-130		
1,2-Dibromoethane (EDB)	19.4		µg/kg wet		20.0		97	70-130		
Dibromomethane	19.0		µg/kg wet		20.0		95	70-130		
1,2-Dichlorobenzene	20.6		µg/kg wet		20.0		103	70-130		
1,3-Dichlorobenzene	20.9		µg/kg wet		20.0		105	70-130		
1,4-Dichlorobenzene	19.9		µg/kg wet		20.0		100	70-130		
Dichlorodifluoromethane (Freon12)	18.4		µg/kg wet		20.0		92	70-130		
1,1-Dichloroethane	17.1		µg/kg wet		20.0		86	70-130		
1,2-Dichloroethane	17.6		µg/kg wet		20.0		88	70-130		
1,1-Dichloroethene	17.8		µg/kg wet		20.0		89	70-130		
cis-1,2-Dichloroethene	17.7		µg/kg wet		20.0		89	70-130		
trans-1,2-Dichloroethene	17.4		µg/kg wet		20.0		87	70-130		
1,2-Dichloropropane	17.4		µg/kg wet		20.0		87	70-130		
1,3-Dichloropropane	18.4		µg/kg wet		20.0		92	70-130		
2,2-Dichloropropane	18.0		µg/kg wet		20.0		90	70-130		
1,1-Dichloropropene	17.6		µg/kg wet		20.0		88	70-130		
cis-1,3-Dichloropropene	17.6		µg/kg wet		20.0		88	70-130		
trans-1,3-Dichloropropene	18.9		µg/kg wet		20.0		95	70-130		
Ethylbenzene	20.1		µg/kg wet		20.0		100	70-130		
Hexachlorobutadiene	19.4		µg/kg wet		20.0		97	70-130		
2-Hexanone (MBK)	20.7		µg/kg wet		20.0		104	70-130		
Isopropylbenzene	20.1		µg/kg wet		20.0		101	70-130		
4-Isopropyltoluene	19.7		µg/kg wet		20.0		98	70-130		
Methyl tert-butyl ether	18.5		µg/kg wet		20.0		92	70-130		
4-Methyl-2-pentanone (MIBK)	22.6		µg/kg wet		20.0		113	70-130		
Methylene chloride	17.7		µg/kg wet		20.0		89	70-130		
Naphthalene	19.8		µg/kg wet		20.0		99	70-130		
n-Propylbenzene	20.5		µg/kg wet		20.0		102	70-130		
Styrene	20.2		µg/kg wet		20.0		101	70-130		
1,1,1,2-Tetrachloroethane	21.1		µg/kg wet		20.0		105	70-130		
1,1,2,2-Tetrachloroethane	22.3		µg/kg wet		20.0		111	70-130		
Tetrachloroethene	19.0		µg/kg wet		20.0		95	70-130		
Toluene	16.7		µg/kg wet		20.0		83	70-130		
1,2,3-Trichlorobenzene	22.2		µg/kg wet		20.0		111	70-130		
1,2,4-Trichlorobenzene	21.1		µg/kg wet		20.0		106	70-130		
1,3,5-Trichlorobenzene	21.6		µg/kg wet		20.0		108	70-130		
1,1,1-Trichloroethane	17.8		µg/kg wet		20.0		89	70-130		
1,1,2-Trichloroethane	18.9		µg/kg wet		20.0		94	70-130		
Trichloroethene	17.6		µg/kg wet		20.0		88	70-130		
Trichlorofluoromethane (Freon 11)	18.0		µg/kg wet		20.0		90	70-130		
1,2,3-Trichloropropane	22.2		µg/kg wet		20.0		111	70-130		
1,2,4-Trimethylbenzene	20.4		µg/kg wet		20.0		102	70-130		
1,3,5-Trimethylbenzene	20.2		µg/kg wet		20.0		101	70-130		
Vinyl chloride	17.6		µg/kg wet		20.0		88	70-130		
m,p-Xylene	40.8		µg/kg wet		40.0		102	70-130		
o-Xylene	20.1		µg/kg wet		20.0		100	70-130		
Tetrahydrofuran	18.9		µg/kg wet		20.0		95	70-130		
Ethyl ether	17.9		µg/kg wet		20.0		90	70-130		
Tert-amyl methyl ether	17.0		µg/kg wet		20.0		85	70-130		
Ethyl tert-butyl ether	18.0		µg/kg wet		20.0		90	70-130		
Di-isopropyl ether	17.1		µg/kg wet		20.0		86	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103831 - SW846 5035A Soil (low level)										
LCS (1103831-BS1)						Prepared: 04-Mar-11 Analyzed: 07-Mar-11				
Tert-Butanol / butyl alcohol	201		µg/kg wet		200		100	70-130		
1,4-Dioxane	199		µg/kg wet		200		100	70-130		
trans-1,4-Dichloro-2-butene	22.7		µg/kg wet		20.0		113	70-130		
Ethanol	324		µg/kg wet		400		81	70-130		
Surrogate: 4-Bromofluorobenzene	*51.2*		µg/kg wet		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*47.7*		µg/kg wet		*50.0*		*95*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.9*		µg/kg wet		*50.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*49.5*		µg/kg wet		*50.0*		*99*	*70-130*		
LCS Dup (1103831-BSD1)						Prepared: 04-Mar-11 Analyzed: 07-Mar-11				
1,1,2-Trichlorotrifluoroethane (Freon 113)	16.7		µg/kg wet		20.0		84	70-130	8	25
Acetone	15.3		µg/kg wet		20.0		77	70-130	0.8	50
Acrylonitrile	20.1		µg/kg wet		20.0		100	70-130	2	25
Benzene	16.9		µg/kg wet		20.0		84	70-130	3	25
Bromobenzene	20.5		µg/kg wet		20.0		103	70-130	3	25
Bromochloromethane	19.5		µg/kg wet		20.0		97	70-130	1	25
Bromodichloromethane	17.7		µg/kg wet		20.0		88	70-130	2	25
Bromoform	23.8		µg/kg wet		20.0		119	70-130	4	25
Bromomethane	16.4		µg/kg wet		20.0		82	70-130	7	50
2-Butanone (MEK)	18.3		µg/kg wet		20.0		91	70-130	6	50
n-Butylbenzene	19.6		µg/kg wet		20.0		98	70-130	3	25
sec-Butylbenzene	19.7		µg/kg wet		20.0		99	70-130	3	25
tert-Butylbenzene	19.9		µg/kg wet		20.0		100	70-130	1	25
Carbon disulfide	16.9		µg/kg wet		20.0		85	70-130	5	25
Carbon tetrachloride	17.6		µg/kg wet		20.0		88	70-130	1	25
Chlorobenzene	19.9		µg/kg wet		20.0		100	70-130	0.9	25
Chloroethane	16.2		µg/kg wet		20.0		81	70-130	7	50
Chloroform	16.2		µg/kg wet		20.0		81	70-130	3	25
Chloromethane	15.6		µg/kg wet		20.0		78	70-130	2	25
2-Chlorotoluene	19.2		µg/kg wet		20.0		96	70-130	3	25
4-Chlorotoluene	20.1		µg/kg wet		20.0		100	70-130	2	25
1,2-Dibromo-3-chloropropane	24.6		µg/kg wet		20.0		123	70-130	3	25
Dibromochloromethane	18.9		µg/kg wet		20.0		95	70-130	0.6	50
1,2-Dibromoethane (EDB)	19.5		µg/kg wet		20.0		97	70-130	0.4	25
Dibromomethane	18.9		µg/kg wet		20.0		94	70-130	0.4	25
1,2-Dichlorobenzene	20.4		µg/kg wet		20.0		102	70-130	1	25
1,3-Dichlorobenzene	20.6		µg/kg wet		20.0		103	70-130	2	25
1,4-Dichlorobenzene	19.7		µg/kg wet		20.0		98	70-130	1	25
Dichlorodifluoromethane (Freon12)	17.8		µg/kg wet		20.0		89	70-130	3	50
1,1-Dichloroethane	16.2		µg/kg wet		20.0		81	70-130	5	25
1,2-Dichloroethane	17.3		µg/kg wet		20.0		86	70-130	2	25
1,1-Dichloroethene	17.0		µg/kg wet		20.0		85	70-130	5	25
cis-1,2-Dichloroethene	17.4		µg/kg wet		20.0		87	70-130	2	25
trans-1,2-Dichloroethene	17.1		µg/kg wet		20.0		86	70-130	2	25
1,2-Dichloropropane	16.9		µg/kg wet		20.0		85	70-130	3	25
1,3-Dichloropropane	18.8		µg/kg wet		20.0		94	70-130	2	25
2,2-Dichloropropane	17.3		µg/kg wet		20.0		86	70-130	4	25
1,1-Dichloropropene	16.9		µg/kg wet		20.0		85	70-130	4	25
cis-1,3-Dichloropropene	17.6		µg/kg wet		20.0		88	70-130	0.2	25
trans-1,3-Dichloropropene	18.8		µg/kg wet		20.0		94	70-130	0.8	25
Ethylbenzene	19.5		µg/kg wet		20.0		98	70-130	3	25
Hexachlorobutadiene	19.2		µg/kg wet		20.0		96	70-130	0.5	50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103831 - SW846 5035A Soil (low level)										
LCS Dup (1103831-BSD1)					Prepared: 04-Mar-11 Analyzed: 07-Mar-11					
2-Hexanone (MBK)	21.3		µg/kg wet		20.0		106	70-130	3	25
Isopropylbenzene	19.9		µg/kg wet		20.0		100	70-130	0.9	25
4-Isopropyltoluene	19.5		µg/kg wet		20.0		97	70-130	0.9	25
Methyl tert-butyl ether	18.5		µg/kg wet		20.0		92	70-130	0.05	25
4-Methyl-2-pentanone (MIBK)	22.7		µg/kg wet		20.0		114	70-130	0.6	50
Methylene chloride	17.0		µg/kg wet		20.0		85	70-130	4	25
Naphthalene	20.2		µg/kg wet		20.0		101	70-130	2	25
n-Propylbenzene	19.8		µg/kg wet		20.0		99	70-130	4	25
Styrene	20.3		µg/kg wet		20.0		101	70-130	0.2	25
1,1,1,2-Tetrachloroethane	21.2		µg/kg wet		20.0		106	70-130	0.4	25
1,1,2,2-Tetrachloroethane	23.0		µg/kg wet		20.0		115	70-130	3	25
Tetrachloroethene	18.0		µg/kg wet		20.0		90	70-130	6	25
Toluene	16.3		µg/kg wet		20.0		81	70-130	2	25
1,2,3-Trichlorobenzene	22.4		µg/kg wet		20.0		112	70-130	0.7	25
1,2,4-Trichlorobenzene	21.1		µg/kg wet		20.0		106	70-130	0.05	25
1,3,5-Trichlorobenzene	21.4		µg/kg wet		20.0		107	70-130	1	25
1,1,1-Trichloroethane	17.0		µg/kg wet		20.0		85	70-130	4	25
1,1,2-Trichloroethane	18.5		µg/kg wet		20.0		92	70-130	2	25
Trichloroethene	16.9		µg/kg wet		20.0		85	70-130	4	25
Trichlorofluoromethane (Freon 11)	17.6		µg/kg wet		20.0		88	70-130	3	50
1,2,3-Trichloropropane	22.2		µg/kg wet		20.0		111	70-130	0.3	25
1,2,4-Trimethylbenzene	20.3		µg/kg wet		20.0		101	70-130	0.8	25
1,3,5-Trimethylbenzene	19.9		µg/kg wet		20.0		99	70-130	2	25
Vinyl chloride	16.9		µg/kg wet		20.0		85	70-130	4	25
m,p-Xylene	40.1		µg/kg wet		40.0		100	70-130	2	25
o-Xylene	20.2		µg/kg wet		20.0		101	70-130	0.4	25
Tetrahydrofuran	19.5		µg/kg wet		20.0		97	70-130	3	25
Ethyl ether	17.6		µg/kg wet		20.0		88	70-130	2	50
Tert-amyl methyl ether	16.9		µg/kg wet		20.0		84	70-130	0.8	25
Ethyl tert-butyl ether	17.9		µg/kg wet		20.0		89	70-130	0.5	25
Di-isopropyl ether	16.9		µg/kg wet		20.0		84	70-130	1	25
Tert-Butanol / butyl alcohol	215		µg/kg wet		200		107	70-130	7	25
1,4-Dioxane	214		µg/kg wet		200		107	70-130	7	25
trans-1,4-Dichloro-2-butene	23.6		µg/kg wet		20.0		118	70-130	4	25
Ethanol	344		µg/kg wet		400		86	70-130	6	30
Surrogate: 4-Bromofluorobenzene	*51.3*		µg/kg wet		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*47.2*		µg/kg wet		*50.0*		*94*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*49.3*		µg/kg wet		*50.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*49.5*		µg/kg wet		*50.0*		*99*	*70-130*		
Batch 1103905 - SW846 5030 Soil (high level)										
Blank (1103905-BLK1)					Prepared & Analyzed: 07-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg wet	50.0						
Acetone	BRL		µg/kg wet	500						
Acrylonitrile	BRL		µg/kg wet	50.0						
Benzene	BRL		µg/kg wet	50.0						
Bromobenzene	BRL		µg/kg wet	50.0						
Bromochloromethane	BRL		µg/kg wet	50.0						
Bromodichloromethane	BRL		µg/kg wet	50.0						
Bromoform	BRL		µg/kg wet	50.0						
Bromomethane	BRL		µg/kg wet	100						
2-Butanone (MEK)	BRL		µg/kg wet	500						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103905 - SW846 5030 Soil (high level)										
Blank (1103905-BLK1)					Prepared & Analyzed: 07-Mar-11					
n-Butylbenzene	BRL		µg/kg wet	50.0						
sec-Butylbenzene	BRL		µg/kg wet	50.0						
tert-Butylbenzene	BRL		µg/kg wet	50.0						
Carbon disulfide	BRL		µg/kg wet	100						
Carbon tetrachloride	BRL		µg/kg wet	50.0						
Chlorobenzene	BRL		µg/kg wet	50.0						
Chloroethane	BRL		µg/kg wet	100						
Chloroform	BRL		µg/kg wet	50.0						
Chloromethane	BRL		µg/kg wet	100						
2-Chlorotoluene	BRL		µg/kg wet	50.0						
4-Chlorotoluene	BRL		µg/kg wet	50.0						
1,2-Dibromo-3-chloropropane	BRL		µg/kg wet	100						
Dibromochloromethane	BRL		µg/kg wet	50.0						
1,2-Dibromoethane (EDB)	BRL		µg/kg wet	50.0						
Dibromomethane	BRL		µg/kg wet	50.0						
1,2-Dichlorobenzene	BRL		µg/kg wet	50.0						
1,3-Dichlorobenzene	BRL		µg/kg wet	50.0						
1,4-Dichlorobenzene	BRL		µg/kg wet	50.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet	100						
1,1-Dichloroethane	BRL		µg/kg wet	50.0						
1,2-Dichloroethane	BRL		µg/kg wet	50.0						
1,1-Dichloroethene	BRL		µg/kg wet	50.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet	50.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet	50.0						
1,2-Dichloropropane	BRL		µg/kg wet	50.0						
1,3-Dichloropropane	BRL		µg/kg wet	50.0						
2,2-Dichloropropane	BRL		µg/kg wet	50.0						
1,1-Dichloropropene	BRL		µg/kg wet	50.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet	50.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet	50.0						
Ethylbenzene	BRL		µg/kg wet	50.0						
Hexachlorobutadiene	BRL		µg/kg wet	50.0						
2-Hexanone (MBK)	BRL		µg/kg wet	500						
Isopropylbenzene	BRL		µg/kg wet	50.0						
4-Isopropyltoluene	BRL		µg/kg wet	50.0						
Methyl tert-butyl ether	BRL		µg/kg wet	50.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg wet	500						
Methylene chloride	BRL		µg/kg wet	100						
Naphthalene	BRL		µg/kg wet	50.0						
n-Propylbenzene	BRL		µg/kg wet	50.0						
Styrene	BRL		µg/kg wet	50.0						
1,1,1,2-Tetrachloroethane	BRL		µg/kg wet	50.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet	50.0						
Tetrachloroethene	BRL		µg/kg wet	50.0						
Toluene	BRL		µg/kg wet	50.0						
1,2,3-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,3,5-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,1,1-Trichloroethane	BRL		µg/kg wet	50.0						
1,1,2-Trichloroethane	BRL		µg/kg wet	50.0						
Trichloroethene	BRL		µg/kg wet	50.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet	50.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103905 - SW846 5030 Soil (high level)										
Blank (1103905-BLK1)					Prepared & Analyzed: 07-Mar-11					
1,2,3-Trichloropropane	BRL		µg/kg wet	50.0						
1,2,4-Trimethylbenzene	BRL		µg/kg wet	50.0						
1,3,5-Trimethylbenzene	BRL		µg/kg wet	50.0						
Vinyl chloride	BRL		µg/kg wet	50.0						
m,p-Xylene	BRL		µg/kg wet	100						
o-Xylene	BRL		µg/kg wet	50.0						
Tetrahydrofuran	BRL		µg/kg wet	100						
Ethyl ether	BRL		µg/kg wet	50.0						
Tert-amyl methyl ether	BRL		µg/kg wet	50.0						
Ethyl tert-butyl ether	BRL		µg/kg wet	50.0						
Di-isopropyl ether	BRL		µg/kg wet	50.0						
Tert-Butanol / butyl alcohol	BRL		µg/kg wet	500						
1,4-Dioxane	BRL		µg/kg wet	1000						
trans-1,4-Dichloro-2-butene	BRL		µg/kg wet	250						
Ethanol	BRL		µg/kg wet	20000						
Surrogate: 4-Bromofluorobenzene	*29.1*		µg/kg wet		*30.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*28.4*		µg/kg wet		*30.0*		*95*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*31.3*		µg/kg wet		*30.0*		*104*	*70-130*		
LCS (1103905-BS1)					Prepared & Analyzed: 07-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0		µg/kg wet		20.0		100	70-130		
Acetone	18.4		µg/kg wet		20.0		92	70-130		
Acrylonitrile	19.4		µg/kg wet		20.0		97	70-130		
Benzene	18.8		µg/kg wet		20.0		94	70-130		
Bromobenzene	20.2		µg/kg wet		20.0		101	70-130		
Bromochloromethane	21.7		µg/kg wet		20.0		109	70-130		
Bromodichloromethane	21.7		µg/kg wet		20.0		108	70-130		
Bromoform	21.4		µg/kg wet		20.0		107	70-130		
Bromomethane	20.3		µg/kg wet		20.0		102	70-130		
2-Butanone (MEK)	21.0		µg/kg wet		20.0		105	70-130		
n-Butylbenzene	20.3		µg/kg wet		20.0		101	70-130		
sec-Butylbenzene	20.8		µg/kg wet		20.0		104	70-130		
tert-Butylbenzene	20.3		µg/kg wet		20.0		101	70-130		
Carbon disulfide	18.5		µg/kg wet		20.0		93	70-130		
Carbon tetrachloride	20.2		µg/kg wet		20.0		101	70-130		
Chlorobenzene	19.0		µg/kg wet		20.0		95	70-130		
Chloroethane	18.0		µg/kg wet		20.0		90	70-130		
Chloroform	20.3		µg/kg wet		20.0		102	70-130		
Chloromethane	17.2		µg/kg wet		20.0		86	70-130		
2-Chlorotoluene	19.8		µg/kg wet		20.0		99	70-130		
4-Chlorotoluene	20.5		µg/kg wet		20.0		102	70-130		
1,2-Dibromo-3-chloropropane	24.2		µg/kg wet		20.0		121	70-130		
Dibromochloromethane	22.1		µg/kg wet		20.0		110	70-130		
1,2-Dibromoethane (EDB)	20.9		µg/kg wet		20.0		104	70-130		
Dibromomethane	21.9		µg/kg wet		20.0		109	70-130		
1,2-Dichlorobenzene	19.5		µg/kg wet		20.0		98	70-130		
1,3-Dichlorobenzene	20.2		µg/kg wet		20.0		101	70-130		
1,4-Dichlorobenzene	18.9		µg/kg wet		20.0		95	70-130		
Dichlorodifluoromethane (Freon12)	18.8		µg/kg wet		20.0		94	70-130		
1,1-Dichloroethane	18.8		µg/kg wet		20.0		94	70-130		
1,2-Dichloroethane	20.0		µg/kg wet		20.0		100	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103905 - SW846 5030 Soil (high level)										
LCS (1103905-BS1)					Prepared & Analyzed: 07-Mar-11					
1,1-Dichloroethene	19.9		µg/kg wet		20.0		100	70-130		
cis-1,2-Dichloroethene	19.8		µg/kg wet		20.0		99	70-130		
trans-1,2-Dichloroethene	20.0		µg/kg wet		20.0		100	70-130		
1,2-Dichloropropane	18.5		µg/kg wet		20.0		92	70-130		
1,3-Dichloropropane	19.6		µg/kg wet		20.0		98	70-130		
2,2-Dichloropropane	21.4		µg/kg wet		20.0		107	70-130		
1,1-Dichloropropene	19.5		µg/kg wet		20.0		97	70-130		
cis-1,3-Dichloropropene	20.7		µg/kg wet		20.0		103	70-130		
trans-1,3-Dichloropropene	21.6		µg/kg wet		20.0		108	70-130		
Ethylbenzene	19.6		µg/kg wet		20.0		98	70-130		
Hexachlorobutadiene	21.6		µg/kg wet		20.0		108	70-130		
2-Hexanone (MBK)	21.4		µg/kg wet		20.0		107	70-130		
Isopropylbenzene	19.8		µg/kg wet		20.0		99	70-130		
4-Isopropyltoluene	20.1		µg/kg wet		20.0		100	70-130		
Methyl tert-butyl ether	20.3		µg/kg wet		20.0		101	70-130		
4-Methyl-2-pentanone (MIBK)	19.8		µg/kg wet		20.0		99	70-130		
Methylene chloride	18.5		µg/kg wet		20.0		92	70-130		
Naphthalene	22.1		µg/kg wet		20.0		110	70-130		
n-Propylbenzene	20.6		µg/kg wet		20.0		103	70-130		
Styrene	20.7		µg/kg wet		20.0		104	70-130		
1,1,1,2-Tetrachloroethane	20.7		µg/kg wet		20.0		104	70-130		
1,1,2,2-Tetrachloroethane	24.5		µg/kg wet		20.0		122	70-130		
Tetrachloroethene	19.2		µg/kg wet		20.0		96	70-130		
Toluene	18.5		µg/kg wet		20.0		92	70-130		
1,2,3-Trichlorobenzene	21.2		µg/kg wet		20.0		106	70-130		
1,2,4-Trichlorobenzene	20.3		µg/kg wet		20.0		101	70-130		
1,3,5-Trichlorobenzene	19.4		µg/kg wet		20.0		97	70-130		
1,1,1-Trichloroethane	21.7		µg/kg wet		20.0		109	70-130		
1,1,2-Trichloroethane	21.1		µg/kg wet		20.0		105	70-130		
Trichloroethene	19.8		µg/kg wet		20.0		99	70-130		
Trichlorofluoromethane (Freon 11)	21.2		µg/kg wet		20.0		106	70-130		
1,2,3-Trichloropropane	22.5		µg/kg wet		20.0		113	70-130		
1,2,4-Trimethylbenzene	20.8		µg/kg wet		20.0		104	70-130		
1,3,5-Trimethylbenzene	20.8		µg/kg wet		20.0		104	70-130		
Vinyl chloride	21.0		µg/kg wet		20.0		105	70-130		
m,p-Xylene	40.1		µg/kg wet		40.0		100	70-130		
o-Xylene	20.0		µg/kg wet		20.0		100	70-130		
Tetrahydrofuran	18.0		µg/kg wet		20.0		90	70-130		
Ethyl ether	20.2		µg/kg wet		20.0		101	70-130		
Tert-amyl methyl ether	19.6		µg/kg wet		20.0		98	70-130		
Ethyl tert-butyl ether	18.9		µg/kg wet		20.0		95	70-130		
Di-isopropyl ether	17.9		µg/kg wet		20.0		90	70-130		
Tert-Butanol / butyl alcohol	203		µg/kg wet		200		102	70-130		
1,4-Dioxane	215		µg/kg wet		200		107	70-130		
trans-1,4-Dichloro-2-butene	20.9		µg/kg wet		20.0		104	70-130		
Ethanol	407		µg/kg wet		400		102	70-130		
Surrogate: 4-Bromofluorobenzene	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*28.3*		µg/kg wet		*30.0*		*94*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*32.4*		µg/kg wet		*30.0*		*108*	*70-130*		
LCS Dup (1103905-BSD1)					Prepared & Analyzed: 07-Mar-11					

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103905 - SW846 5030 Soil (high level)										
LCS Dup (1103905-BSD1)					Prepared & Analyzed: 07-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.3		µg/kg wet		20.0		106	70-130	6	25
Acetone	18.6		µg/kg wet		20.0		93	70-130	1	50
Acrylonitrile	19.7		µg/kg wet		20.0		99	70-130	1	25
Benzene	19.3		µg/kg wet		20.0		97	70-130	3	25
Bromobenzene	20.6		µg/kg wet		20.0		103	70-130	2	25
Bromochloromethane	22.0		µg/kg wet		20.0		110	70-130	2	25
Bromodichloromethane	22.3		µg/kg wet		20.0		111	70-130	3	25
Bromoform	21.5		µg/kg wet		20.0		107	70-130	0.5	25
Bromomethane	20.3		µg/kg wet		20.0		102	70-130	0	50
2-Butanone (MEK)	19.1		µg/kg wet		20.0		96	70-130	9	50
n-Butylbenzene	21.1		µg/kg wet		20.0		105	70-130	4	25
sec-Butylbenzene	21.4		µg/kg wet		20.0		107	70-130	2	25
tert-Butylbenzene	20.9		µg/kg wet		20.0		105	70-130	3	25
Carbon disulfide	18.8		µg/kg wet		20.0		94	70-130	2	25
Carbon tetrachloride	20.6		µg/kg wet		20.0		103	70-130	2	25
Chlorobenzene	19.9		µg/kg wet		20.0		99	70-130	4	25
Chloroethane	19.1		µg/kg wet		20.0		96	70-130	6	50
Chloroform	21.0		µg/kg wet		20.0		105	70-130	3	25
Chloromethane	19.5		µg/kg wet		20.0		98	70-130	13	25
2-Chlorotoluene	20.0		µg/kg wet		20.0		100	70-130	1	25
4-Chlorotoluene	20.8		µg/kg wet		20.0		104	70-130	2	25
1,2-Dibromo-3-chloropropane	24.7		µg/kg wet		20.0		123	70-130	2	25
Dibromochloromethane	22.5		µg/kg wet		20.0		112	70-130	2	50
1,2-Dibromoethane (EDB)	21.1		µg/kg wet		20.0		106	70-130	1	25
Dibromomethane	22.2		µg/kg wet		20.0		111	70-130	1	25
1,2-Dichlorobenzene	20.3		µg/kg wet		20.0		102	70-130	4	25
1,3-Dichlorobenzene	20.5		µg/kg wet		20.0		102	70-130	1	25
1,4-Dichlorobenzene	19.6		µg/kg wet		20.0		98	70-130	4	25
Dichlorodifluoromethane (Freon12)	19.8		µg/kg wet		20.0		99	70-130	5	50
1,1-Dichloroethane	19.4		µg/kg wet		20.0		97	70-130	3	25
1,2-Dichloroethane	20.4		µg/kg wet		20.0		102	70-130	2	25
1,1-Dichloroethene	21.0		µg/kg wet		20.0		105	70-130	5	25
cis-1,2-Dichloroethene	20.5		µg/kg wet		20.0		102	70-130	3	25
trans-1,2-Dichloroethene	20.6		µg/kg wet		20.0		103	70-130	3	25
1,2-Dichloropropane	18.9		µg/kg wet		20.0		95	70-130	2	25
1,3-Dichloropropane	20.2		µg/kg wet		20.0		101	70-130	3	25
2,2-Dichloropropane	20.4		µg/kg wet		20.0		102	70-130	5	25
1,1-Dichloropropene	20.2		µg/kg wet		20.0		101	70-130	4	25
cis-1,3-Dichloropropene	20.6		µg/kg wet		20.0		103	70-130	0.4	25
trans-1,3-Dichloropropene	21.6		µg/kg wet		20.0		108	70-130	0.2	25
Ethylbenzene	20.4		µg/kg wet		20.0		102	70-130	4	25
Hexachlorobutadiene	22.5		µg/kg wet		20.0		113	70-130	4	50
2-Hexanone (MBK)	20.9		µg/kg wet		20.0		104	70-130	2	25
Isopropylbenzene	20.4		µg/kg wet		20.0		102	70-130	3	25
4-Isopropyltoluene	20.7		µg/kg wet		20.0		103	70-130	3	25
Methyl tert-butyl ether	20.5		µg/kg wet		20.0		103	70-130	1	25
4-Methyl-2-pentanone (MIBK)	19.0		µg/kg wet		20.0		95	70-130	4	50
Methylene chloride	18.9		µg/kg wet		20.0		95	70-130	2	25
Naphthalene	22.2		µg/kg wet		20.0		111	70-130	0.5	25
n-Propylbenzene	21.1		µg/kg wet		20.0		105	70-130	2	25
Styrene	21.1		µg/kg wet		20.0		105	70-130	2	25
1,1,1,2-Tetrachloroethane	21.3		µg/kg wet		20.0		107	70-130	3	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103905 - SW846 5030 Soil (high level)										
LCS Dup (1103905-BSD1)					Prepared & Analyzed: 07-Mar-11					
1,1,2,2-Tetrachloroethane	24.6		µg/kg wet		20.0		123	70-130	0.2	25
Tetrachloroethene	19.5		µg/kg wet		20.0		98	70-130	2	25
Toluene	18.9		µg/kg wet		20.0		94	70-130	2	25
1,2,3-Trichlorobenzene	21.4		µg/kg wet		20.0		107	70-130	0.7	25
1,2,4-Trichlorobenzene	20.4		µg/kg wet		20.0		102	70-130	0.8	25
1,3,5-Trichlorobenzene	19.9		µg/kg wet		20.0		100	70-130	3	25
1,1,1-Trichloroethane	22.4		µg/kg wet		20.0		112	70-130	3	25
1,1,2-Trichloroethane	21.0		µg/kg wet		20.0		105	70-130	0.3	25
Trichloroethene	20.6		µg/kg wet		20.0		103	70-130	4	25
Trichlorofluoromethane (Freon 11)	22.2		µg/kg wet		20.0		111	70-130	5	50
1,2,3-Trichloropropane	22.4		µg/kg wet		20.0		112	70-130	0.8	25
1,2,4-Trimethylbenzene	21.3		µg/kg wet		20.0		106	70-130	2	25
1,3,5-Trimethylbenzene	21.1		µg/kg wet		20.0		106	70-130	2	25
Vinyl chloride	22.1		µg/kg wet		20.0		110	70-130	5	25
m,p-Xylene	40.7		µg/kg wet		40.0		102	70-130	1	25
o-Xylene	20.3		µg/kg wet		20.0		102	70-130	2	25
Tetrahydrofuran	17.4		µg/kg wet		20.0		87	70-130	3	25
Ethyl ether	20.4		µg/kg wet		20.0		102	70-130	1	50
Tert-amyl methyl ether	19.5		µg/kg wet		20.0		97	70-130	0.9	25
Ethyl tert-butyl ether	19.0		µg/kg wet		20.0		95	70-130	0.4	25
Di-isopropyl ether	18.2		µg/kg wet		20.0		91	70-130	2	25
Tert-Butanol / butyl alcohol	201		µg/kg wet		200		100	70-130	1	25
1,4-Dioxane	208		µg/kg wet		200		104	70-130	3	25
trans-1,4-Dichloro-2-butene	20.2		µg/kg wet		20.0		101	70-130	3	25
Ethanol	418		µg/kg wet		400		104	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*27.9*		µg/kg wet		*30.0*		*93*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.5*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Dibromofluoromethane	*33.0*		µg/kg wet		*30.0*		*110*	*70-130*		
Batch 1103992 - SW846 5030 Soil (high level)										
Blank (1103992-BLK1)					Prepared & Analyzed: 08-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg wet	50.0						
Acetone	BRL		µg/kg wet	500						
Acrylonitrile	BRL		µg/kg wet	50.0						
Benzene	BRL		µg/kg wet	50.0						
Bromobenzene	BRL		µg/kg wet	50.0						
Bromochloromethane	BRL		µg/kg wet	50.0						
Bromodichloromethane	BRL		µg/kg wet	50.0						
Bromoform	BRL		µg/kg wet	50.0						
Bromomethane	BRL		µg/kg wet	100						
2-Butanone (MEK)	BRL		µg/kg wet	500						
n-Butylbenzene	BRL		µg/kg wet	50.0						
sec-Butylbenzene	BRL		µg/kg wet	50.0						
tert-Butylbenzene	BRL		µg/kg wet	50.0						
Carbon disulfide	BRL		µg/kg wet	100						
Carbon tetrachloride	BRL		µg/kg wet	50.0						
Chlorobenzene	BRL		µg/kg wet	50.0						
Chloroethane	BRL		µg/kg wet	100						
Chloroform	BRL		µg/kg wet	50.0						
Chloromethane	BRL		µg/kg wet	100						
2-Chlorotoluene	BRL		µg/kg wet	50.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103992 - SW846 5030 Soil (high level)										
Blank (1103992-BLK1)					Prepared & Analyzed: 08-Mar-11					
4-Chlorotoluene	BRL		µg/kg wet	50.0						
1,2-Dibromo-3-chloropropane	BRL		µg/kg wet	100						
Dibromochloromethane	BRL		µg/kg wet	50.0						
1,2-Dibromoethane (EDB)	BRL		µg/kg wet	50.0						
Dibromomethane	BRL		µg/kg wet	50.0						
1,2-Dichlorobenzene	BRL		µg/kg wet	50.0						
1,3-Dichlorobenzene	BRL		µg/kg wet	50.0						
1,4-Dichlorobenzene	BRL		µg/kg wet	50.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet	100						
1,1-Dichloroethane	BRL		µg/kg wet	50.0						
1,2-Dichloroethane	BRL		µg/kg wet	50.0						
1,1-Dichloroethene	BRL		µg/kg wet	50.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet	50.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet	50.0						
1,2-Dichloropropane	BRL		µg/kg wet	50.0						
1,3-Dichloropropane	BRL		µg/kg wet	50.0						
2,2-Dichloropropane	BRL		µg/kg wet	50.0						
1,1-Dichloropropene	BRL		µg/kg wet	50.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet	50.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet	50.0						
Ethylbenzene	BRL		µg/kg wet	50.0						
Hexachlorobutadiene	BRL		µg/kg wet	50.0						
2-Hexanone (MBK)	BRL		µg/kg wet	500						
Isopropylbenzene	BRL		µg/kg wet	50.0						
4-Isopropyltoluene	BRL		µg/kg wet	50.0						
Methyl tert-butyl ether	BRL		µg/kg wet	50.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg wet	500						
Methylene chloride	BRL		µg/kg wet	100						
Naphthalene	BRL		µg/kg wet	50.0						
n-Propylbenzene	BRL		µg/kg wet	50.0						
Styrene	BRL		µg/kg wet	50.0						
1,1,1,2-Tetrachloroethane	BRL		µg/kg wet	50.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet	50.0						
Tetrachloroethene	BRL		µg/kg wet	50.0						
Toluene	BRL		µg/kg wet	50.0						
1,2,3-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,3,5-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,1,1-Trichloroethane	BRL		µg/kg wet	50.0						
1,1,2-Trichloroethane	BRL		µg/kg wet	50.0						
Trichloroethene	BRL		µg/kg wet	50.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet	50.0						
1,2,3-Trichloropropane	BRL		µg/kg wet	50.0						
1,2,4-Trimethylbenzene	BRL		µg/kg wet	50.0						
1,3,5-Trimethylbenzene	BRL		µg/kg wet	50.0						
Vinyl chloride	BRL		µg/kg wet	50.0						
m,p-Xylene	BRL		µg/kg wet	100						
o-Xylene	BRL		µg/kg wet	50.0						
Tetrahydrofuran	BRL		µg/kg wet	100						
Ethyl ether	BRL		µg/kg wet	50.0						
Tert-amyl methyl ether	BRL		µg/kg wet	50.0						
Ethyl tert-butyl ether	BRL		µg/kg wet	50.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103992 - SW846 5030 Soil (high level)										
Blank (1103992-BLK1)						Prepared & Analyzed: 08-Mar-11				
Di-isopropyl ether	BRL		µg/kg wet	50.0						
Tert-Butanol / butyl alcohol	BRL		µg/kg wet	500						
1,4-Dioxane	BRL		µg/kg wet	1000						
trans-1,4-Dichloro-2-butene	BRL		µg/kg wet	250						
Ethanol	BRL		µg/kg wet	20000						
Surrogate: 4-Bromofluorobenzene	*29.0*		µg/kg wet		*30.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*27.1*		µg/kg wet		*30.0*		*90*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.8*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*31.5*		µg/kg wet		*30.0*		*105*	*70-130*		
LCS (1103992-BS1)						Prepared & Analyzed: 08-Mar-11				
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.3		µg/kg wet		20.0		107	70-130		
Acetone	16.7		µg/kg wet		20.0		84	70-130		
Acrylonitrile	19.4		µg/kg wet		20.0		97	70-130		
Benzene	19.4		µg/kg wet		20.0		97	70-130		
Bromobenzene	20.4		µg/kg wet		20.0		102	70-130		
Bromochloromethane	21.9		µg/kg wet		20.0		110	70-130		
Bromodichloromethane	20.9		µg/kg wet		20.0		105	70-130		
Bromoform	20.1		µg/kg wet		20.0		101	70-130		
Bromomethane	21.9		µg/kg wet		20.0		109	70-130		
2-Butanone (MEK)	18.0		µg/kg wet		20.0		90	70-130		
n-Butylbenzene	20.3		µg/kg wet		20.0		102	70-130		
sec-Butylbenzene	21.4		µg/kg wet		20.0		107	70-130		
tert-Butylbenzene	21.1		µg/kg wet		20.0		105	70-130		
Carbon disulfide	17.6		µg/kg wet		20.0		88	70-130		
Carbon tetrachloride	20.2		µg/kg wet		20.0		101	70-130		
Chlorobenzene	19.8		µg/kg wet		20.0		99	70-130		
Chloroethane	18.9		µg/kg wet		20.0		95	70-130		
Chloroform	20.8		µg/kg wet		20.0		104	70-130		
Chloromethane	18.8		µg/kg wet		20.0		94	70-130		
2-Chlorotoluene	20.4		µg/kg wet		20.0		102	70-130		
4-Chlorotoluene	21.0		µg/kg wet		20.0		105	70-130		
1,2-Dibromo-3-chloropropane	21.7		µg/kg wet		20.0		109	70-130		
Dibromochloromethane	20.5		µg/kg wet		20.0		103	70-130		
1,2-Dibromoethane (EDB)	20.0		µg/kg wet		20.0		100	70-130		
Dibromomethane	21.9		µg/kg wet		20.0		110	70-130		
1,2-Dichlorobenzene	19.8		µg/kg wet		20.0		99	70-130		
1,3-Dichlorobenzene	20.7		µg/kg wet		20.0		103	70-130		
1,4-Dichlorobenzene	19.5		µg/kg wet		20.0		97	70-130		
Dichlorodifluoromethane (Freon12)	20.9		µg/kg wet		20.0		104	70-130		
1,1-Dichloroethane	19.0		µg/kg wet		20.0		95	70-130		
1,2-Dichloroethane	20.3		µg/kg wet		20.0		101	70-130		
1,1-Dichloroethene	21.2		µg/kg wet		20.0		106	70-130		
cis-1,2-Dichloroethene	20.4		µg/kg wet		20.0		102	70-130		
trans-1,2-Dichloroethene	20.9		µg/kg wet		20.0		104	70-130		
1,2-Dichloropropane	18.6		µg/kg wet		20.0		93	70-130		
1,3-Dichloropropane	19.5		µg/kg wet		20.0		97	70-130		
2,2-Dichloropropane	18.0		µg/kg wet		20.0		90	70-130		
1,1-Dichloropropene	20.3		µg/kg wet		20.0		101	70-130		
cis-1,3-Dichloropropene	17.8		µg/kg wet		20.0		89	70-130		
trans-1,3-Dichloropropene	18.3		µg/kg wet		20.0		92	70-130		
Ethylbenzene	20.4		µg/kg wet		20.0		102	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103992 - SW846 5030 Soil (high level)										
LCS (1103992-BS1)					Prepared & Analyzed: 08-Mar-11					
Hexachlorobutadiene	20.4		µg/kg wet		20.0		102	70-130		
2-Hexanone (MBK)	19.1		µg/kg wet		20.0		96	70-130		
Isopropylbenzene	20.3		µg/kg wet		20.0		102	70-130		
4-Isopropyltoluene	20.5		µg/kg wet		20.0		102	70-130		
Methyl tert-butyl ether	19.1		µg/kg wet		20.0		96	70-130		
4-Methyl-2-pentanone (MIBK)	17.8		µg/kg wet		20.0		89	70-130		
Methylene chloride	19.3		µg/kg wet		20.0		96	70-130		
Naphthalene	20.9		µg/kg wet		20.0		104	70-130		
n-Propylbenzene	21.2		µg/kg wet		20.0		106	70-130		
Styrene	21.0		µg/kg wet		20.0		105	70-130		
1,1,1,2-Tetrachloroethane	19.8		µg/kg wet		20.0		99	70-130		
1,1,2,2-Tetrachloroethane	23.9		µg/kg wet		20.0		120	70-130		
Tetrachloroethene	19.1		µg/kg wet		20.0		96	70-130		
Toluene	18.5		µg/kg wet		20.0		92	70-130		
1,2,3-Trichlorobenzene	20.1		µg/kg wet		20.0		100	70-130		
1,2,4-Trichlorobenzene	19.3		µg/kg wet		20.0		97	70-130		
1,3,5-Trichlorobenzene	19.0		µg/kg wet		20.0		95	70-130		
1,1,1-Trichloroethane	21.4		µg/kg wet		20.0		107	70-130		
1,1,2-Trichloroethane	20.6		µg/kg wet		20.0		103	70-130		
Trichloroethene	20.7		µg/kg wet		20.0		104	70-130		
Trichlorofluoromethane (Freon 11)	23.0		µg/kg wet		20.0		115	70-130		
1,2,3-Trichloropropane	21.9		µg/kg wet		20.0		109	70-130		
1,2,4-Trimethylbenzene	21.0		µg/kg wet		20.0		105	70-130		
1,3,5-Trimethylbenzene	21.2		µg/kg wet		20.0		106	70-130		
Vinyl chloride	23.6		µg/kg wet		20.0		118	70-130		
m,p-Xylene	41.6		µg/kg wet		40.0		104	70-130		
o-Xylene	20.4		µg/kg wet		20.0		102	70-130		
Tetrahydrofuran	16.6		µg/kg wet		20.0		83	70-130		
Ethyl ether	20.0		µg/kg wet		20.0		100	70-130		
Tert-amyl methyl ether	16.6		µg/kg wet		20.0		83	70-130		
Ethyl tert-butyl ether	17.1		µg/kg wet		20.0		85	70-130		
Di-isopropyl ether	17.5		µg/kg wet		20.0		87	70-130		
Tert-Butanol / butyl alcohol	170		µg/kg wet		200		85	70-130		
1,4-Dioxane	206		µg/kg wet		200		103	70-130		
trans-1,4-Dichloro-2-butene	19.6		µg/kg wet		20.0		98	70-130		
Ethanol	415		µg/kg wet		400		104	70-130		
Surrogate: 4-Bromofluorobenzene	*29.9*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*27.5*		µg/kg wet		*30.0*		*92*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.6*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Dibromofluoromethane	*32.5*		µg/kg wet		*30.0*		*108*	*70-130*		
LCS Dup (1103992-BSD1)					Prepared & Analyzed: 08-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.3		µg/kg wet		20.0		106	70-130	0.3	25
Acetone	18.6		µg/kg wet		20.0		93	70-130	11	50
Acrylonitrile	19.7		µg/kg wet		20.0		98	70-130	2	25
Benzene	20.0		µg/kg wet		20.0		100	70-130	3	25
Bromobenzene	21.1		µg/kg wet		20.0		105	70-130	3	25
Bromochloromethane	22.5		µg/kg wet		20.0		112	70-130	2	25
Bromodichloromethane	21.4		µg/kg wet		20.0		107	70-130	2	25
Bromoform	20.2		µg/kg wet		20.0		101	70-130	0.6	25
Bromomethane	22.1		µg/kg wet		20.0		111	70-130	1	50
2-Butanone (MEK)	20.0		µg/kg wet		20.0		100	70-130	11	50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103992 - SW846 5030 Soil (high level)										
LCS Dup (1103992-BSD1)					Prepared & Analyzed: 08-Mar-11					
n-Butylbenzene	21.4		µg/kg wet		20.0		107	70-130	5	25
sec-Butylbenzene	22.1		µg/kg wet		20.0		111	70-130	3	25
tert-Butylbenzene	21.7		µg/kg wet		20.0		108	70-130	3	25
Carbon disulfide	17.9		µg/kg wet		20.0		90	70-130	2	25
Carbon tetrachloride	21.1		µg/kg wet		20.0		106	70-130	5	25
Chlorobenzene	20.1		µg/kg wet		20.0		100	70-130	2	25
Chloroethane	19.2		µg/kg wet		20.0		96	70-130	1	50
Chloroform	21.4		µg/kg wet		20.0		107	70-130	3	25
Chloromethane	20.3		µg/kg wet		20.0		102	70-130	8	25
2-Chlorotoluene	21.0		µg/kg wet		20.0		105	70-130	3	25
4-Chlorotoluene	21.9		µg/kg wet		20.0		110	70-130	4	25
1,2-Dibromo-3-chloropropane	21.9		µg/kg wet		20.0		110	70-130	0.9	25
Dibromochloromethane	20.7		µg/kg wet		20.0		103	70-130	0.9	50
1,2-Dibromoethane (EDB)	20.4		µg/kg wet		20.0		102	70-130	2	25
Dibromomethane	22.4		µg/kg wet		20.0		112	70-130	2	25
1,2-Dichlorobenzene	20.1		µg/kg wet		20.0		101	70-130	2	25
1,3-Dichlorobenzene	21.2		µg/kg wet		20.0		106	70-130	3	25
1,4-Dichlorobenzene	19.8		µg/kg wet		20.0		99	70-130	2	25
Dichlorodifluoromethane (Freon12)	20.6		µg/kg wet		20.0		103	70-130	2	50
1,1-Dichloroethane	19.8		µg/kg wet		20.0		99	70-130	4	25
1,2-Dichloroethane	20.8		µg/kg wet		20.0		104	70-130	2	25
1,1-Dichloroethene	21.4		µg/kg wet		20.0		107	70-130	1	25
cis-1,2-Dichloroethene	20.9		µg/kg wet		20.0		105	70-130	2	25
trans-1,2-Dichloroethene	21.5		µg/kg wet		20.0		107	70-130	3	25
1,2-Dichloropropane	19.3		µg/kg wet		20.0		97	70-130	4	25
1,3-Dichloropropane	19.6		µg/kg wet		20.0		98	70-130	0.4	25
2,2-Dichloropropane	18.6		µg/kg wet		20.0		93	70-130	3	25
1,1-Dichloropropene	21.1		µg/kg wet		20.0		105	70-130	4	25
cis-1,3-Dichloropropene	18.1		µg/kg wet		20.0		90	70-130	2	25
trans-1,3-Dichloropropene	18.2		µg/kg wet		20.0		91	70-130	0.6	25
Ethylbenzene	21.0		µg/kg wet		20.0		105	70-130	3	25
Hexachlorobutadiene	21.1		µg/kg wet		20.0		106	70-130	3	50
2-Hexanone (MBK)	18.6		µg/kg wet		20.0		93	70-130	3	25
Isopropylbenzene	21.4		µg/kg wet		20.0		107	70-130	5	25
4-Isopropyltoluene	21.2		µg/kg wet		20.0		106	70-130	4	25
Methyl tert-butyl ether	19.0		µg/kg wet		20.0		95	70-130	0.4	25
4-Methyl-2-pentanone (MIBK)	18.2		µg/kg wet		20.0		91	70-130	2	50
Methylene chloride	19.4		µg/kg wet		20.0		97	70-130	0.9	25
Naphthalene	21.0		µg/kg wet		20.0		105	70-130	0.3	25
n-Propylbenzene	22.2		µg/kg wet		20.0		111	70-130	5	25
Styrene	21.7		µg/kg wet		20.0		109	70-130	3	25
1,1,1,2-Tetrachloroethane	20.4		µg/kg wet		20.0		102	70-130	3	25
1,1,2,2-Tetrachloroethane	24.2		µg/kg wet		20.0		121	70-130	1	25
Tetrachloroethene	19.9		µg/kg wet		20.0		100	70-130	4	25
Toluene	19.2		µg/kg wet		20.0		96	70-130	4	25
1,2,3-Trichlorobenzene	20.0		µg/kg wet		20.0		100	70-130	0.4	25
1,2,4-Trichlorobenzene	19.8		µg/kg wet		20.0		99	70-130	2	25
1,3,5-Trichlorobenzene	19.6		µg/kg wet		20.0		98	70-130	3	25
1,1,1-Trichloroethane	22.6		µg/kg wet		20.0		113	70-130	6	25
1,1,2-Trichloroethane	20.7		µg/kg wet		20.0		104	70-130	0.8	25
Trichloroethene	21.3		µg/kg wet		20.0		106	70-130	3	25
Trichlorofluoromethane (Freon 11)	23.3		µg/kg wet		20.0		117	70-130	1	50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103992 - SW846 5030 Soil (high level)										
LCS Dup (1103992-BSD1)					Prepared & Analyzed: 08-Mar-11					
1,2,3-Trichloropropane	22.3		µg/kg wet		20.0		111	70-130	2	25
1,2,4-Trimethylbenzene	21.8		µg/kg wet		20.0		109	70-130	3	25
1,3,5-Trimethylbenzene	21.8		µg/kg wet		20.0		109	70-130	3	25
Vinyl chloride	23.4		µg/kg wet		20.0		117	70-130	0.9	25
m,p-Xylene	42.8		µg/kg wet		40.0		107	70-130	3	25
o-Xylene	21.2		µg/kg wet		20.0		106	70-130	4	25
Tetrahydrofuran	17.4		µg/kg wet		20.0		87	70-130	4	25
Ethyl ether	20.1		µg/kg wet		20.0		101	70-130	0.5	50
Tert-amyl methyl ether	16.7		µg/kg wet		20.0		84	70-130	0.7	25
Ethyl tert-butyl ether	17.3		µg/kg wet		20.0		87	70-130	2	25
Di-isopropyl ether	17.7		µg/kg wet		20.0		88	70-130	1	25
Tert-Butanol / butyl alcohol	170		µg/kg wet		200		85	70-130	0.2	25
1,4-Dioxane	203		µg/kg wet		200		101	70-130	2	25
trans-1,4-Dichloro-2-butene	20.1		µg/kg wet		20.0		100	70-130	3	25
Ethanol	390		µg/kg wet		400		97	70-130	6	30
Surrogate: 4-Bromofluorobenzene	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*27.2*		µg/kg wet		*30.0*		*91*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*32.9*		µg/kg wet		*30.0*		*110*	*70-130*		
Matrix Spike (1103992-MS1)			**Source: SB25218-10**		Prepared & Analyzed: 08-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.4		µg/kg dry		20.0	BRL	107	70-130		
Acetone	18.5		µg/kg dry		20.0	BRL	92	70-130		
Acrylonitrile	17.0		µg/kg dry		20.0	BRL	85	70-130		
Benzene	18.8		µg/kg dry		20.0	BRL	94	70-130		
Bromobenzene	20.8		µg/kg dry		20.0	BRL	104	70-130		
Bromochloromethane	19.2		µg/kg dry		20.0	BRL	96	70-130		
Bromodichloromethane	18.0		µg/kg dry		20.0	BRL	90	70-130		
Bromoform	16.3		µg/kg dry		20.0	BRL	82	70-130		
Bromomethane	8.2	QM7	µg/kg dry		20.0	BRL	41	70-130		
2-Butanone (MEK)	19.4		µg/kg dry		20.0	BRL	97	70-130		
n-Butylbenzene	23.6		µg/kg dry		20.0	BRL	118	70-130		
sec-Butylbenzene	23.7		µg/kg dry		20.0	BRL	118	70-130		
tert-Butylbenzene	23.1		µg/kg dry		20.0	BRL	116	70-130		
Carbon disulfide	5.7	QM7	µg/kg dry		20.0	BRL	29	70-130		
Carbon tetrachloride	16.5		µg/kg dry		20.0	BRL	82	70-130		
Chlorobenzene	20.2		µg/kg dry		20.0	BRL	101	70-130		
Chloroethane	15.6		µg/kg dry		20.0	BRL	78	70-130		
Chloroform	20.4		µg/kg dry		20.0	BRL	102	70-130		
Chloromethane	10.1	QM7	µg/kg dry		20.0	BRL	51	70-130		
2-Chlorotoluene	21.7		µg/kg dry		20.0	BRL	109	70-130		
4-Chlorotoluene	22.2		µg/kg dry		20.0	BRL	111	70-130		
1,2-Dibromo-3-chloropropane	16.1		µg/kg dry		20.0	BRL	81	70-130		
Dibromochloromethane	17.7		µg/kg dry		20.0	BRL	88	70-130		
1,2-Dibromoethane (EDB)	18.7		µg/kg dry		20.0	BRL	93	70-130		
Dibromomethane	18.9		µg/kg dry		20.0	BRL	94	70-130		
1,2-Dichlorobenzene	20.7		µg/kg dry		20.0	BRL	104	70-130		
1,3-Dichlorobenzene	21.9		µg/kg dry		20.0	BRL	109	70-130		
1,4-Dichlorobenzene	20.2		µg/kg dry		20.0	BRL	101	70-130		
Dichlorodifluoromethane (Freon12)	14.7		µg/kg dry		20.0	BRL	73	70-130		
1,1-Dichloroethane	18.6		µg/kg dry		20.0	BRL	93	70-130		
1,2-Dichloroethane	19.4		µg/kg dry		20.0	BRL	97	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103992 - SW846 5030 Soil (high level)										
Matrix Spike (1103992-MS1)			**Source: SB25218-10**		Prepared & Analyzed: 08-Mar-11					
1,1-Dichloroethene	16.6		µg/kg dry		20.0	BRL	83	70-130		
cis-1,2-Dichloroethene	19.3		µg/kg dry		20.0	BRL	96	70-130		
trans-1,2-Dichloroethene	17.6		µg/kg dry		20.0	BRL	88	70-130		
1,2-Dichloropropane	18.2		µg/kg dry		20.0	BRL	91	70-130		
1,3-Dichloropropane	19.1		µg/kg dry		20.0	BRL	95	70-130		
2,2-Dichloropropane	18.0		µg/kg dry		20.0	BRL	90	70-130		
1,1-Dichloropropene	18.6		µg/kg dry		20.0	BRL	93	70-130		
cis-1,3-Dichloropropene	16.5		µg/kg dry		20.0	BRL	82	70-130		
trans-1,3-Dichloropropene	16.4		µg/kg dry		20.0	BRL	82	70-130		
Ethylbenzene	21.0		µg/kg dry		20.0	BRL	105	70-130		
Hexachlorobutadiene	26.3	QM7	µg/kg dry		20.0	BRL	132	70-130		
2-Hexanone (MBK)	16.1		µg/kg dry		20.0	BRL	81	70-130		
Isopropylbenzene	21.8		µg/kg dry		20.0	BRL	109	70-130		
4-Isopropyltoluene	22.4		µg/kg dry		20.0	BRL	112	70-130		
Methyl tert-butyl ether	18.4		µg/kg dry		20.0	BRL	92	70-130		
4-Methyl-2-pentanone (MIBK)	14.5		µg/kg dry		20.0	BRL	73	70-130		
Methylene chloride	17.6		µg/kg dry		20.0	BRL	88	70-130		
Naphthalene	23.2		µg/kg dry		20.0	1.7	107	70-130		
n-Propylbenzene	23.5		µg/kg dry		20.0	BRL	117	70-130		
Styrene	21.7		µg/kg dry		20.0	BRL	109	70-130		
1,1,1,2-Tetrachloroethane	19.2		µg/kg dry		20.0	BRL	96	70-130		
1,1,2,2-Tetrachloroethane	22.3		µg/kg dry		20.0	BRL	112	70-130		
Tetrachloroethene	19.6		µg/kg dry		20.0	BRL	98	70-130		
Toluene	18.4		µg/kg dry		20.0	BRL	92	70-130		
1,2,3-Trichlorobenzene	21.9		µg/kg dry		20.0	BRL	110	70-130		
1,2,4-Trichlorobenzene	21.9		µg/kg dry		20.0	BRL	110	70-130		
1,3,5-Trichlorobenzene	21.9		µg/kg dry		20.0	BRL	109	70-130		
1,1,1-Trichloroethane	19.0		µg/kg dry		20.0	BRL	95	70-130		
1,1,2-Trichloroethane	20.1		µg/kg dry		20.0	BRL	100	70-130		
Trichloroethene	19.8		µg/kg dry		20.0	BRL	99	70-130		
Trichlorofluoromethane (Freon 11)	18.1		µg/kg dry		20.0	BRL	90	70-130		
1,2,3-Trichloropropane	21.2		µg/kg dry		20.0	BRL	106	70-130		
1,2,4-Trimethylbenzene	22.7		µg/kg dry		20.0	BRL	113	70-130		
1,3,5-Trimethylbenzene	22.8		µg/kg dry		20.0	BRL	114	70-130		
Vinyl chloride	6.2	QM7	µg/kg dry		20.0	BRL	31	70-130		
m,p-Xylene	42.3		µg/kg dry		40.0	BRL	106	70-130		
o-Xylene	21.0		µg/kg dry		20.0	BRL	105	70-130		
Tetrahydrofuran	14.4		µg/kg dry		20.0	BRL	72	70-130		
Ethyl ether	18.2		µg/kg dry		20.0	BRL	91	70-130		
Tert-amyl methyl ether	16.1		µg/kg dry		20.0	BRL	80	70-130		
Ethyl tert-butyl ether	16.6		µg/kg dry		20.0	BRL	83	70-130		
Di-isopropyl ether	16.9		µg/kg dry		20.0	BRL	85	70-130		
Tert-Butanol / butyl alcohol	105	QM7	µg/kg dry		200	BRL	53	70-130		
1,4-Dioxane	202		µg/kg dry		200	BRL	101	70-130		
trans-1,4-Dichloro-2-butene	18.8		µg/kg dry		20.0	BRL	94	70-130		
Ethanol	421		µg/kg dry		400	BRL	105	70-130		
Surrogate: 4-Bromofluorobenzene	*30.3*		µg/kg dry		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*27.9*		µg/kg dry		*30.0*		*93*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.8*		µg/kg dry		*30.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*30.4*		µg/kg dry		*30.0*		*101*	*70-130*		
Matrix Spike Dup (1103992-MSD1)			**Source: SB25218-10**		Prepared & Analyzed: 08-Mar-11					

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103992 - SW846 5030 Soil (high level)										
Matrix Spike Dup (1103992-MSD1)			**Source: SB25218-10**		Prepared & Analyzed: 08-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.1		µg/kg dry		20.0	BRL	100	70-130	6	30
Acetone	15.7		µg/kg dry		20.0	BRL	79	70-130	16	30
Acrylonitrile	17.1		µg/kg dry		20.0	BRL	86	70-130	0.4	30
Benzene	18.7		µg/kg dry		20.0	BRL	94	70-130	0.4	30
Bromobenzene	20.8		µg/kg dry		20.0	BRL	104	70-130	0.5	30
Bromochloromethane	19.7		µg/kg dry		20.0	BRL	99	70-130	2	30
Bromodichloromethane	18.3		µg/kg dry		20.0	BRL	92	70-130	2	30
Bromoform	16.1		µg/kg dry		20.0	BRL	81	70-130	1	30
Bromomethane	9.1	QM7	µg/kg dry		20.0	BRL	45	70-130	10	30
2-Butanone (MEK)	17.1		µg/kg dry		20.0	BRL	86	70-130	12	30
n-Butylbenzene	21.8		µg/kg dry		20.0	BRL	109	70-130	8	30
sec-Butylbenzene	22.3		µg/kg dry		20.0	BRL	112	70-130	6	30
tert-Butylbenzene	21.9		µg/kg dry		20.0	BRL	110	70-130	5	30
Carbon disulfide	5.8	QM7	µg/kg dry		20.0	BRL	29	70-130	2	30
Carbon tetrachloride	16.4		µg/kg dry		20.0	BRL	82	70-130	0.1	30
Chlorobenzene	19.6		µg/kg dry		20.0	BRL	98	70-130	3	30
Chloroethane	15.2		µg/kg dry		20.0	BRL	76	70-130	3	30
Chloroform	20.1		µg/kg dry		20.0	BRL	101	70-130	1	30
Chloromethane	9.9	QM7	µg/kg dry		20.0	BRL	49	70-130	2	30
2-Chlorotoluene	20.4		µg/kg dry		20.0	BRL	102	70-130	6	30
4-Chlorotoluene	21.1		µg/kg dry		20.0	BRL	106	70-130	5	30
1,2-Dibromo-3-chloropropane	16.1		µg/kg dry		20.0	BRL	80	70-130	0.1	30
Dibromochloromethane	17.3		µg/kg dry		20.0	BRL	87	70-130	2	30
1,2-Dibromoethane (EDB)	18.8		µg/kg dry		20.0	BRL	94	70-130	0.4	30
Dibromomethane	19.3		µg/kg dry		20.0	BRL	96	70-130	2	30
1,2-Dichlorobenzene	20.1		µg/kg dry		20.0	BRL	101	70-130	3	30
1,3-Dichlorobenzene	21.1		µg/kg dry		20.0	BRL	105	70-130	4	30
1,4-Dichlorobenzene	19.4		µg/kg dry		20.0	BRL	97	70-130	4	30
Dichlorodifluoromethane (Freon12)	12.8	QM7	µg/kg dry		20.0	BRL	64	70-130	13	30
1,1-Dichloroethane	18.5		µg/kg dry		20.0	BRL	93	70-130	0.3	30
1,2-Dichloroethane	19.5		µg/kg dry		20.0	BRL	97	70-130	0.4	30
1,1-Dichloroethene	16.8		µg/kg dry		20.0	BRL	84	70-130	0.7	30
cis-1,2-Dichloroethene	19.2		µg/kg dry		20.0	BRL	96	70-130	0.6	30
trans-1,2-Dichloroethene	17.2		µg/kg dry		20.0	BRL	86	70-130	2	30
1,2-Dichloropropane	18.2		µg/kg dry		20.0	BRL	91	70-130	0.1	30
1,3-Dichloropropane	19.0		µg/kg dry		20.0	BRL	95	70-130	0.05	30
2,2-Dichloropropane	18.7		µg/kg dry		20.0	BRL	94	70-130	4	30
1,1-Dichloropropene	18.2		µg/kg dry		20.0	BRL	91	70-130	2	30
cis-1,3-Dichloropropene	16.1		µg/kg dry		20.0	BRL	81	70-130	2	30
trans-1,3-Dichloropropene	16.2		µg/kg dry		20.0	BRL	81	70-130	1	30
Ethylbenzene	20.0		µg/kg dry		20.0	BRL	100	70-130	4	30
Hexachlorobutadiene	23.8		µg/kg dry		20.0	BRL	119	70-130	10	30
2-Hexanone (MBK)	18.7		µg/kg dry		20.0	BRL	93	70-130	15	30
Isopropylbenzene	20.7		µg/kg dry		20.0	BRL	103	70-130	6	30
4-Isopropyltoluene	20.9		µg/kg dry		20.0	BRL	104	70-130	7	30
Methyl tert-butyl ether	18.3		µg/kg dry		20.0	BRL	91	70-130	0.3	30
4-Methyl-2-pentanone (MIBK)	16.2		µg/kg dry		20.0	BRL	81	70-130	11	30
Methylene chloride	17.6		µg/kg dry		20.0	BRL	88	70-130	0.5	30
Naphthalene	22.8		µg/kg dry		20.0	1.7	105	70-130	2	30
n-Propylbenzene	22.4		µg/kg dry		20.0	BRL	112	70-130	5	30
Styrene	21.0		µg/kg dry		20.0	BRL	105	70-130	3	30
1,1,1,2-Tetrachloroethane	18.7		µg/kg dry		20.0	BRL	94	70-130	2	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103992 - SW846 5030 Soil (high level)										
Matrix Spike Dup (1103992-MSD1)			**Source: SB25218-10**		Prepared & Analyzed: 08-Mar-11					
1,1,2,2-Tetrachloroethane	22.2		µg/kg dry		20.0	BRL	111	70-130	0.4	30
Tetrachloroethene	19.1		µg/kg dry		20.0	BRL	95	70-130	3	30
Toluene	18.7		µg/kg dry		20.0	BRL	94	70-130	2	30
1,2,3-Trichlorobenzene	20.9		µg/kg dry		20.0	BRL	105	70-130	5	30
1,2,4-Trichlorobenzene	20.7		µg/kg dry		20.0	BRL	104	70-130	6	30
1,3,5-Trichlorobenzene	20.4		µg/kg dry		20.0	BRL	102	70-130	7	30
1,1,1-Trichloroethane	19.0		µg/kg dry		20.0	BRL	95	70-130	0.05	30
1,1,2-Trichloroethane	20.1		µg/kg dry		20.0	BRL	101	70-130	0.1	30
Trichloroethene	19.7		µg/kg dry		20.0	BRL	98	70-130	0.6	30
Trichlorofluoromethane (Freon 11)	18.2		µg/kg dry		20.0	BRL	91	70-130	0.9	30
1,2,3-Trichloropropane	21.0		µg/kg dry		20.0	BRL	105	70-130	0.9	30
1,2,4-Trimethylbenzene	21.5		µg/kg dry		20.0	BRL	108	70-130	5	30
1,3,5-Trimethylbenzene	21.8		µg/kg dry		20.0	BRL	109	70-130	4	30
Vinyl chloride	5.7	QM7	µg/kg dry		20.0	BRL	28	70-130	9	30
m,p-Xylene	40.7		µg/kg dry		40.0	BRL	102	70-130	4	30
o-Xylene	20.4		µg/kg dry		20.0	BRL	102	70-130	3	30
Tetrahydrofuran	14.8		µg/kg dry		20.0	BRL	74	70-130	3	30
Ethyl ether	17.7		µg/kg dry		20.0	BRL	89	70-130	3	30
Tert-amyl methyl ether	16.5		µg/kg dry		20.0	BRL	82	70-130	2	30
Ethyl tert-butyl ether	16.6		µg/kg dry		20.0	BRL	83	70-130	0.4	30
Di-isopropyl ether	16.7		µg/kg dry		20.0	BRL	84	70-130	1	30
Tert-Butanol / butyl alcohol	115	QM7	µg/kg dry		200	BRL	58	70-130	9	30
1,4-Dioxane	189		µg/kg dry		200	BRL	95	70-130	7	30
trans-1,4-Dichloro-2-butene	18.6		µg/kg dry		20.0	BRL	93	70-130	1	30
Ethanol	359		µg/kg dry		400	BRL	90	70-130	16	30
Surrogate: 4-Bromofluorobenzene	*30.3*		µg/kg dry		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*28.5*		µg/kg dry		*30.0*		*95*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*31.2*		µg/kg dry		*30.0*		*104*	*70-130*		
Surrogate: Dibromofluoromethane	*31.1*		µg/kg dry		*30.0*		*104*	*70-130*		
Batch 1104077 - SW846 5035A Soil (low level)										
Blank (1104077-BLK1)					Prepared & Analyzed: 09-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg wet	5.0						
Acetone	BRL		µg/kg wet	50.0						
Acrylonitrile	BRL		µg/kg wet	5.0						
Benzene	BRL		µg/kg wet	5.0						
Bromobenzene	BRL		µg/kg wet	5.0						
Bromochloromethane	BRL		µg/kg wet	5.0						
Bromodichloromethane	BRL		µg/kg wet	5.0						
Bromoform	BRL		µg/kg wet	5.0						
Bromomethane	BRL		µg/kg wet	10.0						
2-Butanone (MEK)	BRL		µg/kg wet	50.0						
n-Butylbenzene	BRL		µg/kg wet	5.0						
sec-Butylbenzene	BRL		µg/kg wet	5.0						
tert-Butylbenzene	BRL		µg/kg wet	5.0						
Carbon disulfide	BRL		µg/kg wet	10.0						
Carbon tetrachloride	BRL		µg/kg wet	5.0						
Chlorobenzene	BRL		µg/kg wet	5.0						
Chloroethane	BRL		µg/kg wet	10.0						
Chloroform	BRL		µg/kg wet	5.0						
Chloromethane	BRL		µg/kg wet	10.0						
2-Chlorotoluene	BRL		µg/kg wet	5.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104077 - SW846 5035A Soil (low level)										
Blank (1104077-BLK1)					Prepared & Analyzed: 09-Mar-11					
4-Chlorotoluene	BRL		µg/kg wet	5.0						
1,2-Dibromo-3-chloropropane	BRL		µg/kg wet	10.0						
Dibromochloromethane	BRL		µg/kg wet	5.0						
1,2-Dibromoethane (EDB)	BRL		µg/kg wet	5.0						
Dibromomethane	BRL		µg/kg wet	5.0						
1,2-Dichlorobenzene	BRL		µg/kg wet	5.0						
1,3-Dichlorobenzene	BRL		µg/kg wet	5.0						
1,4-Dichlorobenzene	BRL		µg/kg wet	5.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet	10.0						
1,1-Dichloroethane	BRL		µg/kg wet	5.0						
1,2-Dichloroethane	BRL		µg/kg wet	5.0						
1,1-Dichloroethene	BRL		µg/kg wet	5.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet	5.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet	5.0						
1,2-Dichloropropane	BRL		µg/kg wet	5.0						
1,3-Dichloropropane	BRL		µg/kg wet	5.0						
2,2-Dichloropropane	BRL		µg/kg wet	5.0						
1,1-Dichloropropene	BRL		µg/kg wet	5.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet	5.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet	5.0						
Ethylbenzene	BRL		µg/kg wet	5.0						
Hexachlorobutadiene	BRL		µg/kg wet	5.0						
2-Hexanone (MBK)	BRL		µg/kg wet	50.0						
Isopropylbenzene	BRL		µg/kg wet	5.0						
4-Isopropyltoluene	BRL		µg/kg wet	5.0						
Methyl tert-butyl ether	BRL		µg/kg wet	5.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg wet	50.0						
Methylene chloride	BRL		µg/kg wet	10.0						
Naphthalene	BRL		µg/kg wet	5.0						
n-Propylbenzene	BRL		µg/kg wet	5.0						
Styrene	BRL		µg/kg wet	5.0						
1,1,1,2-Tetrachloroethane	BRL		µg/kg wet	5.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet	5.0						
Tetrachloroethene	BRL		µg/kg wet	5.0						
Toluene	BRL		µg/kg wet	5.0						
1,2,3-Trichlorobenzene	BRL		µg/kg wet	5.0						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	5.0						
1,3,5-Trichlorobenzene	BRL		µg/kg wet	5.0						
1,1,1-Trichloroethane	BRL		µg/kg wet	5.0						
1,1,2-Trichloroethane	BRL		µg/kg wet	5.0						
Trichloroethene	BRL		µg/kg wet	5.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet	5.0						
1,2,3-Trichloropropane	BRL		µg/kg wet	5.0						
1,2,4-Trimethylbenzene	BRL		µg/kg wet	5.0						
1,3,5-Trimethylbenzene	BRL		µg/kg wet	5.0						
Vinyl chloride	BRL		µg/kg wet	5.0						
m,p-Xylene	BRL		µg/kg wet	10.0						
o-Xylene	BRL		µg/kg wet	5.0						
Tetrahydrofuran	BRL		µg/kg wet	10.0						
Ethyl ether	BRL		µg/kg wet	5.0						
Tert-amyl methyl ether	BRL		µg/kg wet	5.0						
Ethyl tert-butyl ether	BRL		µg/kg wet	5.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104077 - SW846 5035A Soil (low level)										
Blank (1104077-BLK1)					Prepared & Analyzed: 09-Mar-11					
Di-isopropyl ether	BRL		µg/kg wet	5.0						
Tert-Butanol / butyl alcohol	BRL		µg/kg wet	50.0						
1,4-Dioxane	BRL		µg/kg wet	100						
trans-1,4-Dichloro-2-butene	BRL		µg/kg wet	25.0						
Ethanol	BRL		µg/kg wet	2000						
Surrogate: 4-Bromofluorobenzene	*50.3*		µg/kg wet		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*47.5*		µg/kg wet		*50.0*		*95*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*52.7*		µg/kg wet		*50.0*		*105*	*70-130*		
Surrogate: Dibromofluoromethane	*49.7*		µg/kg wet		*50.0*		*99*	*70-130*		
LCS (1104077-BS1)					Prepared & Analyzed: 09-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	17.2		µg/kg wet		20.0		86	70-130		
Acetone	13.9		µg/kg wet		20.0		70	70-130		
Acrylonitrile	17.4		µg/kg wet		20.0		87	70-130		
Benzene	17.2		µg/kg wet		20.0		86	70-130		
Bromobenzene	21.2		µg/kg wet		20.0		106	70-130		
Bromochloromethane	18.8		µg/kg wet		20.0		94	70-130		
Bromodichloromethane	17.5		µg/kg wet		20.0		87	70-130		
Bromoform	23.0		µg/kg wet		20.0		115	70-130		
Bromomethane	16.6		µg/kg wet		20.0		83	70-130		
2-Butanone (MEK)	12.4		µg/kg wet		20.0		62	70-130		
n-Butylbenzene	19.0		µg/kg wet		20.0		95	70-130		
sec-Butylbenzene	20.3		µg/kg wet		20.0		102	70-130		
tert-Butylbenzene	20.7		µg/kg wet		20.0		103	70-130		
Carbon disulfide	16.8		µg/kg wet		20.0		84	70-130		
Carbon tetrachloride	17.2		µg/kg wet		20.0		86	70-130		
Chlorobenzene	20.4		µg/kg wet		20.0		102	70-130		
Chloroethane	16.5		µg/kg wet		20.0		82	70-130		
Chloroform	16.2		µg/kg wet		20.0		81	70-130		
Chloromethane	14.8		µg/kg wet		20.0		74	70-130		
2-Chlorotoluene	19.4		µg/kg wet		20.0		97	70-130		
4-Chlorotoluene	20.1		µg/kg wet		20.0		101	70-130		
1,2-Dibromo-3-chloropropane	20.4		µg/kg wet		20.0		102	70-130		
Dibromochloromethane	18.5		µg/kg wet		20.0		92	70-130		
1,2-Dibromoethane (EDB)	18.5		µg/kg wet		20.0		92	70-130		
Dibromomethane	18.5		µg/kg wet		20.0		92	70-130		
1,2-Dichlorobenzene	20.3		µg/kg wet		20.0		102	70-130		
1,3-Dichlorobenzene	20.6		µg/kg wet		20.0		103	70-130		
1,4-Dichlorobenzene	19.6		µg/kg wet		20.0		98	70-130		
Dichlorodifluoromethane (Freon12)	18.3		µg/kg wet		20.0		92	70-130		
1,1-Dichloroethane	16.3		µg/kg wet		20.0		82	70-130		
1,2-Dichloroethane	16.4		µg/kg wet		20.0		82	70-130		
1,1-Dichloroethene	18.3		µg/kg wet		20.0		91	70-130		
cis-1,2-Dichloroethene	17.2		µg/kg wet		20.0		86	70-130		
trans-1,2-Dichloroethene	17.7		µg/kg wet		20.0		88	70-130		
1,2-Dichloropropane	16.7		µg/kg wet		20.0		84	70-130		
1,3-Dichloropropane	17.5		µg/kg wet		20.0		87	70-130		
2,2-Dichloropropane	16.8		µg/kg wet		20.0		84	70-130		
1,1-Dichloropropene	17.1		µg/kg wet		20.0		85	70-130		
cis-1,3-Dichloropropene	17.2		µg/kg wet		20.0		86	70-130		
trans-1,3-Dichloropropene	18.2		µg/kg wet		20.0		91	70-130		
Ethylbenzene	20.1		µg/kg wet		20.0		101	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104077 - SW846 5035A Soil (low level)										
LCS (1104077-BS1)					Prepared & Analyzed: 09-Mar-11					
Hexachlorobutadiene	19.5		µg/kg wet		20.0		97	70-130		
2-Hexanone (MBK)	16.9		µg/kg wet		20.0		84	70-130		
Isopropylbenzene	20.5		µg/kg wet		20.0		102	70-130		
4-Isopropyltoluene	19.4		µg/kg wet		20.0		97	70-130		
Methyl tert-butyl ether	17.8		µg/kg wet		20.0		89	70-130		
4-Methyl-2-pentanone (MIBK)	19.3		µg/kg wet		20.0		97	70-130		
Methylene chloride	16.8		µg/kg wet		20.0		84	70-130		
Naphthalene	18.4		µg/kg wet		20.0		92	70-130		
n-Propylbenzene	20.1		µg/kg wet		20.0		101	70-130		
Styrene	20.6		µg/kg wet		20.0		103	70-130		
1,1,1,2-Tetrachloroethane	20.8		µg/kg wet		20.0		104	70-130		
1,1,2,2-Tetrachloroethane	20.9		µg/kg wet		20.0		104	70-130		
Tetrachloroethene	18.1		µg/kg wet		20.0		91	70-130		
Toluene	16.4		µg/kg wet		20.0		82	70-130		
1,2,3-Trichlorobenzene	21.2		µg/kg wet		20.0		106	70-130		
1,2,4-Trichlorobenzene	20.3		µg/kg wet		20.0		102	70-130		
1,3,5-Trichlorobenzene	20.8		µg/kg wet		20.0		104	70-130		
1,1,1-Trichloroethane	17.2		µg/kg wet		20.0		86	70-130		
1,1,2-Trichloroethane	17.7		µg/kg wet		20.0		88	70-130		
Trichloroethene	17.3		µg/kg wet		20.0		87	70-130		
Trichlorofluoromethane (Freon 11)	17.6		µg/kg wet		20.0		88	70-130		
1,2,3-Trichloropropane	20.4		µg/kg wet		20.0		102	70-130		
1,2,4-Trimethylbenzene	20.5		µg/kg wet		20.0		102	70-130		
1,3,5-Trimethylbenzene	20.6		µg/kg wet		20.0		103	70-130		
Vinyl chloride	17.0		µg/kg wet		20.0		85	70-130		
m,p-Xylene	41.2		µg/kg wet		40.0		103	70-130		
o-Xylene	20.5		µg/kg wet		20.0		102	70-130		
Tetrahydrofuran	15.9		µg/kg wet		20.0		79	70-130		
Ethyl ether	17.2		µg/kg wet		20.0		86	70-130		
Tert-amyl methyl ether	15.8		µg/kg wet		20.0		79	70-130		
Ethyl tert-butyl ether	17.2		µg/kg wet		20.0		86	70-130		
Di-isopropyl ether	15.9		µg/kg wet		20.0		79	70-130		
Tert-Butanol / butyl alcohol	162		µg/kg wet		200		81	70-130		
1,4-Dioxane	179		µg/kg wet		200		89	70-130		
trans-1,4-Dichloro-2-butene	21.1		µg/kg wet		20.0		106	70-130		
Ethanol	277	QM9	µg/kg wet		400		69	70-130		
Surrogate: 4-Bromofluorobenzene	*51.5*		µg/kg wet		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*47.4*		µg/kg wet		*50.0*		*95*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*45.7*		µg/kg wet		*50.0*		*91*	*70-130*		
Surrogate: Dibromofluoromethane	*48.4*		µg/kg wet		*50.0*		*97*	*70-130*		
LCS Dup (1104077-BSD1)					Prepared & Analyzed: 09-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	17.2		µg/kg wet		20.0		86	70-130	0.06	25
Acetone	14.6		µg/kg wet		20.0		73	70-130	5	50
Acrylonitrile	18.3		µg/kg wet		20.0		91	70-130	5	25
Benzene	17.1		µg/kg wet		20.0		86	70-130	0.1	25
Bromobenzene	21.1		µg/kg wet		20.0		106	70-130	0.7	25
Bromochloromethane	19.5		µg/kg wet		20.0		98	70-130	4	25
Bromodichloromethane	17.4		µg/kg wet		20.0		87	70-130	0.6	25
Bromoform	23.5		µg/kg wet		20.0		118	70-130	2	25
Bromomethane	16.8		µg/kg wet		20.0		84	70-130	1	50
2-Butanone (MEK)	15.2		µg/kg wet		20.0		76	70-130	21	50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104077 - SW846 5035A Soil (low level)										
LCS Dup (1104077-BSD1)					Prepared & Analyzed: 09-Mar-11					
n-Butylbenzene	18.9		µg/kg wet		20.0		94	70-130	1	25
sec-Butylbenzene	20.2		µg/kg wet		20.0		101	70-130	0.3	25
tert-Butylbenzene	20.6		µg/kg wet		20.0		103	70-130	0.5	25
Carbon disulfide	16.9		µg/kg wet		20.0		84	70-130	0.2	25
Carbon tetrachloride	17.8		µg/kg wet		20.0		89	70-130	3	25
Chlorobenzene	20.1		µg/kg wet		20.0		100	70-130	2	25
Chloroethane	16.8		µg/kg wet		20.0		84	70-130	2	50
Chloroform	16.2		µg/kg wet		20.0		81	70-130	0.4	25
Chloromethane	15.0		µg/kg wet		20.0		75	70-130	2	25
2-Chlorotoluene	19.4		µg/kg wet		20.0		97	70-130	0.2	25
4-Chlorotoluene	19.8		µg/kg wet		20.0		99	70-130	2	25
1,2-Dibromo-3-chloropropane	22.2		µg/kg wet		20.0		111	70-130	8	25
Dibromochloromethane	19.0		µg/kg wet		20.0		95	70-130	3	50
1,2-Dibromoethane (EDB)	19.1		µg/kg wet		20.0		96	70-130	3	25
Dibromomethane	18.8		µg/kg wet		20.0		94	70-130	2	25
1,2-Dichlorobenzene	20.1		µg/kg wet		20.0		100	70-130	1	25
1,3-Dichlorobenzene	20.6		µg/kg wet		20.0		103	70-130	0.2	25
1,4-Dichlorobenzene	19.4		µg/kg wet		20.0		97	70-130	0.8	25
Dichlorodifluoromethane (Freon12)	18.5		µg/kg wet		20.0		93	70-130	1	50
1,1-Dichloroethane	16.6		µg/kg wet		20.0		83	70-130	2	25
1,2-Dichloroethane	16.6		µg/kg wet		20.0		83	70-130	2	25
1,1-Dichloroethene	18.2		µg/kg wet		20.0		91	70-130	0.5	25
cis-1,2-Dichloroethene	17.2		µg/kg wet		20.0		86	70-130	0.1	25
trans-1,2-Dichloroethene	16.9		µg/kg wet		20.0		85	70-130	4	25
1,2-Dichloropropane	17.2		µg/kg wet		20.0		86	70-130	3	25
1,3-Dichloropropane	18.3		µg/kg wet		20.0		92	70-130	5	25
2,2-Dichloropropane	16.8		µg/kg wet		20.0		84	70-130	0.1	25
1,1-Dichloropropene	17.2		µg/kg wet		20.0		86	70-130	0.5	25
cis-1,3-Dichloropropene	17.6		µg/kg wet		20.0		88	70-130	3	25
trans-1,3-Dichloropropene	18.4		µg/kg wet		20.0		92	70-130	0.7	25
Ethylbenzene	20.0		µg/kg wet		20.0		100	70-130	0.8	25
Hexachlorobutadiene	18.7		µg/kg wet		20.0		94	70-130	4	50
2-Hexanone (MBK)	18.9		µg/kg wet		20.0		94	70-130	11	25
Isopropylbenzene	20.3		µg/kg wet		20.0		101	70-130	1	25
4-Isopropyltoluene	19.5		µg/kg wet		20.0		98	70-130	0.4	25
Methyl tert-butyl ether	18.4		µg/kg wet		20.0		92	70-130	4	25
4-Methyl-2-pentanone (MIBK)	20.5		µg/kg wet		20.0		103	70-130	6	50
Methylene chloride	17.3		µg/kg wet		20.0		86	70-130	3	25
Naphthalene	18.7		µg/kg wet		20.0		94	70-130	1	25
n-Propylbenzene	19.9		µg/kg wet		20.0		100	70-130	1	25
Styrene	20.7		µg/kg wet		20.0		104	70-130	0.4	25
1,1,1,2-Tetrachloroethane	21.3		µg/kg wet		20.0		106	70-130	2	25
1,1,2,2-Tetrachloroethane	21.7		µg/kg wet		20.0		108	70-130	4	25
Tetrachloroethene	18.4		µg/kg wet		20.0		92	70-130	1	25
Toluene	16.7		µg/kg wet		20.0		84	70-130	2	25
1,2,3-Trichlorobenzene	20.8		µg/kg wet		20.0		104	70-130	2	25
1,2,4-Trichlorobenzene	20.2		µg/kg wet		20.0		101	70-130	0.4	25
1,3,5-Trichlorobenzene	20.7		µg/kg wet		20.0		103	70-130	0.4	25
1,1,1-Trichloroethane	17.0		µg/kg wet		20.0		85	70-130	0.9	25
1,1,2-Trichloroethane	18.2		µg/kg wet		20.0		91	70-130	3	25
Trichloroethene	17.4		µg/kg wet		20.0		87	70-130	0.6	25
Trichlorofluoromethane (Freon 11)	17.6		µg/kg wet		20.0		88	70-130	0.2	50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104077 - SW846 5035A Soil (low level)										
LCS Dup (1104077-BSD1)					Prepared & Analyzed: 09-Mar-11					
1,2,3-Trichloropropane	21.1		µg/kg wet		20.0		105	70-130	3	25
1,2,4-Trimethylbenzene	20.3		µg/kg wet		20.0		102	70-130	0.8	25
1,3,5-Trimethylbenzene	20.2		µg/kg wet		20.0		101	70-130	2	25
Vinyl chloride	17.2		µg/kg wet		20.0		86	70-130	1	25
m,p-Xylene	40.9		µg/kg wet		40.0		102	70-130	0.7	25
o-Xylene	20.1		µg/kg wet		20.0		101	70-130	2	25
Tetrahydrofuran	17.3		µg/kg wet		20.0		86	70-130	9	25
Ethyl ether	17.8		µg/kg wet		20.0		89	70-130	3	50
Tert-amyl methyl ether	16.1		µg/kg wet		20.0		80	70-130	2	25
Ethyl tert-butyl ether	17.6		µg/kg wet		20.0		88	70-130	2	25
Di-isopropyl ether	16.2		µg/kg wet		20.0		81	70-130	2	25
Tert-Butanol / butyl alcohol	188		µg/kg wet		200		94	70-130	15	25
1,4-Dioxane	197		µg/kg wet		200		98	70-130	10	25
trans-1,4-Dichloro-2-butene	21.7		µg/kg wet		20.0		108	70-130	3	25
Ethanol	302		µg/kg wet		400		76	70-130	9	30
Surrogate: 4-Bromofluorobenzene	*51.1*		µg/kg wet		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*47.5*		µg/kg wet		*50.0*		*95*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*47.0*		µg/kg wet		*50.0*		*94*	*70-130*		
Surrogate: Dibromofluoromethane	*48.3*		µg/kg wet		*50.0*		*97*	*70-130*		
Batch 1104079 - SW846 5030 Soil (high level)										
Blank (1104079-BLK1)					Prepared & Analyzed: 09-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg wet	50.0						
Acetone	BRL		µg/kg wet	500						
Acrylonitrile	BRL		µg/kg wet	50.0						
Benzene	BRL		µg/kg wet	50.0						
Bromobenzene	BRL		µg/kg wet	50.0						
Bromochloromethane	BRL		µg/kg wet	50.0						
Bromodichloromethane	BRL		µg/kg wet	50.0						
Bromoform	BRL		µg/kg wet	50.0						
Bromomethane	BRL		µg/kg wet	100						
2-Butanone (MEK)	BRL		µg/kg wet	500						
n-Butylbenzene	BRL		µg/kg wet	50.0						
sec-Butylbenzene	BRL		µg/kg wet	50.0						
tert-Butylbenzene	BRL		µg/kg wet	50.0						
Carbon disulfide	BRL		µg/kg wet	100						
Carbon tetrachloride	BRL		µg/kg wet	50.0						
Chlorobenzene	BRL		µg/kg wet	50.0						
Chloroethane	BRL		µg/kg wet	100						
Chloroform	BRL		µg/kg wet	50.0						
Chloromethane	BRL		µg/kg wet	100						
2-Chlorotoluene	BRL		µg/kg wet	50.0						
4-Chlorotoluene	BRL		µg/kg wet	50.0						
1,2-Dibromo-3-chloropropane	BRL		µg/kg wet	100						
Dibromochloromethane	BRL		µg/kg wet	50.0						
1,2-Dibromoethane (EDB)	BRL		µg/kg wet	50.0						
Dibromomethane	BRL		µg/kg wet	50.0						
1,2-Dichlorobenzene	BRL		µg/kg wet	50.0						
1,3-Dichlorobenzene	BRL		µg/kg wet	50.0						
1,4-Dichlorobenzene	BRL		µg/kg wet	50.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet	100						
1,1-Dichloroethane	BRL		µg/kg wet	50.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104079 - SW846 5030 Soil (high level)										
Blank (1104079-BLK1)					Prepared & Analyzed: 09-Mar-11					
1,2-Dichloroethane	BRL		µg/kg wet	50.0						
1,1-Dichloroethene	BRL		µg/kg wet	50.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet	50.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet	50.0						
1,2-Dichloropropane	BRL		µg/kg wet	50.0						
1,3-Dichloropropane	BRL		µg/kg wet	50.0						
2,2-Dichloropropane	BRL		µg/kg wet	50.0						
1,1-Dichloropropene	BRL		µg/kg wet	50.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet	50.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet	50.0						
Ethylbenzene	BRL		µg/kg wet	50.0						
Hexachlorobutadiene	BRL		µg/kg wet	50.0						
2-Hexanone (MBK)	BRL		µg/kg wet	500						
Isopropylbenzene	BRL		µg/kg wet	50.0						
4-Isopropyltoluene	BRL		µg/kg wet	50.0						
Methyl tert-butyl ether	BRL		µg/kg wet	50.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg wet	500						
Methylene chloride	BRL		µg/kg wet	100						
Naphthalene	BRL		µg/kg wet	50.0						
n-Propylbenzene	BRL		µg/kg wet	50.0						
Styrene	BRL		µg/kg wet	50.0						
1,1,1,2-Tetrachloroethane	BRL		µg/kg wet	50.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet	50.0						
Tetrachloroethene	BRL		µg/kg wet	50.0						
Toluene	BRL		µg/kg wet	50.0						
1,2,3-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,3,5-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,1,1-Trichloroethane	BRL		µg/kg wet	50.0						
1,1,2-Trichloroethane	BRL		µg/kg wet	50.0						
Trichloroethene	BRL		µg/kg wet	50.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet	50.0						
1,2,3-Trichloropropane	BRL		µg/kg wet	50.0						
1,2,4-Trimethylbenzene	BRL		µg/kg wet	50.0						
1,3,5-Trimethylbenzene	BRL		µg/kg wet	50.0						
Vinyl chloride	BRL		µg/kg wet	50.0						
m,p-Xylene	BRL		µg/kg wet	100						
o-Xylene	BRL		µg/kg wet	50.0						
Tetrahydrofuran	BRL		µg/kg wet	100						
Ethyl ether	BRL		µg/kg wet	50.0						
Tert-amyl methyl ether	BRL		µg/kg wet	50.0						
Ethyl tert-butyl ether	BRL		µg/kg wet	50.0						
Di-isopropyl ether	BRL		µg/kg wet	50.0						
Tert-Butanol / butyl alcohol	BRL		µg/kg wet	500						
1,4-Dioxane	BRL		µg/kg wet	1000						
trans-1,4-Dichloro-2-butene	BRL		µg/kg wet	250						
Ethanol	BRL		µg/kg wet	20000						
Surrogate: 4-Bromofluorobenzene	*28.7*		µg/kg wet		*30.0*		*96*	*70-130*		
Surrogate: Toluene-d8	*27.0*		µg/kg wet		*30.0*		*90*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*31.1*		µg/kg wet		*30.0*		*104*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104079 - SW846 5030 Soil (high level)										
LCS (1104079-BS1)					Prepared & Analyzed: 09-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.1		µg/kg wet		20.0		101	70-130		
Acetone	18.5		µg/kg wet		20.0		93	70-130		
Acrylonitrile	18.7		µg/kg wet		20.0		94	70-130		
Benzene	18.5		µg/kg wet		20.0		92	70-130		
Bromobenzene	19.9		µg/kg wet		20.0		100	70-130		
Bromochloromethane	21.6		µg/kg wet		20.0		108	70-130		
Bromodichloromethane	20.3		µg/kg wet		20.0		101	70-130		
Bromoform	19.8		µg/kg wet		20.0		99	70-130		
Bromomethane	19.8		µg/kg wet		20.0		99	70-130		
2-Butanone (MEK)	19.2		µg/kg wet		20.0		96	70-130		
n-Butylbenzene	19.8		µg/kg wet		20.0		99	70-130		
sec-Butylbenzene	20.5		µg/kg wet		20.0		103	70-130		
tert-Butylbenzene	20.3		µg/kg wet		20.0		101	70-130		
Carbon disulfide	16.3		µg/kg wet		20.0		81	70-130		
Carbon tetrachloride	19.3		µg/kg wet		20.0		96	70-130		
Chlorobenzene	19.0		µg/kg wet		20.0		95	70-130		
Chloroethane	17.5		µg/kg wet		20.0		88	70-130		
Chloroform	20.1		µg/kg wet		20.0		100	70-130		
Chloromethane	17.2		µg/kg wet		20.0		86	70-130		
2-Chlorotoluene	19.4		µg/kg wet		20.0		97	70-130		
4-Chlorotoluene	20.2		µg/kg wet		20.0		101	70-130		
1,2-Dibromo-3-chloropropane	21.2		µg/kg wet		20.0		106	70-130		
Dibromochloromethane	19.8		µg/kg wet		20.0		99	70-130		
1,2-Dibromoethane (EDB)	19.6		µg/kg wet		20.0		98	70-130		
Dibromomethane	21.6		µg/kg wet		20.0		108	70-130		
1,2-Dichlorobenzene	19.6		µg/kg wet		20.0		98	70-130		
1,3-Dichlorobenzene	19.8		µg/kg wet		20.0		99	70-130		
1,4-Dichlorobenzene	18.8		µg/kg wet		20.0		94	70-130		
Dichlorodifluoromethane (Freon12)	19.9		µg/kg wet		20.0		100	70-130		
1,1-Dichloroethane	18.3		µg/kg wet		20.0		91	70-130		
1,2-Dichloroethane	19.9		µg/kg wet		20.0		99	70-130		
1,1-Dichloroethene	20.0		µg/kg wet		20.0		100	70-130		
cis-1,2-Dichloroethene	19.7		µg/kg wet		20.0		98	70-130		
trans-1,2-Dichloroethene	19.7		µg/kg wet		20.0		98	70-130		
1,2-Dichloropropane	18.2		µg/kg wet		20.0		91	70-130		
1,3-Dichloropropane	18.5		µg/kg wet		20.0		92	70-130		
2,2-Dichloropropane	16.6		µg/kg wet		20.0		83	70-130		
1,1-Dichloropropene	19.1		µg/kg wet		20.0		95	70-130		
cis-1,3-Dichloropropene	17.4		µg/kg wet		20.0		87	70-130		
trans-1,3-Dichloropropene	17.9		µg/kg wet		20.0		90	70-130		
Ethylbenzene	19.4		µg/kg wet		20.0		97	70-130		
Hexachlorobutadiene	20.7		µg/kg wet		20.0		104	70-130		
2-Hexanone (MBK)	19.7		µg/kg wet		20.0		98	70-130		
Isopropylbenzene	19.8		µg/kg wet		20.0		99	70-130		
4-Isopropyltoluene	19.5		µg/kg wet		20.0		98	70-130		
Methyl tert-butyl ether	18.8		µg/kg wet		20.0		94	70-130		
4-Methyl-2-pentanone (MIBK)	17.7		µg/kg wet		20.0		89	70-130		
Methylene chloride	18.2		µg/kg wet		20.0		91	70-130		
Naphthalene	21.4		µg/kg wet		20.0		107	70-130		
n-Propylbenzene	20.0		µg/kg wet		20.0		100	70-130		
Styrene	20.0		µg/kg wet		20.0		100	70-130		
1,1,1,2-Tetrachloroethane	19.7		µg/kg wet		20.0		98	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104079 - SW846 5030 Soil (high level)										
LCS (1104079-BS1)					Prepared & Analyzed: 09-Mar-11					
1,1,2,2-Tetrachloroethane	23.2		µg/kg wet		20.0		116	70-130		
Tetrachloroethene	17.8		µg/kg wet		20.0		89	70-130		
Toluene	17.5		µg/kg wet		20.0		87	70-130		
1,2,3-Trichlorobenzene	20.6		µg/kg wet		20.0		103	70-130		
1,2,4-Trichlorobenzene	19.8		µg/kg wet		20.0		99	70-130		
1,3,5-Trichlorobenzene	18.7		µg/kg wet		20.0		94	70-130		
1,1,1-Trichloroethane	20.7		µg/kg wet		20.0		103	70-130		
1,1,2-Trichloroethane	19.5		µg/kg wet		20.0		97	70-130		
Trichloroethene	19.6		µg/kg wet		20.0		98	70-130		
Trichlorofluoromethane (Freon 11)	21.7		µg/kg wet		20.0		108	70-130		
1,2,3-Trichloropropane	21.7		µg/kg wet		20.0		108	70-130		
1,2,4-Trimethylbenzene	20.4		µg/kg wet		20.0		102	70-130		
1,3,5-Trimethylbenzene	20.5		µg/kg wet		20.0		103	70-130		
Vinyl chloride	20.3		µg/kg wet		20.0		102	70-130		
m,p-Xylene	39.5		µg/kg wet		40.0		99	70-130		
o-Xylene	19.6		µg/kg wet		20.0		98	70-130		
Tetrahydrofuran	16.5		µg/kg wet		20.0		83	70-130		
Ethyl ether	19.4		µg/kg wet		20.0		97	70-130		
Tert-amyl methyl ether	16.4		µg/kg wet		20.0		82	70-130		
Ethyl tert-butyl ether	16.8		µg/kg wet		20.0		84	70-130		
Di-isopropyl ether	17.0		µg/kg wet		20.0		85	70-130		
Tert-Butanol / butyl alcohol	161		µg/kg wet		200		81	70-130		
1,4-Dioxane	185		µg/kg wet		200		92	70-130		
trans-1,4-Dichloro-2-butene	19.8		µg/kg wet		20.0		99	70-130		
Ethanol	397		µg/kg wet		400		99	70-130		
Surrogate: 4-Bromofluorobenzene	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*27.0*		µg/kg wet		*30.0*		*90*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*31.1*		µg/kg wet		*30.0*		*104*	*70-130*		
Surrogate: Dibromofluoromethane	*32.9*		µg/kg wet		*30.0*		*110*	*70-130*		
LCS Dup (1104079-BSD1)					Prepared & Analyzed: 09-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.4		µg/kg wet		20.0		102	70-130	1	25
Acetone	18.5		µg/kg wet		20.0		92	70-130	0.2	50
Acrylonitrile	19.5		µg/kg wet		20.0		97	70-130	4	25
Benzene	18.9		µg/kg wet		20.0		94	70-130	2	25
Bromobenzene	20.3		µg/kg wet		20.0		102	70-130	2	25
Bromochloromethane	21.9		µg/kg wet		20.0		110	70-130	2	25
Bromodichloromethane	20.6		µg/kg wet		20.0		103	70-130	2	25
Bromoform	20.1		µg/kg wet		20.0		101	70-130	2	25
Bromomethane	21.0		µg/kg wet		20.0		105	70-130	5	50
2-Butanone (MEK)	19.4		µg/kg wet		20.0		97	70-130	0.8	50
n-Butylbenzene	20.2		µg/kg wet		20.0		101	70-130	2	25
sec-Butylbenzene	21.2		µg/kg wet		20.0		106	70-130	3	25
tert-Butylbenzene	21.0		µg/kg wet		20.0		105	70-130	4	25
Carbon disulfide	16.8		µg/kg wet		20.0		84	70-130	3	25
Carbon tetrachloride	20.1		µg/kg wet		20.0		100	70-130	4	25
Chlorobenzene	19.4		µg/kg wet		20.0		97	70-130	2	25
Chloroethane	18.0		µg/kg wet		20.0		90	70-130	3	50
Chloroform	20.5		µg/kg wet		20.0		103	70-130	2	25
Chloromethane	18.8		µg/kg wet		20.0		94	70-130	9	25
2-Chlorotoluene	20.1		µg/kg wet		20.0		101	70-130	4	25
4-Chlorotoluene	20.8		µg/kg wet		20.0		104	70-130	3	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104079 - SW846 5030 Soil (high level)										
LCS Dup (1104079-BSD1)					Prepared & Analyzed: 09-Mar-11					
1,2-Dibromo-3-chloropropane	22.4		µg/kg wet		20.0		112	70-130	6	25
Dibromochloromethane	20.3		µg/kg wet		20.0		102	70-130	3	50
1,2-Dibromoethane (EDB)	19.8		µg/kg wet		20.0		99	70-130	1	25
Dibromomethane	21.8		µg/kg wet		20.0		109	70-130	0.8	25
1,2-Dichlorobenzene	20.0		µg/kg wet		20.0		100	70-130	2	25
1,3-Dichlorobenzene	20.4		µg/kg wet		20.0		102	70-130	3	25
1,4-Dichlorobenzene	19.4		µg/kg wet		20.0		97	70-130	3	25
Dichlorodifluoromethane (Freon12)	20.4		µg/kg wet		20.0		102	70-130	2	50
1,1-Dichloroethane	18.7		µg/kg wet		20.0		94	70-130	2	25
1,2-Dichloroethane	20.1		µg/kg wet		20.0		101	70-130	1	25
1,1-Dichloroethene	20.2		µg/kg wet		20.0		101	70-130	1	25
cis-1,2-Dichloroethene	20.1		µg/kg wet		20.0		100	70-130	2	25
trans-1,2-Dichloroethene	20.2		µg/kg wet		20.0		101	70-130	3	25
1,2-Dichloropropane	18.2		µg/kg wet		20.0		91	70-130	0.5	25
1,3-Dichloropropane	19.0		µg/kg wet		20.0		95	70-130	3	25
2,2-Dichloropropane	17.3		µg/kg wet		20.0		86	70-130	4	25
1,1-Dichloropropene	19.8		µg/kg wet		20.0		99	70-130	4	25
cis-1,3-Dichloropropene	17.6		µg/kg wet		20.0		88	70-130	1	25
trans-1,3-Dichloropropene	17.8		µg/kg wet		20.0		89	70-130	0.5	25
Ethylbenzene	20.1		µg/kg wet		20.0		100	70-130	3	25
Hexachlorobutadiene	20.9		µg/kg wet		20.0		104	70-130	0.7	50
2-Hexanone (MBK)	19.3		µg/kg wet		20.0		96	70-130	2	25
Isopropylbenzene	20.2		µg/kg wet		20.0		101	70-130	2	25
4-Isopropyltoluene	20.1		µg/kg wet		20.0		100	70-130	3	25
Methyl tert-butyl ether	19.2		µg/kg wet		20.0		96	70-130	2	25
4-Methyl-2-pentanone (MIBK)	17.1		µg/kg wet		20.0		86	70-130	4	50
Methylene chloride	18.9		µg/kg wet		20.0		95	70-130	4	25
Naphthalene	22.0		µg/kg wet		20.0		110	70-130	2	25
n-Propylbenzene	21.1		µg/kg wet		20.0		105	70-130	5	25
Styrene	21.0		µg/kg wet		20.0		105	70-130	5	25
1,1,1,2-Tetrachloroethane	20.1		µg/kg wet		20.0		101	70-130	2	25
1,1,2,2-Tetrachloroethane	24.1		µg/kg wet		20.0		120	70-130	4	25
Tetrachloroethene	18.3		µg/kg wet		20.0		92	70-130	3	25
Toluene	17.8		µg/kg wet		20.0		89	70-130	2	25
1,2,3-Trichlorobenzene	20.7		µg/kg wet		20.0		104	70-130	0.4	25
1,2,4-Trichlorobenzene	19.8		µg/kg wet		20.0		99	70-130	0.1	25
1,3,5-Trichlorobenzene	19.0		µg/kg wet		20.0		95	70-130	1	25
1,1,1-Trichloroethane	21.3		µg/kg wet		20.0		106	70-130	3	25
1,1,2-Trichloroethane	20.0		µg/kg wet		20.0		100	70-130	3	25
Trichloroethene	19.9		µg/kg wet		20.0		99	70-130	2	25
Trichlorofluoromethane (Freon 11)	22.4		µg/kg wet		20.0		112	70-130	3	50
1,2,3-Trichloropropane	22.2		µg/kg wet		20.0		111	70-130	2	25
1,2,4-Trimethylbenzene	21.1		µg/kg wet		20.0		105	70-130	3	25
1,3,5-Trimethylbenzene	21.1		µg/kg wet		20.0		105	70-130	3	25
Vinyl chloride	20.5		µg/kg wet		20.0		102	70-130	0.8	25
m,p-Xylene	40.7		µg/kg wet		40.0		102	70-130	3	25
o-Xylene	20.3		µg/kg wet		20.0		102	70-130	3	25
Tetrahydrofuran	17.3		µg/kg wet		20.0		87	70-130	5	25
Ethyl ether	19.6		µg/kg wet		20.0		98	70-130	0.8	50
Tert-amyl methyl ether	16.7		µg/kg wet		20.0		83	70-130	2	25
Ethyl tert-butyl ether	17.0		µg/kg wet		20.0		85	70-130	0.8	25
Di-isopropyl ether	17.4		µg/kg wet		20.0		87	70-130	3	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104079 - SW846 5030 Soil (high level)										
LCS Dup (1104079-BSD1)					Prepared & Analyzed: 09-Mar-11					
Tert-Butanol / butyl alcohol	165		µg/kg wet		200		82	70-130	2	25
1,4-Dioxane	196		µg/kg wet		200		98	70-130	6	25
trans-1,4-Dichloro-2-butene	19.9		µg/kg wet		20.0		100	70-130	0.4	25
Ethanol	386		µg/kg wet		400		96	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*27.1*		µg/kg wet		*30.0*		*90*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*32.7*		µg/kg wet		*30.0*		*109*	*70-130*		
Batch 1104178 - SW846 5030 Soil (high level)										
Blank (1104178-BLK1)					Prepared & Analyzed: 10-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg wet	50.0						
Acetone	BRL		µg/kg wet	500						
Acrylonitrile	BRL		µg/kg wet	50.0						
Benzene	BRL		µg/kg wet	50.0						
Bromobenzene	BRL		µg/kg wet	50.0						
Bromochloromethane	BRL		µg/kg wet	50.0						
Bromodichloromethane	BRL		µg/kg wet	50.0						
Bromoform	BRL		µg/kg wet	50.0						
Bromomethane	BRL		µg/kg wet	100						
2-Butanone (MEK)	BRL		µg/kg wet	500						
n-Butylbenzene	BRL		µg/kg wet	50.0						
sec-Butylbenzene	BRL		µg/kg wet	50.0						
tert-Butylbenzene	BRL		µg/kg wet	50.0						
Carbon disulfide	BRL		µg/kg wet	100						
Carbon tetrachloride	BRL		µg/kg wet	50.0						
Chlorobenzene	BRL		µg/kg wet	50.0						
Chloroethane	BRL		µg/kg wet	100						
Chloroform	BRL		µg/kg wet	50.0						
Chloromethane	BRL		µg/kg wet	100						
2-Chlorotoluene	BRL		µg/kg wet	50.0						
4-Chlorotoluene	BRL		µg/kg wet	50.0						
1,2-Dibromo-3-chloropropane	BRL		µg/kg wet	100						
Dibromochloromethane	BRL		µg/kg wet	50.0						
1,2-Dibromoethane (EDB)	BRL		µg/kg wet	50.0						
Dibromomethane	BRL		µg/kg wet	50.0						
1,2-Dichlorobenzene	BRL		µg/kg wet	50.0						
1,3-Dichlorobenzene	BRL		µg/kg wet	50.0						
1,4-Dichlorobenzene	BRL		µg/kg wet	50.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet	100						
1,1-Dichloroethane	BRL		µg/kg wet	50.0						
1,2-Dichloroethane	BRL		µg/kg wet	50.0						
1,1-Dichloroethene	BRL		µg/kg wet	50.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet	50.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet	50.0						
1,2-Dichloropropane	BRL		µg/kg wet	50.0						
1,3-Dichloropropane	BRL		µg/kg wet	50.0						
2,2-Dichloropropane	BRL		µg/kg wet	50.0						
1,1-Dichloropropene	BRL		µg/kg wet	50.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet	50.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet	50.0						
Ethylbenzene	BRL		µg/kg wet	50.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104178 - SW846 5030 Soil (high level)										
Blank (1104178-BLK1)					Prepared & Analyzed: 10-Mar-11					
Hexachlorobutadiene	BRL		µg/kg wet	50.0						
2-Hexanone (MBK)	BRL		µg/kg wet	500						
Isopropylbenzene	BRL		µg/kg wet	50.0						
4-Isopropyltoluene	BRL		µg/kg wet	50.0						
Methyl tert-butyl ether	BRL		µg/kg wet	50.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg wet	500						
Methylene chloride	BRL		µg/kg wet	100						
Naphthalene	BRL		µg/kg wet	50.0						
n-Propylbenzene	BRL		µg/kg wet	50.0						
Styrene	BRL		µg/kg wet	50.0						
1,1,1,2-Tetrachloroethane	BRL		µg/kg wet	50.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet	50.0						
Tetrachloroethene	BRL		µg/kg wet	50.0						
Toluene	BRL		µg/kg wet	50.0						
1,2,3-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,3,5-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,1,1-Trichloroethane	BRL		µg/kg wet	50.0						
1,1,2-Trichloroethane	BRL		µg/kg wet	50.0						
Trichloroethene	BRL		µg/kg wet	50.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet	50.0						
1,2,3-Trichloropropane	BRL		µg/kg wet	50.0						
1,2,4-Trimethylbenzene	BRL		µg/kg wet	50.0						
1,3,5-Trimethylbenzene	BRL		µg/kg wet	50.0						
Vinyl chloride	BRL		µg/kg wet	50.0						
m,p-Xylene	BRL		µg/kg wet	100						
o-Xylene	BRL		µg/kg wet	50.0						
Tetrahydrofuran	BRL		µg/kg wet	100						
Ethyl ether	BRL		µg/kg wet	50.0						
Tert-amyl methyl ether	BRL		µg/kg wet	50.0						
Ethyl tert-butyl ether	BRL		µg/kg wet	50.0						
Di-isopropyl ether	BRL		µg/kg wet	50.0						
Tert-Butanol / butyl alcohol	BRL		µg/kg wet	500						
1,4-Dioxane	BRL		µg/kg wet	1000						
trans-1,4-Dichloro-2-butene	BRL		µg/kg wet	250						
Ethanol	BRL		µg/kg wet	20000						
Surrogate: 4-Bromofluorobenzene	*29.1*		µg/kg wet		*30.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*27.3*		µg/kg wet		*30.0*		*91*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.6*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Dibromofluoromethane	*30.7*		µg/kg wet		*30.0*		*102*	*70-130*		
LCS (1104178-BS1)					Prepared & Analyzed: 10-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.2		µg/kg wet		20.0		106	70-130		
Acetone	21.3		µg/kg wet		20.0		107	70-130		
Acrylonitrile	19.6		µg/kg wet		20.0		98	70-130		
Benzene	19.2		µg/kg wet		20.0		96	70-130		
Bromobenzene	21.3		µg/kg wet		20.0		106	70-130		
Bromochloromethane	21.7		µg/kg wet		20.0		109	70-130		
Bromodichloromethane	20.5		µg/kg wet		20.0		102	70-130		
Bromoform	19.9		µg/kg wet		20.0		99	70-130		
Bromomethane	22.7		µg/kg wet		20.0		113	70-130		
2-Butanone (MEK)	20.3		µg/kg wet		20.0		102	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104178 - SW846 5030 Soil (high level)										
LCS (1104178-BS1)					Prepared & Analyzed: 10-Mar-11					
n-Butylbenzene	20.6		µg/kg wet		20.0		103	70-130		
sec-Butylbenzene	22.2		µg/kg wet		20.0		111	70-130		
tert-Butylbenzene	21.7		µg/kg wet		20.0		109	70-130		
Carbon disulfide	16.5		µg/kg wet		20.0		83	70-130		
Carbon tetrachloride	19.3		µg/kg wet		20.0		97	70-130		
Chlorobenzene	20.2		µg/kg wet		20.0		101	70-130		
Chloroethane	18.2		µg/kg wet		20.0		91	70-130		
Chloroform	20.7		µg/kg wet		20.0		104	70-130		
Chloromethane	26.2		µg/kg wet		20.0		131	70-130		
2-Chlorotoluene	22.7		µg/kg wet		20.0		113	70-130		
4-Chlorotoluene	21.8		µg/kg wet		20.0		109	70-130		
1,2-Dibromo-3-chloropropane	21.5		µg/kg wet		20.0		108	70-130		
Dibromochloromethane	20.4		µg/kg wet		20.0		102	70-130		
1,2-Dibromoethane (EDB)	20.6		µg/kg wet		20.0		103	70-130		
Dibromomethane	22.3		µg/kg wet		20.0		111	70-130		
1,2-Dichlorobenzene	20.2		µg/kg wet		20.0		101	70-130		
1,3-Dichlorobenzene	21.7		µg/kg wet		20.0		108	70-130		
1,4-Dichlorobenzene	19.9		µg/kg wet		20.0		99	70-130		
Dichlorodifluoromethane (Freon12)	21.6		µg/kg wet		20.0		108	70-130		
1,1-Dichloroethane	18.9		µg/kg wet		20.0		94	70-130		
1,2-Dichloroethane	20.5		µg/kg wet		20.0		103	70-130		
1,1-Dichloroethene	20.6		µg/kg wet		20.0		103	70-130		
cis-1,2-Dichloroethene	20.3		µg/kg wet		20.0		102	70-130		
trans-1,2-Dichloroethene	20.8		µg/kg wet		20.0		104	70-130		
1,2-Dichloropropane	18.3		µg/kg wet		20.0		92	70-130		
1,3-Dichloropropane	19.7		µg/kg wet		20.0		99	70-130		
2,2-Dichloropropane	17.2		µg/kg wet		20.0		86	70-130		
1,1-Dichloropropene	20.2		µg/kg wet		20.0		101	70-130		
cis-1,3-Dichloropropene	17.8		µg/kg wet		20.0		89	70-130		
trans-1,3-Dichloropropene	17.9		µg/kg wet		20.0		89	70-130		
Ethylbenzene	20.8		µg/kg wet		20.0		104	70-130		
Hexachlorobutadiene	21.9		µg/kg wet		20.0		110	70-130		
2-Hexanone (MBK)	18.8		µg/kg wet		20.0		94	70-130		
Isopropylbenzene	21.1		µg/kg wet		20.0		106	70-130		
4-Isopropyltoluene	20.8		µg/kg wet		20.0		104	70-130		
Methyl tert-butyl ether	19.4		µg/kg wet		20.0		97	70-130		
4-Methyl-2-pentanone (MIBK)	17.7		µg/kg wet		20.0		88	70-130		
Methylene chloride	18.7		µg/kg wet		20.0		94	70-130		
Naphthalene	22.3		µg/kg wet		20.0		112	70-130		
n-Propylbenzene	22.3		µg/kg wet		20.0		112	70-130		
Styrene	21.5		µg/kg wet		20.0		108	70-130		
1,1,1,2-Tetrachloroethane	19.9		µg/kg wet		20.0		100	70-130		
1,1,2,2-Tetrachloroethane	23.9		µg/kg wet		20.0		120	70-130		
Tetrachloroethene	19.8		µg/kg wet		20.0		99	70-130		
Toluene	18.8		µg/kg wet		20.0		94	70-130		
1,2,3-Trichlorobenzene	21.7		µg/kg wet		20.0		108	70-130		
1,2,4-Trichlorobenzene	20.4		µg/kg wet		20.0		102	70-130		
1,3,5-Trichlorobenzene	19.8		µg/kg wet		20.0		99	70-130		
1,1,1-Trichloroethane	20.8		µg/kg wet		20.0		104	70-130		
1,1,2-Trichloroethane	20.8		µg/kg wet		20.0		104	70-130		
Trichloroethene	21.0		µg/kg wet		20.0		105	70-130		
Trichlorofluoromethane (Freon 11)	22.7		µg/kg wet		20.0		114	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104178 - SW846 5030 Soil (high level)										
LCS (1104178-BS1)					Prepared & Analyzed: 10-Mar-11					
1,2,3-Trichloropropane	22.8		µg/kg wet		20.0		114	70-130		
1,2,4-Trimethylbenzene	22.2		µg/kg wet		20.0		111	70-130		
1,3,5-Trimethylbenzene	22.0		µg/kg wet		20.0		110	70-130		
Vinyl chloride	17.8		µg/kg wet		20.0		89	70-130		
m,p-Xylene	42.3		µg/kg wet		40.0		106	70-130		
o-Xylene	21.0		µg/kg wet		20.0		105	70-130		
Tetrahydrofuran	18.4		µg/kg wet		20.0		92	70-130		
Ethyl ether	19.9		µg/kg wet		20.0		99	70-130		
Tert-amyl methyl ether	16.9		µg/kg wet		20.0		84	70-130		
Ethyl tert-butyl ether	17.0		µg/kg wet		20.0		85	70-130		
Di-isopropyl ether	17.0		µg/kg wet		20.0		85	70-130		
Tert-Butanol / butyl alcohol	179		µg/kg wet		200		90	70-130		
1,4-Dioxane	202		µg/kg wet		200		101	70-130		
trans-1,4-Dichloro-2-butene	20.7		µg/kg wet		20.0		103	70-130		
Ethanol	372		µg/kg wet		400		93	70-130		
Surrogate: 4-Bromofluorobenzene	*30.7*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*27.5*		µg/kg wet		*30.0*		*92*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.8*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*31.6*		µg/kg wet		*30.0*		*105*	*70-130*		
LCS Dup (1104178-BSD1)					Prepared & Analyzed: 10-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	22.0		µg/kg wet		20.0		110	70-130	4	25
Acetone	18.1		µg/kg wet		20.0		90	70-130	16	50
Acrylonitrile	18.1		µg/kg wet		20.0		90	70-130	8	25
Benzene	19.5		µg/kg wet		20.0		97	70-130	1	25
Bromobenzene	20.7		µg/kg wet		20.0		104	70-130	3	25
Bromochloromethane	21.9		µg/kg wet		20.0		110	70-130	0.9	25
Bromodichloromethane	20.9		µg/kg wet		20.0		105	70-130	2	25
Bromoform	20.4		µg/kg wet		20.0		102	70-130	3	25
Bromomethane	21.0		µg/kg wet		20.0		105	70-130	8	50
2-Butanone (MEK)	18.0		µg/kg wet		20.0		90	70-130	12	50
n-Butylbenzene	21.4		µg/kg wet		20.0		107	70-130	4	25
sec-Butylbenzene	22.0		µg/kg wet		20.0		110	70-130	1	25
tert-Butylbenzene	21.4		µg/kg wet		20.0		107	70-130	2	25
Carbon disulfide	16.9		µg/kg wet		20.0		85	70-130	3	25
Carbon tetrachloride	20.1		µg/kg wet		20.0		101	70-130	4	25
Chlorobenzene	19.9		µg/kg wet		20.0		100	70-130	1	25
Chloroethane	18.3		µg/kg wet		20.0		91	70-130	0.4	50
Chloroform	21.0		µg/kg wet		20.0		105	70-130	2	25
Chloromethane	19.0	QR2	µg/kg wet		20.0		95	70-130	32	25
2-Chlorotoluene	20.5		µg/kg wet		20.0		103	70-130	10	25
4-Chlorotoluene	21.5		µg/kg wet		20.0		107	70-130	1	25
1,2-Dibromo-3-chloropropane	21.3		µg/kg wet		20.0		106	70-130	1	25
Dibromochloromethane	21.2		µg/kg wet		20.0		106	70-130	4	50
1,2-Dibromoethane (EDB)	20.3		µg/kg wet		20.0		101	70-130	2	25
Dibromomethane	21.6		µg/kg wet		20.0		108	70-130	3	25
1,2-Dichlorobenzene	20.5		µg/kg wet		20.0		103	70-130	1	25
1,3-Dichlorobenzene	21.1		µg/kg wet		20.0		106	70-130	3	25
1,4-Dichlorobenzene	20.1		µg/kg wet		20.0		101	70-130	1	25
Dichlorodifluoromethane (Freon12)	22.0		µg/kg wet		20.0		110	70-130	2	50
1,1-Dichloroethane	19.5		µg/kg wet		20.0		98	70-130	3	25
1,2-Dichloroethane	20.6		µg/kg wet		20.0		103	70-130	0.4	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104178 - SW846 5030 Soil (high level)										
LCS Dup (1104178-BSD1)					Prepared & Analyzed: 10-Mar-11					
1,1-Dichloroethene	20.9		µg/kg wet		20.0		104	70-130	1	25
cis-1,2-Dichloroethene	20.8		µg/kg wet		20.0		104	70-130	2	25
trans-1,2-Dichloroethene	21.2		µg/kg wet		20.0		106	70-130	2	25
1,2-Dichloropropane	18.4		µg/kg wet		20.0		92	70-130	0.4	25
1,3-Dichloropropane	19.4		µg/kg wet		20.0		97	70-130	2	25
2,2-Dichloropropane	16.4		µg/kg wet		20.0		82	70-130	5	25
1,1-Dichloropropene	20.4		µg/kg wet		20.0		102	70-130	0.9	25
cis-1,3-Dichloropropene	18.2		µg/kg wet		20.0		91	70-130	2	25
trans-1,3-Dichloropropene	18.5		µg/kg wet		20.0		92	70-130	3	25
Ethylbenzene	20.6		µg/kg wet		20.0		103	70-130	0.7	25
Hexachlorobutadiene	22.7		µg/kg wet		20.0		113	70-130	3	50
2-Hexanone (MBK)	19.0		µg/kg wet		20.0		95	70-130	1	25
Isopropylbenzene	20.9		µg/kg wet		20.0		104	70-130	1	25
4-Isopropyltoluene	21.1		µg/kg wet		20.0		106	70-130	2	25
Methyl tert-butyl ether	18.9		µg/kg wet		20.0		95	70-130	3	25
4-Methyl-2-pentanone (MIBK)	17.8		µg/kg wet		20.0		89	70-130	0.3	50
Methylene chloride	18.9		µg/kg wet		20.0		94	70-130	0.7	25
Naphthalene	22.5		µg/kg wet		20.0		113	70-130	0.8	25
n-Propylbenzene	21.5		µg/kg wet		20.0		108	70-130	4	25
Styrene	21.3		µg/kg wet		20.0		106	70-130	1	25
1,1,1,2-Tetrachloroethane	20.7		µg/kg wet		20.0		104	70-130	4	25
1,1,2,2-Tetrachloroethane	24.1		µg/kg wet		20.0		120	70-130	0.7	25
Tetrachloroethene	19.5		µg/kg wet		20.0		98	70-130	1	25
Toluene	18.8		µg/kg wet		20.0		94	70-130	0	25
1,2,3-Trichlorobenzene	22.2		µg/kg wet		20.0		111	70-130	2	25
1,2,4-Trichlorobenzene	20.9		µg/kg wet		20.0		104	70-130	2	25
1,3,5-Trichlorobenzene	20.2		µg/kg wet		20.0		101	70-130	2	25
1,1,1-Trichloroethane	21.4		µg/kg wet		20.0		107	70-130	3	25
1,1,2-Trichloroethane	20.3		µg/kg wet		20.0		102	70-130	2	25
Trichloroethene	20.8		µg/kg wet		20.0		104	70-130	0.7	25
Trichlorofluoromethane (Freon 11)	23.5		µg/kg wet		20.0		118	70-130	3	50
1,2,3-Trichloropropane	21.9		µg/kg wet		20.0		110	70-130	4	25
1,2,4-Trimethylbenzene	21.5		µg/kg wet		20.0		107	70-130	3	25
1,3,5-Trimethylbenzene	21.6		µg/kg wet		20.0		108	70-130	2	25
Vinyl chloride	21.6		µg/kg wet		20.0		108	70-130	19	25
m,p-Xylene	41.8		µg/kg wet		40.0		104	70-130	1	25
o-Xylene	20.5		µg/kg wet		20.0		102	70-130	3	25
Tetrahydrofuran	16.2		µg/kg wet		20.0		81	70-130	13	25
Ethyl ether	19.4		µg/kg wet		20.0		97	70-130	2	50
Tert-amyl methyl ether	16.3		µg/kg wet		20.0		81	70-130	4	25
Ethyl tert-butyl ether	16.6		µg/kg wet		20.0		83	70-130	3	25
Di-isopropyl ether	17.2		µg/kg wet		20.0		86	70-130	1	25
Tert-Butanol / butyl alcohol	160		µg/kg wet		200		80	70-130	11	25
1,4-Dioxane	211		µg/kg wet		200		105	70-130	4	25
trans-1,4-Dichloro-2-butene	19.4		µg/kg wet		20.0		97	70-130	6	25
Ethanol	370		µg/kg wet		400		92	70-130	0.5	30
Surrogate: 4-Bromofluorobenzene	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*27.6*		µg/kg wet		*30.0*		*92*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*32.6*		µg/kg wet		*30.0*		*109*	*70-130*		

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103882 - SW846 3545A										
Blank (1103882-BLK1)					Prepared & Analyzed: 07-Mar-11					
C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg wet	5.00						
C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg wet	5.00						
C11-C22 Aromatic Hydrocarbons	BRL		mg/kg wet	5.00						
Unadjusted C11-C22 Aromatic Hydrocarbons	BRL		mg/kg wet	5.00						
Total Petroleum Hydrocarbons	BRL		mg/kg wet	5.00						
Unadjusted Total Petroleum Hydrocarbons	BRL		mg/kg wet	5.00						
Naphthalene	BRL		µg/kg wet	166						
2-Methylnaphthalene	BRL		µg/kg wet	166						
Acenaphthylene	BRL		µg/kg wet	166						
Acenaphthene	BRL		µg/kg wet	166						
Fluorene	BRL		µg/kg wet	166						
Phenanthrene	BRL		µg/kg wet	166						
Anthracene	BRL		µg/kg wet	166						
Fluoranthene	BRL		µg/kg wet	166						
Pyrene	BRL		µg/kg wet	166						
Benzo (a) anthracene	BRL		µg/kg wet	166						
Chrysene	BRL		µg/kg wet	166						
Benzo (b) fluoranthene	BRL		µg/kg wet	166						
Benzo (k) fluoranthene	BRL		µg/kg wet	166						
Benzo (a) pyrene	BRL		µg/kg wet	166						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	166						
Dibenzo (a,h) anthracene	BRL		µg/kg wet	166						
Benzo (g,h,i) perylene	BRL		µg/kg wet	166						
Naphthalene (aliphatic fraction)	0.00		µg/kg wet							
2-Methylnaphthalene (aliphatic fraction)	0.00		µg/kg wet							
Surrogate: 1-Chlorooctadecane	*1340*		µg/kg wet		*3330*		*40*	*40-140*		
Surrogate: Ortho-Terphenyl	*1880*		µg/kg wet		*3330*		*56*	*40-140*		
Surrogate: 2-Fluorobiphenyl	*1390*		µg/kg wet		*2670*		*52*	*40-140*		
LCS (1103882-BS1)					Prepared & Analyzed: 07-Mar-11					
C9-C18 Aliphatic Hydrocarbons	26.2		mg/kg wet	5.00	40.0		66	40-140		
C19-C36 Aliphatic Hydrocarbons	38.4		mg/kg wet	5.00	53.3		72	40-140		
C11-C22 Aromatic Hydrocarbons	67.3		mg/kg wet	5.00	113		59	40-140		
Naphthalene	2790		µg/kg wet	166	6670		42	40-140		
2-Methylnaphthalene	2970		µg/kg wet	166	6670		45	40-140		
Acenaphthylene	3540		µg/kg wet	166	6670		53	40-140		
Acenaphthene	3570		µg/kg wet	166	6670		54	40-140		
Fluorene	3960		µg/kg wet	166	6670		59	40-140		
Phenanthrene	4510		µg/kg wet	166	6670		68	40-140		
Anthracene	4620		µg/kg wet	166	6670		69	40-140		
Fluoranthene	4840		µg/kg wet	166	6670		73	40-140		
Pyrene	4860		µg/kg wet	166	6670		73	40-140		
Benzo (a) anthracene	5120		µg/kg wet	166	6670		77	40-140		
Chrysene	5130		µg/kg wet	166	6670		77	40-140		
Benzo (b) fluoranthene	5010		µg/kg wet	166	6670		75	40-140		
Benzo (k) fluoranthene	5270		µg/kg wet	166	6670		79	40-140		
Benzo (a) pyrene	4860		µg/kg wet	166	6670		73	40-140		
Indeno (1,2,3-cd) pyrene	5140		µg/kg wet	166	6670		77	40-140		
Dibenzo (a,h) anthracene	5220		µg/kg wet	166	6670		78	40-140		
Benzo (g,h,i) perylene	5250		µg/kg wet	166	6670		79	40-140		
Naphthalene (aliphatic fraction)	0.00667		µg/kg wet		6670		0.0001	0-200		
2-Methylnaphthalene (aliphatic fraction)	0.00667		µg/kg wet		6670		0.0001	0-200		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103882 - SW846 3545A										
LCS (1103882-BS1)					Prepared & Analyzed: 07-Mar-11					
Surrogate: 1-Chlorooctadecane	*2020*		µg/kg wet		*3330*		*61*	*40-140*		
Surrogate: Ortho-Terphenyl	*2130*		µg/kg wet		*3330*		*64*	*40-140*		
Surrogate: 2-Fluorobiphenyl	*1400*		µg/kg wet		*2670*		*52*	*40-140*		
Naphthalene Breakthrough	0.00		%					0-5		
2-Methylnaphthalene Breakthrough	0.00		%					0-5		
LCS (1103882-BS2)					Prepared & Analyzed: 07-Mar-11					
C9-C18 Aliphatic Hydrocarbons	23.8		mg/kg wet	5.00	40.0		60	40-140		
C19-C36 Aliphatic Hydrocarbons	33.6		mg/kg wet	5.00	53.3		63	40-140		
C11-C22 Aromatic Hydrocarbons	70.0		mg/kg wet	5.00	113		62	40-140		
Naphthalene	3280		µg/kg wet	166	6670		49	40-140		
2-Methylnaphthalene	3550		µg/kg wet	166	6670		53	40-140		
Acenaphthylene	4170		µg/kg wet	166	6670		62	40-140		
Acenaphthene	4030		µg/kg wet	166	6670		61	40-140		
Fluorene	4340		µg/kg wet	166	6670		65	40-140		
Phenanthrene	4660		µg/kg wet	166	6670		70	40-140		
Anthracene	4720		µg/kg wet	166	6670		71	40-140		
Fluoranthene	4990		µg/kg wet	166	6670		75	40-140		
Pyrene	4980		µg/kg wet	166	6670		75	40-140		
Benzo (a) anthracene	5220		µg/kg wet	166	6670		78	40-140		
Chrysene	5170		µg/kg wet	166	6670		78	40-140		
Benzo (b) fluoranthene	5000		µg/kg wet	166	6670		75	40-140		
Benzo (k) fluoranthene	5280		µg/kg wet	166	6670		79	40-140		
Benzo (a) pyrene	5140		µg/kg wet	166	6670		77	40-140		
Indeno (1,2,3-cd) pyrene	5070		µg/kg wet	166	6670		76	40-140		
Dibenzo (a,h) anthracene	5130		µg/kg wet	166	6670		77	40-140		
Benzo (g,h,i) perylene	5170		µg/kg wet	166	6670		78	40-140		
Naphthalene (aliphatic fraction)	0.00		µg/kg wet		6670			0-200		
2-Methylnaphthalene (aliphatic fraction)	0.00		µg/kg wet		6670			0-200		
Surrogate: 1-Chlorooctadecane	*2060*		µg/kg wet		*3330*		*62*	*40-140*		
Surrogate: Ortho-Terphenyl	*2200*		µg/kg wet		*3330*		*66*	*40-140*		
Surrogate: 2-Fluorobiphenyl	*1410*		µg/kg wet		*2670*		*53*	*40-140*		
Naphthalene Breakthrough	0.00		%					0-5		
2-Methylnaphthalene Breakthrough	0.00		%					0-5		
LCS Dup (1103882-BSD1)					Prepared & Analyzed: 07-Mar-11					
C9-C18 Aliphatic Hydrocarbons	22.3		mg/kg wet	5.00	40.0		56	40-140	16	25
C19-C36 Aliphatic Hydrocarbons	36.7		mg/kg wet	5.00	53.3		69	40-140	4	25
C11-C22 Aromatic Hydrocarbons	63.3		mg/kg wet	5.00	113		56	40-140	6	25
Naphthalene	2730		µg/kg wet	166	6670		41	40-140	2	25
2-Methylnaphthalene	2930		µg/kg wet	166	6670		44	40-140	2	25
Acenaphthylene	3470		µg/kg wet	166	6670		52	40-140	2	25
Acenaphthene	3550		µg/kg wet	166	6670		53	40-140	0.3	25
Fluorene	4030		µg/kg wet	166	6670		60	40-140	2	25
Phenanthrene	4480		µg/kg wet	166	6670		67	40-140	0.7	25
Anthracene	4550		µg/kg wet	166	6670		68	40-140	2	25
Fluoranthene	4770		µg/kg wet	166	6670		72	40-140	1	25
Pyrene	4730		µg/kg wet	166	6670		71	40-140	3	25
Benzo (a) anthracene	4730		µg/kg wet	166	6670		71	40-140	8	25
Chrysene	4710		µg/kg wet	166	6670		71	40-140	9	25
Benzo (b) fluoranthene	4440		µg/kg wet	166	6670		67	40-140	12	25
Benzo (k) fluoranthene	4780		µg/kg wet	166	6670		72	40-140	10	25

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103882 - SW846 3545A										
LCS Dup (1103882-BSD1)					Prepared & Analyzed: 07-Mar-11					
Benzo (a) pyrene	4360		µg/kg wet	166	6670		65	40-140	11	25
Indeno (1,2,3-cd) pyrene	4470		µg/kg wet	166	6670		67	40-140	14	25
Dibenzo (a,h) anthracene	4530		µg/kg wet	166	6670		68	40-140	14	25
Benzo (g,h,i) perylene	4600		µg/kg wet	166	6670		69	40-140	13	25
Naphthalene (aliphatic fraction)	0.00667		µg/kg wet		6670		0.0001	0-200	0	200
2-Methylnaphthalene (aliphatic fraction)	0.00667		µg/kg wet		6670		0.0001	0-200	0	200
Surrogate: 1-Chlorooctadecane	*2320*		µg/kg wet		*3330*		*70*	*40-140*		
Surrogate: Ortho-Terphenyl	*2130*		µg/kg wet		*3330*		*64*	*40-140*		
Surrogate: 2-Fluorobiphenyl	*1350*		µg/kg wet		*2670*		*51*	*40-140*		
Naphthalene Breakthrough	0.00		%					0-5		
2-Methylnaphthalene Breakthrough	0.00		%					0-5		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103848 - SW846 3050B										
Blank (1103848-BLK1)						Prepared: 07-Mar-11	Analyzed: 09-Mar-11			
Nickel	BRL		mg/kg wet	0.908						
Zinc	BRL		mg/kg wet	0.908						
Thallium	BRL		mg/kg wet	2.72						
Selenium	BRL		mg/kg wet	1.36						
Antimony	BRL		mg/kg wet	4.54						
Lead	BRL		mg/kg wet	1.36						
Silver	BRL		mg/kg wet	1.36						
Copper	BRL		mg/kg wet	0.908						
Chromium	BRL		mg/kg wet	0.908						
Cadmium	BRL		mg/kg wet	0.454						
Beryllium	BRL		mg/kg wet	0.454						
Arsenic	BRL		mg/kg wet	1.36						
Reference (1103848-SRM1)						Prepared: 07-Mar-11	Analyzed: 09-Mar-11			
Zinc	73.9		mg/kg wet	1.00	70.6		105	80.9-119.1		
Thallium	61.7		mg/kg wet	3.00	61.6		100	81.3-118.7		
Selenium	46.1		mg/kg wet	1.50	44.8		103	79-120.7		
Antimony	41.3		mg/kg wet	5.00	61.1		68	0-220.5		
Lead	48.2		mg/kg wet	1.50	46.3		104	83.3-116.9		
Nickel	31.1		mg/kg wet	1.00	29.6		105	83.8-116.2		
Beryllium	31.9		mg/kg wet	0.500	31.2		102	83.81-116		
Copper	46.3		mg/kg wet	1.00	40.7		114	83.9-116		
Cadmium	32.8		mg/kg wet	0.500	30.9		106	83.3-116.5		
Arsenic	47.1		mg/kg wet	1.50	46.4		101	82.9-116.6		
Silver	18.8		mg/kg wet	1.50	17.2		109	66.3-133.7		
Chromium	38.9		mg/kg wet	1.00	35.7		109	81.8-118.2		
Reference (1103848-SRM2)						Prepared: 07-Mar-11	Analyzed: 09-Mar-11			
Lead	51.3		mg/kg wet	1.50	46.6		110	83.3-116.9		
Nickel	33.0		mg/kg wet	1.00	29.8		111	83.8-116.2		
Antimony	42.5		mg/kg wet	5.00	61.5		69	0-220.5		
Selenium	49.0		mg/kg wet	1.50	45.1		109	79-120.7		
Thallium	66.4		mg/kg wet	3.00	62.0		107	81.3-118.7		
Zinc	79.2		mg/kg wet	1.00	71.1		112	80.9-119.1		
Chromium	40.9		mg/kg wet	1.00	35.9		114	81.8-118.2		
Silver	19.5		mg/kg wet	1.50	17.3		113	66.3-133.7		
Cadmium	34.8		mg/kg wet	0.500	31.1		112	83.3-116.5		
Beryllium	33.6		mg/kg wet	0.500	31.4		107	83.81-116		
Arsenic	50.1		mg/kg wet	1.50	46.7		107	82.9-116.6		
Copper	49.9	QM9	mg/kg wet	1.00	40.9		122	83.9-116		
Batch 1103849 - EPA200/SW7000 Series										
Blank (1103849-BLK1)						Prepared: 07-Mar-11	Analyzed: 08-Mar-11			
Mercury	BRL		mg/kg wet	0.0284						
Reference (1103849-SRM1)						Prepared: 07-Mar-11	Analyzed: 08-Mar-11			
Mercury	0.882		mg/kg wet	0.300	0.987		89	71.6-128.4		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103858 - General Preparation										
Duplicate (1103858-DUP1)			**Source: SB25218-01**			Prepared: 04-Mar-11 Analyzed: 07-Mar-11				
% Solids	88.3		%			87.4			0.9	20
Batch 1103894 - SW846 9010B										
Blank (1103894-BLK1)						Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	BRL		mg/kg wet	1.00						
Blank (1103894-BLK2)						Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	BRL		mg/kg wet	1.00						
LCS (1103894-BS1)						Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	31.8		mg/kg wet	1.00	30.0		106	90-110		
LCS (1103894-BS2)						Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	28.4		mg/kg wet	1.00	30.0		95	90-110		
Duplicate (1103894-DUP1)			**Source: SB25218-06**			Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	2.42		mg/kg dry	1.07		2.02			18	35
Matrix Spike (1103894-MS1)			**Source: SB25218-06**			Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	36.5		mg/kg dry	1.17	35.0	2.02	98	90-110		
Matrix Spike Dup (1103894-MSD1)			**Source: SB25218-06**			Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	35.1		mg/kg dry	1.07	32.1	2.02	103	90-110	4	35
Reference (1103894-SRM1)						Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	54.0		mg/kg wet	4.16	67.9		80	38.4-162		
Batch 1103903 - General Preparation										
Duplicate (1103903-DUP1)			**Source: SB25218-06**			Prepared & Analyzed: 07-Mar-11				
% Solids	89.2		%			88.9			0.4	20
Batch 1103909 - SW846 9010B										
Blank (1103909-BLK1)						Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	BRL		mg/kg wet	1.00						
Blank (1103909-BLK2)						Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	BRL		mg/kg wet	1.00						
LCS (1103909-BS1)						Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	32.5		mg/kg wet	1.00	30.0		108	90-110		
LCS (1103909-BS2)						Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	29.6		mg/kg wet	1.00	30.0		99	90-110		
Duplicate (1103909-DUP1)			**Source: SB25218-14**			Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	0.903	J	mg/kg dry	1.35		0.795			13	35
Matrix Spike (1103909-MS1)			**Source: SB25218-14**			Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	37.1		mg/kg dry	1.27	38.2	0.795	95	90-110		
Matrix Spike Dup (1103909-MSD1)			**Source: SB25218-14**			Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	40.0		mg/kg dry	1.20	36.1	0.795	109	90-110	7	35
Reference (1103909-SRM1)						Prepared & Analyzed: 07-Mar-11				
Cyanide (total)	50.7		mg/kg wet	2.31	67.9		75	38.4-162		

Extractable Petroleum Hydrocarbons - CCV Evaluation Report

Analyte(s)	Average RF	CCRF	% D	Limit
Batch S101727				
Calibration Check (S101727-CCV1)				
C9-C18 Aliphatic Hydrocarbons	1.315332E+08	1.186347E+08	-6.3	25
C19-C36 Aliphatic Hydrocarbons	1.533876E+08	1.121001E+08	-8.1	25
C11-C22 Aromatic Hydrocarbons	21.70554	19.79114	-8.8	25
Naphthalene	8.207569	8.907541	8.5	25
2-Methylnaphthalene	5.249364	5.71159	8.8	25
Acenaphthylene	7.632873	8.390762	9.9	25
Acenaphthene	4.714004	5.19681	10.2	25
Fluorene	5.102917	5.559022	8.9	25
Phenanthrene	7.036955	7.691958	9.3	25
Anthracene	7.111659	7.58964	6.7	25
Fluoranthene	6.982094	7.897501	13.1	25
Pyrene	7.12881	8.081382	13.4	25
Benzo (a) anthracene	5.92254	6.820867	15.2	25
Chrysene	5.934326	6.809846	14.8	25
Benzo (b) fluoranthene	6.029999	6.371648	5.7	25
Benzo (k) fluoranthene	5.900239	6.17268	4.6	25
Benzo (a) pyrene	5.406469	6.404463	18.5	25
Indeno (1,2,3-cd) pyrene	6.80145	8.037728	18.2	25
Dibenzo (a,h) anthracene	5.675102	6.625745	16.8	25
Benzo (g,h,i) perylene	5.902326	7.05584	19.5	25

Notes and Definitions

E	The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
QM7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
QR2	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
R01	The Reporting Limit has been raised to account for matrix interference.
VOC8	Reporting limits reflect SW846 5030 extraction technique due to interference and/or QC issues using SW846 5035A extraction technique.
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

A Matrix Spike and Matrix Spike Duplicate (MS/MSD) for MADEP EPH CAM may not have been analyzed with the samples in this work order. According to the method these spikes are performed only when requested by the client. If requested the spike recoveries are included in the batch QC data.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
June O'Connor
Nicole Leja

The following outlines the condition of all EPH samples contained within this report upon laboratory receipt.

Matrices	Soil
Containers	✓ Satisfactory
Aqueous Preservative	✓ N/A pH≤2 pH>2 pH adjusted to <2 in lab
Temperature	✓ Received on ice ✓ Received at 4 ± 2 ºC

Were all QA/QC procedures followed as required by the EPH method? *Yes*
Were any significant modifications made to the EPH method as specified in Section 11.3? *No*
Were all performance/acceptance standards for required QA/QC procedures achieved? *Yes*

I attest that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Authorized by:

Nicole Leja
Laboratory Director

MassDEP Analytical Protocol Certification Form

Laboratory Name: Spectrum Analytical, Inc.	**Project #:** 11-1395
Project Location: Volpe Center - Cambridge, MA	**RTN:**
This form provides certifications for the following data set:	SB25218-01 through SB25218-15
Matrices: Soil	

CAM Protocol

✓ 8260 VOC CAM II A	✓ 7470/7471 Hg CAM III B	MassDEP VPH CAM IV A	8081 Pesticides CAM V B	7196 Hex Cr CAM VI B	MassDEP APH CAM IX A
8270 SVOC CAM II B	7010 Metals CAM III C	✓ MassDEP EPH CAM IV B	8151 Herbicides CAM V C	8330 Explosives CAM VIII A	TO-15 VOC CAM IX B
✓ 6010 Metals CAM III A	6020 Metals CAM III D	8082 PCB CAM V A	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate CAM VIII B	

Affirmative responses to questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	✓ Yes	No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	✓ Yes	No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	✓ Yes	No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	✓ Yes	No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	✓ Yes Yes	No No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to questions A through E)?	✓ Yes	No

Responses to questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes	✓ No

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.***

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes	✓ No
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes	✓ No

All negative responses are addressed in a case narrative on the cover page of this report.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Nicole Leja

Nicole Leja
Laboratory Director
Date: 3/10/2011

SB25218 Bu

SPECTRUM ANALYTICAL, INC.
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CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 5-day
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: FS Engineers, Inc
2 Clock Tower Place, Suite 630
Maynard, MA 01754

Telephone #: (978) 298-5956
Project Mgr. Faroog Siddique

Invoice To: FS Engineers

P.O. No.: RQN:

Project No.: 11-1395
Site Name: TSC - Volpe Center
Location: Cambridge State: MA
Sampler(s): P. Buscemi

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10= 11=

List preservative code below:

QA/QC Reporting Notes:
* additional charges may apply

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

MA DEP MCP CAM Report: Yes☒ No☐
CT DPH RCP Report: Yes☐ No☐

QA/QC Reporting Level
☐ Standard ☐ No QC ☐ DQA*
☐ NY ASP A* ☐ NY ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ TIER II* ☐ TIER V*
☒ Other S-1/GW-1

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs via 8260	MA EPH	PP13 Metals	Cyanide
25218 01	SB-101-030211 0-3'	3/2/11	0953	G	SO	3	2			X	X	X	X
02	SB-101-030211 3-8'	3/2/11	1000	G	SO	3	1			X	X		
03	SB-102-030211 0-3'	3/2/11	1047	G	SO	3	2			X	X	X	X
04	SB-102-030211 4-7'	3/2/11	1050	G	SO	3	1			X	X		
05	SB-103-030211 0-3'	3/2/11	1152	G	SO	3	2			X	X	X	X
06	SB-104-030211 0-3'	3/2/11	1232	G	SO	3	2			X	X	X	X
07	SB-104-030211 3-8'	3/2/11	1240	G	SO	3	1			X	X		
08	SB-105-030211 0-3'	3/2/11	1305	G	SO	3	2			X	X	X	X
09	SB-105-030211 8-12'	3/2/11	1332	G	SO	3	1			X	X		
10	SB-106-030211 0-3'	3/2/11	1417	G	SO	3	2			X	X	X	X

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[signature]	[signature]	3/3/11	1707	2.3

☐ EDD Format
☐ E-mail to

☐ Ambient ☒ Iced ☐ Refrigerated ☐ Fridge temp ___ °C ☐ Freezer temp ___ °C

SB 25218 Dry

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HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 2 of 2

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 5 day
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: FS Engineers Inc.
2 Clock Tower Place, Suite 630
Maynard, MA 01754

Telephone #: (978) 298-5956
Project Mgr. Farooq Siddique

Invoice To: FS Engineers

P.O. No.: _____ RQN: _____

Project No.: 11-1395
Site Name: TSC - Volpe Center
Location: Cambridge State: MA
Sampler(s): P. Buscemi

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10= _____ 11= _____

List preservative code below:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= _____ X2= _____ X3= _____

G=Grab C=Composite

QA/QC Reporting Notes:
* additional charges may apply

MA DEP MCP CAM Report: Yes☒ No☐
CT DPH RCP Report: Yes☐ No☐

QA/QC Reporting Level
☐ Standard ☐ No QC ☐ DQA*
☐ NY ASP A* ☐ NY ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ TIER II* ☐ TIER V*
☒ Other S-1/GW-1

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs via 8260	MA EPH	PP13 Metals	Cyanide
25218-11	SB-107-030211 0-3'	3/2/11	1429	G	SO	3	2			X	X	X	X
12	SB-108-030211 0-3'	3/2/11	1521	G	SO	3	2			X	X	X	X
13	SB-108-030211 3-7'	3/2/11	1530	G	SO	3	1			X	X		
14	SB-109-030211 0-3'	3/2/11	1553	G	SO	3	2			X	X	X	X
15	FD-01-030211	3/2/11	1030	G	SO	3	2			X	X	X	

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[signature]	[signature]	3/3/11	1707	2.3

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☐ E-mail to _____

☐ Ambient ☒ Iced ☐ Refrigerated ☐ Fridge temp ____ °C ☐ Freezer temp ____ °C

Report Date:
11-Mar-11 14:47

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
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Laboratory Report

FS Engineers, Inc.
2 Clock Tower Place, Suite 630
Maynard, MA 01754
Attn: Farooq Siddique

Project: Volpe Center - Cambridge, MA
Project #: 11-1395

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB25250-01	SB-110-030311 0-3'	Soil	03-Mar-11 08:50	04-Mar-11 15:48
SB25250-02	SB-110-030311 3-6'	Soil	03-Mar-11 09:00	04-Mar-11 15:48
SB25250-03	SB-111-030311 0-3'	Soil	03-Mar-11 09:21	04-Mar-11 15:48
SB25250-04	SB-111-030311 10-12'	Soil	03-Mar-11 09:28	04-Mar-11 15:48
SB25250-05	SB-112-030311 0-3'	Soil	03-Mar-11 10:28	04-Mar-11 15:48
SB25250-06	SB-113-030311 0-3'	Soil	03-Mar-11 10:45	04-Mar-11 15:48
SB25250-07	SB-113-030311 4-8'	Soil	03-Mar-11 10:52	04-Mar-11 15:48
SB25250-08	SB-114-030311 0-3'	Soil	03-Mar-11 11:10	04-Mar-11 15:48
SB25250-09	SB-114-030311 8-12'	Soil	03-Mar-11 11:23	04-Mar-11 15:48

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes.
Please note that this report contains 65 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

CASE NARRATIVE:

The sample temperature upon receipt by Spectrum Analytical courier was recorded as 2.4 degrees Celsius. The condition of these samples was further noted as received on ice. The samples were transported on ice to the laboratory facility and the temperature was recorded at 2.0 degrees Celsius upon receipt at the laboratory. Please refer to the Chain of Custody for details specific to sample receipt times.

An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

MADEP has published a list of analytical methods (CAM) which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of MCP decisions. "Presumptive Certainty" can be established only for those methods published by the MADEP in the MCP CAM. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

According to WSC-CAM 5/2009 Rev.1, Table 11 A-1, recovery for some VOC analytes have been deemed potentially difficult. Although they may still be within the recommended recovery range, a range has been set based on historical control limits.

Some target analytes which are not listed as exceptions in the Summary of CAM Reporting Limits may exceed the recommended RL based on sample initial volume or weight provided, % moisture content, or responsiveness of a particular analyte to purge and trap instrumentation.

All VOC soils samples submitted and analyzed in methanol will have a minimum dilution factor of 50. This is the minimum amount of solvent allowed on the instrumentation without causing interference. Additional dilution factors may be required to keep analyte concentration within instrument calibration.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

+MADEP EPH 5/2004 R

Samples:

SB25250-05 *SB-112-030311 0-3'*

The Reporting Limit has been raised to account for matrix interference.

SB25250-09 *SB-114-030311 8-12'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SW846 8260C

Calibration:

1102034

Analyte quantified by quadratic equation type calibration.

1,1,1,2-Tetrachloroethane
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane (EDB)
2-Hexanone (MBK)
Bromodichloromethane
Bromoform
Carbon disulfide
Carbon tetrachloride
cis-1,3-Dichloropropene
Dibromochloromethane
trans-1,3-Dichloropropene

SW846 8260C

Calibration:

1102034

This affected the following samples:

S101398-ICV1

Laboratory Control Samples:

1103983 BS/BSD

Bromoform percent recoveries (133/125) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

SB-110-030311 3-6'
SB-111-030311 10-12'
SB-113-030311 4-8'
SB-114-030311 0-3'
SB-114-030311 8-12'

1104178 BS/BSD

Chloromethane percent recoveries (131/95) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

SB-112-030311 0-3'

1104178 BSD

Chloromethane RPD 32% (25%) is outside individual acceptance criteria, but within overall method allowances.

1104178-BSD1

The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

Chloromethane

Samples:

S101674-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Bromoform (27.8%)
Ethanol (-29.9%)
trans-1,4-Dichloro-2-butene (23.2%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Acetone (-22.5%)

This affected the following samples:

1103983-BLK1
1103983-BS1
1103983-BSD1
SB-110-030311 3-6'
SB-111-030311 10-12'
SB-113-030311 4-8'
SB-114-030311 0-3'
SB-114-030311 8-12'

S101687-CCV1

SW846 8260C

Samples:

S101687-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Tetrahydrofuran (-20.7%)

This affected the following samples:

1104079-BLK1
1104079-BS1
1104079-BSD1
SB-110-030311 0-3'
SB-111-030311 0-3'
SB-111-030311 10-12'
SB-113-030311 0-3'
SB-114-030311 8-12'

S101736-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Tetrahydrofuran (-23.2%)

This affected the following samples:

1104178-BLK1
1104178-BS1
1104178-BSD1
SB-112-030311 0-3'

SB25250-01 *SB-110-030311 0-3'*

Reporting limits reflect SW846 5030 extraction technique due to interference and/or QC issues using SW846 5035A extraction technique.

SB25250-03 *SB-111-030311 0-3'*

Reporting limits reflect SW846 5030 extraction technique due to interference and/or QC issues using SW846 5035A extraction technique.

SB25250-04 *SB-111-030311 10-12'*

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Naphthalene

SB25250-04RE1 *SB-111-030311 10-12'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB25250-05 *SB-112-030311 0-3'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB25250-06 *SB-113-030311 0-3'*

Reporting limits reflect SW846 5030 extraction technique due to interference and/or QC issues using SW846 5035A extraction technique.

SB25250-09 *SB-114-030311 8-12'*

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Naphthalene

SW846 8260C

Samples:

SB25250-09RE1 *SB-114-030311 8-12'*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-110-030311 0-3'	11-1395	Soil	03-Mar-11 08:50	04-Mar-11
SB25250-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103875	
Volatile Organic Compounds			VOC8									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 14.95 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	71.8	50	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
67-64-1	Acetone	BRL		µg/kg dry	718	50	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	144	50	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	718	50	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	144	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	144	50	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	144	50	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	144	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	144	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	718	50	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-110-030311 0-3'	11-1395	Soil	03-Mar-11 08:50	04-Mar-11
SB25250-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds			VOC8									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 14.95 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	71.8	50	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	718	50	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	144	50	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	144	50	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	144	50	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	71.8	50	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	718	50	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1440	50	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	359	50	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	28700	50	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*99*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*94*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*103*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*89*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.5	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.5	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-110-030311 0-3'	11-1395	Soil	03-Mar-11 08:50	04-Mar-11
SB25250-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	26.8		mg/kg dry	11.5	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	Unadjusted C11-C22 Aromatic Hydrocarbons	36.9		mg/kg dry	11.5	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	26.8		mg/kg dry	11.5	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	36.9		mg/kg dry	11.5	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	BRL		µg/kg dry	384	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	384	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	384	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	384	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	384	1	"	"	"	"	"	
85-01-8	Phenanthrene	1,290		µg/kg dry	384	1	"	"	"	"	"	
120-12-7	Anthracene	BRL		µg/kg dry	384	1	"	"	"	"	"	
206-44-0	Fluoranthene	1,900		µg/kg dry	384	1	"	"	"	"	"	
129-00-0	Pyrene	1,700		µg/kg dry	384	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	823		µg/kg dry	384	1	"	"	"	"	"	
218-01-9	Chrysene	886		µg/kg dry	384	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	584		µg/kg dry	384	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	696		µg/kg dry	384	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	787		µg/kg dry	384	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	384	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	384	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	424		µg/kg dry	384	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*58*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*60*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*64*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.58	1	SW846 6010C	07-Mar-11	08-Mar-11	LR	1103895	
7440-38-2	Arsenic	16.1		mg/kg dry	1.58	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.526	1	"	"	"	"	"	
7440-43-9	Cadmium	0.710		mg/kg dry	0.526	1	"	"	"	"	"	
7440-47-3	Chromium	32.6		mg/kg dry	1.05	1	"	"	"	"	"	
7440-50-8	Copper	171		mg/kg dry	1.05	1	"	"	"	"	"	
7439-97-6	Mercury	7.10		mg/kg dry	0.707	20	SW846 7471B	"	08-Mar-11	HB	1103897	
7440-02-0	Nickel	24.9		mg/kg dry	1.05	1	SW846 6010C	"	08-Mar-11	LR	1103895	
7439-92-1	Lead	651		mg/kg dry	1.58	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	5.26	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	2.00	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	3.16	1	"	"	"	"	"	
7440-66-6	Zinc	313		mg/kg dry	1.05	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	82.2		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-110-030311 0-3'	11-1395	Soil	03-Mar-11 08:50	04-Mar-11
SB25250-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
57-12-5	Cyanide (total)	BRL		mg/kg dry	1.20	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103909	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-110-030311 3-6'	11-1395	Soil	03-Mar-11 09:00	04-Mar-11
SB25250-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103875	
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.11 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	7.8	1	SW846 8260C	07-Mar-11	08-Mar-11	JRO	1103983	
67-64-1	Acetone	BRL		µg/kg dry	77.7	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	15.5	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	77.7	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	15.5	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	15.5	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	15.5	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	15.5	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	15.5	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	77.7	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-110-030311 3-6'	11-1395	Soil	03-Mar-11 09:00	04-Mar-11
SB25250-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.11 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	7.8	1	SW846 8260C	07-Mar-11	08-Mar-11	JRO	1103983	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	77.7	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	15.5	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	15.5	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	15.5	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	7.8	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	77.7	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	155	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	38.8	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	3110	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*95*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*95*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*112*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*105*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	12.5	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg dry	12.5	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-110-030311 3-6'	11-1395	Soil	03-Mar-11 09:00	04-Mar-11
SB25250-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	84.5		mg/kg dry	12.5	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	Unadjusted C11-C22 Aromatic Hydrocarbons	139		mg/kg dry	12.5	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	84.5		mg/kg dry	12.5	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	139		mg/kg dry	12.5	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	BRL		µg/kg dry	418	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	418	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	418	1	"	"	"	"	"	
83-32-9	Acenaphthene	774		µg/kg dry	418	1	"	"	"	"	"	
86-73-7	Fluorene	928		µg/kg dry	418	1	"	"	"	"	"	
85-01-8	Phenanthrene	9,270		µg/kg dry	418	1	"	"	"	"	"	
120-12-7	Anthracene	2,400		µg/kg dry	418	1	"	"	"	"	"	
206-44-0	Fluoranthene	9,640		µg/kg dry	418	1	"	"	"	"	"	
129-00-0	Pyrene	9,120		µg/kg dry	418	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	4,490		µg/kg dry	418	1	"	"	"	"	"	
218-01-9	Chrysene	4,440		µg/kg dry	418	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	2,380		µg/kg dry	418	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	3,330		µg/kg dry	418	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	3,590		µg/kg dry	418	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	1,590		µg/kg dry	418	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	418	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	1,620		µg/kg dry	418	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*61*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*46*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*53*			*40-140 %*		"	"	"	"	"	
General Chemistry Parameters												
	% Solids	77.5		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-111-030311 0-3'	11-1395	Soil	03-Mar-11 09:21	04-Mar-11
SB25250-03				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103875	
Volatile Organic Compounds			VOC8									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 14.9 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	68.8	50	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
67-64-1	Acetone	BRL		µg/kg dry	688	50	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	138	50	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	688	50	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	138	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	138	50	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	138	50	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	138	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	138	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	688	50	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-111-030311 0-3'	11-1395	Soil	03-Mar-11 09:21	04-Mar-11
SB25250-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds			VOC8									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 14.9 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	68.8	50	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	688	50	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	138	50	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	138	50	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	138	50	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	68.8	50	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	688	50	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1380	50	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	344	50	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	27500	50	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*96*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*91*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*108*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*90*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.2	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-111-030311 0-3'	11-1395	Soil	03-Mar-11 09:21	04-Mar-11
SB25250-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	37.7		mg/kg dry	11.2	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	Unadjusted C11-C22 Aromatic Hydrocarbons	53.6		mg/kg dry	11.2	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	37.7		mg/kg dry	11.2	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	53.6		mg/kg dry	11.2	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	BRL		µg/kg dry	372	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	372	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	372	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	372	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	372	1	"	"	"	"	"	
85-01-8	Phenanthrene	2,610		µg/kg dry	372	1	"	"	"	"	"	
120-12-7	Anthracene	642		µg/kg dry	372	1	"	"	"	"	"	
206-44-0	Fluoranthene	3,000		µg/kg dry	372	1	"	"	"	"	"	
129-00-0	Pyrene	2,560		µg/kg dry	372	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	1,310		µg/kg dry	372	1	"	"	"	"	"	
218-01-9	Chrysene	1,310		µg/kg dry	372	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	875		µg/kg dry	372	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	929		µg/kg dry	372	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	1,120		µg/kg dry	372	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	508		µg/kg dry	372	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	372	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	517		µg/kg dry	372	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*70*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*61*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*64*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.65	1	SW846 6010C	07-Mar-11	08-Mar-11	LR	1103895	
7440-38-2	Arsenic	8.51		mg/kg dry	1.65	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.550	1	"	"	"	"	"	
7440-43-9	Cadmium	BRL		mg/kg dry	0.550	1	"	"	"	"	"	
7440-47-3	Chromium	16.5		mg/kg dry	1.10	1	"	"	"	"	"	
7440-50-8	Copper	91.2		mg/kg dry	1.10	1	"	"	"	"	"	
7439-97-6	Mercury	1.66		mg/kg dry	0.343	10	SW846 7471B	"	08-Mar-11	HB	1103897	
7440-02-0	Nickel	15.0		mg/kg dry	1.10	1	SW846 6010C	"	08-Mar-11	LR	1103895	
7439-92-1	Lead	572		mg/kg dry	1.65	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	5.50	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	1.65	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	3.30	1	"	"	"	"	"	
7440-66-6	Zinc	182		mg/kg dry	1.10	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	84.4		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-111-030311 0-3'	11-1395	Soil	03-Mar-11 09:21	04-Mar-11
SB25250-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
57-12-5	Cyanide (total)	1.65		mg/kg dry	1.28	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103909	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-111-030311 10-12'	11-1395	Soil	03-Mar-11 09:28	04-Mar-11
SB25250-04				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103875	
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.18 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	6.3	1	SW846 8260C	07-Mar-11	08-Mar-11	JRO	1103983	
67-64-1	Acetone	BRL		µg/kg dry	62.6	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	12.5	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	62.6	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	14.2		µg/kg dry	6.3	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	12.5	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	12.5	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	12.5	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	12.5	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	12.5	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
100-41-4	Ethylbenzene	123		µg/kg dry	6.3	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	62.6	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-111-030311 10-12'	11-1395	Soil	03-Mar-11 09:28	04-Mar-11
SB25250-04				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.18 g							
98-82-8	Isopropylbenzene	44.7		µg/kg dry	6.3	1	SW846 8260C	07-Mar-11	08-Mar-11	JRO	1103983	
99-87-6	4-Isopropyltoluene	11.8		µg/kg dry	6.3	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	62.6	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	12.5	1	"	"	"	"	"	
91-20-3	Naphthalene	4,510	E	µg/kg dry	6.3	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	28.8		µg/kg dry	6.3	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	205		µg/kg dry	6.3	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	73.1		µg/kg dry	6.3	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	34.7		µg/kg dry	12.5	1	"	"	"	"	"	
95-47-6	o-Xylene	50.9		µg/kg dry	6.3	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	12.5	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	6.3	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	62.6	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	125	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	31.3	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	2500	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*104*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*95*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*107*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*			*70-130 %*		"	"	"	"	"	
Re-analysis of Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	321	250	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
67-64-1	Acetone	BRL		µg/kg dry	3210	250	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	321	250	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-111-030311 10-12'	11-1395	Soil	03-Mar-11 09:28	04-Mar-11
SB25250-04				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Re-analysis of Volatile Organic Compounds Prepared by method SW846 5030 Soil (high level)			GS1									
71-43-2	Benzene	BRL		µg/kg dry	321	250	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
108-86-1	Bromobenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	321	250	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	321	250	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	321	250	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	642	250	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	3210	250	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	642	250	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	321	250	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	642	250	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	321	250	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	642	250	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	321	250	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	321	250	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	642	250	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	321	250	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	321	250	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	321	250	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	642	250	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	321	250	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	321	250	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	321	250	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	321	250	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	321	250	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	321	250	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	321	250	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	321	250	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	321	250	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	321	250	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	321	250	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	321	250	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	3210	250	"	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	321	250	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	321	250	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	3210	250	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-111-030311 10-12'	11-1395	Soil	03-Mar-11 09:28	04-Mar-11
SB25250-04				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Re-analysis of Volatile Organic Compounds Prepared by method SW846 5030 Soil (high level)			GS1									
75-09-2	Methylene chloride	BRL		µg/kg dry	642	250	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
91-20-3	Naphthalene	4,340		µg/kg dry	321	250	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	321	250	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	321	250	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	321	250	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	321	250	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	321	250	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	321	250	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	321	250	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	321	250	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	321	250	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	321	250	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	321	250	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	321	250	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	642	250	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	321	250	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	642	250	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	321	250	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	321	250	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	321	250	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	321	250	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	3210	250	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	6420	250	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	1610	250	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	128000	250	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*97*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*94*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	17.0	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg dry	17.0	1	"	"	"	"	"	
	C11-C22 Aromatic Hydrocarbons	87.3		mg/kg dry	17.0	1	"	"	"	"	"	
	Unadjusted C11-C22 Aromatic Hydrocarbons	123		mg/kg dry	17.0	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	87.3		mg/kg dry	17.0	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-111-030311 10-12'	11-1395	Soil	03-Mar-11 09:28	04-Mar-11
SB25250-04				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	Unadjusted Total Petroleum Hydrocarbons	123		mg/kg dry	17.0	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	5,440		µg/kg dry	567	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	2,710		µg/kg dry	567	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	567	1	"	"	"	"	"	
83-32-9	Acenaphthene	3,700		µg/kg dry	567	1	"	"	"	"	"	
86-73-7	Fluorene	2,550		µg/kg dry	567	1	"	"	"	"	"	
85-01-8	Phenanthrene	7,840		µg/kg dry	567	1	"	"	"	"	"	
120-12-7	Anthracene	1,920		µg/kg dry	567	1	"	"	"	"	"	
206-44-0	Fluoranthene	2,310		µg/kg dry	567	1	"	"	"	"	"	
129-00-0	Pyrene	3,240		µg/kg dry	567	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	1,350		µg/kg dry	567	1	"	"	"	"	"	
218-01-9	Chrysene	1,390		µg/kg dry	567	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	567	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	638		µg/kg dry	567	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	1,090		µg/kg dry	567	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	567	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	567	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	567	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*59*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*64*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*67*			*40-140 %*		"	"	"	"	"	
General Chemistry Parameters												
	% Solids	87.3		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-112-030311 0-3'	11-1395	Soil	03-Mar-11 10:28	04-Mar-11
SB25250-05				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103875	
Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 14.9 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	67.5	50	SW846 8260C	10-Mar-11	10-Mar-11	eq	1104178	
67-64-1	Acetone	BRL		µg/kg dry	675	50	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	135	50	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	675	50	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	135	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	135	50	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	135	50	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	135	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	135	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	675	50	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-112-030311 0-3'	11-1395	Soil	03-Mar-11 10:28	04-Mar-11
SB25250-05				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 14.9 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	67.5	50	SW846 8260C	10-Mar-11	10-Mar-11	eq	1104178	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	675	50	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	135	50	"	"	"	"	"	
91-20-3	Naphthalene	2,300		µg/kg dry	67.5	50	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	135	50	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	135	50	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	67.5	50	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	675	50	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1350	50	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	337	50	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	27000	50	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*97*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*91*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*104*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges			R01									
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.6	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	C19-C36 Aliphatic Hydrocarbons	53.1		mg/kg dry	11.6	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-112-030311 0-3'	11-1395	Soil	03-Mar-11 10:28	04-Mar-11
SB25250-05				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A			R01									
	C11-C22 Aromatic Hydrocarbons	189		mg/kg dry	58.0	5	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	Unadjusted C11-C22 Aromatic Hydrocarbons	294		mg/kg dry	58.0	5	"	"	"	"	"	
	Total Petroleum Hydrocarbons	242		mg/kg dry	11.6	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	347		mg/kg dry	11.6	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A			R01									
91-20-3	Naphthalene	BRL		µg/kg dry	1930	5	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	1930	5	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	1930	5	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	1930	5	"	"	"	"	"	
86-73-7	Fluorene	2,530		µg/kg dry	1930	5	"	"	"	"	"	
85-01-8	Phenanthrene	17,700		µg/kg dry	1930	5	"	"	"	"	"	
120-12-7	Anthracene	5,480		µg/kg dry	1930	5	"	"	"	"	"	
206-44-0	Fluoranthene	18,800		µg/kg dry	1930	5	"	"	"	"	"	
129-00-0	Pyrene	16,100		µg/kg dry	1930	5	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	8,040		µg/kg dry	1930	5	"	"	"	"	"	
218-01-9	Chrysene	7,470		µg/kg dry	1930	5	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	4,250		µg/kg dry	1930	5	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	6,600		µg/kg dry	1930	5	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	6,980		µg/kg dry	1930	5	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	3,170		µg/kg dry	1930	5	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	1930	5	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	3,370		µg/kg dry	1930	5	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*48*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*48*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*63*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.57	1	SW846 6010C	07-Mar-11	08-Mar-11	LR	1103895	
7440-38-2	Arsenic	8.30		mg/kg dry	1.57	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.524	1	"	"	"	"	"	
7440-43-9	Cadmium	0.797		mg/kg dry	0.524	1	"	"	"	"	"	
7440-47-3	Chromium	19.5		mg/kg dry	1.05	1	"	"	"	"	"	
7440-50-8	Copper	59.2		mg/kg dry	1.05	1	"	"	"	"	"	
7439-97-6	Mercury	0.498		mg/kg dry	0.319	10	SW846 7471B	"	08-Mar-11	HB	1103897	
7440-02-0	Nickel	14.0		mg/kg dry	1.05	1	SW846 6010C	"	08-Mar-11	LR	1103895	
7439-92-1	Lead	203		mg/kg dry	1.57	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	5.24	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	1.57	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	3.15	1	"	"	"	"	"	
7440-66-6	Zinc	188		mg/kg dry	1.05	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	85.4		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103903	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-112-030311 0-3'	11-1395	Soil	03-Mar-11 10:28	04-Mar-11
SB25250-05				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
57-12-5	Cyanide (total)	6.08		mg/kg dry	1.11	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103909	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-113-030311 0-3'	11-1395	Soil	03-Mar-11 10:45	04-Mar-11
SB25250-06				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103875	
Volatile Organic Compounds			VOC8									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.22 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	65.6	50	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
67-64-1	Acetone	BRL		µg/kg dry	656	50	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	131	50	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	656	50	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	131	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	131	50	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	131	50	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	131	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	131	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	656	50	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-113-030311 0-3'	11-1395	Soil	03-Mar-11 10:45	04-Mar-11
SB25250-06				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds			VOC8									
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.22 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	65.6	50	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	656	50	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	131	50	"	"	"	"	"	
91-20-3	Naphthalene	111		µg/kg dry	65.6	50	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	131	50	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	131	50	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	65.6	50	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	656	50	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1310	50	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	328	50	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	26200	50	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*99*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*94*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*106*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*92*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.6	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	C19-C36 Aliphatic Hydrocarbons	17.7		mg/kg dry	11.6	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-113-030311 0-3'	11-1395	Soil	03-Mar-11 10:45	04-Mar-11
SB25250-06				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	56.8		mg/kg dry	11.6	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	Unadjusted C11-C22 Aromatic Hydrocarbons	97.7		mg/kg dry	11.6	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	74.4		mg/kg dry	11.6	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	115		mg/kg dry	11.6	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	BRL		µg/kg dry	387	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	387	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	387	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	387	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	387	1	"	"	"	"	"	
85-01-8	Phenanthrene	4,360		µg/kg dry	387	1	"	"	"	"	"	
120-12-7	Anthracene	859		µg/kg dry	387	1	"	"	"	"	"	
206-44-0	Fluoranthene	7,770		µg/kg dry	387	1	"	"	"	"	"	
129-00-0	Pyrene	6,610		µg/kg dry	387	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	3,260		µg/kg dry	387	1	"	"	"	"	"	
218-01-9	Chrysene	3,670		µg/kg dry	387	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	2,760		µg/kg dry	387	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	3,270		µg/kg dry	387	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	3,460		µg/kg dry	387	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	1,890		µg/kg dry	387	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	387	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	2,130		µg/kg dry	387	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*49*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*55*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*66*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.47	1	SW846 6010C	07-Mar-11	08-Mar-11	LR	1103895	
7440-38-2	Arsenic	7.26		mg/kg dry	1.47	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.488	1	"	"	"	"	"	
7440-43-9	Cadmium	0.723		mg/kg dry	0.488	1	"	"	"	"	"	
7440-47-3	Chromium	16.6		mg/kg dry	0.977	1	"	"	"	"	"	
7440-50-8	Copper	47.8		mg/kg dry	0.977	1	"	"	"	"	"	
7439-97-6	Mercury	0.449		mg/kg dry	0.0321	1	SW846 7471B	"	08-Mar-11	HB	1103897	
7440-02-0	Nickel	11.4		mg/kg dry	0.977	1	SW846 6010C	"	08-Mar-11	LR	1103895	
7439-92-1	Lead	178		mg/kg dry	1.47	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	4.88	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	1.47	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	2.93	1	"	"	"	"	"	
7440-66-6	Zinc	118		mg/kg dry	0.977	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	85.9		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103904	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-113-030311 0-3'	11-1395	Soil	03-Mar-11 10:45	04-Mar-11
SB25250-06				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
57-12-5	Cyanide (total)	1.04		mg/kg dry	1.04	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103909	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-113-030311 4-8'	11-1395	Soil	03-Mar-11 10:52	04-Mar-11
SB25250-07				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103875	
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 4.92 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	6.0	1	SW846 8260C	07-Mar-11	08-Mar-11	JRO	1103983	
67-64-1	Acetone	BRL		µg/kg dry	60.3	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	60.3	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	60.3	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-113-030311 4-8'	11-1395	Soil	03-Mar-11 10:52	04-Mar-11
SB25250-07				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 4.92 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	6.0	1	SW846 8260C	07-Mar-11	08-Mar-11	JRO	1103983	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	60.3	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
91-20-3	Naphthalene	71.4		µg/kg dry	6.0	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	12.1	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	6.0	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	60.3	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	121	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	30.2	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	2410	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*100*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*95*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*104*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*99*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	10.9	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg dry	10.9	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-113-030311 4-8'	11-1395	Soil	03-Mar-11 10:52	04-Mar-11
SB25250-07				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	24.4		mg/kg dry	10.9	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	Unadjusted C11-C22 Aromatic Hydrocarbons	26.2		mg/kg dry	10.9	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	24.4		mg/kg dry	10.9	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	26.2		mg/kg dry	10.9	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	BRL		µg/kg dry	363	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	363	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	363	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	363	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	363	1	"	"	"	"	"	
85-01-8	Phenanthrene	BRL		µg/kg dry	363	1	"	"	"	"	"	
120-12-7	Anthracene	BRL		µg/kg dry	363	1	"	"	"	"	"	
206-44-0	Fluoranthene	BRL		µg/kg dry	363	1	"	"	"	"	"	
129-00-0	Pyrene	BRL		µg/kg dry	363	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	363	1	"	"	"	"	"	
218-01-9	Chrysene	BRL		µg/kg dry	363	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	363	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	363	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	363	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	363	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	363	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	363	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*54*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*64*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*69*			*40-140 %*		"	"	"	"	"	
General Chemistry Parameters												
	% Solids	91.4		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103904	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-114-030311 0-3'	11-1395	Soil	03-Mar-11 11:10	04-Mar-11
SB25250-08				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103875	
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.04 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	6.9	1	SW846 8260C	07-Mar-11	08-Mar-11	JRO	1103983	
67-64-1	Acetone	BRL		µg/kg dry	69.0	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	13.8	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	69.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	13.8	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	13.8	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	13.8	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	13.8	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	13.8	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	69.0	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-114-030311 0-3'	11-1395	Soil	03-Mar-11 11:10	04-Mar-11
SB25250-08				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.04 g							
98-82-8	Isopropylbenzene	BRL		µg/kg dry	6.9	1	SW846 8260C	07-Mar-11	08-Mar-11	JRO	1103983	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	69.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	13.8	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	13.8	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	13.8	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	6.9	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	69.0	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	138	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	34.5	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	2760	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*89*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*94*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*105*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges												
Prepared by method SW846 3545A												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.9	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg dry	11.9	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-114-030311 0-3'	11-1395	Soil	03-Mar-11 11:10	04-Mar-11
SB25250-08				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A												
	C11-C22 Aromatic Hydrocarbons	BRL		mg/kg dry	11.9	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	Unadjusted C11-C22 Aromatic Hydrocarbons	BRL		mg/kg dry	11.9	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	BRL		mg/kg dry	11.9	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	BRL		mg/kg dry	11.9	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3545A												
91-20-3	Naphthalene	BRL		µg/kg dry	396	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	396	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	396	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/kg dry	396	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	396	1	"	"	"	"	"	
85-01-8	Phenanthrene	BRL		µg/kg dry	396	1	"	"	"	"	"	
120-12-7	Anthracene	BRL		µg/kg dry	396	1	"	"	"	"	"	
206-44-0	Fluoranthene	BRL		µg/kg dry	396	1	"	"	"	"	"	
129-00-0	Pyrene	BRL		µg/kg dry	396	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	396	1	"	"	"	"	"	
218-01-9	Chrysene	BRL		µg/kg dry	396	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	396	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	396	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	396	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	396	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	396	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	396	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*64*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*60*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*62*			*40-140 %*		"	"	"	"	"	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/kg dry	1.68	1	SW846 6010C	07-Mar-11	08-Mar-11	LR	1103895	
7440-38-2	Arsenic	8.74		mg/kg dry	1.68	1	"	"	"	"	"	
7440-41-7	Beryllium	BRL		mg/kg dry	0.560	1	"	"	"	"	"	
7440-43-9	Cadmium	BRL		mg/kg dry	0.560	1	"	"	"	"	"	
7440-47-3	Chromium	15.3		mg/kg dry	1.12	1	"	"	"	"	"	
7440-50-8	Copper	16.2		mg/kg dry	1.12	1	"	"	"	"	"	
7439-97-6	Mercury	0.0376		mg/kg dry	0.0323	1	SW846 7471B	"	08-Mar-11	HB	1103897	
7440-02-0	Nickel	9.32		mg/kg dry	1.12	1	SW846 6010C	"	08-Mar-11	LR	1103895	
7439-92-1	Lead	20.5		mg/kg dry	1.68	1	"	"	"	"	"	
7440-36-0	Antimony	BRL		mg/kg dry	5.60	1	"	"	"	"	"	
7782-49-2	Selenium	BRL		mg/kg dry	1.68	1	"	"	"	"	"	
7440-28-0	Thallium	BRL		mg/kg dry	3.36	1	"	"	"	"	"	
7440-66-6	Zinc	38.1		mg/kg dry	1.12	1	"	"	"	"	"	
General Chemistry Parameters												
	% Solids	83.7		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103904	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit BRL = Below Reporting Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-114-030311 0-3'	11-1395	Soil	03-Mar-11 11:10	04-Mar-11
SB25250-08				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
General Chemistry Parameters												
57-12-5	Cyanide (total)	2.83		mg/kg dry	1.15	1	SW846 9012A	07-Mar-11	07-Mar-11	eemon	1103909	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-114-030311 8-12'	11-1395	Soil	03-Mar-11 11:23	04-Mar-11
SB25250-09				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	04-Mar-11	04-Mar-11	JLH	1103875	
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.16 g							
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	8.2	1	SW846 8260C	07-Mar-11	08-Mar-11	JRO	1103983	
67-64-1	Acetone	222		µg/kg dry	81.6	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
71-43-2	Benzene	99.4		µg/kg dry	8.2	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	16.3	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	81.6	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	19.7		µg/kg dry	8.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	16.3	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	16.3	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	16.3	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	16.3	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	16.3	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
100-41-4	Ethylbenzene	24.0		µg/kg dry	8.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	81.6	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-114-030311 8-12'	11-1395	Soil	03-Mar-11 11:23	04-Mar-11
SB25250-09				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds												
Prepared by method SW846 5035A Soil (low level)					Initial weight: 5.16 g							
98-82-8	Isopropylbenzene	113		µg/kg dry	8.2	1	SW846 8260C	07-Mar-11	08-Mar-11	JRO	1103983	
99-87-6	4-Isopropyltoluene	36.8		µg/kg dry	8.2	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	81.6	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	16.3	1	"	"	"	"	"	
91-20-3	Naphthalene	1,550	E	µg/kg dry	8.2	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	46.9		µg/kg dry	8.2	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	92.5		µg/kg dry	8.2	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	59.5		µg/kg dry	8.2	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	38.5		µg/kg dry	16.3	1	"	"	"	"	"	
95-47-6	o-Xylene	24.9		µg/kg dry	8.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	16.3	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	8.2	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	81.6	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	163	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	40.8	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	3260	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*88*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*90*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*99*			*70-130 %*		"	"	"	"	"	
Re-analysis of Volatile Organic Compounds			GS1									
Prepared by method SW846 5030 Soil (high level)												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	331	200	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
67-64-1	Acetone	BRL		µg/kg dry	3310	200	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	331	200	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-114-030311 8-12'	11-1395	Soil	03-Mar-11 11:23	04-Mar-11
SB25250-09				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Re-analysis of Volatile Organic Compounds Prepared by method SW846 5030 Soil (high level)			GS1									
71-43-2	Benzene	BRL		µg/kg dry	331	200	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
108-86-1	Bromobenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	331	200	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	331	200	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	331	200	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	662	200	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	3310	200	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	662	200	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	331	200	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	662	200	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	331	200	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	662	200	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	331	200	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	331	200	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg dry	662	200	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	331	200	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	331	200	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	331	200	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	662	200	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	331	200	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	331	200	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	331	200	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	331	200	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	331	200	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	331	200	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	331	200	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	331	200	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	331	200	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	331	200	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg dry	331	200	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	331	200	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	3310	200	"	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	331	200	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	331	200	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	3310	200	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-114-030311 8-12'	11-1395	Soil	03-Mar-11 11:23	04-Mar-11
SB25250-09				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Re-analysis of Volatile Organic Compounds Prepared by method SW846 5030 Soil (high level)			GS1									
75-09-2	Methylene chloride	BRL		µg/kg dry	662	200	SW846 8260C	09-Mar-11	09-Mar-11	eq	1104079	
91-20-3	Naphthalene	9,250		µg/kg dry	331	200	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/kg dry	331	200	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	331	200	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	331	200	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	331	200	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	331	200	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	331	200	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	331	200	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	331	200	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	331	200	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	331	200	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	331	200	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	331	200	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	662	200	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	331	200	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	662	200	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	331	200	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	331	200	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	331	200	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	331	200	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	3310	200	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	6620	200	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	1660	200	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	132000	200	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*99*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*93*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*101*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*96*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A			GS1									
	C9-C18 Aliphatic Hydrocarbons	43.6		mg/kg dry	13.1	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
	C19-C36 Aliphatic Hydrocarbons	21.1		mg/kg dry	13.1	1	"	"	"	"	"	
	C11-C22 Aromatic Hydrocarbons	356		mg/kg dry	65.4	5	"	"	"	"	"	
	Unadjusted C11-C22 Aromatic Hydrocarbons	602		mg/kg dry	65.4	5	"	"	"	"	"	
	Total Petroleum Hydrocarbons	420		mg/kg dry	13.1	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-114-030311 8-12'	11-1395	Soil	03-Mar-11 11:23	04-Mar-11
SB25250-09				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3545A			GS1									
	Unadjusted Total Petroleum Hydrocarbons	667		mg/kg dry	13.1	1	+MADEP EPH 5/2004 R	08-Mar-11	10-Mar-11	MM	1103972	
EPH Target PAH Analytes Prepared by method SW846 3545A			GS1									
91-20-3	Naphthalene	3,640		µg/kg dry	2180	5	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	2180	5	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/kg dry	2180	5	"	"	"	"	"	
83-32-9	Acenaphthene	8,500		µg/kg dry	2180	5	"	"	"	"	"	
86-73-7	Fluorene	12,400		µg/kg dry	2180	5	"	"	"	"	"	
85-01-8	Phenanthrene	43,800		µg/kg dry	2180	5	"	"	"	"	"	
120-12-7	Anthracene	16,400		µg/kg dry	2180	5	"	"	"	"	"	
206-44-0	Fluoranthene	43,200		µg/kg dry	2180	5	"	"	"	"	"	
129-00-0	Pyrene	36,900		µg/kg dry	2180	5	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	17,600		µg/kg dry	2180	5	"	"	"	"	"	
218-01-9	Chrysene	15,600		µg/kg dry	2180	5	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	9,540		µg/kg dry	2180	5	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	11,100		µg/kg dry	2180	5	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	13,800		µg/kg dry	2180	5	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	5,170		µg/kg dry	2180	5	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	2180	5	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	5,270		µg/kg dry	2180	5	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*42*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*41*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*57*			*40-140 %*		"	"	"	"	"	
General Chemistry Parameters												
	% Solids	74.8		%		1	SM2540 G Mod.	07-Mar-11	07-Mar-11	BD	1103904	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103983 - SW846 5035A Soil (low level)										
Blank (1103983-BLK1)					Prepared & Analyzed: 08-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg wet	5.0						
Acetone	BRL		µg/kg wet	50.0						
Acrylonitrile	BRL		µg/kg wet	5.0						
Benzene	BRL		µg/kg wet	5.0						
Bromobenzene	BRL		µg/kg wet	5.0						
Bromochloromethane	BRL		µg/kg wet	5.0						
Bromodichloromethane	BRL		µg/kg wet	5.0						
Bromoform	BRL		µg/kg wet	5.0						
Bromomethane	BRL		µg/kg wet	10.0						
2-Butanone (MEK)	BRL		µg/kg wet	50.0						
n-Butylbenzene	BRL		µg/kg wet	5.0						
sec-Butylbenzene	BRL		µg/kg wet	5.0						
tert-Butylbenzene	BRL		µg/kg wet	5.0						
Carbon disulfide	BRL		µg/kg wet	10.0						
Carbon tetrachloride	BRL		µg/kg wet	5.0						
Chlorobenzene	BRL		µg/kg wet	5.0						
Chloroethane	BRL		µg/kg wet	10.0						
Chloroform	BRL		µg/kg wet	5.0						
Chloromethane	BRL		µg/kg wet	10.0						
2-Chlorotoluene	BRL		µg/kg wet	5.0						
4-Chlorotoluene	BRL		µg/kg wet	5.0						
1,2-Dibromo-3-chloropropane	BRL		µg/kg wet	10.0						
Dibromochloromethane	BRL		µg/kg wet	5.0						
1,2-Dibromoethane (EDB)	BRL		µg/kg wet	5.0						
Dibromomethane	BRL		µg/kg wet	5.0						
1,2-Dichlorobenzene	BRL		µg/kg wet	5.0						
1,3-Dichlorobenzene	BRL		µg/kg wet	5.0						
1,4-Dichlorobenzene	BRL		µg/kg wet	5.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet	10.0						
1,1-Dichloroethane	BRL		µg/kg wet	5.0						
1,2-Dichloroethane	BRL		µg/kg wet	5.0						
1,1-Dichloroethene	BRL		µg/kg wet	5.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet	5.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet	5.0						
1,2-Dichloropropane	BRL		µg/kg wet	5.0						
1,3-Dichloropropane	BRL		µg/kg wet	5.0						
2,2-Dichloropropane	BRL		µg/kg wet	5.0						
1,1-Dichloropropene	BRL		µg/kg wet	5.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet	5.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet	5.0						
Ethylbenzene	BRL		µg/kg wet	5.0						
Hexachlorobutadiene	BRL		µg/kg wet	5.0						
2-Hexanone (MBK)	BRL		µg/kg wet	50.0						
Isopropylbenzene	BRL		µg/kg wet	5.0						
4-Isopropyltoluene	BRL		µg/kg wet	5.0						
Methyl tert-butyl ether	BRL		µg/kg wet	5.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg wet	50.0						
Methylene chloride	BRL		µg/kg wet	10.0						
Naphthalene	BRL		µg/kg wet	5.0						
n-Propylbenzene	BRL		µg/kg wet	5.0						
Styrene	BRL		µg/kg wet	5.0						
1,1,1,2-Tetrachloroethane	BRL		µg/kg wet	5.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103983 - SW846 5035A Soil (low level)										
Blank (1103983-BLK1)					Prepared & Analyzed: 08-Mar-11					
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet	5.0						
Tetrachloroethene	BRL		µg/kg wet	5.0						
Toluene	BRL		µg/kg wet	5.0						
1,2,3-Trichlorobenzene	BRL		µg/kg wet	5.0						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	5.0						
1,3,5-Trichlorobenzene	BRL		µg/kg wet	5.0						
1,1,1-Trichloroethane	BRL		µg/kg wet	5.0						
1,1,2-Trichloroethane	BRL		µg/kg wet	5.0						
Trichloroethene	BRL		µg/kg wet	5.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet	5.0						
1,2,3-Trichloropropane	BRL		µg/kg wet	5.0						
1,2,4-Trimethylbenzene	BRL		µg/kg wet	5.0						
1,3,5-Trimethylbenzene	BRL		µg/kg wet	5.0						
Vinyl chloride	BRL		µg/kg wet	5.0						
m,p-Xylene	BRL		µg/kg wet	10.0						
o-Xylene	BRL		µg/kg wet	5.0						
Tetrahydrofuran	BRL		µg/kg wet	10.0						
Ethyl ether	BRL		µg/kg wet	5.0						
Tert-amyl methyl ether	BRL		µg/kg wet	5.0						
Ethyl tert-butyl ether	BRL		µg/kg wet	5.0						
Di-isopropyl ether	BRL		µg/kg wet	5.0						
Tert-Butanol / butyl alcohol	BRL		µg/kg wet	50.0						
1,4-Dioxane	BRL		µg/kg wet	100						
trans-1,4-Dichloro-2-butene	BRL		µg/kg wet	25.0						
Ethanol	BRL		µg/kg wet	2000						
Surrogate: 4-Bromofluorobenzene	*51.0*		µg/kg wet		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*47.4*		µg/kg wet		*50.0*		*95*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*54.2*		µg/kg wet		*50.0*		*108*	*70-130*		
Surrogate: Dibromofluoromethane	*50.4*		µg/kg wet		*50.0*		*101*	*70-130*		
LCS (1103983-BS1)					Prepared & Analyzed: 08-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.9		µg/kg wet		20.0		94	70-130		
Acetone	15.9		µg/kg wet		20.0		80	70-130		
Acrylonitrile	19.6		µg/kg wet		20.0		98	70-130		
Benzene	18.5		µg/kg wet		20.0		93	70-130		
Bromobenzene	22.2		µg/kg wet		20.0		111	70-130		
Bromochloromethane	20.2		µg/kg wet		20.0		101	70-130		
Bromodichloromethane	18.9		µg/kg wet		20.0		95	70-130		
Bromoform	26.6	QM9	µg/kg wet		20.0		133	70-130		
Bromomethane	18.1		µg/kg wet		20.0		90	70-130		
2-Butanone (MEK)	16.3		µg/kg wet		20.0		82	70-130		
n-Butylbenzene	21.2		µg/kg wet		20.0		106	70-130		
sec-Butylbenzene	21.8		µg/kg wet		20.0		109	70-130		
tert-Butylbenzene	22.0		µg/kg wet		20.0		110	70-130		
Carbon disulfide	19.6		µg/kg wet		20.0		98	70-130		
Carbon tetrachloride	19.8		µg/kg wet		20.0		99	70-130		
Chlorobenzene	21.5		µg/kg wet		20.0		107	70-130		
Chloroethane	18.1		µg/kg wet		20.0		90	70-130		
Chloroform	17.4		µg/kg wet		20.0		87	70-130		
Chloromethane	16.4		µg/kg wet		20.0		82	70-130		
2-Chlorotoluene	21.2		µg/kg wet		20.0		106	70-130		
4-Chlorotoluene	21.3		µg/kg wet		20.0		106	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103983 - SW846 5035A Soil (low level)										
LCS (1103983-BS1)					Prepared & Analyzed: 08-Mar-11					
1,2-Dibromo-3-chloropropane	23.5		µg/kg wet		20.0		117	70-130		
Dibromochloromethane	20.4		µg/kg wet		20.0		102	70-130		
1,2-Dibromoethane (EDB)	20.2		µg/kg wet		20.0		101	70-130		
Dibromomethane	19.8		µg/kg wet		20.0		99	70-130		
1,2-Dichlorobenzene	21.5		µg/kg wet		20.0		107	70-130		
1,3-Dichlorobenzene	22.5		µg/kg wet		20.0		112	70-130		
1,4-Dichlorobenzene	20.5		µg/kg wet		20.0		103	70-130		
Dichlorodifluoromethane (Freon12)	20.1		µg/kg wet		20.0		101	70-130		
1,1-Dichloroethane	17.5		µg/kg wet		20.0		87	70-130		
1,2-Dichloroethane	17.6		µg/kg wet		20.0		88	70-130		
1,1-Dichloroethene	19.6		µg/kg wet		20.0		98	70-130		
cis-1,2-Dichloroethene	18.4		µg/kg wet		20.0		92	70-130		
trans-1,2-Dichloroethene	19.0		µg/kg wet		20.0		95	70-130		
1,2-Dichloropropane	18.0		µg/kg wet		20.0		90	70-130		
1,3-Dichloropropane	19.2		µg/kg wet		20.0		96	70-130		
2,2-Dichloropropane	18.6		µg/kg wet		20.0		93	70-130		
1,1-Dichloropropene	18.8		µg/kg wet		20.0		94	70-130		
cis-1,3-Dichloropropene	18.9		µg/kg wet		20.0		94	70-130		
trans-1,3-Dichloropropene	20.0		µg/kg wet		20.0		100	70-130		
Ethylbenzene	21.4		µg/kg wet		20.0		107	70-130		
Hexachlorobutadiene	20.6		µg/kg wet		20.0		103	70-130		
2-Hexanone (MBK)	19.7		µg/kg wet		20.0		99	70-130		
Isopropylbenzene	22.0		µg/kg wet		20.0		110	70-130		
4-Isopropyltoluene	21.0		µg/kg wet		20.0		105	70-130		
Methyl tert-butyl ether	19.1		µg/kg wet		20.0		96	70-130		
4-Methyl-2-pentanone (MIBK)	20.8		µg/kg wet		20.0		104	70-130		
Methylene chloride	18.7		µg/kg wet		20.0		93	70-130		
Naphthalene	19.4		µg/kg wet		20.0		97	70-130		
n-Propylbenzene	22.1		µg/kg wet		20.0		110	70-130		
Styrene	22.1		µg/kg wet		20.0		110	70-130		
1,1,1,2-Tetrachloroethane	22.3		µg/kg wet		20.0		112	70-130		
1,1,2,2-Tetrachloroethane	23.0		µg/kg wet		20.0		115	70-130		
Tetrachloroethene	19.4		µg/kg wet		20.0		97	70-130		
Toluene	17.7		µg/kg wet		20.0		88	70-130		
1,2,3-Trichlorobenzene	22.1		µg/kg wet		20.0		110	70-130		
1,2,4-Trichlorobenzene	21.7		µg/kg wet		20.0		109	70-130		
1,3,5-Trichlorobenzene	22.2		µg/kg wet		20.0		111	70-130		
1,1,1-Trichloroethane	18.9		µg/kg wet		20.0		95	70-130		
1,1,2-Trichloroethane	19.0		µg/kg wet		20.0		95	70-130		
Trichloroethene	18.3		µg/kg wet		20.0		92	70-130		
Trichlorofluoromethane (Freon 11)	19.2		µg/kg wet		20.0		96	70-130		
1,2,3-Trichloropropane	22.6		µg/kg wet		20.0		113	70-130		
1,2,4-Trimethylbenzene	22.0		µg/kg wet		20.0		110	70-130		
1,3,5-Trimethylbenzene	21.6		µg/kg wet		20.0		108	70-130		
Vinyl chloride	19.1		µg/kg wet		20.0		96	70-130		
m,p-Xylene	43.9		µg/kg wet		40.0		110	70-130		
o-Xylene	21.7		µg/kg wet		20.0		109	70-130		
Tetrahydrofuran	19.9		µg/kg wet		20.0		99	70-130		
Ethyl ether	18.6		µg/kg wet		20.0		93	70-130		
Tert-amyl methyl ether	17.2		µg/kg wet		20.0		86	70-130		
Ethyl tert-butyl ether	18.3		µg/kg wet		20.0		92	70-130		
Di-isopropyl ether	17.4		µg/kg wet		20.0		87	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103983 - SW846 5035A Soil (low level)										
LCS (1103983-BS1)						Prepared & Analyzed: 08-Mar-11				
Tert-Butanol / butyl alcohol	205		µg/kg wet		200		103	70-130		
1,4-Dioxane	176		µg/kg wet		200		88	70-130		
trans-1,4-Dichloro-2-butene	24.7		µg/kg wet		20.0		124	70-130		
Ethanol	326		µg/kg wet		400		81	70-130		
Surrogate: 4-Bromofluorobenzene	*51.5*		µg/kg wet		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*47.2*		µg/kg wet		*50.0*		*94*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.7*		µg/kg wet		*50.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*48.9*		µg/kg wet		*50.0*		*98*	*70-130*		
LCS Dup (1103983-BSD1)						Prepared & Analyzed: 08-Mar-11				
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.7		µg/kg wet		20.0		93	70-130	1	25
Acetone	14.0		µg/kg wet		20.0		70	70-130	13	50
Acrylonitrile	18.4		µg/kg wet		20.0		92	70-130	6	25
Benzene	17.9		µg/kg wet		20.0		89	70-130	4	25
Bromobenzene	22.0		µg/kg wet		20.0		110	70-130	1	25
Bromochloromethane	19.4		µg/kg wet		20.0		97	70-130	4	25
Bromodichloromethane	18.1		µg/kg wet		20.0		91	70-130	4	25
Bromoform	25.1		µg/kg wet		20.0		125	70-130	6	25
Bromomethane	17.5		µg/kg wet		20.0		88	70-130	3	50
2-Butanone (MEK)	17.1		µg/kg wet		20.0		86	70-130	5	50
n-Butylbenzene	20.5		µg/kg wet		20.0		103	70-130	3	25
sec-Butylbenzene	21.3		µg/kg wet		20.0		107	70-130	2	25
tert-Butylbenzene	21.5		µg/kg wet		20.0		108	70-130	2	25
Carbon disulfide	18.6		µg/kg wet		20.0		93	70-130	5	25
Carbon tetrachloride	18.8		µg/kg wet		20.0		94	70-130	5	25
Chlorobenzene	21.2		µg/kg wet		20.0		106	70-130	1	25
Chloroethane	17.7		µg/kg wet		20.0		88	70-130	2	50
Chloroform	16.9		µg/kg wet		20.0		85	70-130	3	25
Chloromethane	16.2		µg/kg wet		20.0		81	70-130	1	25
2-Chlorotoluene	20.4		µg/kg wet		20.0		102	70-130	4	25
4-Chlorotoluene	21.0		µg/kg wet		20.0		105	70-130	2	25
1,2-Dibromo-3-chloropropane	21.9		µg/kg wet		20.0		109	70-130	7	25
Dibromochloromethane	19.7		µg/kg wet		20.0		98	70-130	4	50
1,2-Dibromoethane (EDB)	18.9		µg/kg wet		20.0		95	70-130	6	25
Dibromomethane	18.5		µg/kg wet		20.0		93	70-130	7	25
1,2-Dichlorobenzene	20.6		µg/kg wet		20.0		103	70-130	4	25
1,3-Dichlorobenzene	21.7		µg/kg wet		20.0		109	70-130	3	25
1,4-Dichlorobenzene	20.1		µg/kg wet		20.0		100	70-130	2	25
Dichlorodifluoromethane (Freon12)	19.3		µg/kg wet		20.0		96	70-130	4	50
1,1-Dichloroethane	17.3		µg/kg wet		20.0		86	70-130	1	25
1,2-Dichloroethane	17.0		µg/kg wet		20.0		85	70-130	4	25
1,1-Dichloroethene	19.0		µg/kg wet		20.0		95	70-130	3	25
cis-1,2-Dichloroethene	17.9		µg/kg wet		20.0		90	70-130	3	25
trans-1,2-Dichloroethene	18.2		µg/kg wet		20.0		91	70-130	4	25
1,2-Dichloropropane	17.4		µg/kg wet		20.0		87	70-130	3	25
1,3-Dichloropropane	18.3		µg/kg wet		20.0		92	70-130	5	25
2,2-Dichloropropane	17.7		µg/kg wet		20.0		89	70-130	5	25
1,1-Dichloropropene	18.2		µg/kg wet		20.0		91	70-130	3	25
cis-1,3-Dichloropropene	18.3		µg/kg wet		20.0		91	70-130	3	25
trans-1,3-Dichloropropene	19.1		µg/kg wet		20.0		95	70-130	5	25
Ethylbenzene	21.0		µg/kg wet		20.0		105	70-130	2	25
Hexachlorobutadiene	20.5		µg/kg wet		20.0		103	70-130	0.3	50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103983 - SW846 5035A Soil (low level)										
LCS Dup (1103983-BSD1)					Prepared & Analyzed: 08-Mar-11					
2-Hexanone (MBK)	18.2		µg/kg wet		20.0		91	70-130	8	25
Isopropylbenzene	21.2		µg/kg wet		20.0		106	70-130	4	25
4-Isopropyltoluene	20.4		µg/kg wet		20.0		102	70-130	3	25
Methyl tert-butyl ether	18.4		µg/kg wet		20.0		92	70-130	4	25
4-Methyl-2-pentanone (MIBK)	21.0		µg/kg wet		20.0		105	70-130	0.7	50
Methylene chloride	17.9		µg/kg wet		20.0		89	70-130	4	25
Naphthalene	18.4		µg/kg wet		20.0		92	70-130	5	25
n-Propylbenzene	21.4		µg/kg wet		20.0		107	70-130	3	25
Styrene	21.4		µg/kg wet		20.0		107	70-130	3	25
1,1,1,2-Tetrachloroethane	22.3		µg/kg wet		20.0		111	70-130	0.3	25
1,1,2,2-Tetrachloroethane	21.9		µg/kg wet		20.0		109	70-130	5	25
Tetrachloroethene	18.9		µg/kg wet		20.0		94	70-130	3	25
Toluene	17.1		µg/kg wet		20.0		86	70-130	3	25
1,2,3-Trichlorobenzene	21.4		µg/kg wet		20.0		107	70-130	3	25
1,2,4-Trichlorobenzene	20.6		µg/kg wet		20.0		103	70-130	5	25
1,3,5-Trichlorobenzene	21.5		µg/kg wet		20.0		107	70-130	3	25
1,1,1-Trichloroethane	18.0		µg/kg wet		20.0		90	70-130	5	25
1,1,2-Trichloroethane	18.4		µg/kg wet		20.0		92	70-130	3	25
Trichloroethene	18.4		µg/kg wet		20.0		92	70-130	0.5	25
Trichlorofluoromethane (Freon 11)	18.6		µg/kg wet		20.0		93	70-130	3	50
1,2,3-Trichloropropane	21.6		µg/kg wet		20.0		108	70-130	5	25
1,2,4-Trimethylbenzene	21.5		µg/kg wet		20.0		107	70-130	2	25
1,3,5-Trimethylbenzene	21.1		µg/kg wet		20.0		106	70-130	2	25
Vinyl chloride	17.9		µg/kg wet		20.0		90	70-130	6	25
m,p-Xylene	43.2		µg/kg wet		40.0		108	70-130	2	25
o-Xylene	21.4		µg/kg wet		20.0		107	70-130	2	25
Tetrahydrofuran	17.7		µg/kg wet		20.0		88	70-130	12	25
Ethyl ether	17.9		µg/kg wet		20.0		90	70-130	4	50
Tert-amyl methyl ether	16.5		µg/kg wet		20.0		83	70-130	4	25
Ethyl tert-butyl ether	17.9		µg/kg wet		20.0		89	70-130	2	25
Di-isopropyl ether	16.8		µg/kg wet		20.0		84	70-130	4	25
Tert-Butanol / butyl alcohol	180		µg/kg wet		200		90	70-130	13	25
1,4-Dioxane	182		µg/kg wet		200		91	70-130	3	25
trans-1,4-Dichloro-2-butene	24.2		µg/kg wet		20.0		121	70-130	2	25
Ethanol	295		µg/kg wet		400		74	70-130	10	30
Surrogate: 4-Bromofluorobenzene	*51.7*		µg/kg wet		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*47.5*		µg/kg wet		*50.0*		*95*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*47.8*		µg/kg wet		*50.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*48.8*		µg/kg wet		*50.0*		*98*	*70-130*		
Batch 1104079 - SW846 5030 Soil (high level)										
Blank (1104079-BLK1)					Prepared & Analyzed: 09-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg wet	50.0						
Acetone	BRL		µg/kg wet	500						
Acrylonitrile	BRL		µg/kg wet	50.0						
Benzene	BRL		µg/kg wet	50.0						
Bromobenzene	BRL		µg/kg wet	50.0						
Bromochloromethane	BRL		µg/kg wet	50.0						
Bromodichloromethane	BRL		µg/kg wet	50.0						
Bromoform	BRL		µg/kg wet	50.0						
Bromomethane	BRL		µg/kg wet	100						
2-Butanone (MEK)	BRL		µg/kg wet	500						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104079 - SW846 5030 Soil (high level)										
Blank (1104079-BLK1)					Prepared & Analyzed: 09-Mar-11					
n-Butylbenzene	BRL		µg/kg wet	50.0						
sec-Butylbenzene	BRL		µg/kg wet	50.0						
tert-Butylbenzene	BRL		µg/kg wet	50.0						
Carbon disulfide	BRL		µg/kg wet	100						
Carbon tetrachloride	BRL		µg/kg wet	50.0						
Chlorobenzene	BRL		µg/kg wet	50.0						
Chloroethane	BRL		µg/kg wet	100						
Chloroform	BRL		µg/kg wet	50.0						
Chloromethane	BRL		µg/kg wet	100						
2-Chlorotoluene	BRL		µg/kg wet	50.0						
4-Chlorotoluene	BRL		µg/kg wet	50.0						
1,2-Dibromo-3-chloropropane	BRL		µg/kg wet	100						
Dibromochloromethane	BRL		µg/kg wet	50.0						
1,2-Dibromoethane (EDB)	BRL		µg/kg wet	50.0						
Dibromomethane	BRL		µg/kg wet	50.0						
1,2-Dichlorobenzene	BRL		µg/kg wet	50.0						
1,3-Dichlorobenzene	BRL		µg/kg wet	50.0						
1,4-Dichlorobenzene	BRL		µg/kg wet	50.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet	100						
1,1-Dichloroethane	BRL		µg/kg wet	50.0						
1,2-Dichloroethane	BRL		µg/kg wet	50.0						
1,1-Dichloroethene	BRL		µg/kg wet	50.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet	50.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet	50.0						
1,2-Dichloropropane	BRL		µg/kg wet	50.0						
1,3-Dichloropropane	BRL		µg/kg wet	50.0						
2,2-Dichloropropane	BRL		µg/kg wet	50.0						
1,1-Dichloropropene	BRL		µg/kg wet	50.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet	50.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet	50.0						
Ethylbenzene	BRL		µg/kg wet	50.0						
Hexachlorobutadiene	BRL		µg/kg wet	50.0						
2-Hexanone (MBK)	BRL		µg/kg wet	500						
Isopropylbenzene	BRL		µg/kg wet	50.0						
4-Isopropyltoluene	BRL		µg/kg wet	50.0						
Methyl tert-butyl ether	BRL		µg/kg wet	50.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg wet	500						
Methylene chloride	BRL		µg/kg wet	100						
Naphthalene	BRL		µg/kg wet	50.0						
n-Propylbenzene	BRL		µg/kg wet	50.0						
Styrene	BRL		µg/kg wet	50.0						
1,1,1,2-Tetrachloroethane	BRL		µg/kg wet	50.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet	50.0						
Tetrachloroethene	BRL		µg/kg wet	50.0						
Toluene	BRL		µg/kg wet	50.0						
1,2,3-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,3,5-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,1,1-Trichloroethane	BRL		µg/kg wet	50.0						
1,1,2-Trichloroethane	BRL		µg/kg wet	50.0						
Trichloroethene	BRL		µg/kg wet	50.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet	50.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104079 - SW846 5030 Soil (high level)										
Blank (1104079-BLK1)					Prepared & Analyzed: 09-Mar-11					
1,2,3-Trichloropropane	BRL		µg/kg wet	50.0						
1,2,4-Trimethylbenzene	BRL		µg/kg wet	50.0						
1,3,5-Trimethylbenzene	BRL		µg/kg wet	50.0						
Vinyl chloride	BRL		µg/kg wet	50.0						
m,p-Xylene	BRL		µg/kg wet	100						
o-Xylene	BRL		µg/kg wet	50.0						
Tetrahydrofuran	BRL		µg/kg wet	100						
Ethyl ether	BRL		µg/kg wet	50.0						
Tert-amyl methyl ether	BRL		µg/kg wet	50.0						
Ethyl tert-butyl ether	BRL		µg/kg wet	50.0						
Di-isopropyl ether	BRL		µg/kg wet	50.0						
Tert-Butanol / butyl alcohol	BRL		µg/kg wet	500						
1,4-Dioxane	BRL		µg/kg wet	1000						
trans-1,4-Dichloro-2-butene	BRL		µg/kg wet	250						
Ethanol	BRL		µg/kg wet	20000						
Surrogate: 4-Bromofluorobenzene	*28.7*		µg/kg wet		*30.0*		*96*	*70-130*		
Surrogate: Toluene-d8	*27.0*		µg/kg wet		*30.0*		*90*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*31.1*		µg/kg wet		*30.0*		*104*	*70-130*		
LCS (1104079-BS1)					Prepared & Analyzed: 09-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.1		µg/kg wet		20.0		101	70-130		
Acetone	18.5		µg/kg wet		20.0		93	70-130		
Acrylonitrile	18.7		µg/kg wet		20.0		94	70-130		
Benzene	18.5		µg/kg wet		20.0		92	70-130		
Bromobenzene	19.9		µg/kg wet		20.0		100	70-130		
Bromochloromethane	21.6		µg/kg wet		20.0		108	70-130		
Bromodichloromethane	20.3		µg/kg wet		20.0		101	70-130		
Bromoform	19.8		µg/kg wet		20.0		99	70-130		
Bromomethane	19.8		µg/kg wet		20.0		99	70-130		
2-Butanone (MEK)	19.2		µg/kg wet		20.0		96	70-130		
n-Butylbenzene	19.8		µg/kg wet		20.0		99	70-130		
sec-Butylbenzene	20.5		µg/kg wet		20.0		103	70-130		
tert-Butylbenzene	20.3		µg/kg wet		20.0		101	70-130		
Carbon disulfide	16.3		µg/kg wet		20.0		81	70-130		
Carbon tetrachloride	19.3		µg/kg wet		20.0		96	70-130		
Chlorobenzene	19.0		µg/kg wet		20.0		95	70-130		
Chloroethane	17.5		µg/kg wet		20.0		88	70-130		
Chloroform	20.1		µg/kg wet		20.0		100	70-130		
Chloromethane	17.2		µg/kg wet		20.0		86	70-130		
2-Chlorotoluene	19.4		µg/kg wet		20.0		97	70-130		
4-Chlorotoluene	20.2		µg/kg wet		20.0		101	70-130		
1,2-Dibromo-3-chloropropane	21.2		µg/kg wet		20.0		106	70-130		
Dibromochloromethane	19.8		µg/kg wet		20.0		99	70-130		
1,2-Dibromoethane (EDB)	19.6		µg/kg wet		20.0		98	70-130		
Dibromomethane	21.6		µg/kg wet		20.0		108	70-130		
1,2-Dichlorobenzene	19.6		µg/kg wet		20.0		98	70-130		
1,3-Dichlorobenzene	19.8		µg/kg wet		20.0		99	70-130		
1,4-Dichlorobenzene	18.8		µg/kg wet		20.0		94	70-130		
Dichlorodifluoromethane (Freon12)	19.9		µg/kg wet		20.0		100	70-130		
1,1-Dichloroethane	18.3		µg/kg wet		20.0		91	70-130		
1,2-Dichloroethane	19.9		µg/kg wet		20.0		99	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104079 - SW846 5030 Soil (high level)										
LCS (1104079-BS1)					Prepared & Analyzed: 09-Mar-11					
1,1-Dichloroethene	20.0		µg/kg wet		20.0		100	70-130		
cis-1,2-Dichloroethene	19.7		µg/kg wet		20.0		98	70-130		
trans-1,2-Dichloroethene	19.7		µg/kg wet		20.0		98	70-130		
1,2-Dichloropropane	18.2		µg/kg wet		20.0		91	70-130		
1,3-Dichloropropane	18.5		µg/kg wet		20.0		92	70-130		
2,2-Dichloropropane	16.6		µg/kg wet		20.0		83	70-130		
1,1-Dichloropropene	19.1		µg/kg wet		20.0		95	70-130		
cis-1,3-Dichloropropene	17.4		µg/kg wet		20.0		87	70-130		
trans-1,3-Dichloropropene	17.9		µg/kg wet		20.0		90	70-130		
Ethylbenzene	19.4		µg/kg wet		20.0		97	70-130		
Hexachlorobutadiene	20.7		µg/kg wet		20.0		104	70-130		
2-Hexanone (MBK)	19.7		µg/kg wet		20.0		98	70-130		
Isopropylbenzene	19.8		µg/kg wet		20.0		99	70-130		
4-Isopropyltoluene	19.5		µg/kg wet		20.0		98	70-130		
Methyl tert-butyl ether	18.8		µg/kg wet		20.0		94	70-130		
4-Methyl-2-pentanone (MIBK)	17.7		µg/kg wet		20.0		89	70-130		
Methylene chloride	18.2		µg/kg wet		20.0		91	70-130		
Naphthalene	21.4		µg/kg wet		20.0		107	70-130		
n-Propylbenzene	20.0		µg/kg wet		20.0		100	70-130		
Styrene	20.0		µg/kg wet		20.0		100	70-130		
1,1,1,2-Tetrachloroethane	19.7		µg/kg wet		20.0		98	70-130		
1,1,2,2-Tetrachloroethane	23.2		µg/kg wet		20.0		116	70-130		
Tetrachloroethene	17.8		µg/kg wet		20.0		89	70-130		
Toluene	17.5		µg/kg wet		20.0		87	70-130		
1,2,3-Trichlorobenzene	20.6		µg/kg wet		20.0		103	70-130		
1,2,4-Trichlorobenzene	19.8		µg/kg wet		20.0		99	70-130		
1,3,5-Trichlorobenzene	18.7		µg/kg wet		20.0		94	70-130		
1,1,1-Trichloroethane	20.7		µg/kg wet		20.0		103	70-130		
1,1,2-Trichloroethane	19.5		µg/kg wet		20.0		97	70-130		
Trichloroethene	19.6		µg/kg wet		20.0		98	70-130		
Trichlorofluoromethane (Freon 11)	21.7		µg/kg wet		20.0		108	70-130		
1,2,3-Trichloropropane	21.7		µg/kg wet		20.0		108	70-130		
1,2,4-Trimethylbenzene	20.4		µg/kg wet		20.0		102	70-130		
1,3,5-Trimethylbenzene	20.5		µg/kg wet		20.0		103	70-130		
Vinyl chloride	20.3		µg/kg wet		20.0		102	70-130		
m,p-Xylene	39.5		µg/kg wet		40.0		99	70-130		
o-Xylene	19.6		µg/kg wet		20.0		98	70-130		
Tetrahydrofuran	16.5		µg/kg wet		20.0		83	70-130		
Ethyl ether	19.4		µg/kg wet		20.0		97	70-130		
Tert-amyl methyl ether	16.4		µg/kg wet		20.0		82	70-130		
Ethyl tert-butyl ether	16.8		µg/kg wet		20.0		84	70-130		
Di-isopropyl ether	17.0		µg/kg wet		20.0		85	70-130		
Tert-Butanol / butyl alcohol	161		µg/kg wet		200		81	70-130		
1,4-Dioxane	185		µg/kg wet		200		92	70-130		
trans-1,4-Dichloro-2-butene	19.8		µg/kg wet		20.0		99	70-130		
Ethanol	397		µg/kg wet		400		99	70-130		
Surrogate: 4-Bromofluorobenzene	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*27.0*		µg/kg wet		*30.0*		*90*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*31.1*		µg/kg wet		*30.0*		*104*	*70-130*		
Surrogate: Dibromofluoromethane	*32.9*		µg/kg wet		*30.0*		*110*	*70-130*		
LCS Dup (1104079-BSD1)					Prepared & Analyzed: 09-Mar-11					

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104079 - SW846 5030 Soil (high level)										
LCS Dup (1104079-BSD1)					Prepared & Analyzed: 09-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.4		µg/kg wet		20.0		102	70-130	1	25
Acetone	18.5		µg/kg wet		20.0		92	70-130	0.2	50
Acrylonitrile	19.5		µg/kg wet		20.0		97	70-130	4	25
Benzene	18.9		µg/kg wet		20.0		94	70-130	2	25
Bromobenzene	20.3		µg/kg wet		20.0		102	70-130	2	25
Bromochloromethane	21.9		µg/kg wet		20.0		110	70-130	2	25
Bromodichloromethane	20.6		µg/kg wet		20.0		103	70-130	2	25
Bromoform	20.1		µg/kg wet		20.0		101	70-130	2	25
Bromomethane	21.0		µg/kg wet		20.0		105	70-130	5	50
2-Butanone (MEK)	19.4		µg/kg wet		20.0		97	70-130	0.8	50
n-Butylbenzene	20.2		µg/kg wet		20.0		101	70-130	2	25
sec-Butylbenzene	21.2		µg/kg wet		20.0		106	70-130	3	25
tert-Butylbenzene	21.0		µg/kg wet		20.0		105	70-130	4	25
Carbon disulfide	16.8		µg/kg wet		20.0		84	70-130	3	25
Carbon tetrachloride	20.1		µg/kg wet		20.0		100	70-130	4	25
Chlorobenzene	19.4		µg/kg wet		20.0		97	70-130	2	25
Chloroethane	18.0		µg/kg wet		20.0		90	70-130	3	50
Chloroform	20.5		µg/kg wet		20.0		103	70-130	2	25
Chloromethane	18.8		µg/kg wet		20.0		94	70-130	9	25
2-Chlorotoluene	20.1		µg/kg wet		20.0		101	70-130	4	25
4-Chlorotoluene	20.8		µg/kg wet		20.0		104	70-130	3	25
1,2-Dibromo-3-chloropropane	22.4		µg/kg wet		20.0		112	70-130	6	25
Dibromochloromethane	20.3		µg/kg wet		20.0		102	70-130	3	50
1,2-Dibromoethane (EDB)	19.8		µg/kg wet		20.0		99	70-130	1	25
Dibromomethane	21.8		µg/kg wet		20.0		109	70-130	0.8	25
1,2-Dichlorobenzene	20.0		µg/kg wet		20.0		100	70-130	2	25
1,3-Dichlorobenzene	20.4		µg/kg wet		20.0		102	70-130	3	25
1,4-Dichlorobenzene	19.4		µg/kg wet		20.0		97	70-130	3	25
Dichlorodifluoromethane (Freon12)	20.4		µg/kg wet		20.0		102	70-130	2	50
1,1-Dichloroethane	18.7		µg/kg wet		20.0		94	70-130	2	25
1,2-Dichloroethane	20.1		µg/kg wet		20.0		101	70-130	1	25
1,1-Dichloroethene	20.2		µg/kg wet		20.0		101	70-130	1	25
cis-1,2-Dichloroethene	20.1		µg/kg wet		20.0		100	70-130	2	25
trans-1,2-Dichloroethene	20.2		µg/kg wet		20.0		101	70-130	3	25
1,2-Dichloropropane	18.2		µg/kg wet		20.0		91	70-130	0.5	25
1,3-Dichloropropane	19.0		µg/kg wet		20.0		95	70-130	3	25
2,2-Dichloropropane	17.3		µg/kg wet		20.0		86	70-130	4	25
1,1-Dichloropropene	19.8		µg/kg wet		20.0		99	70-130	4	25
cis-1,3-Dichloropropene	17.6		µg/kg wet		20.0		88	70-130	1	25
trans-1,3-Dichloropropene	17.8		µg/kg wet		20.0		89	70-130	0.5	25
Ethylbenzene	20.1		µg/kg wet		20.0		100	70-130	3	25
Hexachlorobutadiene	20.9		µg/kg wet		20.0		104	70-130	0.7	50
2-Hexanone (MBK)	19.3		µg/kg wet		20.0		96	70-130	2	25
Isopropylbenzene	20.2		µg/kg wet		20.0		101	70-130	2	25
4-Isopropyltoluene	20.1		µg/kg wet		20.0		100	70-130	3	25
Methyl tert-butyl ether	19.2		µg/kg wet		20.0		96	70-130	2	25
4-Methyl-2-pentanone (MIBK)	17.1		µg/kg wet		20.0		86	70-130	4	50
Methylene chloride	18.9		µg/kg wet		20.0		95	70-130	4	25
Naphthalene	22.0		µg/kg wet		20.0		110	70-130	2	25
n-Propylbenzene	21.1		µg/kg wet		20.0		105	70-130	5	25
Styrene	21.0		µg/kg wet		20.0		105	70-130	5	25
1,1,1,2-Tetrachloroethane	20.1		µg/kg wet		20.0		101	70-130	2	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104079 - SW846 5030 Soil (high level)										
LCS Dup (1104079-BSD1)					Prepared & Analyzed: 09-Mar-11					
1,1,2,2-Tetrachloroethane	24.1		µg/kg wet		20.0		120	70-130	4	25
Tetrachloroethene	18.3		µg/kg wet		20.0		92	70-130	3	25
Toluene	17.8		µg/kg wet		20.0		89	70-130	2	25
1,2,3-Trichlorobenzene	20.7		µg/kg wet		20.0		104	70-130	0.4	25
1,2,4-Trichlorobenzene	19.8		µg/kg wet		20.0		99	70-130	0.1	25
1,3,5-Trichlorobenzene	19.0		µg/kg wet		20.0		95	70-130	1	25
1,1,1-Trichloroethane	21.3		µg/kg wet		20.0		106	70-130	3	25
1,1,2-Trichloroethane	20.0		µg/kg wet		20.0		100	70-130	3	25
Trichloroethene	19.9		µg/kg wet		20.0		99	70-130	2	25
Trichlorofluoromethane (Freon 11)	22.4		µg/kg wet		20.0		112	70-130	3	50
1,2,3-Trichloropropane	22.2		µg/kg wet		20.0		111	70-130	2	25
1,2,4-Trimethylbenzene	21.1		µg/kg wet		20.0		105	70-130	3	25
1,3,5-Trimethylbenzene	21.1		µg/kg wet		20.0		105	70-130	3	25
Vinyl chloride	20.5		µg/kg wet		20.0		102	70-130	0.8	25
m,p-Xylene	40.7		µg/kg wet		40.0		102	70-130	3	25
o-Xylene	20.3		µg/kg wet		20.0		102	70-130	3	25
Tetrahydrofuran	17.3		µg/kg wet		20.0		87	70-130	5	25
Ethyl ether	19.6		µg/kg wet		20.0		98	70-130	0.8	50
Tert-amyl methyl ether	16.7		µg/kg wet		20.0		83	70-130	2	25
Ethyl tert-butyl ether	17.0		µg/kg wet		20.0		85	70-130	0.8	25
Di-isopropyl ether	17.4		µg/kg wet		20.0		87	70-130	3	25
Tert-Butanol / butyl alcohol	165		µg/kg wet		200		82	70-130	2	25
1,4-Dioxane	196		µg/kg wet		200		98	70-130	6	25
trans-1,4-Dichloro-2-butene	19.9		µg/kg wet		20.0		100	70-130	0.4	25
Ethanol	386		µg/kg wet		400		96	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*27.1*		µg/kg wet		*30.0*		*90*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*32.7*		µg/kg wet		*30.0*		*109*	*70-130*		
Batch 1104178 - SW846 5030 Soil (high level)										
Blank (1104178-BLK1)					Prepared & Analyzed: 10-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg wet	50.0						
Acetone	BRL		µg/kg wet	500						
Acrylonitrile	BRL		µg/kg wet	50.0						
Benzene	BRL		µg/kg wet	50.0						
Bromobenzene	BRL		µg/kg wet	50.0						
Bromochloromethane	BRL		µg/kg wet	50.0						
Bromodichloromethane	BRL		µg/kg wet	50.0						
Bromoform	BRL		µg/kg wet	50.0						
Bromomethane	BRL		µg/kg wet	100						
2-Butanone (MEK)	BRL		µg/kg wet	500						
n-Butylbenzene	BRL		µg/kg wet	50.0						
sec-Butylbenzene	BRL		µg/kg wet	50.0						
tert-Butylbenzene	BRL		µg/kg wet	50.0						
Carbon disulfide	BRL		µg/kg wet	100						
Carbon tetrachloride	BRL		µg/kg wet	50.0						
Chlorobenzene	BRL		µg/kg wet	50.0						
Chloroethane	BRL		µg/kg wet	100						
Chloroform	BRL		µg/kg wet	50.0						
Chloromethane	BRL		µg/kg wet	100						
2-Chlorotoluene	BRL		µg/kg wet	50.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104178 - SW846 5030 Soil (high level)										
Blank (1104178-BLK1)					Prepared & Analyzed: 10-Mar-11					
4-Chlorotoluene	BRL		µg/kg wet	50.0						
1,2-Dibromo-3-chloropropane	BRL		µg/kg wet	100						
Dibromochloromethane	BRL		µg/kg wet	50.0						
1,2-Dibromoethane (EDB)	BRL		µg/kg wet	50.0						
Dibromomethane	BRL		µg/kg wet	50.0						
1,2-Dichlorobenzene	BRL		µg/kg wet	50.0						
1,3-Dichlorobenzene	BRL		µg/kg wet	50.0						
1,4-Dichlorobenzene	BRL		µg/kg wet	50.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet	100						
1,1-Dichloroethane	BRL		µg/kg wet	50.0						
1,2-Dichloroethane	BRL		µg/kg wet	50.0						
1,1-Dichloroethene	BRL		µg/kg wet	50.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet	50.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet	50.0						
1,2-Dichloropropane	BRL		µg/kg wet	50.0						
1,3-Dichloropropane	BRL		µg/kg wet	50.0						
2,2-Dichloropropane	BRL		µg/kg wet	50.0						
1,1-Dichloropropene	BRL		µg/kg wet	50.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet	50.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet	50.0						
Ethylbenzene	BRL		µg/kg wet	50.0						
Hexachlorobutadiene	BRL		µg/kg wet	50.0						
2-Hexanone (MBK)	BRL		µg/kg wet	500						
Isopropylbenzene	BRL		µg/kg wet	50.0						
4-Isopropyltoluene	BRL		µg/kg wet	50.0						
Methyl tert-butyl ether	BRL		µg/kg wet	50.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg wet	500						
Methylene chloride	BRL		µg/kg wet	100						
Naphthalene	BRL		µg/kg wet	50.0						
n-Propylbenzene	BRL		µg/kg wet	50.0						
Styrene	BRL		µg/kg wet	50.0						
1,1,1,2-Tetrachloroethane	BRL		µg/kg wet	50.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet	50.0						
Tetrachloroethene	BRL		µg/kg wet	50.0						
Toluene	BRL		µg/kg wet	50.0						
1,2,3-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,3,5-Trichlorobenzene	BRL		µg/kg wet	50.0						
1,1,1-Trichloroethane	BRL		µg/kg wet	50.0						
1,1,2-Trichloroethane	BRL		µg/kg wet	50.0						
Trichloroethene	BRL		µg/kg wet	50.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet	50.0						
1,2,3-Trichloropropane	BRL		µg/kg wet	50.0						
1,2,4-Trimethylbenzene	BRL		µg/kg wet	50.0						
1,3,5-Trimethylbenzene	BRL		µg/kg wet	50.0						
Vinyl chloride	BRL		µg/kg wet	50.0						
m,p-Xylene	BRL		µg/kg wet	100						
o-Xylene	BRL		µg/kg wet	50.0						
Tetrahydrofuran	BRL		µg/kg wet	100						
Ethyl ether	BRL		µg/kg wet	50.0						
Tert-amyl methyl ether	BRL		µg/kg wet	50.0						
Ethyl tert-butyl ether	BRL		µg/kg wet	50.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104178 - SW846 5030 Soil (high level)										
Blank (1104178-BLK1)					Prepared & Analyzed: 10-Mar-11					
Di-isopropyl ether	BRL		µg/kg wet	50.0						
Tert-Butanol / butyl alcohol	BRL		µg/kg wet	500						
1,4-Dioxane	BRL		µg/kg wet	1000						
trans-1,4-Dichloro-2-butene	BRL		µg/kg wet	250						
Ethanol	BRL		µg/kg wet	20000						
Surrogate: 4-Bromofluorobenzene	*29.1*		µg/kg wet		*30.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*27.3*		µg/kg wet		*30.0*		*91*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.6*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Dibromofluoromethane	*30.7*		µg/kg wet		*30.0*		*102*	*70-130*		
LCS (1104178-BS1)					Prepared & Analyzed: 10-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.2		µg/kg wet		20.0		106	70-130		
Acetone	21.3		µg/kg wet		20.0		107	70-130		
Acrylonitrile	19.6		µg/kg wet		20.0		98	70-130		
Benzene	19.2		µg/kg wet		20.0		96	70-130		
Bromobenzene	21.3		µg/kg wet		20.0		106	70-130		
Bromochloromethane	21.7		µg/kg wet		20.0		109	70-130		
Bromodichloromethane	20.5		µg/kg wet		20.0		102	70-130		
Bromoform	19.9		µg/kg wet		20.0		99	70-130		
Bromomethane	22.7		µg/kg wet		20.0		113	70-130		
2-Butanone (MEK)	20.3		µg/kg wet		20.0		102	70-130		
n-Butylbenzene	20.6		µg/kg wet		20.0		103	70-130		
sec-Butylbenzene	22.2		µg/kg wet		20.0		111	70-130		
tert-Butylbenzene	21.7		µg/kg wet		20.0		109	70-130		
Carbon disulfide	16.5		µg/kg wet		20.0		83	70-130		
Carbon tetrachloride	19.3		µg/kg wet		20.0		97	70-130		
Chlorobenzene	20.2		µg/kg wet		20.0		101	70-130		
Chloroethane	18.2		µg/kg wet		20.0		91	70-130		
Chloroform	20.7		µg/kg wet		20.0		104	70-130		
Chloromethane	26.2		µg/kg wet		20.0		131	70-130		
2-Chlorotoluene	22.7		µg/kg wet		20.0		113	70-130		
4-Chlorotoluene	21.8		µg/kg wet		20.0		109	70-130		
1,2-Dibromo-3-chloropropane	21.5		µg/kg wet		20.0		108	70-130		
Dibromochloromethane	20.4		µg/kg wet		20.0		102	70-130		
1,2-Dibromoethane (EDB)	20.6		µg/kg wet		20.0		103	70-130		
Dibromomethane	22.3		µg/kg wet		20.0		111	70-130		
1,2-Dichlorobenzene	20.2		µg/kg wet		20.0		101	70-130		
1,3-Dichlorobenzene	21.7		µg/kg wet		20.0		108	70-130		
1,4-Dichlorobenzene	19.9		µg/kg wet		20.0		99	70-130		
Dichlorodifluoromethane (Freon12)	21.6		µg/kg wet		20.0		108	70-130		
1,1-Dichloroethane	18.9		µg/kg wet		20.0		94	70-130		
1,2-Dichloroethane	20.5		µg/kg wet		20.0		103	70-130		
1,1-Dichloroethene	20.6		µg/kg wet		20.0		103	70-130		
cis-1,2-Dichloroethene	20.3		µg/kg wet		20.0		102	70-130		
trans-1,2-Dichloroethene	20.8		µg/kg wet		20.0		104	70-130		
1,2-Dichloropropane	18.3		µg/kg wet		20.0		92	70-130		
1,3-Dichloropropane	19.7		µg/kg wet		20.0		99	70-130		
2,2-Dichloropropane	17.2		µg/kg wet		20.0		86	70-130		
1,1-Dichloropropene	20.2		µg/kg wet		20.0		101	70-130		
cis-1,3-Dichloropropene	17.8		µg/kg wet		20.0		89	70-130		
trans-1,3-Dichloropropene	17.9		µg/kg wet		20.0		89	70-130		
Ethylbenzene	20.8		µg/kg wet		20.0		104	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104178 - SW846 5030 Soil (high level)										
LCS (1104178-BS1)					Prepared & Analyzed: 10-Mar-11					
Hexachlorobutadiene	21.9		µg/kg wet		20.0		110	70-130		
2-Hexanone (MBK)	18.8		µg/kg wet		20.0		94	70-130		
Isopropylbenzene	21.1		µg/kg wet		20.0		106	70-130		
4-Isopropyltoluene	20.8		µg/kg wet		20.0		104	70-130		
Methyl tert-butyl ether	19.4		µg/kg wet		20.0		97	70-130		
4-Methyl-2-pentanone (MIBK)	17.7		µg/kg wet		20.0		88	70-130		
Methylene chloride	18.7		µg/kg wet		20.0		94	70-130		
Naphthalene	22.3		µg/kg wet		20.0		112	70-130		
n-Propylbenzene	22.3		µg/kg wet		20.0		112	70-130		
Styrene	21.5		µg/kg wet		20.0		108	70-130		
1,1,1,2-Tetrachloroethane	19.9		µg/kg wet		20.0		100	70-130		
1,1,2,2-Tetrachloroethane	23.9		µg/kg wet		20.0		120	70-130		
Tetrachloroethene	19.8		µg/kg wet		20.0		99	70-130		
Toluene	18.8		µg/kg wet		20.0		94	70-130		
1,2,3-Trichlorobenzene	21.7		µg/kg wet		20.0		108	70-130		
1,2,4-Trichlorobenzene	20.4		µg/kg wet		20.0		102	70-130		
1,3,5-Trichlorobenzene	19.8		µg/kg wet		20.0		99	70-130		
1,1,1-Trichloroethane	20.8		µg/kg wet		20.0		104	70-130		
1,1,2-Trichloroethane	20.8		µg/kg wet		20.0		104	70-130		
Trichloroethene	21.0		µg/kg wet		20.0		105	70-130		
Trichlorofluoromethane (Freon 11)	22.7		µg/kg wet		20.0		114	70-130		
1,2,3-Trichloropropane	22.8		µg/kg wet		20.0		114	70-130		
1,2,4-Trimethylbenzene	22.2		µg/kg wet		20.0		111	70-130		
1,3,5-Trimethylbenzene	22.0		µg/kg wet		20.0		110	70-130		
Vinyl chloride	17.8		µg/kg wet		20.0		89	70-130		
m,p-Xylene	42.3		µg/kg wet		40.0		106	70-130		
o-Xylene	21.0		µg/kg wet		20.0		105	70-130		
Tetrahydrofuran	18.4		µg/kg wet		20.0		92	70-130		
Ethyl ether	19.9		µg/kg wet		20.0		99	70-130		
Tert-amyl methyl ether	16.9		µg/kg wet		20.0		84	70-130		
Ethyl tert-butyl ether	17.0		µg/kg wet		20.0		85	70-130		
Di-isopropyl ether	17.0		µg/kg wet		20.0		85	70-130		
Tert-Butanol / butyl alcohol	179		µg/kg wet		200		90	70-130		
1,4-Dioxane	202		µg/kg wet		200		101	70-130		
trans-1,4-Dichloro-2-butene	20.7		µg/kg wet		20.0		103	70-130		
Ethanol	372		µg/kg wet		400		93	70-130		
Surrogate: 4-Bromofluorobenzene	*30.7*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*27.5*		µg/kg wet		*30.0*		*92*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.8*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*31.6*		µg/kg wet		*30.0*		*105*	*70-130*		
LCS Dup (1104178-BSD1)					Prepared & Analyzed: 10-Mar-11					
1,1,2-Trichlorotrifluoroethane (Freon 113)	22.0		µg/kg wet		20.0		110	70-130	4	25
Acetone	18.1		µg/kg wet		20.0		90	70-130	16	50
Acrylonitrile	18.1		µg/kg wet		20.0		90	70-130	8	25
Benzene	19.5		µg/kg wet		20.0		97	70-130	1	25
Bromobenzene	20.7		µg/kg wet		20.0		104	70-130	3	25
Bromochloromethane	21.9		µg/kg wet		20.0		110	70-130	0.9	25
Bromodichloromethane	20.9		µg/kg wet		20.0		105	70-130	2	25
Bromoform	20.4		µg/kg wet		20.0		102	70-130	3	25
Bromomethane	21.0		µg/kg wet		20.0		105	70-130	8	50
2-Butanone (MEK)	18.0		µg/kg wet		20.0		90	70-130	12	50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104178 - SW846 5030 Soil (high level)										
LCS Dup (1104178-BSD1)					Prepared & Analyzed: 10-Mar-11					
n-Butylbenzene	21.4		µg/kg wet		20.0		107	70-130	4	25
sec-Butylbenzene	22.0		µg/kg wet		20.0		110	70-130	1	25
tert-Butylbenzene	21.4		µg/kg wet		20.0		107	70-130	2	25
Carbon disulfide	16.9		µg/kg wet		20.0		85	70-130	3	25
Carbon tetrachloride	20.1		µg/kg wet		20.0		101	70-130	4	25
Chlorobenzene	19.9		µg/kg wet		20.0		100	70-130	1	25
Chloroethane	18.3		µg/kg wet		20.0		91	70-130	0.4	50
Chloroform	21.0		µg/kg wet		20.0		105	70-130	2	25
Chloromethane	19.0	QR2	µg/kg wet		20.0		95	70-130	32	25
2-Chlorotoluene	20.5		µg/kg wet		20.0		103	70-130	10	25
4-Chlorotoluene	21.5		µg/kg wet		20.0		107	70-130	1	25
1,2-Dibromo-3-chloropropane	21.3		µg/kg wet		20.0		106	70-130	1	25
Dibromochloromethane	21.2		µg/kg wet		20.0		106	70-130	4	50
1,2-Dibromoethane (EDB)	20.3		µg/kg wet		20.0		101	70-130	2	25
Dibromomethane	21.6		µg/kg wet		20.0		108	70-130	3	25
1,2-Dichlorobenzene	20.5		µg/kg wet		20.0		103	70-130	1	25
1,3-Dichlorobenzene	21.1		µg/kg wet		20.0		106	70-130	3	25
1,4-Dichlorobenzene	20.1		µg/kg wet		20.0		101	70-130	1	25
Dichlorodifluoromethane (Freon12)	22.0		µg/kg wet		20.0		110	70-130	2	50
1,1-Dichloroethane	19.5		µg/kg wet		20.0		98	70-130	3	25
1,2-Dichloroethane	20.6		µg/kg wet		20.0		103	70-130	0.4	25
1,1-Dichloroethene	20.9		µg/kg wet		20.0		104	70-130	1	25
cis-1,2-Dichloroethene	20.8		µg/kg wet		20.0		104	70-130	2	25
trans-1,2-Dichloroethene	21.2		µg/kg wet		20.0		106	70-130	2	25
1,2-Dichloropropane	18.4		µg/kg wet		20.0		92	70-130	0.4	25
1,3-Dichloropropane	19.4		µg/kg wet		20.0		97	70-130	2	25
2,2-Dichloropropane	16.4		µg/kg wet		20.0		82	70-130	5	25
1,1-Dichloropropene	20.4		µg/kg wet		20.0		102	70-130	0.9	25
cis-1,3-Dichloropropene	18.2		µg/kg wet		20.0		91	70-130	2	25
trans-1,3-Dichloropropene	18.5		µg/kg wet		20.0		92	70-130	3	25
Ethylbenzene	20.6		µg/kg wet		20.0		103	70-130	0.7	25
Hexachlorobutadiene	22.7		µg/kg wet		20.0		113	70-130	3	50
2-Hexanone (MBK)	19.0		µg/kg wet		20.0		95	70-130	1	25
Isopropylbenzene	20.9		µg/kg wet		20.0		104	70-130	1	25
4-Isopropyltoluene	21.1		µg/kg wet		20.0		106	70-130	2	25
Methyl tert-butyl ether	18.9		µg/kg wet		20.0		95	70-130	3	25
4-Methyl-2-pentanone (MIBK)	17.8		µg/kg wet		20.0		89	70-130	0.3	50
Methylene chloride	18.9		µg/kg wet		20.0		94	70-130	0.7	25
Naphthalene	22.5		µg/kg wet		20.0		113	70-130	0.8	25
n-Propylbenzene	21.5		µg/kg wet		20.0		108	70-130	4	25
Styrene	21.3		µg/kg wet		20.0		106	70-130	1	25
1,1,1,2-Tetrachloroethane	20.7		µg/kg wet		20.0		104	70-130	4	25
1,1,2,2-Tetrachloroethane	24.1		µg/kg wet		20.0		120	70-130	0.7	25
Tetrachloroethene	19.5		µg/kg wet		20.0		98	70-130	1	25
Toluene	18.8		µg/kg wet		20.0		94	70-130	0	25
1,2,3-Trichlorobenzene	22.2		µg/kg wet		20.0		111	70-130	2	25
1,2,4-Trichlorobenzene	20.9		µg/kg wet		20.0		104	70-130	2	25
1,3,5-Trichlorobenzene	20.2		µg/kg wet		20.0		101	70-130	2	25
1,1,1-Trichloroethane	21.4		µg/kg wet		20.0		107	70-130	3	25
1,1,2-Trichloroethane	20.3		µg/kg wet		20.0		102	70-130	2	25
Trichloroethene	20.8		µg/kg wet		20.0		104	70-130	0.7	25
Trichlorofluoromethane (Freon 11)	23.5		µg/kg wet		20.0		118	70-130	3	50

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104178 - SW846 5030 Soil (high level)										
LCS Dup (1104178-BSD1)					Prepared & Analyzed: 10-Mar-11					
1,2,3-Trichloropropane	21.9		µg/kg wet		20.0		110	70-130	4	25
1,2,4-Trimethylbenzene	21.5		µg/kg wet		20.0		107	70-130	3	25
1,3,5-Trimethylbenzene	21.6		µg/kg wet		20.0		108	70-130	2	25
Vinyl chloride	21.6		µg/kg wet		20.0		108	70-130	19	25
m,p-Xylene	41.8		µg/kg wet		40.0		104	70-130	1	25
o-Xylene	20.5		µg/kg wet		20.0		102	70-130	3	25
Tetrahydrofuran	16.2		µg/kg wet		20.0		81	70-130	13	25
Ethyl ether	19.4		µg/kg wet		20.0		97	70-130	2	50
Tert-amyl methyl ether	16.3		µg/kg wet		20.0		81	70-130	4	25
Ethyl tert-butyl ether	16.6		µg/kg wet		20.0		83	70-130	3	25
Di-isopropyl ether	17.2		µg/kg wet		20.0		86	70-130	1	25
Tert-Butanol / butyl alcohol	160		µg/kg wet		200		80	70-130	11	25
1,4-Dioxane	211		µg/kg wet		200		105	70-130	4	25
trans-1,4-Dichloro-2-butene	19.4		µg/kg wet		20.0		97	70-130	6	25
Ethanol	370		µg/kg wet		400		92	70-130	0.5	30
Surrogate: 4-Bromofluorobenzene	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*27.6*		µg/kg wet		*30.0*		*92*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*32.6*		µg/kg wet		*30.0*		*109*	*70-130*		

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103972 - SW846 3545A										
Blank (1103972-BLK1)						Prepared & Analyzed: 08-Mar-11				
C9-C18 Aliphatic Hydrocarbons	BRL		mg/kg wet	5.00						
C19-C36 Aliphatic Hydrocarbons	BRL		mg/kg wet	5.00						
C11-C22 Aromatic Hydrocarbons	BRL		mg/kg wet	5.00						
Unadjusted C11-C22 Aromatic Hydrocarbons	BRL		mg/kg wet	5.00						
Total Petroleum Hydrocarbons	BRL		mg/kg wet	5.00						
Unadjusted Total Petroleum Hydrocarbons	BRL		mg/kg wet	5.00						
Naphthalene	BRL		µg/kg wet	166						
2-Methylnaphthalene	BRL		µg/kg wet	166						
Acenaphthylene	BRL		µg/kg wet	166						
Acenaphthene	BRL		µg/kg wet	166						
Fluorene	BRL		µg/kg wet	166						
Phenanthrene	BRL		µg/kg wet	166						
Anthracene	BRL		µg/kg wet	166						
Fluoranthene	BRL		µg/kg wet	166						
Pyrene	BRL		µg/kg wet	166						
Benzo (a) anthracene	BRL		µg/kg wet	166						
Chrysene	BRL		µg/kg wet	166						
Benzo (b) fluoranthene	BRL		µg/kg wet	166						
Benzo (k) fluoranthene	BRL		µg/kg wet	166						
Benzo (a) pyrene	BRL		µg/kg wet	166						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	166						
Dibenzo (a,h) anthracene	BRL		µg/kg wet	166						
Benzo (g,h,i) perylene	BRL		µg/kg wet	166						
Naphthalene (aliphatic fraction)	0.00		µg/kg wet							
2-Methylnaphthalene (aliphatic fraction)	0.00		µg/kg wet							
Surrogate: 1-Chlorooctadecane	*2010*		µg/kg wet		*3330*		*60*	*40-140*		
Surrogate: Ortho-Terphenyl	*1800*		µg/kg wet		*3330*		*54*	*40-140*		
Surrogate: 2-Fluorobiphenyl	*1340*		µg/kg wet		*2670*		*50*	*40-140*		
LCS (1103972-BS1)						Prepared & Analyzed: 08-Mar-11				
C9-C18 Aliphatic Hydrocarbons	22.9		mg/kg wet	5.00	40.0		57	40-140		
C19-C36 Aliphatic Hydrocarbons	41.9		mg/kg wet	5.00	53.3		79	40-140		
C11-C22 Aromatic Hydrocarbons	71.3		mg/kg wet	5.00	113		63	40-140		
Naphthalene	2820		µg/kg wet	166	6670		42	40-140		
2-Methylnaphthalene	3140		µg/kg wet	166	6670		47	40-140		
Acenaphthylene	3720		µg/kg wet	166	6670		56	40-140		
Acenaphthene	3680		µg/kg wet	166	6670		55	40-140		
Fluorene	4070		µg/kg wet	166	6670		61	40-140		
Phenanthrene	4480		µg/kg wet	166	6670		67	40-140		
Anthracene	4590		µg/kg wet	166	6670		69	40-140		
Fluoranthene	4900		µg/kg wet	166	6670		74	40-140		
Pyrene	4880		µg/kg wet	166	6670		73	40-140		
Benzo (a) anthracene	5380		µg/kg wet	166	6670		81	40-140		
Chrysene	5080		µg/kg wet	166	6670		76	40-140		
Benzo (b) fluoranthene	5920		µg/kg wet	166	6670		89	40-140		
Benzo (k) fluoranthene	5180		µg/kg wet	166	6670		78	40-140		
Benzo (a) pyrene	5220		µg/kg wet	166	6670		78	40-140		
Indeno (1,2,3-cd) pyrene	5860		µg/kg wet	166	6670		88	40-140		
Dibenzo (a,h) anthracene	5790		µg/kg wet	166	6670		87	40-140		
Benzo (g,h,i) perylene	5810		µg/kg wet	166	6670		87	40-140		
Naphthalene (aliphatic fraction)	0.00667		µg/kg wet		6670		0.0001	0-200		
2-Methylnaphthalene (aliphatic fraction)	0.00667		µg/kg wet		6670		0.0001	0-200		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103972 - SW846 3545A										
LCS (1103972-BS1)					Prepared & Analyzed: 08-Mar-11					
Surrogate: 1-Chlorooctadecane	*2060*		µg/kg wet		*3330*		*62*	*40-140*		
Surrogate: Ortho-Terphenyl	*2000*		µg/kg wet		*3330*		*60*	*40-140*		
Surrogate: 2-Fluorobiphenyl	*1340*		µg/kg wet		*2670*		*50*	*40-140*		
Naphthalene Breakthrough	0.00		%					0-5		
2-Methylnaphthalene Breakthrough	0.00		%					0-5		
LCS (1103972-BS2)					Prepared & Analyzed: 08-Mar-11					
C9-C18 Aliphatic Hydrocarbons	28.6		mg/kg wet	5.00	40.0		72	40-140		
C19-C36 Aliphatic Hydrocarbons	44.3		mg/kg wet	5.00	53.3		83	40-140		
C11-C22 Aromatic Hydrocarbons	70.0		mg/kg wet	5.00	113		62	40-140		
Naphthalene	3340		µg/kg wet	166	6670		50	40-140		
2-Methylnaphthalene	3680		µg/kg wet	166	6670		55	40-140		
Acenaphthylene	4270		µg/kg wet	166	6670		64	40-140		
Acenaphthene	4110		µg/kg wet	166	6670		62	40-140		
Fluorene	4450		µg/kg wet	166	6670		67	40-140		
Phenanthrene	4710		µg/kg wet	166	6670		71	40-140		
Anthracene	4770		µg/kg wet	166	6670		72	40-140		
Fluoranthene	4870		µg/kg wet	166	6670		73	40-140		
Pyrene	4830		µg/kg wet	166	6670		72	40-140		
Benzo (a) anthracene	4980		µg/kg wet	166	6670		75	40-140		
Chrysene	4730		µg/kg wet	166	6670		71	40-140		
Benzo (b) fluoranthene	4990		µg/kg wet	166	6670		75	40-140		
Benzo (k) fluoranthene	4740		µg/kg wet	166	6670		71	40-140		
Benzo (a) pyrene	4870		µg/kg wet	166	6670		73	40-140		
Indeno (1,2,3-cd) pyrene	5130		µg/kg wet	166	6670		77	40-140		
Dibenzo (a,h) anthracene	5040		µg/kg wet	166	6670		76	40-140		
Benzo (g,h,i) perylene	4980		µg/kg wet	166	6670		75	40-140		
Naphthalene (aliphatic fraction)	0.00		µg/kg wet		6670			0-200		
2-Methylnaphthalene (aliphatic fraction)	0.00		µg/kg wet		6670			0-200		
Surrogate: 1-Chlorooctadecane	*2490*		µg/kg wet		*3330*		*75*	*40-140*		
Surrogate: Ortho-Terphenyl	*2230*		µg/kg wet		*3330*		*67*	*40-140*		
Surrogate: 2-Fluorobiphenyl	*1430*		µg/kg wet		*2670*		*54*	*40-140*		
Naphthalene Breakthrough	0.00		%					0-5		
2-Methylnaphthalene Breakthrough	0.00		%					0-5		
LCS Dup (1103972-BSD1)					Prepared & Analyzed: 08-Mar-11					
C9-C18 Aliphatic Hydrocarbons	23.5		mg/kg wet	5.00	40.0		59	40-140	3	25
C19-C36 Aliphatic Hydrocarbons	40.3		mg/kg wet	5.00	53.3		76	40-140	4	25
C11-C22 Aromatic Hydrocarbons	76.0		mg/kg wet	5.00	113		67	40-140	6	25
Naphthalene	2960		µg/kg wet	166	6670		44	40-140	5	25
2-Methylnaphthalene	3310		µg/kg wet	166	6670		50	40-140	5	25
Acenaphthylene	3930		µg/kg wet	166	6670		59	40-140	5	25
Acenaphthene	3960		µg/kg wet	166	6670		59	40-140	7	25
Fluorene	4400		µg/kg wet	166	6670		66	40-140	8	25
Phenanthrene	4860		µg/kg wet	166	6670		73	40-140	8	25
Anthracene	4970		µg/kg wet	166	6670		74	40-140	8	25
Fluoranthene	5180		µg/kg wet	166	6670		78	40-140	5	25
Pyrene	5130		µg/kg wet	166	6670		77	40-140	5	25
Benzo (a) anthracene	5650		µg/kg wet	166	6670		85	40-140	5	25
Chrysene	5380		µg/kg wet	166	6670		81	40-140	6	25
Benzo (b) fluoranthene	6050		µg/kg wet	166	6670		91	40-140	2	25
Benzo (k) fluoranthene	5620		µg/kg wet	166	6670		84	40-140	8	25

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103972 - SW846 3545A										
LCS Dup (1103972-BSD1)					Prepared & Analyzed: 08-Mar-11					
Benzo (a) pyrene	5710		µg/kg wet	166	6670		86	40-140	9	25
Indeno (1,2,3-cd) pyrene	6630		µg/kg wet	166	6670		99	40-140	12	25
Dibenzo (a,h) anthracene	6490		µg/kg wet	166	6670		97	40-140	11	25
Benzo (g,h,i) perylene	6550		µg/kg wet	166	6670		98	40-140	12	25
Naphthalene (aliphatic fraction)	0.00667		µg/kg wet		6670		0.0001	0-200	0	200
2-Methylnaphthalene (aliphatic fraction)	0.00667		µg/kg wet		6670		0.0001	0-200	0	200
Surrogate: 1-Chlorooctadecane	*2410*		µg/kg wet		*3330*		*72*	*40-140*		
Surrogate: Ortho-Terphenyl	*2140*		µg/kg wet		*3330*		*64*	*40-140*		
Surrogate: 2-Fluorobiphenyl	*1340*		µg/kg wet		*2670*		*50*	*40-140*		
Naphthalene Breakthrough	0.00		%					0-5		
2-Methylnaphthalene Breakthrough	0.00		%					0-5		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103895 - SW846 3050B										
Blank (1103895-BLK1)						Prepared: 07-Mar-11	Analyzed: 08-Mar-11			
Thallium	BRL		mg/kg wet	2.96						
Selenium	BRL		mg/kg wet	1.48						
Antimony	BRL		mg/kg wet	4.93						
Zinc	BRL		mg/kg wet	0.986						
Lead	BRL		mg/kg wet	1.48						
Nickel	BRL		mg/kg wet	0.986						
Silver	BRL		mg/kg wet	1.48						
Chromium	BRL		mg/kg wet	0.986						
Copper	BRL		mg/kg wet	0.986						
Cadmium	BRL		mg/kg wet	0.493						
Beryllium	BRL		mg/kg wet	0.493						
Arsenic	BRL		mg/kg wet	1.48						
Reference (1103895-SRM1)						Prepared: 07-Mar-11	Analyzed: 08-Mar-11			
Lead	44.6		mg/kg wet	1.50	46.4		96	83.3-116.9		
Antimony	39.3		mg/kg wet	5.00	61.2		64	0-220.5		
Selenium	43.5		mg/kg wet	1.50	44.9		97	79-120.7		
Thallium	58.8		mg/kg wet	3.00	61.7		95	81.3-118.7		
Zinc	69.1		mg/kg wet	1.00	70.8		98	80.9-119.1		
Nickel	29.2		mg/kg wet	1.00	29.7		99	83.8-116.2		
Chromium	35.4		mg/kg wet	1.00	35.8		99	81.8-118.2		
Copper	42.2		mg/kg wet	1.00	40.7		104	83.9-116		
Beryllium	30.1		mg/kg wet	0.500	31.3		96	83.81-116		
Silver	16.6		mg/kg wet	1.50	17.3		96	66.3-133.7		
Arsenic	43.2		mg/kg wet	1.50	46.5		93	82.9-116.6		
Cadmium	30.8		mg/kg wet	0.500	31.0		99	83.3-116.5		
Reference (1103895-SRM2)						Prepared: 07-Mar-11	Analyzed: 08-Mar-11			
Zinc	74.4		mg/kg wet	1.00	72.7		102	80.9-119.1		
Thallium	62.7		mg/kg wet	3.00	63.4		99	81.3-118.7		
Selenium	46.3		mg/kg wet	1.50	46.1		100	79-120.7		
Antimony	42.1		mg/kg wet	5.00	62.9		67	0-220.5		
Lead	48.5		mg/kg wet	1.50	47.6		102	83.3-116.9		
Nickel	30.5		mg/kg wet	1.00	30.5		100	83.8-116.2		
Beryllium	32.3		mg/kg wet	0.500	32.2		100	83.81-116		
Copper	45.5		mg/kg wet	1.00	41.9		109	83.9-116		
Cadmium	32.3		mg/kg wet	0.500	31.9		101	83.3-116.5		
Arsenic	46.6		mg/kg wet	1.50	47.7		98	82.9-116.6		
Silver	18.9		mg/kg wet	1.50	17.7		106	66.3-133.7		
Chromium	38.0		mg/kg wet	1.00	36.8		103	81.8-118.2		
Batch 1103897 - EPA200/SW7000 Series										
Blank (1103897-BLK1)						Prepared: 07-Mar-11	Analyzed: 08-Mar-11			
Mercury	BRL		mg/kg wet	0.0293						
Reference (1103897-SRM1)						Prepared: 07-Mar-11	Analyzed: 08-Mar-11			
Mercury	1.06		mg/kg wet	0.300	0.997		106	71.6-128.4		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1103904 - General Preparation										
Duplicate (1103904-DUP1)			**Source: SB25250-06**		Prepared & Analyzed: 07-Mar-11					
% Solids	84.9		%			85.9			1	20
Batch 1103909 - SW846 9010B										
Blank (1103909-BLK1)					Prepared & Analyzed: 07-Mar-11					
Cyanide (total)	BRL		mg/kg wet	1.00						
Blank (1103909-BLK2)					Prepared & Analyzed: 07-Mar-11					
Cyanide (total)	BRL		mg/kg wet	1.00						
LCS (1103909-BS1)					Prepared & Analyzed: 07-Mar-11					
Cyanide (total)	32.5		mg/kg wet	1.00	30.0		108	90-110		
LCS (1103909-BS2)					Prepared & Analyzed: 07-Mar-11					
Cyanide (total)	29.6		mg/kg wet	1.00	30.0		99	90-110		
Reference (1103909-SRM1)					Prepared & Analyzed: 07-Mar-11					
Cyanide (total)	50.7		mg/kg wet	2.31	67.9		75	38.4-162		

Extractable Petroleum Hydrocarbons - CCV Evaluation Report

Analyte(s)	Average RF	CCRF	% D	Limit
Batch S101767				
Calibration Check (S101767-CCV1)				
C9-C18 Aliphatic Hydrocarbons	1.315332E+08	1.054997E+08	-16.7	25
C19-C36 Aliphatic Hydrocarbons	1.533876E+08	1.139135E+08	-6.4	25
C11-C22 Aromatic Hydrocarbons	21.70554	19.22739	-11.4	25
Naphthalene	8.207569	7.974618	-2.8	25
2-Methylnaphthalene	5.249364	5.149492	-1.9	25
Acenaphthylene	7.632873	7.500101	-1.7	25
Acenaphthene	4.714004	4.629664	-1.8	25
Fluorene	5.102917	5.102607	-0.006	25
Phenanthrene	7.036955	7.039326	0.03	25
Anthracene	7.111659	6.955744	-2.2	25
Fluoranthene	6.982094	7.221487	3.4	25
Pyrene	7.12881	7.439266	4.4	25
Benzo (a) anthracene	5.92254	6.713096	13.3	25
Chrysene	5.934326	6.543936	10.3	25
Benzo (b) fluoranthene	6.029999	6.544984	8.5	25
Benzo (k) fluoranthene	5.900239	6.344171	7.5	25
Benzo (a) pyrene	5.406469	6.376618	17.9	25
Indeno (1,2,3-cd) pyrene	6.80145	8.032036	18.1	25
Dibenzo (a,h) anthracene	5.675102	6.738024	18.7	25
Benzo (g,h,i) perylene	5.902326	6.83257	15.8	25

Notes and Definitions

E	The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
QR2	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
R01	The Reporting Limit has been raised to account for matrix interference.
VOC8	Reporting limits reflect SW846 5030 extraction technique due to interference and/or QC issues using SW846 5035A extraction technique.
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

A Matrix Spike and Matrix Spike Duplicate (MS/MSD) for MADEP EPH CAM may not have been analyzed with the samples in this work order. According to the method these spikes are performed only when requested by the client. If requested the spike recoveries are included in the batch QC data.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
June O'Connor
Kimberly Wisk

The following outlines the condition of all EPH samples contained within this report upon laboratory receipt.

Matrices	Soil
Containers	✓ Satisfactory
Aqueous Preservative	✓ N/A pH≤2 pH>2 pH adjusted to <2 in lab
Temperature	✓ Received on ice ✓ Received at 4 ± 2 ºC

Were all QA/QC procedures followed as required by the EPH method? *Yes*
Were any significant modifications made to the EPH method as specified in Section 11.3? *No*
Were all performance/acceptance standards for required QA/QC procedures achieved? *Yes*

I attest that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Authorized by:

Nicole Leja
Laboratory Director

MassDEP Analytical Protocol Certification Form

Laboratory Name: Spectrum Analytical, Inc.	**Project #:** 11-1395
Project Location: Volpe Center - Cambridge, MA	**RTN:**
This form provides certifications for the following data set:	SB25250-01 through SB25250-09
Matrices: Soil	

CAM Protocol

✓ 8260 VOC CAM II A	✓ 7470/7471 Hg CAM III B	MassDEP VPH CAM IV A	8081 Pesticides CAM V B	7196 Hex Cr CAM VI B	MassDEP APH CAM IX A
8270 SVOC CAM II B	7010 Metals CAM III C	✓ MassDEP EPH CAM IV B	8151 Herbicides CAM V C	8330 Explosives CAM VIII A	TO-15 VOC CAM IX B
✓ 6010 Metals CAM III A	6020 Metals CAM III D	8082 PCB CAM V A	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate CAM VIII B	

Affirmative responses to questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	✓ Yes No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	✓ Yes No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	✓ Yes No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	✓ Yes No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	✓ Yes No Yes No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to questions A through E)?	✓ Yes No

Responses to questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes ✓ No

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes ✓ No
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes ✓ No

All negative responses are addressed in a case narrative on the cover page of this report.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Nicole Leja

Nicole Leja
Laboratory Director
Date: 3/11/2011

SB 25250 By

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 5-day
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: FS Engineers, Inc.
2 Clock Tower Place, Suite 630
Maynard, MA 01754
Telephone #: (978) 298-5956
Project Mgr. Faroug Siddique

Invoice To: FS Engineers
P.O. No.: RQN:

Project No.: 11-1395
Site Name: TSC Volpe Center
Location: Cambridge State: MA
Sampler(s): P Buscemi

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10= 11=

List preservative code below: 7,9 – – –

QA/QC Reporting Notes:
* additional charges may apply

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

MA DEP MCP CAM Report: Yes☒ No☐
CT DPH RCP Report: Yes☐ No☐

QA/QC Reporting Level
☐ Standard ☐ No QC ☐ DQA*
☐ NY ASP A* ☐ NY ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ TIER II* ☐ TIER V*
☒ Other S1/GW-1

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs via 8260	MA EPH	PP13 Metals	Cyanide
25250-01	SB-110-030311 0-3'	3/3/11	08:50	G	SO	3	2			X	X	X	X
02	SB-110-030311 3-6'	3/3/11	09:00	G	SO	3	1			X	X		
03	SB-111-030311 0-3'	3/3/11	09:21	G	SO	3	2			X	X	X	X
04	SB-111-030311 10-12'	3/3/11	09:28	G	SO	3	1			X	X		
05	SB-112-030311 0-3'	3/3/11	10:28	G	SO	3	2			X	X	X	X
06	SB-113-030311 0-3'	3/3/11	10:45	G	SO	3	2			X	X	X	X
07	SB-113-030311 4-8'	3/3/11	10:52	G	SO	3	1			X	X		
08	SB-114-030311 0-3'	3/3/11	11:10	G	SO	3	2			X	X	X	X
09	SB-114-030311 8-12'	3/3/11	11:23	G	SO	3	1			X	X		

Relinquished by:	Received by:	Date:	Time:	Temp°C
[signature]	[signature]	3-4-11	1212	2-4
[signature]	[signature]	3/4/11	1548	2.0

☐ EDD Format
☐ E-mail to

☐ Ambient ☒ Iced ☐ Refrigerated ☐ Fridge temp ___°C ☐ Freezer temp ___°C

Report Date:
25-Mar-11 15:40

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

FS Engineers, Inc.
2 Clock Tower Place, Suite 630
Maynard, MA 01754
Attn: Farooq Siddique

Project: TSC-Volpe Center - Cambridge, MA
Project #: 11-1395

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB25934-01	MW-1-031711	Ground Water	17-Mar-11 11:33	18-Mar-11 17:51
SB25934-02	MW-3-031711	Ground Water	17-Mar-11 12:31	18-Mar-11 17:51
SB25934-03	MW-4-031711	Ground Water	17-Mar-11 14:33	18-Mar-11 17:51
SB25934-04	MW-5-031711	Ground Water	17-Mar-11 13:33	18-Mar-11 17:51
SB25934-05	MW-6-031711	Ground Water	17-Mar-11 09:03	18-Mar-11 17:51
SB25934-06	MW-7-031711	Ground Water	17-Mar-11 15:36	18-Mar-11 17:51
SB25934-07	MW-8-031711	Ground Water	17-Mar-11 10:14	18-Mar-11 17:51
SB25934-08	MW-9-031711	Ground Water	17-Mar-11 16:46	18-Mar-11 17:51
SB25934-09	FD-1-031711	Ground Water	17-Mar-11 14:03	18-Mar-11 17:51

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes.
Please note that this report contains 52 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

CASE NARRATIVE:

The sample temperature upon receipt by Spectrum Analytical courier was recorded as 1.2 degrees Celsius. The condition of these samples was further noted as received on ice. The samples were transported on ice to the laboratory facility and the temperature was recorded at 0.7 degrees Celsius upon receipt at the laboratory. Please refer to the Chain of Custody for details specific to sample receipt times.

An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

MADEP has published a list of analytical methods (CAM) which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of MCP decisions. "Presumptive Certainty" can be established only for those methods published by the MADEP in the MCP CAM. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

According to WSC-CAM 5/2009 Rev.1, Table 11 A-1, recovery for some VOC analytes have been deemed potentially difficult. Although they may still be within the recommended recovery range, a range has been set based on historical control limits.

Some target analytes which are not listed as exceptions in the Summary of CAM Reporting Limits may exceed the recommended RL based on sample initial volume or weight provided, % moisture content, or responsiveness of a particular analyte to purge and trap instrumentation.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

+MADEP EPH 5/2004 R

Samples:

SB25934-06 *MW-7-031711*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SW846 8260C

Calibration:

1103008

Analyte quantified by quadratic equation type calibration.

Dibromochloromethane
trans-1,3-Dichloropropene

This affected the following samples:

1105106-BLK1
1105106-BS1
1105106-BSD1
1105106-MS1
1105106-MSD1
FD-1-031711
MW-1-031711
MW-3-031711
MW-4-031711
MW-6-031711
MW-7-031711
MW-8-031711
S101704-ICV1
S102160-CCV1

SW846 8260C

Calibration:

1103016

Analyte quantified by quadratic equation type calibration.

1,1-Dichloroethane
Acrylonitrile
trans-1,2-Dichloroethene
Vinyl chloride

This affected the following samples:

1105196-BLK1
1105196-BS1
1105196-BSD1
MW-5-031711
MW-9-031711
S101868-ICV1
S102222-CCV1

S101868-ICV1

Analyte percent recovery is outside individual acceptance criteria (70-130).

1,1-Dichloroethane (152%)
Naphthalene (131%)

This affected the following samples:

1105196-BLK1
1105196-BS1
1105196-BSD1
MW-5-031711
MW-9-031711
S102222-CCV1

Laboratory Control Samples:

1105106 BS/BSD

2-Butanone (MEK) percent recoveries (122/136) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

FD-1-031711
MW-1-031711
MW-3-031711
MW-4-031711
MW-6-031711
MW-7-031711
MW-8-031711

Acetone percent recoveries (135/130) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

FD-1-031711
MW-1-031711
MW-3-031711
MW-4-031711
MW-6-031711
MW-7-031711
MW-8-031711

SW846 8260C

Laboratory Control Samples:

1105106 BS/BSD

Bromomethane percent recoveries (136/141) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

FD-1-031711
MW-1-031711
MW-3-031711
MW-4-031711
MW-6-031711
MW-7-031711
MW-8-031711

1105196 BS/BSD

Chloromethane percent recoveries (146/118) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-5-031711
MW-9-031711

Vinyl chloride percent recoveries (146/127) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-5-031711
MW-9-031711

Spikes:

1105106-MS1 *Source: SB25934-03*

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

1,4-Dioxane
4-Methyl-2-pentanone (MIBK)
Acetone
Acrylonitrile
Carbon disulfide
Carbon tetrachloride
Chloromethane
Dichlorodifluoromethane (Freon12)
Ethanol
Naphthalene

1105106-MSD1 *Source: SB25934-03*

RPD out of acceptance range.

1,4-Dioxane
4-Methyl-2-pentanone (MIBK)
Acetone
Dichlorodifluoromethane (Freon12)
Ethanol

The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

1,1,2-Trichlorotrifluoroethane (Freon 113)
Trichlorofluoromethane (Freon 11)

SW846 8260C

Spikes:

1105106-MSD1 *Source: SB25934-03*

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

1,2-Dibromo-3-chloropropane
Carbon disulfide
Chloromethane

Samples:

S102160-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Bromomethane (29.1%)
Dichlorodifluoromethane (Freon12) (20.7%)
Trichlorofluoromethane (Freon 11) (21.0%)
Vinyl chloride (20.2%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Acrylonitrile (25.1%)
trans-1,3-Dichloropropene (-22.2%)

This affected the following samples:

1105106-BLK1
1105106-BS1
1105106-BSD1
1105106-MS1
1105106-MSD1
FD-1-031711
MW-1-031711
MW-3-031711
MW-4-031711
MW-6-031711
MW-7-031711
MW-8-031711

S102222-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Methyl tert-butyl ether (-20.1%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

2-Butanone (MEK) (-23.6%)
Acrylonitrile (25.0%)
Chloromethane (23.1%)
Vinyl chloride (32.9%)

This affected the following samples:

1105196-BLK1
1105196-BS1
1105196-BSD1
MW-5-031711
MW-9-031711

SB25934-05 *MW-6-031711*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SW846 8260C

Samples:

SB25934-06 *MW-7-031711*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1-031711	11-1395	Ground Water	17-Mar-11 11:33	18-Mar-11
SB25934-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds Prepared by method SW846 5030 Water MS												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0	1	SW846 8260C	24-Mar-11	24-Mar-11	eq	1105106	
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	2.0	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1-031711	11-1395	Ground Water	17-Mar-11 11:33	18-Mar-11
SB25934-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds Prepared by method SW846 5030 Water MS												
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	SW846 8260C	24-Mar-11	24-Mar-11	eq	1105106	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	2.0	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/l	2.0	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*98*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*94*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*107*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3510C												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/l	0.1	1	+MADEP EPH 5/2004 R	23-Mar-11	24-Mar-11	MM	1105003	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/l	0.1	1	"	"	"	"	"	
	C11-C22 Aromatic Hydrocarbons	BRL		mg/l	0.1	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1-031711	11-1395	Ground Water	17-Mar-11 11:33	18-Mar-11
SB25934-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3510C												
	Unadjusted C11-C22 Aromatic Hydrocarbons	BRL		mg/l	0.1	1	+MADEP EPH 5/2004 R	23-Mar-11	24-Mar-11	MM	1105003	
	Total Petroleum Hydrocarbons	BRL		mg/l	0.1	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	BRL		mg/l	0.1	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3510C												
91-20-3	Naphthalene	BRL		µg/l	1.00	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/l	1.00	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/l	1.00	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/l	1.00	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/l	1.00	1	"	"	"	"	"	
85-01-8	Phenanthrene	BRL		µg/l	1.00	1	"	"	"	"	"	
120-12-7	Anthracene	BRL		µg/l	1.00	1	"	"	"	"	"	
206-44-0	Fluoranthene	BRL		µg/l	1.00	1	"	"	"	"	"	
129-00-0	Pyrene	BRL		µg/l	1.00	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	BRL		µg/l	1.00	1	"	"	"	"	"	
218-01-9	Chrysene	BRL		µg/l	1.00	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	1.00	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	1.00	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	BRL		µg/l	0.200	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	0.500	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	0.500	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	1.00	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*45*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*59*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*71*			*40-140 %*		"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-3-031711	11-1395	Ground Water	17-Mar-11 12:31	18-Mar-11
SB25934-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds Prepared by method SW846 5030 Water MS												
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0	1	SW846 8260C	24-Mar-11	24-Mar-11	eq	1105106	
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	2.0	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-3-031711	11-1395	Ground Water	17-Mar-11 12:31	18-Mar-11
SB25934-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds Prepared by method SW846 5030 Water MS												
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	SW846 8260C	24-Mar-11	24-Mar-11	eq	1105106	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	2.0	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/l	2.0	1	"	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	"	
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*101*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*98*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*111*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*111*			*70-130 %*		"	"	"	"	"	
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3510C												
	C9-C18 Aliphatic Hydrocarbons	BRL		mg/l	0.1	1	+MADEP EPH 5/2004 R	23-Mar-11	24-Mar-11	MM	1105003	
	C19-C36 Aliphatic Hydrocarbons	BRL		mg/l	0.1	1	"	"	"	"	"	
	C11-C22 Aromatic Hydrocarbons	BRL		mg/l	0.1	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-3-031711	11-1395	Ground Water	17-Mar-11 12:31	18-Mar-11
SB25934-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Extractable Petroleum Hydrocarbons												
EPH Aliphatic/Aromatic Ranges Prepared by method SW846 3510C												
	Unadjusted C11-C22 Aromatic Hydrocarbons	BRL		mg/l	0.1	1	+MADEP EPH 5/2004 R	23-Mar-11	24-Mar-11	MM	1105003	
	Total Petroleum Hydrocarbons	BRL		mg/l	0.1	1	"	"	"	"	"	
	Unadjusted Total Petroleum Hydrocarbons	BRL		mg/l	0.1	1	"	"	"	"	"	
EPH Target PAH Analytes Prepared by method SW846 3510C												
91-20-3	Naphthalene	BRL		µg/l	1.00	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/l	1.00	1	"	"	"	"	"	
208-96-8	Acenaphthylene	BRL		µg/l	1.00	1	"	"	"	"	"	
83-32-9	Acenaphthene	BRL		µg/l	1.00	1	"	"	"	"	"	
86-73-7	Fluorene	BRL		µg/l	1.00	1	"	"	"	"	"	
85-01-8	Phenanthrene	BRL		µg/l	1.00	1	"	"	"	"	"	
120-12-7	Anthracene	BRL		µg/l	1.00	1	"	"	"	"	"	
206-44-0	Fluoranthene	BRL		µg/l	1.00	1	"	"	"	"	"	
129-00-0	Pyrene	BRL		µg/l	1.00	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	BRL		µg/l	1.00	1	"	"	"	"	"	
218-01-9	Chrysene	BRL		µg/l	1.00	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	1.00	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	1.00	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	BRL		µg/l	0.200	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	0.500	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	0.500	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	1.00	1	"	"	"	"	"	
Surrogate recoveries:												
3386-33-2	*1-Chlorooctadecane*	*70*			*40-140 %*		"	"	"	"	"	
84-15-1	*Ortho-Terphenyl*	*60*			*40-140 %*		"	"	"	"	"	
321-60-8	*2-Fluorobiphenyl*	*80*			*40-140 %*		"	"	"	"	"	