CORPORATE ENVIRONMENTAL ADVISORS, INC.

Consultants | Engineers | Contractors

October 5, 2009

Mr. Dennis O'Neill
National Grange Mutual Insurance Company
27B Midstate Drive, Suite 100
Auburn, MA 01501-1896

RE: Corrective Action Feasibility Investigation Report
Jeffery Residence
8 Nichols Road
Landgrove, Vermont
VT DEC SMS Site No. 20022951
CEA Project No.: RI-0011-06

Dear Mr. O'Neill,

Corporate Environmental Advisors, Inc. (CEA) presents this Corrective Action Feasibility Investigation (CAFI) Report for a release of fuel oil at the above-referenced location (the Site).

If you have any questions, or require additional information, please contact either of the undersigned at (603) 225-7400.

Sincerely,
Corporate Environmental Advisors, Inc.

William H. Hopper
Sr. Environmental Scientist

Eric M. Johnson, CPG
Regional Manager

cc: Mr. Gerald Noyes, VTDEC, Waste Management Division, 103 South Main Street/West Building, Waterbury, VT 05671-0404
Mr. Michael Jeffery, 8 Nichols Road, Landgrove, VT 05418

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Phase (check one)	Type (check one)
☐ Initial Site Investigation	☐ Work Scope
✓ Corrective Action Feasibility Investigation	✓ Technical Report
☐ Corrective Action Plan	☐ PCF Reimbursement Request
☐ Corrective Action Summary Rpt	☐ General Correspondence
☐ Operations & Monitoring Report	

CORRECTIVE ACTION
FEASABILITY INVESTIGATION REPORT
Jeffery Residence
8 Nichols Road
Landgrove, Vermont
VT DEC SMS Site No. 20022951
CEA Project # RI-0011-06

Prepared for:
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1.0 INTRODUCTION

Corporate Environmental Advisors, Inc. (CEA) was retained to conduct environmental consulting services at the Jeffery residence located at 8 Nichols Road in Landgrove, Vermont (the Site). CEA has prepared this Corrective Action Feasibility Investigation (CAFI) Report at the request of the Vermont Department of Environmental Conservation (VTDEC). The CAFI and additional groundwater sampling detailed below were necessary to further evaluate environmental impacts to soil and groundwater following a release of No. 2 fuel oil from an underground storage tank (UST) in 2001.

2.0 GENERAL SITE INFORMATION

2.1 Site Description

The Site is located at 8 Nichols Road in a rural residential area in the town of Landgrove, Vermont. Over all, the property is sloped gently down to the northwest. Please refer to **Figure 1** which shows the Site with respect to surrounding topography. Additionally, **Figure 2** depicts the Site and locations of pertinent Site features including monitor wells, recovery wells, buildings, and other structures.

2.2 Site History

In the winter of 2001, a snow plow reportedly struck the fill pipe to the No. 2 fuel oil UST located approximately 20 feet southeast and hydraulically upgradient from the southern portion of the house. During subsequent fuel oil deliveries, an unknown volume of fuel oil was released from a break between the fill pipe and the UST. The released fuel oil flowed with groundwater under the southern portion of the house and migrated through the footing drain to a surface discharge point located approximately 80 feet west of the house. The footing drain discharge pipe and backfill were excavated and replaced. The fuel oil underground storage tank was removed. At a later date, surficial impacted soil from the former UST area was also removed. Soil borings have been performed through the basement floor and outside the residence. Some borings were completed as monitoring wells and some were completed as recovery wells. Fuel oil has been recovered from the recovery wells and from the terminus of the footing drain. Fuel oil has not been observed in the discharge from the footing drain in recent years. Analysis of drinking water samples have not detected target analytes at concentrations above the laboratory detection limits. Please note that the depth to bedrock was reported by others to be less than five feet below grade surface based on borings performed through the basement floor.

3.0 SUMMARY OF 2009 ASSESSMENT

3.1 Summary of June – August Assessment Activities

From June 8 to June 9, 2009, a total of four soil borings were advanced at the Site, identified as B(MW)-4 through B(MW)-7. The borings were advanced in the former UST grave, downgradient of the former UST grave, in the driveway (down/crossgradient of the basement

recovery wells) and north of the basement in the back yard. The borings were performed to better assess the horizontal and vertical extent of petroleum impact to the property. Soil borings were performed by Drilex Environmental of West Boylston, Massachusetts using a track-mounted CME-55 drill rig, equipped with an air hammer. Borings were completed under the observation of CEA. Borings were advanced to a maximum depth of approximately 22 feet bgs. Soil samples were collected, where applicable, during completion of the borings using ASTM Method 1586-84. During the advancement of the borings, soil samples were collected at a rate of two feet every five feet until the air hammer attachment was utilized to progress through cobbles and large boulders.

Soil samples collected during soil boring activities were screened for total volatile organic compounds (VOCs) using the headspace method and a photoionization detector (PID). The PID was calibrated with isobutylene at a concentration of 100 parts per million prior to the start of work each day. Headspace readings ranged from not detected above the instrument detection limit [(<1.0 ppmv) to 139 ppmv [B-(MW)-4 at 20-22 feet bgs]. Soil encountered during boring consisted of find sand and silt to approximately eight feet below grade. Fine sand and silt, recovered from 20 to 22 feet below grade in boring B(MW)-4, was interpreted to be glacial till.

Soil samples were collected from borings B(MW)-4 and B(MW)-5 and submitted to Spectrum Analytical, Inc. (Spectrum), a Vermont certified laboratory, located in Agawam, Massachusetts for analysis for VOC by EPA Method 8260 and for polynuclear aromatic hydrocarbons (PAH) by EPA Method 8270. Laboratory analysis of the soil samples collected from the borings detected numerous VOCs and PAHs. However, the reported concentrations were below the VTDEC Residential Preliminary Remediation Goals. Please refer to **Table 1** for a summary of the laboratory analytical data and **Appendix A** for copies of the soil laboratory analytical report. Soil samples were not collected from borings B(MW)-6 and B(MW)-7 because the air hammer attachment was utilized to drill through large boulders.

Soil borings B(MW)-4 through B(MW)-7 were completed as monitoring wells MW-4 through MW-7, respectively. These four monitoring wells were constructed of thread-coupled, 2-inch inside diameter Schedule 40 PVC well materials. The well screens were set across the water table. A sandpack was placed in the annular space between the well screens and the bore hole and a bentonite seal was placed above the sandpack. After the well installations were complete, the wells were developed using the surge and bail technique. During development, a light sheen was observed on the water purged from monitoring well MW-4 and a heavier sheen was observed in the water removed from MW-6. Please refer to **Appendix B** for a copy of the bore logs.

3.2 Survey

On June 24, 2009, the tops of the monitoring well casings were surveyed, using standard leveling and stadia techniques, relative to an arbitrary datum of 100.00 feet set at the left side of the right garage door. The survey was performed to determine the wellhead elevations for calculation of the groundwater table gradient.

3.3 Air Sampling and Analysis

On June 24, 2009, CEA performed indoor air sampling at the residence to evaluate potential indoor air impacts. The windows of the residence were closed in the first floor room above the basement and no windows or doors were open during sample collection. CEA also utilized a PID equipped with a 10.2 eV lamp, which is appropriate for petroleum screening prior to sample collection to determine if VOCs could be detected in ambient air. No PID readings above 0.0 ppmv were recorded on the first floor and 0.9 ppmv was recorded in the basement and petroleum odors were not noted.

3.3.1 Air Sample Collection

CEA set up three 6-liter summa air sampling canisters to evaluate airborne petroleum concentrations. One summa canister was set-up in the living/dining room on the first floor, one summa canister was set-up in the basement, and a third summa canister was set-up on the front porch to collect an ambient air sample for comparison purposes. These samples were collected to evaluate potential vapor intrusion into the residence as a result of the releases of fuel oil. The samples were collected over a 4-hour period and were submitted to Spectrum for analysis by EPA Method TO-15.

3.3.2 Laboratory Analytical Results

Laboratory analysis of the three air samples detected 1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene in the basement at concentrations above the EPA Region III Regional Screening Levels for Indoor Air. Numerous other compounds, frequently present in cleaning agents and air fresheners, were detected in the basement sample, but at concentrations below the EPA Region III Regional Screening Levels for Indoor Air. Freon 11 and Freon 12 were both detected in the house and may indicate a refrigerant coolant leak. The concentrations of petroleum-related compounds detected in the sample from the first floor were below those detected in the basement sample and were all below the EPA Region III Regional Screening Levels for Indoor Air. Please refer to **Table 4** for a summary of the air analytical results, and a copy of the laboratory analytical report is attached in **Appendix A**.

3.3.3 Basement Recovery Well PID Screening

Following air sample collection, CEA screened recovery wells (RW-4 through RW-7) with a calibrated PID via tubing inserted into a drilled hole in the well covers to determine the potential of vapors to infiltrate the basement and potentially the residence. Headspace readings within the recovery wells ranged from 17.7 ppmv in RW-6 to 237 ppmv in RW-7. Strong petroleum odors were noted in all recovery wells. As noted above, the ambient headspace reading in the basement prior to air sample collection was 0.9 ppmv. Prior to departure, the drilled holes in the recovery wells were plugged to minimize the potential for vapors to impact indoor air.

The correlation between indoor air PID readings, indoor air sample analytical results and the basement recovery wells PID readings demonstrates that minimal vapor intrusion is occurring from those monitoring points.

3.4 Sheen on Pond Investigation

On August 5, 2009, a neighbor reported to Mr. Jeffery that a sheen was present on a pond downgradient of the house. That day, CEA visited the Site and investigated the sheen CEA determined that an organic based sheen was present on water at the edge of the pond and on standing water near the pond. This organic sheen was not petroleum based and not associated with the fuel oil release. A PID was utilized to screen ambient air and all readings were at the detection limit of the unit. No petroleum odors were detected on the water or in the ambient air.

3.5 Drain Line Discharge Investigation

Two four-inch PVC pipes terminate on the property near monitoring wells MW-1 and MW-2 and upgradient of the pond. These drains are for the footing or curtain drain that is believed to rap around the foundation and for grey water from the laundry room in the basement. Dead and stressed vegetation has been observed at and beyond the terminus and a slight petroleum odor has been noted in the past.

August 5, 2009, CEA hand excavated under the drain lines approximately one foot upgradient of the terminus to collect a soil sample. This sample was collected to determine if the material used as backfill around the lines was acting as a preferential migration pathway for petroleum when the groundwater elevation was high. The fine sand and silt, generally matching the native material nearby, was observed under the drain lines to a depth of one foot bgs. The soil sample from under the drain lines and a second soil sample collected from downgradient of the terminus in the dead vegetation were screened with a PID and the headspace method. The PID was calibrated with isobutylene prior to the start of work. Headspace readings from soil samples were not detected above the instrument detection limits (<1.0 ppmv).

No odor has been detected in the grey water line and the foundation drain line has historically been dry when CEA has been on Site. On August 5, 2009, CEA observed water trickling from the foundation drain line. A sample of the water discharging from the drain was collected, stored on ice, and transported under Chain-of-Custody protocol to Spectrum, for analysis for VOCs by EPA Method 8260 and PAHs by EPA Method 8270. Laboratory analysis of the groundwater samples collected from the foundation drain line did not detect VOCs or PAHs at concentrations at or above the laboratory detection limits. While in the vicinity of the drain terminus, a faint petroleum odor was intermittently noted. The source could not be identified.

The dead and stressed vegetation is located in an area impacted immediately after the release was discovered. A minimal amount of residual petroleum could be remaining in this area causing the dead and stressed vegetation or possibly bleach from laundering could be impacting the vegetation.

3.6 Summary of Recent Groundwater Sampling Events

3.6.1 June 2009 Groundwater Sampling Event

On June 24, 2009, monitoring wells MW-4 through MW-7 were gauged and sampled for VOC and PAH. Groundwater monitoring wells were gauged using an electronic interface probe, capable of measuring the depth to water and, if present, light non-aqueous phase liquid (LNAPL) to the nearest 0.01 foot. LNAPL was detected during the gauging event in RW-5 (estimated at 0.05 feet thick), RW-6 (estimated at 0.01 feet thick) and RW-7 (at 0.02 feet thick). Additionally, the absorbent pads previously set in recovery well RW-7 were completely saturated and yielded approximately ½-gallon of oil.

Following gauging, groundwater samples were collected from the newly installed monitoring wells. Prior to sampling, a minimum of three (3) well volumes of groundwater was purged from each monitoring well, using dedicated polyethylene bailers, to ensure representative groundwater sample collection. Groundwater samples were placed in pre-cleaned and preserved containers, stored on ice, and transported under Chain-of-Custody protocol to Spectrum, for analysis for VOCs by EPA Method 8260 and PAHs by EPA Method 8270. Please refer to **Table 2** for a summary of well gauging data and groundwater elevations.

Laboratory analysis of the groundwater sample collected from monitoring well MW-7 did not detect VOCs or PAHs at concentrations at or above the laboratory detection limits. Laboratory analysis of the groundwater samples collected from monitoring wells MW-4 and MW-5 detected naphthalene at concentrations above the VTDEC Enforcement Standards. Laboratory analysis of the groundwater sample collected from monitoring well MW-6 detected naphthalene, benzene, 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene at concentrations above the VTDEC Enforcement Standards. Please refer to **Table 3** for a summary of groundwater analytical results and **Appendix A** for a copy of the laboratory analytical report for this sampling event.

3.6.2 August 2009 Groundwater Sampling Event

On August 25, 2009, monitoring wells MW-1 through MW-7, recovery well RW-7, the foundation drain line, and the private drinking water well (PDW-1) were gauged and/or sampled for PAH and/or VOC. Groundwater monitoring wells were gauged using an electronic interface probe, capable of measuring the depth to water and, if present, light non-aqueous phase liquid (LNAPL) to the nearest 0.01 foot. LNAPL was not detected during the gauging event. The wellhead survey and gauging data were coupled to compile **Figure 2** which depicts the groundwater elevations in the monitoring wells and hydraulic gradient. The hydraulic gradient appears to be down to the west from the former UST location to monitoring well MW-7. Then from monitoring well MW-7 to wells MW-2 and MW-3 it appears to slope down to the northwest.

Following gauging, groundwater samples were collected from each monitoring well. Prior to sampling, a minimum of three (3) well volumes of groundwater was purged from each monitoring well, using dedicated polyethylene bailers, to ensure representative groundwater

sample collection. In addition, the drinking water well (PDW-1) was purged for approximately 20-minutes prior to sample collection by running water from an outside spigot near the basement bulkhead and a sample of the water trickling from the foundation drain line was collected. Groundwater samples were collected, stored on ice, and transported under Chain-of-Custody protocol to Spectrum, for analysis for VOCs by EPA Method 8260 and PAHs by EPA Method 8270. Please refer to **Table 2** for a summary of well gauging data and groundwater elevations.

Laboratory analysis of the groundwater samples collected from monitoring wells MW-1, MW-2, MW-3, MW-7, PDW-1 and the foundation drain line did not detect PAHs and/or VOCs at concentrations at or above the laboratory detection limits. Laboratory analysis of the groundwater sample collected from monitoring well MW-5 detected several VOCs at concentrations above the laboratory detection limits, but below the VTDEC Enforcement Standards. Laboratory analysis of the groundwater samples collected from monitoring wells MW-4, MW-6 and RW-7 detected benzene and/or naphthalene at concentrations above the VTDEC Enforcement Standards. Please refer to **Table 3** for a summary of groundwater analytical results and **Appendix A** for a copy of the laboratory analytical report for this sampling event.

4.0 SITE GEOLOGY AND HYDROGEOLOGY

4.1 Site Geology

During the June 2009 drilling activities by CEA, soil encountered beneath the Site was classified using ASTM D 2488 – 90, the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure). The native soil consisted of a heterogeneous mixture of tightly packed tan silt and fine sand underlain by glacial till. Bedrock which was historically reported to be present within 10 feet of grade surface was determined to be large cobbles and boulders measuring several feet to at least seven feet thick. Bedrock was not encountered to the maximum depth of 22 feet below grade surface (bgs).

4.2 Site Hydrogeology

On August 25, 2009, the groundwater monitoring wells, and recovery wells in the basement of the residence, were gauged using an electronic interface probe, capable of measuring the depth to water and, if present, light non-aqueous phase liquid (LNAPL) to the nearest 0.01 foot. LNAPL was not detected during this gauging event. During the gauging event, the depth to groundwater ranged from 0.46 feet below the top of the well (TOW) in recovery well RW-4 to 8.84 feet below the TOW in monitoring well MW-7. The wellhead survey and gauging data were coupled to compile the groundwater elevations and hydraulic gradient. Based on that data, the average hydraulic gradient across the Site is 0.04 feet per foot down to the northwest.

5.0 NATURE AND EXTENT OF IMPACTS

The nature and extent of OHM present at the Site were evaluated through the collection of soil, groundwater and air samples, and the review of historical data. The August 2009 groundwater data are considered representative of current Site conditions.

5.1 Nature of Impacts

No. 2 fuel oil constituents have impacted soil and groundwater. The concentrations detected in the soil are below the applicable VT Enforcement Standards. The concentrations detected in the groundwater in some monitoring wells do exceed the applicable standards. The petroleum concentrations detected in the air samples in the basement living space of the house are below the EPA Region II Screening levels.

5.2 Extent of OHM in Soil

During advancement of soil borings B(MW)-4 and B(MW)-5 in June, 2009, soil samples were collected from several locations and depths for laboratory analysis. Based on field PID screening data, impacts to soil are evident at and below the groundwater table. Soil screening results identified total VOCs at concentrations ranging from not detected above the instrument detection limits [(<1.0 ppmv) to 139 ppmv [B-(MW)-4 at 20-22 feet bgs]. Laboratory analysis did not detect petroleum at concentrations above the Residential Preliminary Remediation Goals in samples collected from between depths of 5 to 7 feet bgs to 22 feet bgs. The fact that petroleum is being observed in RWs below the basement floor indicates soil impact remains below the house. Based on observations made during soil boring, headspace screening performed during boring, and the periodic presence of LNAPL in the basement recovery wells, it appears that the oil impact to soil extends from the former UST area to beyond MW-6 and down to at least 22 feet bgs at MW-4. After the release, some fuel oil flowed into the footing drain, a preferential migration pathway, which likely reduced the extent of oil impact to soil. Please refer to **Table 1** for a summary of soil laboratory analytical results, **Figure 3** for the estimated impact to soil and **Appendix B** for a copy of the bore logs with PID readings.

5.3 Extent of OHM in Groundwater

Groundwater laboratory analytical results have identified several VOCs above the VTDEC Enforcement Standards in monitoring wells MW-4, MW-5, MW-6 and RW-7. Based on the laboratory results, impacted groundwater has been identified in the former UST area, under the southern portion of the house and as far downgradient as monitoring well MW-6. Impact to the potable water supply has not been detected and impacts to groundwater from and downgradient of MW-7, in samples from wells MW-1, MW-2 or MW-3, have not been detected. Monitoring wells MW-1, MW-2, and MW-3 are located hydraulically downgradient from the impacted area.

The petroleum impacts to groundwater are not anticipated to disperse extensively in the vertical dimension due to the nature of OHM released, the physical Site features, and the hydrogeologic Site characteristics. Please note that following the release, some fuel oil flowed into the footing drain, a preferential migration pathway, which likely reduced the extent of oil impact to groundwater. Please refer to **Table 3** for a summary of groundwater laboratory analytical results.

6.0 IDENTIFICATION AND EVALUATION OF REMEDIAL ACTION ALTERNATIVES

Potential remedial options were chosen for this Site based on the nature and extent of OHM, the media that are impacted and Site characteristics. The evaluation assumes that the Site will be used for residential purposes, although remedial options are evaluated in the event that the future use of the property is not restricted.

The objective of this CAFI is to consider remedial options based on Site data and currently available technologies, and to select an option which is most suited to the conditions at a the Site. An evaluation of remedial action alternatives is summarized below.

The following sections discuss various remedial alternatives that are reasonably likely to be feasible.

6.1 Natural Attenuation

Natural (or intrinsic) bioremediation is an innovative remedial approach that relies on natural attenuation to remediate contaminants. Natural attenuation processes include advection, dispersion, sorption, volatilization, and biodegradation. Numerous studies indicate that intrinsic bioremediation is the principle mechanism for the attenuation of petroleum hydrocarbons in the subsurface, and is the only attenuation process capable of degrading petroleum hydrocarbons to an innocuous by-product.

Intrinsic bioremediation will control the migration of contaminants from untreated or residual sources. The degree of effectiveness depends on the types and concentrations of contaminants, and the physical, chemical, and biological characteristics of the soil and groundwater. Where conditions are favorable, natural attenuation may reduce contaminant concentrations at sufficient

rates to achieve remediation objectives and adequately reduce the potential risks posed by hydrocarbon compounds.

When nutrients are present in the aquifer, biodegradation is accomplished by microbial activity of indigenous (native) subsurface microorganisms. The microorganisms consume nutrients for cell production and maintenance. At most sites, the rate of intrinsic bioremediation is governed by the availability of electron acceptors. The microorganisms metabolize these compounds through a series of oxidation-reduction (redox) reactions. This results in the oxidation of an electron donor and the reduction of an electron acceptor.

Common electron donors at sites contaminated with petroleum hydrocarbons are natural organic carbon and petroleum-related organic compounds (i.e. BTEX compounds). Common electron acceptors found in groundwater include dissolved oxygen (DO), nitrate (NO3-), and sulfate (SO4-). In addition, iron (III) is a common electron acceptor found in aquifer soils.

Generally, DO is utilized first as the primary electron acceptor (aerobic respiration). During aerobic respiration, oxygen is reduced to water and carbon dioxide, and microbial biomass is produced as a by-product. Dissolved oxygen depletion caused by increased levels of microbial respiration can eventually establish anaerobic conditions. Under anaerobic conditions, microorganisms typically use the other electron acceptors mentioned above. Depending on the electron acceptor, the by-products of anaerobic respiration can include nitrogen gas, hydrogen sulfide, reduced forms of metals, and methane. Environmental conditions and microbial competition will determine which process will dominate.

The use of intrinsic remediation requires monitoring and evaluation to determine that existing environmental conditions are sufficient for biodegradation to occur and that biodegradation is occurring. When indigenous microorganisms are active in reducing hydrocarbon compounds, changes in groundwater chemistry occur both temporally and spatially. Measurement of these changes can be used to demonstrate intrinsic bioremediation.

Biodegradation is indicated by the consumption of electron acceptors (oxygen) or the presence of respiration by-products (reduced iron, carbon dioxide). General indicators such as pH, dissolved oxygen, and redox potential can also be used as biodegradation indicators.

The Site hydrogeological conditions are favorable for stimulation of aerobic growth of soil microorganisms. Aerobic degradation of some VOCs in select wells is occurring at the Site.

Monitored natural attenuation (MNA) has been chosen as a potential active remedial monitoring program at the Site. After initial remedial actions have taken place, MNA can be used to monitor OHM degradation at the Site. Monitored natural attenuation has been shown to be effective when addressing petroleum-related contaminants.

6.2 Oxygen Injection

Oxygen Injection is a technique to remediate impacted soil and groundwater in-situ by injecting oxygen into subsurface soils and groundwater to stimulate microbial activity, thereby facilitating the degradation of petroleum hydrocarbons. Initial set-up requires the purchase or rental of a oxygen remediation system and advancement of oxygen injection wells and trenching for applicable tubing. This type of system works best in sandy overburden which allows oxygen to move relatively freely in the subsurface.

The majority of groundwater impacts appear to be limited to under the residence and may not be influenced by injection points which would be installed outside the building foundation. Large boulders in the subsurface impeded drilling efforts and would impede drilling to advance injection points to adequate depths. In addition, a subslab depressurization system would likely be required to minimize the potential of flow in to the basement. Oxygen injection has not been retained as a potential response action at the Site.

6.3 Enhanced Passive Remediation

Magnesium peroxide or calcium peroxide addition to groundwater is one method to promote biological degradation of hydrocarbons. The process provides a slow release of dissolved oxygen to groundwater, stimulating indigenous bacteria to biodegrade petroleum hydrocarbons in the subsurface. A commercially available magnesium peroxide oxygen source known as Oxygen Release Compound (ORC®), is manufactured as a powder. Magnesium or calcium peroxide can be injected as a slurry into on-site boreholes, mixed with soil to backfill an excavation, or placed in permeable socks and inserted into site wells. Oxygen is then released into the groundwater. Previous site-specific case studies have been compiled by the manufacturer of ORC® to demonstrate that magnesium peroxide additive is effective in the remediation of dissolved phase hydrocarbons.

This technology has several advantages when compared to traditional remedial approaches. Unlike aeration technologies such as air sparging where air is physically forced into groundwater, ORC® is a passive technology, which introduces oxygen to groundwater without volatilizing VOCs. ORC® thus removes the need for a separate soil vapor collection and treatment system, reducing overhead and O&M costs. In addition, existing monitoring wells can be used as ORC® injection points, minimizing both disruption of normal property usage and the aesthetic impact of the treatment system.

Due to the shallow depth to groundwater in the basement recovery wells and limited number application points, only a small volume of ORC® would be able to be applied each site visit. Additionally, a representative sample would not be able to be collected from the recovery and monitoring wells receiving an application until the ORC® has fully dissolved, sometimes months after application. Therefore, ORC® has not been retained as a potential response action at the Site.

6.4 Injection of "Modified" Fenton's Reagent

Hydrogen peroxide is a strong oxidant that can be injected into a impacted zone to destroy petroleum hydrocarbons. Hydrogen peroxide is particularly effective when it reacts with ferrous iron (Fe^{2+}) to produce Fenton's Reagent. The ferrous iron may be naturally present in the subsurface soils and/or groundwater, or it may be added as a catalyst solution together with the hydrogen peroxide. Hydrogen peroxide in the presence of Fe^{2+} reacts to form hydroxyl radicals ($OH\bullet$), ferric iron (Fe^{3+}), and hydroxyl ions (OH^-). The hydroxyl ions are oxidizers and react with the petroleum hydrocarbon bonds. Fenton's Reagent requires soluble Fe^{2+} to form $OH\bullet$. The optimal reaction occurs under relatively low pH conditions (pH of 2-4). Due to the low pH range required for the optimal reaction conditions acidifying the subsurface soil or adding a chelating agent is often required. A "Modified" Fenton's Reagent system operates at relatively neutral pH conditions with hydrogen peroxides and a chelated metal catalysts. The reaction of the oxidants with the catalysts generates hydroxyl radicals, which react in nanoseconds with most organic contaminants encountered in the subsurface. The advantage to this approach is the ability to use the Fenton's Reagent under relatively neutral pH conditions, requiring little or no acidification of the subsurface. The modified Fenton reagent produces mixed oxidizing and reducing species including hydroxide radicals, superoxide radicals and hydrogen peroxide anions. These mixed radical species react synergistically with most contaminants in the subsurface to produce end products including carbon dioxide and water. The injected hydrogen peroxide may decompose to release oxygen, which stimulate the aerobic growths of indigenous microorganisms to degrade the contaminants and its byproducts after the oxidant injection.

Due to the potential for interaction between the Fenton's Reagent and subject property subsurface utilities in the basement, the potential for heat and pressure build up below the house and limited application area, "Modified" Fenton Reagent system has not been retained as an applicable remedial action at the Site.

6.5 Soil Excavation

Soil excavation involves the removal of contaminated subsurface soils from their current location. Excavating impacted soils removes the contaminant source. After analysis, excavated soils are removed from the site and transported to a treatment or recycling facility.

Soil excavation with off-site recycling can be a cost-effective and efficient method of hydrocarbon mass removal. At sites where subsurface LNAPL is identified in limited or isolated areas, soil excavation presents an expedient method of source removal.

Much of the impacted soil is believed to be under or immediately adjacent to residence and basement. Soil excavation in the basement would severely disrupt the occupants of the house as the furnace, existing fuel oil aboveground storage tanks and laundry are present in the basement. The shallow groundwater in the basement would also require dewatering, groundwater treatment and discharge. Therefore soil excavation will not be carried forward as a potential remedial action at the Site.

6.6 Ex-situ Bioremediation

One form of ex-situ bioremediation of petroleum impacted soil, also known as land farming, involves the excavation and spreading of impacted soil into a thin layer across the ground surface. The material is periodically tilled and mixed with supplemental bacteria and nutrients. This aeration process promotes volatilization of volatile petroleum hydrocarbons while providing oxygen to stimulate indigenous aerobic biodegradation. To further enhance biodegradation, water is also added to maintain sufficient moisture content within the biocell.

Although proven to be an effective method in remediating soils impacted with petroleum products such as gasoline and fuel oil, the feasibility of ex-situ bioremediation at this site is limited by the limitations listed for soil excavation and impacted water and sediment would need to be collected and controlled. Some impacted groundwater would be remediated using this option and the residual source of the oil would be removed..

Because of the limiting factors listed above, ex-situ bioremediation is not considered a viable option for the Site.

6.7 Groundwater Extraction and Treatment

Groundwater extraction and treatment is a proven technology for the recovery of impacted groundwater. This method is most effectively used to hydraulically contain groundwater via large diameter recovery wells. Hydraulic gradients are steepened by the removal of groundwater from saturated pore spaces, which in turn enhances gravity flow of floating hydrocarbons towards recovery points. Implementation of these systems involves the installation of multiple large diameter wells, purchase of dual pumping systems and treatment equipment, and a means to discharge treated effluent. These factors may represent significant capital costs prior to implementation.

The effectiveness of groundwater extraction and treatment systems is dependent on factors such as secondary groundwater quality (hardness, pH), soil type and permeability, and the chemical characteristics of the contaminants. High concentrations of elemental iron and manganese in groundwater tend to cause equipment fouling, thereby reducing well yields and increasing operation and maintenance (O&M) costs. Soil permeability directly influences well yields, and will determine whether the system will operate intermittently or continuously.

Contaminants exhibiting low solubility will display minimal mass transfer in a pump-and-treat system. The effectiveness of these systems is also limited in treating contaminants with a high organic carbon partition coefficient (Koc), as these contaminants will readily bind to organic matter in the soil.

Currently, samples from wells MW-4, MW-5, MW-6 and RW-7 have reported concentrations of contaminants of concern exceeding applicable VTDEC Enforcement Standards and three basement recovery wells have sporadic LNAPL. Based on historical analytical results of dissolved phase concentrations of petroleum hydrocarbons, groundwater extraction and treatment

is expected to be cost prohibitive in relation to the expected reduction in petroleum concentrations and has not been retained as an applicable remedial action at the Site.

6.8 Soil Vapor Extraction

SVE is a remedial technique used for the removal of contaminants adsorbed to vadose zone soils. For VOC applications, the technique relies heavily on the volatility of constituents of concern and on the permeability of unsaturated soil matrices to allow air movement across impacted areas. These two concepts allow for quick and efficient mass removal of contaminants from the subsurface. An additional benefit of SVE is the transport of oxygen to the indigenous microbiological community within the vadose zone, augmenting natural biodegradation processes.

SVE is performed by applying a vacuum to vertical or horizontal vapor extraction wells, which are screened in the area of maximum hydrocarbon concentrations. The resulting pressure gradient induces adsorbed hydrocarbon liquids with sufficiently high vapor pressures to volatilize and migrate through the soil pores toward the vapor extraction wells.

When operated efficiently, SVE can be one of the most cost-effective remediation processes for soil contaminated with moderately to highly volatile petroleum hydrocarbons. The components of soil venting systems are readily acquired. However, the accuracy of design parameters involving the number of wells, well spacing, well location, well construction, and off-gas treatment methods is critical to ensure overall system cost efficiency. SVE can also be an integral part of an air sparge system, helping to remove hydrocarbon vapors that have been mobilized from groundwater by air sparge wells. Air sparging can be used in conjunction with SVE to enhance removal from groundwater and saturated soils, and biodegradation.

An SVE system was operated at the Site in the past, but the shallow depth to groundwater below the floor prohibited effective operation of the system. The operation of an SVE system will not reduce concentrations of fuel oil constituents below the water table. SVE is expected to be ineffective and has not been retained as an applicable remedial action at the Site.

6.9 Air Sparging

Air sparging is the introduction of air below the groundwater table. Sparging is utilized to transfer volatile organics, semi-volatile organics and lighter hydrocarbon fractions from a liquid or dissolved phase into the vapor phase where they can be removed by an SVE system. Volatile organics with favorable vapor pressures and Henry's Law constants are treatable using air sparging.

Air sparging also enhances natural biodegradation by introducing an inexpensive oxygen source below the water table and is a practical enhancement to an SVE system, where dewatering would otherwise be needed to expose sediments containing contaminants below the water table to the SVE system. Air sparging is an alternative to removal and treatment of groundwater for dissolved-phase components.

One limitation to the effectiveness of air sparging is the formation of "channels," or preferential airflow passages, within the pore spaces of the aquifer. This adverse condition prevents sediments outside the channel from being exposed to airflow, thus minimizing the rapid volatilization of contaminants from those sediments. Channeling of the air stream in the pore spaces of the aquifer may be reduced by intermittent operation, or "pulsing" of the AS system, in which air injection is alternately turned on and off.

Soil vapor extraction is conducted in conjunction with air sparging to prevent potential migration of vapor phase contaminants, which are mobilized during the air sparging process. The installation of dedicated air sparge wells (screened within the saturated zone) is required to introduce air below the water table.

The air sparge wells and remedial system lines would have to be installed around the residence and in the basement, and trenching to the remedial system trailer would be required. Air sparging has been has not been retained as an applicable remedial action at the Site.

6.10 High Vacuum, Dual-Phase Extraction

High-vacuum dual-phase extraction (HVE), utilizes a high vacuum (greater than 36-inches of water column) to remove groundwater and hydrocarbon vapors simultaneously from impacted zones. Equipment typically used to apply vacuum includes combustion engines, liquid ring pumps, rotary lobe blowers and vacuum trucks. Groundwater and soil vapor are removed through a slotted PVC drop tube, which is lowered into the water table (through a groundwater monitoring or recovery well) under high vacuum. The vacuum induced in the well depresses the water table, promoting horizontal flow of impacted groundwater. Extraction of soil vapors in turn introduces oxygen to the subsurface and enhances aerobic bioremediation (bioventing).

Installation of recovery wells that extend deeper than the existing wells, would be required and difficult. This option has not been retained as a potential applicable remedial action at the Site.

6.11 LNAPL Removal

Periodically key monitoring wells will be gauged for depth to LNAPL and depth to water. If LNAPL is encountered, it will be hand bailed into an on site accumulation drum. To facilitate LNAPL removal in between site visits oil absorbent socks can be placed into the monitoring wells as needed. According to manufacture specifications, one liter of LNAPL can be absorbed by each sock when it is spent. NAPL Removal will be retained as an applicable remedial action at the site.

7.0 SELECTION OF REMEDIAL ALTERNATIVE

Based on the type and concentration of OHM present in groundwater at the Site, and the type of subsurface materials and physical Site conditions, natural attenuation with LNAPL recovery have been selected as the preferred remedial alternatives. Natural attenuation and degradation will be evaluated by periodic groundwater sampling and LNAPL recovery will be performed as necessary by deploying sorbent sox in to monitoring wells RW-5, RW-6 and RW-7 .

The remedial action alternatives selected for this site (natural attenuation and LNAPL recovery) have been demonstrated to be adequate at petroleum-impacted sites with similar subsurface conditions throughout the region.

8.0 SUMMARY OF FINDINGS

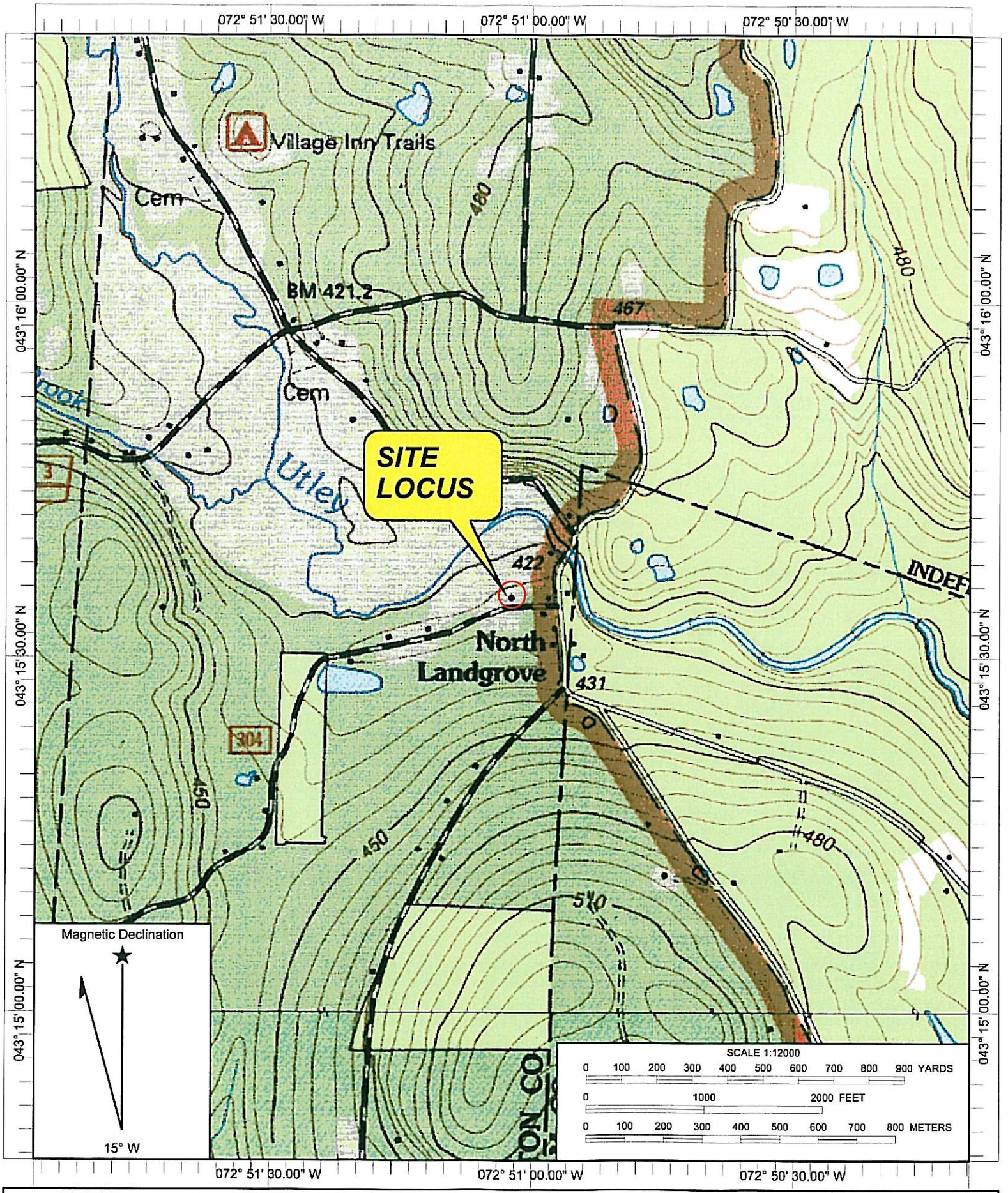
This CAFI has identified the following:

- Groundwater monitoring wells MW-4 through MW-7 were installed to better define the impacts to soil and groundwater. Soil encountered during soil boring consisted of a heterogeneous mixture of tightly packed tan silt and fine sand under lain by glacial till. Numerous large cobbles and boulders were also encountered. Two borings were advanced to depths of 20 and 22 feet bgs. Based on the elevations of these borings relative to the basement floor, the depth to bedrock is greater than the five feet below the basement floor as historically reported;
- The average hydraulic gradient across the Site is 0.04 feet per foot down to the west from the former UST location to monitoring well MW-7. Then from monitoring well MW-7 to wells MW-2 and MW-3 it appears to slope down to the northwest.
- Petroleum compounds were detected in soil at concentration below the VTDEC Residential Preliminary Remediation Goals. The horizontal and vertical extent of soil impact extends from the former UST area, under the southern portion of the house, to beyond MW-6 and down to at least 22 feet bgs.
- Petroleum impacts were not detected or observed in the pond, at or under the drain line terminus;
- Petroleum constituents were not detected in groundwater at concentrations above the VTDEC Enforcement Standards during the August 25, 2009 sampling event in monitoring wells MW-1, MW-2, MW-3, MW-7, PDW-1 and foundation drain line. At least one petroleum constituent was detected at a concentration exceeding the VTDEC Enforcement Standard in the samples analyzed from monitoring wells MW-4, MW-5, MW-6 and recovery well RW-7;
- The fact that oil constituents have not been detected in groundwater samples collected from monitoring well MW-7, MW-1 through MW-3 indicates that migration of oil has been attenuated by the soil and biodegradation is likely occurring;
- It appears that the footing drain had acted as a preferential migration pathway immediately following the release and likely reduced the extent of fuel oil impact to soil and groundwater below the house;

- Laboratory analysis of the air sample collected in the basement detected 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene at concentrations above the EPA Region III Screening Levels for Indoor Air. Analysis of an air sample collected from the first floor (living space) did not detected petroleum-related compounds at concentrations at or above the EPA Region III Screening Levels;
- Minimal vapor intrusion is occurring based on the comparison of indoor air PID readings, indoor air sample analytical results and the basement recovery wells PID readings; and
- Natural attenuation and LNAPL recovery have been selected as the most appropriate remedial technologies for the Site.

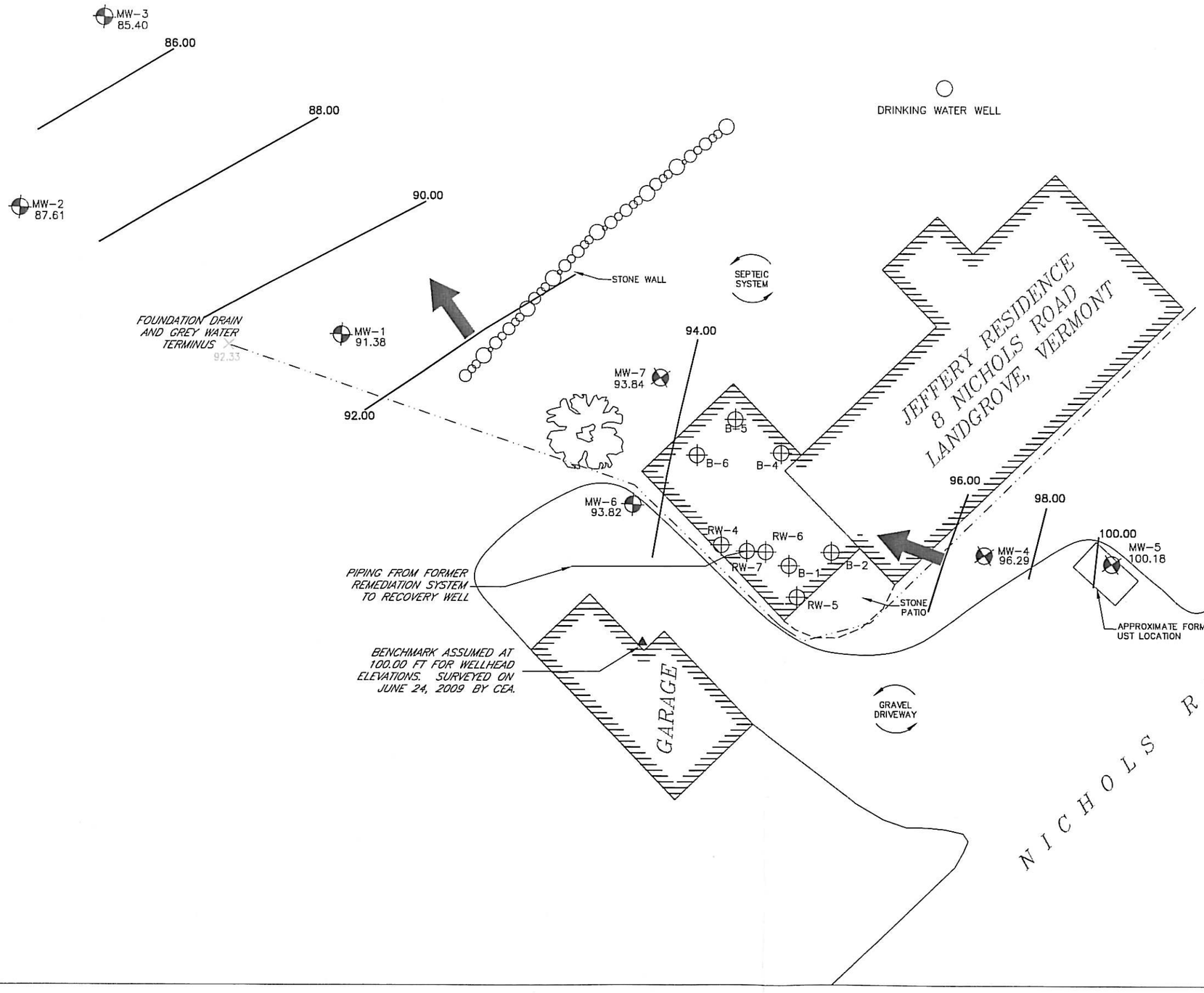
Figures

Figure 1 – Site Locus Map
Figure 2 – Site Layout with Groundwater Contours
Figure 3 – Estimated Soil and Groundwater Impact Plan



Name: WESTON
Date: 9/30/2009
Scale: 1 inch equals 1000 feet

Location: 043° 15' 35.05" N 072° 51' 03.39" W NAD 27
Caption: Figure 1 Site Locus Map
8 Nichols Road
Landgrove, Vermont



N
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LEGEND

- MW-1 95.27 — GROUNDWATER MONITORING WELL WITH GROUNDWATER ELEVATION FROM AUGUST 25, 2009 GAUGING EVENT
- RW-7 — GROUNDWATER RECOVERY WELL
- B-1 — SOIL BORING LOCATION
- 99.18 — SPOT ELEVATION
- 94.75 — GROUNDWATER CONTOUR LINE
- GROUNDWATER FLOW DIRECTION

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. PLAN BASED ON CEA SITE VISITS AND SURVEY ON MAY 8, 2009.

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)

CORPORATE ENVIRONMENTAL ADVISORS, INC.

Assessments – Remediation – Emergency Response

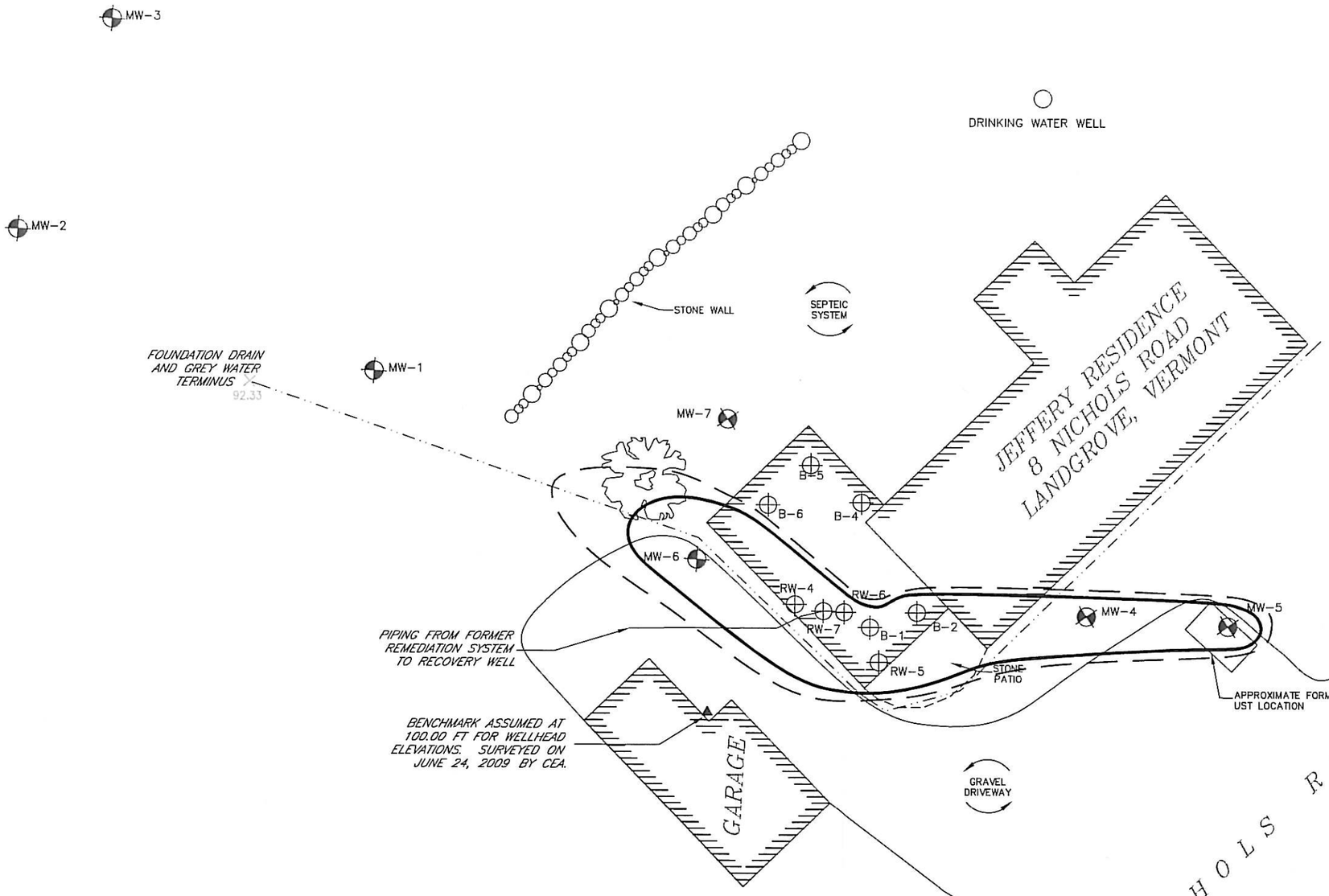
62A HALL STREET, CONCORD, NH

SCALE: 1" = 20'		DR. BY: WHH
DATE: September 21, 2009	APP. BY: EJ	JOB NO.: RI-0011-06

SITE LAYOUT WITH GROUNDWATER CONTOURS

NGMIC
Jeffery Residence
8 Nichols Road
Landgrove, Vermont

FIGURE 2



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LEGEND

- MW-1 — GROUNDWATER MONITORING WELL
- RW-7 — GROUNDWATER RECOVERY WELL
- B-1 — SOIL BORING LOCATION
- 99.16 — SPOT ELEVATION
- ESTIMATED AREA OF SOIL IMPACT
- ESTIMATED AREA OF GROUNDWATER IMPACT

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. PLAN BASED ON CEA SITE VISITS AND SURVEY ON MAY 8, 2009.

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)

CORPORATE ENVIRONMENTAL ADVISORS, INC.
Assessments – Remediation – Emergency Response
62A HALL STREET, CONCORD, NH

SCALE: 1" = 20'		DR. BY: WHH
DATE: September 21, 2009	APP. BY: EJ	JOB NO.: RI-0011-06

ESTIMATED SOIL AND GROUNDWATER IMPACT PLAN

NGMIC
Jeffery Residence
8 Nichols Road
Landgrove, Vermont

FIGURE 3

Tables

CORPORATE ENVIRONMENTAL ADVISORS, INC.

Table 1
Summary of Soil Analytical Results
Jeffery Residence
8 Nichols Road
Landgrove, Vermont

Sample ID Depth (Feet) Date	Residential Preliminary Remediation Goals	B(MW)-4 7-9 6/8/09	B(MW)-4 20-22 6/9/09	B(MW)-5 5-7 6/8/09
Volatile Organic Compounds (VOC) by EPA Method 8260B				
n-Butylbenzene	240	<0.0864	1.350	8.590
sec-Butylbenzene	220	<0.0864	1.140	7.330
tert-Butylbenzene	390	<0.0864	<0.330	1.770
Ethylbenzene	400	<0.0864	0.373	<1.210
Isopropylbenzene	570	<0.0864	0.564	2.990
4-Isopropyltoluene	NS	<0.0864	0.587	5.850
Naphthalene	56	<0.0864	2.160	3.330
n-Propylbenzene	240	<0.0864	1.390	7.550
1,2,4-Trimethylbenzene	56	<0.0864	2.670	7.600
1,3,5-Trimethylbenzene	56	<0.0864	1.980	13.000
Polynuclear Aromatic Hydrocarbons (PAH) by EPA Method 8270				
Acenaphthene	3,700	<0.160	<0.172	0.830
Fluorene	2,700	<0.160	<0.172	1.890
1-Methylnaphthalene	NS	<0.160	0.713	10.100
2-Methylnaphthalene	NS	<0.160	1.240	17.100
Naphthalene	56	<0.160	0.352	4.850
Phenanthrene	NS	<0.160	0.396	4.820
Pyrene	NS	<0.160	<0.172	0.626

Notes:
All concentrations are in milligrams per kilogram (mg/kg).
All other VOC and PAH concentrations not listed here were not detected above the laboratory detection limit.
<x.xx. indicates compound was below the laboratory reporting limit
NS - No standard available.

CORPORATE ENVIRONMENTAL ADVISORS, INC.

Table 2
Summary of Monitoring Well Gauging Data
Jeffrey Residence
8 Nichols Road
Landgrove, Vermont

Well Number	Date Gauged	Casing Elevation (ft)	Depth to Water (ft)	Depth to Product	Product Thickness	Groundwater Elevation (ft)
MW-1	06/24/09	95.59	4.22	--	--	91.37
	08/25/09	95.59	4.21	--	--	91.38
MW-2	06/24/09	88.51	1.69	--	--	86.82
	08/25/09	88.51	0.90	--	--	87.61
MW-3	05/08/08	86.25	1.86	--	--	84.39
	06/06/08	86.25	3.73	--	--	82.52
	06/12/08	86.25	2.89	--	--	83.36
	06/24/09	86.25	1.86	--	--	84.39
	08/25/09	86.25	0.85	--	--	85.40
MW-4	06/24/09	103.87	6.99		--	96.88
	08/25/09	103.87	7.58	--	--	96.29
MW-5	06/24/09	103.84	3.85	--	--	99.99
	08/25/09	103.84	3.66	--	--	100.18
MW-6	06/24/09	99.72	5.53	--	--	94.19
	08/25/09	99.72	5.90	--	--	93.82
MW-7	06/24/09	102.68	7.84	--	--	94.84
	08/25/09	102.68	8.84	--	--	93.84
RW-4	04/30/07	--	0.41	--	--	--
	07/09/07	--	Dry @ 2.50	--	--	--
	09/11/07	--	Dry @ 2.50	--	--	--
	04/14/08	--	0.45	--	--	--
	05/08/08	--	0.67	--	--	--
	06/06/08	--	Dry @ 2.50	--	--	--
	06/24/09	--	<0.86	--	--	--
	08/25/09	--	0.46	--	--	--
RW-5	04/30/07	--	NR	NR	0.03	--
	07/09/07	--	Dry @ 2.30	--	--	--
	09/11/07	--	Dry @ 2.30	--	--	--
	04/14/08	--	0.38	--	--	--
	05/08/08	--	0.45	--	--	--
	06/06/08	--	Dry @ 2.30	--	--	--
	06/24/09	--	<0.86	--	0.05*	--
	08/25/09	--	0.60	--	--	--

CORPORATE ENVIRONMENTAL ADVISORS, INC.

Table 2 (Continued)
Summary of Monitoring Well Gauging Data

Well Number	Date Gauged	Casing Elevation (ft)	Depth to Water (ft)	Depth to Product	Product Thickness	Groundwater Elevation (ft)
RW-6	04/30/07	--	0.41	--	--	--
	07/09/07	--	Dry @ 2.49	--	--	--
	09/11/07	--	Dry @ 2.49	--	--	--
	04/14/08	--	0.38	--	--	--
	05/08/08	--	0.52	--	--	--
	06/06/08	--	Dry @ 2.49	--	--	--
	06/24/09	--	<0.86	--	0.01*	--
	08/25/09	--	1.43	--	--	--
RW-7	04/30/07	--	0.37	--	--	--
	07/09/07	--	Dry @ 3.35	--	--	--
	09/11/07	--	Dry @ 3.35	--	--	--
	04/14/08	--	0.42	--	--	--
	05/08/08	--	0.35	--	--	--
	06/06/08	--	Dry @ 3.35	--	--	--
	06/24/09	--	0.92	0.90	0.02	--
	08/25/09	--	1.80	--	--	--

NR = Not Recorded

Elevations are measured in feet.

-- = Not Applicable

* = The liquid elevation was too close to the top of the wellhead to be gauged with an interface probe. Therefore the thickness was estimated.

CORPORATE ENVIRONMENTAL ADVISORS, INC.

Table 3
Summary of Groundwater Laboratory Analytical Results
Jeffery Residence
8 Nichols Road
Landgrove, Vermont

Monitoring Well ID	Outlet/Drain Line	MW-1	MW-2	MW-3		MW-4		MW-5		MW-6		MW-7		RW-4	RW-5	RW-6	RW-7		PDW-1				VDEC Enforcement Standards
Sampling Date	9/11/07	8/25/09	8/25/09	5/8/08	8/25/09	6/24/09	8/25/09	6/24/09	8/25/09	6/24/09	8/25/09	6/24/09	8/25/09	4/14/08	4/14/08	4/14/08	4/14/08	8/25/09	11/16/07	4/14/08	8/25/09	8/25/09	
Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270																							
Acenaphthene	--	<6.67	<5.95	<5.21	<0.10	<5.26	<5.43	<5.26	<8.33	<6.49	11.0	<5.21	<5.56	<5.32	0.27	810	<0.10	<0.10	<83.3	--	--	--	--	NS
Fluoranthene	--	<6.67	<5.95	<5.21	<0.10	<5.26	<5.43	<5.26	<8.33	<6.49	<5.43	<5.21	<5.56	<5.32	0.17	***<400***	<0.10	<0.10	<83.3	--	--	--	--	280.0
Fluorene	--	<6.67	<5.95	<5.21	<0.10	<5.26	<5.43	<5.26	<8.33	<6.49	13.6	6.00	<5.56	<5.32	0.72	**1,200**	<0.10	<0.10	105	--	--	--	--	280.0
1-Methylnaphthalene	--	<6.67	<5.95	<5.21	<0.10	<5.26	12.6	19.5	<8.33	<6.49	88.4	50.4	<5.56	<5.32	<0.10	<400	<0.10	<0.10	517	--	--	--	--	NS
2-Methylnaphthalene	--	<6.67	<5.95	<5.21	<0.10	<5.26	<5.43	15.9	<8.33	<6.49	96.7	60.0	<5.56	<5.32	4.6	11,000	10	45	812	--	--	--	--	NS
Naphthalene	--	<6.67	<5.95	<5.21	<0.10	<5.26	<5.43	15.1	<8.33	<6.49	**83.0**	**64.2**	<5.56	<5.32	1.8	**3,200**	<0.10	**71**	**240**	--	--	--	--	20.0
Phenanthrene	--	<6.67	<5.95	<5.21	<0.10	<5.26	<5.43	<5.26	<8.33	<6.49	21.6	5.40	<5.56	<5.32	1.1	2,200	<0.10	<0.10	223	--	--	--	--	NS
Pyrene	--	<6.67	<5.95	<5.21	<0.10	<5.26	<5.43	<5.26	<8.33	<6.49	<5.43	<5.21	<5.56	<5.32	0.68	400	<0.10	<0.10	<83.3	--	--	--	--	NS
Volatile Organic Compounds (VOCs) by EPA Method 8260B or 524.2																							
Acetone	--	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0	<50	<10.0	<10.0	<10.0	<100	210	<100	16.1	--	<5.0	<5.0	<10.0	700
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.3	1.2	<1.0	<1.0	**18.3**	**17.6**	<1.0	<1.0	<1.0	**33**	**5.5**	**76**	**24.2**	<1.0	<0.50	<0.50	<0.50	5
2-Butanone (MEK)	--	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0	<50.0	<10.0	<10.0	<10.0	<100	53	<100	<10.0	--	<5.0	<0.50	<10.0	NS
n-Butylbenzene	--	<1.0	<1.0	<1.0	<2.0	<1.0	4.4	2.2	2.8	1.8	8.8	9.4	<1.0	<1.0	<2.0	<20	<2.0	<20	2.8	--	<0.50	<0.50	<0.50	260
sec-Butylbenzene	--	<1.0	<1.0	<1.0	<2.0	<1.0	5.1	3.7	2.7	3.7	11.0	14.2	<1.0	<1.0	<2.0	<20	<2.0	<20	3.8	--	<0.50	<0.50	<0.50	260
tert-Butylbenzene	--	<1.0	<1.0	<1.0	<2.0	<1.0	3.0	2.2	2.7	2.0	5.2	6.0	<1.0	<1.0	<2.0	<20	<2.0	<20	2.8	--	<0.50	<0.50	<0.50	260
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	34.7	23.2	12.3	4.0	70.4	68.1	<1.0	<1.0	<2.0	74	2.8	81	39.1	<1.0	<0.50	<0.50	<0.50	700
Isopropylbenzene	--	<1.0	<1.0	<1.0	<2.0	<1.0	11.7	8.2	4.9	4.4	22.7	26.4	<1.0	<1.0	<2.0	31	<2.0	20	10.6	--	<0.50	<0.50	<0.50	NS
p-Isopropyltoluene	--	<1.0	<1.0	<1.0	<2.0	<1.0	3.3	1.8	4.0	3.2	9.2	9.8	<1.0	<1.0	<2.0	<20	<2.0	<20	3.0	--	<0.50	<0.50	<0.50	260
Naphthalene	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	**78.2**	**59.6**	**52.0**	18.4	**225**	**155**	<1.0	<1.0	<5.0	**260**	7.5	**160**	**103**	<1.0	<0.50	<0.50	<0.50	20
n-Propylbenzene	--	<1.0	<1.0	<1.0	<2.0	<1.0	14.7	11.4	5.2	6.6	33.8	44.0	<1.0	<1.0	<2.0	52	2.2	25	13.0	--	<0.50	<0.50	<0.50	NS
Styrene	--	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	1.0	--	<0.50	<0.50	<0.50	100
Tetrahydrofuran (THF)	--	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	32.4	--	<5.0	<2.5	<10	154
Toluene	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<2.0	<2.0	<2.0	<20	1.3	<1.0	<0.50	<0.50	<0.50	1,000
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	87.9	46.5	24.9	4.4	**278**	245	<1.0	<1.0	<2.0	**340**	13	160	141	<1.0	<0.50	<0.50	<0.50	Total for Both Counds
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	34.2	18.0	32.6	18.7	**77.7**	74.2	<1.0	<1.0	<2.0	**110**	4.3	43	45.6	<1.0	<0.50	<0.50	<0.50	Greater than 350
Total Xylenes	<4.0	<3.0	<3.0	<3.0	<4.0	<3.0	65.3	37.3	14.2	5.3	249	176.3	<3.0	<3.0	<4.0	340	11.2	340	184.5	<4.0	<1.0	<1.0	<1.0	10,000

Notes:
All concentrations are in micrograms per liter (ug/l).
Bold & Itallics indicates concentration is below laboratory reporting limit, but above the applicable Enforcement Standard.
Bold & Shaded indicates concentration exceeds the applicable Enforcement Standard.
<x.xx. indicates compound was below the laboratory reporting limit.
NS - No standard available.
-- not analyzed.
Only compounds with results above the laboratory reporting limit are shown for clarity. All other results were below reporting limit.

Table 4
Summary of Air Analytical Results
Jeffery Residence
8 Nichols Road
Landgrove, Vermont

Sample ID / Sample Date	Basement 6/24/09	First Floor 6/24/09	Ambient 6/24/09	EPA Region III Screening Level for Indoor Air
Volatile Organic Compounds (VOC) by EPA Method TO-15				
Dichlorodifluoromethane (Freon 12)	25.27	6.92	2.92	200
Chloromethane	<1.03	1.07	1.05	90
Acetone	32.08	45.62	7.34	31,000
Trichlorofluoromethane (Freon 11)	6.52	9.22	<2.81	700
Ethanol	12.05	65.61	3.79	NS
Isopropyl alcohol	1.77	2.60	3.98	7,000
2-Butanone (MEK)	5.60	8.11	<1.47	5,000
Cyclohexane	4.16	4.75	<1.72	6,000
n-Heptane	7.75	4.47	<2.05	NS
4-Methyl-2-pentanone (MIBK)	169.25	<2.05	<2.05	3,000
Toluene	42.14	16.67	<1.88	5,000
Tetrachloroethene	<3.39	196.65	<3.39	270
Ethylbenzene	11.36	<2.17	<2.17	1,000
Total Xylenes	78.81	2.51	<4.34	100
Isopropylbenzene	2.65	<2.46	<2.46	NS
1,3,5-Trimethylbenzene	**9.24**	<2.46	<2.46	6
4-Ethyltoluene	7.13	<2.46	<2.46	NS
1,2,4-Trimethylbenzene	**17.75**	<2.46	<2.46	7
4-Isopropyltoluene	3.38	<2.68	<2.68	NS
1,2-Dichlorobenzene	5.71	<2.74	<3.01	200
All other compounds	BRL	BRL	BRL	NS

Notes:

All concentrations are in micrograms per cubic meter (ug/m^3).
<x.xx. indicates compound was below the laboratory reporting limit
NS - No standard available.
BRL indicates results were below the laboratory reporting limit.

APPENDIX A
Copy of Laboratory Analytical Reports

Report Date:
25-Jun-09 16:23

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

CEA, Inc
62B Hall Street
Concord, NH 03301
Attn: Eric Johnson

Project: Jeffries Residence - Landgrove, VT
Project RI-0011-06

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA96169-01	B(MW)-4 7-9'	Soil	08-Jun-09 11:00	11-Jun-09 15:25
SA96169-02	B(MW)-4 20-22'	Soil	09-Jun-09 10:10	11-Jun-09 15:25
SA96169-03	B(MW)-5 5-7'	Soil	08-Jun-09 13:25	11-Jun-09 15:25

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
Vermont # VT-11393

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

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 21 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supercedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report is 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).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

CASE NARRATIVE:

The samples were received 2.3 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt.
An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

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

SW846 8260B

Blanks:

9061255-BLK1

Analyte quantified by quadratic equation type calibration.

1,2-Dibromo-3-chloropropane
trans-1,3-Dichloropropene

Laboratory Control Samples:

9061255-BS1

Analyte quantified by quadratic equation type calibration.

1,2-Dibromo-3-chloropropane
trans-1,3-Dichloropropene

9061255-BSD1

Analyte quantified by quadratic equation type calibration.

1,2-Dibromo-3-chloropropane
trans-1,3-Dichloropropene

Samples:

S905601-CCV1

Analyte quantified by quadratic equation type calibration.

1,2-Dibromo-3-chloropropane
trans-1,3-Dichloropropene

SA96169-01 *B(MW)-4 7-9'*

Analyte quantified by quadratic equation type calibration.

1,2-Dibromo-3-chloropropane
trans-1,3-Dichloropropene

SA96169-02 *B(MW)-4 20-22'*

Analyte quantified by quadratic equation type calibration.

1,2-Dibromo-3-chloropropane
trans-1,3-Dichloropropene

Elevated Reporting Limits due to the presence of high levels of non-target analytes.

SA96169-03 *B(MW)-5 5-7'*

Analyte quantified by quadratic equation type calibration.

1,2-Dibromo-3-chloropropane
trans-1,3-Dichloropropene

Elevated Reporting Limits due to the presence of high levels of non-target analytes.

SW846 8270C

Spikes:

9060992-MS1 *Source: SA96078-12*

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.

Pyrene

9060992-MSD1 *Source: SA96078-12*

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.

Pyrene

Duplicates:

9060992-DUP1 *Source: SA96078-12*

Analyses are not controlled on RPD values from sample concentrations less than the reporting limit. QC batch accepted based on LCS and/or LCSD QC results

Acenaphthylene

Visual evaluation of the sample indicates the RPD is above the control limit due to a non-homogeneous sample matrix.

Anthracene
Benzo (a) anthracene
Benzo (a) pyrene
Benzo (g,h,i) perylene
Benzo (k) fluoranthene
Chrysene
Fluoranthene
Indeno (1,2,3-cd) pyrene
Phenanthrene
Pyrene

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B(MW)-4 7-9' SA96169-01	RI-0011-06	Soil	08-Jun-09 11:00	11-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	11-Jun-09	11-Jun-09	9060995	
Volatile Organic Compounds						Initial weight: 12.28 g					
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	86.4	50	SW846 8260B	16-Jun-09	16-Jun-09	9061255	
67-64-1	Acetone	BRL		µg/kg dry	864	50	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	86.4	50	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	86.4	50	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	86.4	50	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	86.4	50	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	173	50	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	864	50	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	432	50	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	86.4	50	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	173	50	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	86.4	50	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	173	50	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	86.4	50	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	86.4	50	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL	CAL1	µg/kg dry	173	50	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	86.4	50	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	86.4	50	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	86.4	50	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	173	50	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	86.4	50	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	86.4	50	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	86.4	50	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	86.4	50	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	86.4	50	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	86.4	50	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	86.4	50	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	86.4	50	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	86.4	50	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	86.4	50	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL	CAL1	µg/kg dry	86.4	50	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	86.4	50	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	864	50	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/kg dry	86.4	50	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	86.4	50	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	864	50	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	864	50	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/kg dry	86.4	50	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B(MW)-4 7-9' SA96169-01	RI-0011-06	Soil	08-Jun-09 11:00	11-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds						Initial weight: 12.28 g					
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg dry	86.4	50	SW846 8260B	16-Jun-09	16-Jun-09	9061255	
100-42-5	Styrene	BRL		µg/kg dry	86.4	50	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	86.4	50	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	86.4	50	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	86.4	50	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	86.4	50	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	86.4	50	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	86.4	50	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	86.4	50	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	86.4	50	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	86.4	50	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg dry	86.4	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	86.4	50	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	173	50	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	86.4	50	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	864	50	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	86.4	50	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	86.4	50	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	86.4	50	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	86.4	50	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	864	50	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	1730	50	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	432	50	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	34500	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*105*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*99*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*94*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*92*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3545A											
83-32-9	Acenaphthene	BRL		µg/kg dry	160	1	SW846 8270C	12-Jun-09	22-Jun-09	9060992	
208-96-8	Acenaphthylene	BRL		µg/kg dry	160	1	"	"	"	"	
120-12-7	Anthracene	BRL		µg/kg dry	160	1	"	"	"	"	
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	160	1	"	"	"	"	
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	160	1	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	160	1	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	160	1	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	160	1	"	"	"	"	
218-01-9	Chrysene	BRL		µg/kg dry	160	1	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	160	1	"	"	"	"	
206-44-0	Fluoranthene	BRL		µg/kg dry	160	1	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	160	1	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	160	1	"	"	"	"	
90-12-0	1-Methylnaphthalene	BRL		µg/kg dry	160	1	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B(MW)-4 7-9' SA96169-01	RI-0011-06	Soil	08-Jun-09 11:00	11-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3545A											
91-57-6	2-Methylnaphthalene	BRL		µg/kg dry	160	1	SW846 8270C	12-Jun-09	22-Jun-09	9060992	
91-20-3	Naphthalene	BRL		µg/kg dry	160	1	"	"	"	"	
85-01-8	Phenanthrene	BRL		µg/kg dry	160	1	"	"	"	"	
129-00-0	Pyrene	BRL		µg/kg dry	160	1	"	"	"	"	
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*73*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*62*		*30-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	81.4		%		1	SM2540 G Mod.	19-Jun-09	19-Jun-09	9061583	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B(MW)-4 20-22' SA96169-02	RI-0011-06	Soil	09-Jun-09 10:10	11-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	11-Jun-09	11-Jun-09	9060995	
Volatile Organic Compounds			R05			Initial weight: 11.02 g					
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	330	200	SW846 8260B	16-Jun-09	17-Jun-09	9061255	
67-64-1	Acetone	BRL		µg/kg dry	3300	200	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	330	200	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	330	200	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	330	200	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	330	200	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	330	200	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	330	200	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	660	200	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	3300	200	"	"	"	"	
104-51-8	n-Butylbenzene	1,350		µg/kg dry	330	200	"	"	"	"	
135-98-8	sec-Butylbenzene	1,140		µg/kg dry	330	200	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/kg dry	330	200	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	1650	200	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	330	200	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	330	200	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	660	200	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	330	200	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	660	200	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	330	200	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	330	200	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL	CAL1	µg/kg dry	660	200	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	330	200	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	330	200	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	330	200	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	330	200	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	330	200	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	330	200	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	660	200	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	330	200	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	330	200	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	330	200	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	330	200	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	330	200	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	330	200	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	330	200	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	330	200	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	330	200	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	330	200	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL	CAL1	µg/kg dry	330	200	"	"	"	"	
100-41-4	Ethylbenzene	373		µg/kg dry	330	200	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	330	200	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	3300	200	"	"	"	"	
98-82-8	Isopropylbenzene	564		µg/kg dry	330	200	"	"	"	"	
99-87-6	4-Isopropyltoluene	587		µg/kg dry	330	200	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	330	200	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	3300	200	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	3300	200	"	"	"	"	
91-20-3	Naphthalene	2,160		µg/kg dry	330	200	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B(MW)-4 20-22' SA96169-02	RI-0011-06	Soil	09-Jun-09 10:10	11-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds			R05								
Prepared by method SW846 5030 Soil (high level)						Initial weight: 11.02 g					
103-65-1	n-Propylbenzene	1,390		µg/kg dry	330	200	SW846 8260B	16-Jun-09	17-Jun-09	9061255	
100-42-5	Styrene	BRL		µg/kg dry	330	200	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	330	200	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	330	200	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	330	200	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	330	200	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	330	200	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	330	200	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	330	200	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	330	200	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	330	200	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	330	200	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	330	200	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	330	200	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	2,670		µg/kg dry	330	200	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	1,980		µg/kg dry	330	200	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	330	200	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	660	200	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	330	200	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	3300	200	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	330	200	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	330	200	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	330	200	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	330	200	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	3300	200	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	6600	200	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	1650	200	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	132000	200	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*102*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*100*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3545A											
83-32-9	Acenaphthene	BRL		µg/kg dry	172	1	SW846 8270C	12-Jun-09	22-Jun-09	9060992	
208-96-8	Acenaphthylene	BRL		µg/kg dry	172	1	"	"	"	"	
120-12-7	Anthracene	BRL		µg/kg dry	172	1	"	"	"	"	
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	172	1	"	"	"	"	
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	172	1	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	172	1	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	172	1	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	172	1	"	"	"	"	
218-01-9	Chrysene	BRL		µg/kg dry	172	1	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	172	1	"	"	"	"	
206-44-0	Fluoranthene	BRL		µg/kg dry	172	1	"	"	"	"	
86-73-7	Fluorene	BRL		µg/kg dry	172	1	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	172	1	"	"	"	"	
90-12-0	1-Methylnaphthalene	713		µg/kg dry	172	1	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B(MW)-4 20-22' SA96169-02	RI-0011-06	Soil	09-Jun-09 10:10	11-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3545A											
91-57-6	2-Methylnaphthalene	1,240		µg/kg dry	172	1	SW846 8270C	12-Jun-09	22-Jun-09	9060992	
91-20-3	Naphthalene	352		µg/kg dry	172	1	"	"	"	"	
85-01-8	Phenanthrene	396		µg/kg dry	172	1	"	"	"	"	
129-00-0	Pyrene	BRL		µg/kg dry	172	1	"	"	"	"	
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*74*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*63*		*30-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	89.1		%		1	SM2540 G Mod.	19-Jun-09	19-Jun-09	9061583	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B(MW)-5 5-7' SA96169-03	RI-0011-06	Soil	08-Jun-09 13:25	11-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
	VOC Extraction	Field extracted		N/A		1	VOC Soil Extraction	11-Jun-09	11-Jun-09	9060995	
Volatile Organic Compounds			R05			Initial weight: 8.29 g					
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg dry	1210	500	SW846 8260B	16-Jun-09	17-Jun-09	9061255	
67-64-1	Acetone	BRL		µg/kg dry	12100	500	"	"	"	"	
107-13-1	Acrylonitrile	BRL		µg/kg dry	1210	500	"	"	"	"	
71-43-2	Benzene	BRL		µg/kg dry	1210	500	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/kg dry	1210	500	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/kg dry	1210	500	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/kg dry	1210	500	"	"	"	"	
75-25-2	Bromoform	BRL		µg/kg dry	1210	500	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/kg dry	2420	500	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/kg dry	12100	500	"	"	"	"	
104-51-8	n-Butylbenzene	8,590		µg/kg dry	1210	500	"	"	"	"	
135-98-8	sec-Butylbenzene	7,330		µg/kg dry	1210	500	"	"	"	"	
98-06-6	tert-Butylbenzene	1,770		µg/kg dry	1210	500	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/kg dry	6050	500	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/kg dry	1210	500	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/kg dry	1210	500	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/kg dry	2420	500	"	"	"	"	
67-66-3	Chloroform	BRL		µg/kg dry	1210	500	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/kg dry	2420	500	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/kg dry	1210	500	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/kg dry	1210	500	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL	CAL1	µg/kg dry	2420	500	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/kg dry	1210	500	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg dry	1210	500	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/kg dry	1210	500	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg dry	1210	500	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg dry	1210	500	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg dry	1210	500	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg dry	2420	500	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/kg dry	1210	500	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/kg dry	1210	500	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/kg dry	1210	500	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	1210	500	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg dry	1210	500	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/kg dry	1210	500	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/kg dry	1210	500	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/kg dry	1210	500	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/kg dry	1210	500	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg dry	1210	500	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL	CAL1	µg/kg dry	1210	500	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/kg dry	1210	500	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/kg dry	1210	500	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/kg dry	12100	500	"	"	"	"	
98-82-8	Isopropylbenzene	2,990		µg/kg dry	1210	500	"	"	"	"	
99-87-6	4-Isopropyltoluene	5,850		µg/kg dry	1210	500	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg dry	1210	500	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg dry	12100	500	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/kg dry	12100	500	"	"	"	"	
91-20-3	Naphthalene	3,330		µg/kg dry	1210	500	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B(MW)-5 5-7' SA96169-03	RI-0011-06	Soil	08-Jun-09 13:25	11-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds			R05			Initial weight: 8.29 g					
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	7,550		µg/kg dry	1210	500	SW846 8260B	16-Jun-09	17-Jun-09	9061255	
100-42-5	Styrene	BRL		µg/kg dry	1210	500	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg dry	1210	500	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg dry	1210	500	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	1210	500	"	"	"	"	
108-88-3	Toluene	BRL		µg/kg dry	1210	500	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg dry	1210	500	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg dry	1210	500	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/kg dry	1210	500	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg dry	1210	500	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg dry	1210	500	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	1210	500	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg dry	1210	500	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg dry	1210	500	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	7,600		µg/kg dry	1210	500	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	13,000		µg/kg dry	1210	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	1210	500	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/kg dry	2420	500	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/kg dry	1210	500	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/kg dry	12100	500	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/kg dry	1210	500	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/kg dry	1210	500	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg dry	1210	500	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/kg dry	1210	500	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg dry	12100	500	"	"	"	"	
123-91-1	1,4-Dioxane	BRL		µg/kg dry	24200	500	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/kg dry	6050	500	"	"	"	"	
64-17-5	Ethanol	BRL		µg/kg dry	484000	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*99*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*96*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3545A											
83-32-9	Acenaphthene	830		µg/kg dry	194	1	SW846 8270C	12-Jun-09	22-Jun-09	9060992	
208-96-8	Acenaphthylene	BRL		µg/kg dry	194	1	"	"	"	"	
120-12-7	Anthracene	BRL		µg/kg dry	194	1	"	"	"	"	
56-55-3	Benzo (a) anthracene	BRL		µg/kg dry	194	1	"	"	"	"	
50-32-8	Benzo (a) pyrene	BRL		µg/kg dry	194	1	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg dry	194	1	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg dry	194	1	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg dry	194	1	"	"	"	"	
218-01-9	Chrysene	BRL		µg/kg dry	194	1	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg dry	194	1	"	"	"	"	
206-44-0	Fluoranthene	BRL		µg/kg dry	194	1	"	"	"	"	
86-73-7	Fluorene	1,890		µg/kg dry	194	1	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg dry	194	1	"	"	"	"	
90-12-0	1-Methylnaphthalene	10,100		µg/kg dry	194	1	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B(MW)-5 5-7' SA96169-03	RI-0011-06	Soil	08-Jun-09 13:25	11-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3545A											
91-57-6	2-Methylnaphthalene	17,100		µg/kg dry	194	1	SW846 8270C	12-Jun-09	22-Jun-09	9060992	
91-20-3	Naphthalene	4,850		µg/kg dry	194	1	"	"	"	"	
85-01-8	Phenanthrene	4,280		µg/kg dry	194	1	"	"	"	"	
129-00-0	Pyrene	626		µg/kg dry	194	1	"	"	"	"	
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*72*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*63*		*30-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	82.1		%		1	SM2540 G Mod.	19-Jun-09	19-Jun-09	9061583	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9061255 - SW846 5030 Soil (high level)										
Blank (9061255-BLK1)										
Prepared & Analyzed: 16-Jun-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg wet	1.0						
Acetone	BRL		µg/kg wet	10.0						
Acrylonitrile	BRL		µg/kg wet	1.0						
Benzene	BRL		µg/kg wet	1.0						
Bromobenzene	BRL		µg/kg wet	1.0						
Bromochloromethane	BRL		µg/kg wet	1.0						
Bromodichloromethane	BRL		µg/kg wet	1.0						
Bromoform	BRL		µg/kg wet	1.0						
Bromomethane	BRL		µg/kg wet	2.0						
2-Butanone (MEK)	BRL		µg/kg wet	10.0						
n-Butylbenzene	BRL		µg/kg wet	1.0						
sec-Butylbenzene	BRL		µg/kg wet	1.0						
tert-Butylbenzene	BRL		µg/kg wet	1.0						
Carbon disulfide	BRL		µg/kg wet	5.0						
Carbon tetrachloride	BRL		µg/kg wet	1.0						
Chlorobenzene	BRL		µg/kg wet	1.0						
Chloroethane	BRL		µg/kg wet	2.0						
Chloroform	BRL		µg/kg wet	1.0						
Chloromethane	BRL		µg/kg wet	2.0						
2-Chlorotoluene	BRL		µg/kg wet	1.0						
4-Chlorotoluene	BRL		µg/kg wet	1.0						
1,2-Dibromo-3-chloropropane	BRL	CAL1	µg/kg wet	2.0						
Dibromochloromethane	BRL		µg/kg wet	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/kg wet	1.0						
Dibromomethane	BRL		µg/kg wet	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet	2.0						
1,1-Dichloroethane	BRL		µg/kg wet	1.0						
1,2-Dichloroethane	BRL		µg/kg wet	1.0						
1,1-Dichloroethene	BRL		µg/kg wet	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet	1.0						
1,2-Dichloropropane	BRL		µg/kg wet	1.0						
1,3-Dichloropropane	BRL		µg/kg wet	1.0						
2,2-Dichloropropane	BRL		µg/kg wet	1.0						
1,1-Dichloropropene	BRL		µg/kg wet	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet	1.0						
trans-1,3-Dichloropropene	BRL	CAL1	µg/kg wet	1.0						
Ethylbenzene	BRL		µg/kg wet	1.0						
Hexachlorobutadiene	BRL		µg/kg wet	1.0						
2-Hexanone (MBK)	BRL		µg/kg wet	10.0						
Isopropylbenzene	BRL		µg/kg wet	1.0						
4-Isopropyltoluene	BRL		µg/kg wet	1.0						
Methyl tert-butyl ether	BRL		µg/kg wet	1.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg wet	10.0						
Methylene chloride	BRL		µg/kg wet	10.0						
Naphthalene	BRL		µg/kg wet	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9061255 - SW846 5030 Soil (high level)										
Blank (9061255-BLK1)										
Prepared & Analyzed: 16-Jun-09										
n-Propylbenzene	BRL		µg/kg wet	1.0						
Styrene	BRL		µg/kg wet	1.0						
1,1,1,2-Tetrachloroethane	BRL		µg/kg wet	1.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet	1.0						
Tetrachloroethene	BRL		µg/kg wet	1.0						
Toluene	BRL		µg/kg wet	1.0						
1,2,3-Trichlorobenzene	BRL		µg/kg wet	1.0						
1,2,4-Trichlorobenzene	BRL		µg/kg wet	1.0						
1,3,5-Trichlorobenzene	BRL		µg/kg wet	1.0						
1,1,1-Trichloroethane	BRL		µg/kg wet	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet	1.0						
Trichloroethene	BRL		µg/kg wet	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet	1.0						
1,2,3-Trichloropropane	BRL		µg/kg wet	1.0						
1,2,4-Trimethylbenzene	BRL		µg/kg wet	1.0						
1,3,5-Trimethylbenzene	BRL		µg/kg wet	1.0						
Vinyl chloride	BRL		µg/kg wet	1.0						
m,p-Xylene	BRL		µg/kg wet	2.0						
o-Xylene	BRL		µg/kg wet	1.0						
Tetrahydrofuran	BRL		µg/kg wet	10.0						
Ethyl ether	BRL		µg/kg wet	1.0						
Tert-amyl methyl ether	BRL		µg/kg wet	1.0						
Ethyl tert-butyl ether	BRL		µg/kg wet	1.0						
Di-isopropyl ether	BRL		µg/kg wet	1.0						
Tert-Butanol / butyl alcohol	BRL		µg/kg wet	10.0						
1,4-Dioxane	BRL		µg/kg wet	20.0						
trans-1,4-Dichloro-2-butene	BRL		µg/kg wet	5.0						
Ethanol	BRL		µg/kg wet	400						
Surrogate: 4-Bromofluorobenzene	*29.7*		µg/kg wet		*30.0*		*99*	*70-130*		
Surrogate: Toluene-d8	*31.1*		µg/kg wet		*30.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.7*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Dibromofluoromethane	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
LCS (9061255-BS1)										
Prepared & Analyzed: 16-Jun-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	25.0		µg/kg wet		20.0		125	70-130		
Acetone	18.0		µg/kg wet		20.0		90	40-193		
Acrylonitrile	17.2		µg/kg wet		20.0		86	70-130		
Benzene	19.9		µg/kg wet		20.0		99	70-130		
Bromobenzene	19.2		µg/kg wet		20.0		96	70-130		
Bromochloromethane	19.3		µg/kg wet		20.0		97	70-130		
Bromodichloromethane	20.5		µg/kg wet		20.0		102	70-130		
Bromoform	20.6		µg/kg wet		20.0		103	70-130		
Bromomethane	19.0		µg/kg wet		20.0		95	62.9-131		
2-Butanone (MEK)	16.2		µg/kg wet		20.0		81	47-163		
n-Butylbenzene	19.8		µg/kg wet		20.0		99	70-130		
sec-Butylbenzene	20.1		µg/kg wet		20.0		100	70-130		
tert-Butylbenzene	20.5		µg/kg wet		20.0		103	70-130		
Carbon disulfide	18.7		µg/kg wet		20.0		94	70-130		
Carbon tetrachloride	23.2		µg/kg wet		20.0		116	70-130		
Chlorobenzene	19.7		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 9061255 - SW846 5030 Soil (high level)										
LCS (9061255-BS1)										
Prepared & Analyzed: 16-Jun-09										
Chloroethane	18.9		µg/kg wet		20.0		94	64.2-130		
Chloroform	20.5		µg/kg wet		20.0		103	70-130		
Chloromethane	18.4		µg/kg wet		20.0		92	70-130		
2-Chlorotoluene	19.8		µg/kg wet		20.0		99	70-130		
4-Chlorotoluene	19.8		µg/kg wet		20.0		99	70-130		
1,2-Dibromo-3-chloropropane	17.4	CAL1	µg/kg wet		20.0		87	70-130		
Dibromochloromethane	21.5		µg/kg wet		20.0		108	70-130		
1,2-Dibromoethane (EDB)	19.9		µg/kg wet		20.0		99	70-130		
Dibromomethane	19.2		µg/kg wet		20.0		96	70-130		
1,2-Dichlorobenzene	17.7		µg/kg wet		20.0		89	70-130		
1,3-Dichlorobenzene	19.0		µg/kg wet		20.0		95	70-130		
1,4-Dichlorobenzene	17.5		µg/kg wet		20.0		87	70-130		
Dichlorodifluoromethane (Freon12)	19.2		µg/kg wet		20.0		96	62.6-136		
1,1-Dichloroethane	20.8		µg/kg wet		20.0		104	70-130		
1,2-Dichloroethane	19.8		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	20.4		µg/kg wet		20.0		102	70-130		
trans-1,2-Dichloroethene	19.0		µg/kg wet		20.0		95	70-130		
1,2-Dichloropropane	20.8		µg/kg wet		20.0		104	70-130		
1,3-Dichloropropane	19.6		µg/kg wet		20.0		98	70-130		
2,2-Dichloropropane	23.5		µg/kg wet		20.0		118	70-130		
1,1-Dichloropropene	21.2		µg/kg wet		20.0		106	70-130		
cis-1,3-Dichloropropene	20.2		µg/kg wet		20.0		101	70-130		
trans-1,3-Dichloropropene	22.0	CAL1	µg/kg wet		20.0		110	70-130		
Ethylbenzene	19.4		µg/kg wet		20.0		97	70-130		
Hexachlorobutadiene	17.4		µg/kg wet		20.0		87	70-130		
2-Hexanone (MBK)	17.3		µg/kg wet		20.0		86	70-130		
Isopropylbenzene	17.5		µg/kg wet		20.0		88	70-130		
4-Isopropyltoluene	19.7		µg/kg wet		20.0		98	70-130		
Methyl tert-butyl ether	20.6		µg/kg wet		20.0		103	70-130		
4-Methyl-2-pentanone (MIBK)	17.8		µg/kg wet		20.0		89	70-130		
Methylene chloride	18.0		µg/kg wet		20.0		90	70-130		
Naphthalene	17.2		µg/kg wet		20.0		86	70-130		
n-Propylbenzene	20.5		µg/kg wet		20.0		102	70-130		
Styrene	20.0		µg/kg wet		20.0		100	70-130		
1,1,1,2-Tetrachloroethane	21.5		µg/kg wet		20.0		107	70-130		
1,1,2,2-Tetrachloroethane	18.9		µg/kg wet		20.0		95	70-130		
Tetrachloroethene	21.6		µg/kg wet		20.0		108	70-130		
Toluene	20.2		µg/kg wet		20.0		101	70-130		
1,2,3-Trichlorobenzene	18.4		µg/kg wet		20.0		92	70-130		
1,2,4-Trichlorobenzene	17.3		µg/kg wet		20.0		87	70-130		
1,3,5-Trichlorobenzene	17.8		µg/kg wet		20.0		89	70-130		
1,1,1-Trichloroethane	22.3		µg/kg wet		20.0		112	70-130		
1,1,2-Trichloroethane	20.8		µg/kg wet		20.0		104	70-130		
Trichloroethene	20.8		µg/kg wet		20.0		104	70-130		
Trichlorofluoromethane (Freon 11)	22.7		µg/kg wet		20.0		114	70-140		
1,2,3-Trichloropropane	18.9		µg/kg wet		20.0		94	70-130		
1,2,4-Trimethylbenzene	19.2		µg/kg wet		20.0		96	70-130		
1,3,5-Trimethylbenzene	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 9061255 - SW846 5030 Soil (high level)										
LCS (9061255-BS1)										
Prepared & Analyzed: 16-Jun-09										
Vinyl chloride	25.4		µg/kg wet		20.0		127	70-130		
m,p-Xylene	39.1		µg/kg wet		40.0		98	70-130		
o-Xylene	19.7		µg/kg wet		20.0		99	70-130		
Tetrahydrofuran	17.6		µg/kg wet		20.0		88	70-130		
Ethyl ether	18.8		µg/kg wet		20.0		94	70-132		
Tert-amyl methyl ether	21.5		µg/kg wet		20.0		108	70-130		
Ethyl tert-butyl ether	21.6		µg/kg wet		20.0		108	70-130		
Di-isopropyl ether	17.9		µg/kg wet		20.0		90	70-130		
Tert-Butanol / butyl alcohol	189		µg/kg wet		200		94	70-130		
1,4-Dioxane	223		µg/kg wet		200		111	59.1-148		
trans-1,4-Dichloro-2-butene	21.0		µg/kg wet		20.0		105	70-130		
Ethanol	375		µg/kg wet		400		94	70-130		
Surrogate: 4-Bromofluorobenzene	*30.8*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*31.6*		µg/kg wet		*30.0*		*105*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*30.0*		µg/kg wet		*30.0*		*100*	*70-130*		
LCS Dup (9061255-BSD1)										
Prepared & Analyzed: 16-Jun-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	23.1		µg/kg wet		20.0		115	70-130	8	25
Acetone	17.8		µg/kg wet		20.0		89	40-193	1	50
Acrylonitrile	17.6		µg/kg wet		20.0		88	70-130	3	25
Benzene	18.8		µg/kg wet		20.0		94	70-130	5	25
Bromobenzene	18.6		µg/kg wet		20.0		93	70-130	3	25
Bromochloromethane	18.3		µg/kg wet		20.0		92	70-130	5	25
Bromodichloromethane	19.6		µg/kg wet		20.0		98	70-130	5	25
Bromoform	20.7		µg/kg wet		20.0		104	70-130	0.9	25
Bromomethane	17.9		µg/kg wet		20.0		90	62.9-131	6	50
2-Butanone (MEK)	17.6		µg/kg wet		20.0		88	47-163	8	50
n-Butylbenzene	20.3		µg/kg wet		20.0		102	70-130	2	25
sec-Butylbenzene	21.4		µg/kg wet		20.0		107	70-130	6	25
tert-Butylbenzene	21.0		µg/kg wet		20.0		105	70-130	2	25
Carbon disulfide	18.1		µg/kg wet		20.0		91	70-130	3	25
Carbon tetrachloride	21.8		µg/kg wet		20.0		109	70-130	6	25
Chlorobenzene	20.3		µg/kg wet		20.0		101	70-130	3	25
Chloroethane	17.6		µg/kg wet		20.0		88	64.2-130	7	50
Chloroform	20.0		µg/kg wet		20.0		100	70-130	2	25
Chloromethane	17.3		µg/kg wet		20.0		87	70-130	6	25
2-Chlorotoluene	20.0		µg/kg wet		20.0		100	70-130	0.9	25
4-Chlorotoluene	20.3		µg/kg wet		20.0		101	70-130	2	25
1,2-Dibromo-3-chloropropane	21.0	CAL1	µg/kg wet		20.0		105	70-130	18	25
Dibromochloromethane	20.0		µg/kg wet		20.0		100	70-130	7	50
1,2-Dibromoethane (EDB)	20.2		µg/kg wet		20.0		101	70-130	2	25
Dibromomethane	18.2		µg/kg wet		20.0		91	70-130	6	25
1,2-Dichlorobenzene	19.1		µg/kg wet		20.0		96	70-130	8	25
1,3-Dichlorobenzene	20.4		µg/kg wet		20.0		102	70-130	7	25
1,4-Dichlorobenzene	18.7		µg/kg wet		20.0		93	70-130	7	25
Dichlorodifluoromethane (Freon12)	16.3		µg/kg wet		20.0		81	62.6-136	17	50
1,1-Dichloroethane	19.6		µg/kg wet		20.0		98	70-130	6	25
1,2-Dichloroethane	19.1		µg/kg wet		20.0		96	70-130	4	25
1,1-Dichloroethene	18.6		µg/kg wet		20.0		93	70-130	7	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9061255 - SW846 5030 Soil (high level)										
LCS Dup (9061255-BSD1)										
Prepared & Analyzed: 16-Jun-09										
cis-1,2-Dichloroethene	19.9		µg/kg wet		20.0		100	70-130	2	25
trans-1,2-Dichloroethene	18.4		µg/kg wet		20.0		92	70-130	3	25
1,2-Dichloropropane	19.9		µg/kg wet		20.0		99	70-130	5	25
1,3-Dichloropropane	19.2		µg/kg wet		20.0		96	70-130	2	25
2,2-Dichloropropane	22.8		µg/kg wet		20.0		114	70-130	3	25
1,1-Dichloropropene	19.3		µg/kg wet		20.0		96	70-130	9	25
cis-1,3-Dichloropropene	19.0		µg/kg wet		20.0		95	70-130	6	25
trans-1,3-Dichloropropene	20.9	CAL1	µg/kg wet		20.0		104	70-130	5	25
Ethylbenzene	19.4		µg/kg wet		20.0		97	70-130	0.1	25
Hexachlorobutadiene	18.9		µg/kg wet		20.0		94	70-130	8	50
2-Hexanone (MBK)	19.0		µg/kg wet		20.0		95	70-130	9	25
Isopropylbenzene	17.4		µg/kg wet		20.0		87	70-130	1	25
4-Isopropyltoluene	20.2		µg/kg wet		20.0		101	70-130	3	25
Methyl tert-butyl ether	20.1		µg/kg wet		20.0		100	70-130	3	25
4-Methyl-2-pentanone (MIBK)	17.2		µg/kg wet		20.0		86	70-130	3	50
Methylene chloride	17.8		µg/kg wet		20.0		89	70-130	0.7	25
Naphthalene	18.9		µg/kg wet		20.0		95	70-130	10	25
n-Propylbenzene	19.9		µg/kg wet		20.0		100	70-130	3	25
Styrene	19.8		µg/kg wet		20.0		99	70-130	1	25
1,1,1,2-Tetrachloroethane	22.2		µg/kg wet		20.0		111	70-130	3	25
1,1,2,2-Tetrachloroethane	20.3		µg/kg wet		20.0		102	70-130	7	25
Tetrachloroethene	19.3		µg/kg wet		20.0		96	70-130	11	25
Toluene	19.1		µg/kg wet		20.0		96	70-130	5	25
1,2,3-Trichlorobenzene	19.8		µg/kg wet		20.0		99	70-130	7	25
1,2,4-Trichlorobenzene	19.0		µg/kg wet		20.0		95	70-130	9	25
1,3,5-Trichlorobenzene	18.8		µg/kg wet		20.0		94	70-130	5	25
1,1,1-Trichloroethane	21.6		µg/kg wet		20.0		108	70-130	4	25
1,1,2-Trichloroethane	19.9		µg/kg wet		20.0		99	70-130	4	25
Trichloroethene	20.0		µg/kg wet		20.0		100	70-130	4	25
Trichlorofluoromethane (Freon 11)	21.4		µg/kg wet		20.0		107	70-140	6	50
1,2,3-Trichloropropane	20.8		µg/kg wet		20.0		104	70-130	9	25
1,2,4-Trimethylbenzene	19.2		µg/kg wet		20.0		96	70-130	0.2	25
1,3,5-Trimethylbenzene	19.9		µg/kg wet		20.0		100	70-130	1	25
Vinyl chloride	23.5		µg/kg wet		20.0		117	70-130	8	25
m,p-Xylene	39.8		µg/kg wet		40.0		100	70-130	2	25
o-Xylene	18.8		µg/kg wet		20.0		94	70-130	5	25
Tetrahydrofuran	18.3		µg/kg wet		20.0		91	70-130	4	25
Ethyl ether	18.9		µg/kg wet		20.0		94	70-132	0.5	50
Tert-amyl methyl ether	21.4		µg/kg wet		20.0		107	70-130	0.6	25
Ethyl tert-butyl ether	22.2		µg/kg wet		20.0		111	70-130	2	25
Di-isopropyl ether	17.5		µg/kg wet		20.0		88	70-130	2	25
Tert-Butanol / butyl alcohol	197		µg/kg wet		200		98	70-130	4	25
1,4-Dioxane	203		µg/kg wet		200		101	59.1-148	9	25
trans-1,4-Dichloro-2-butene	21.6		µg/kg wet		20.0		108	70-130	3	25
Ethanol	383		µg/kg wet		400		96	70-130	2	30
Surrogate: 4-Bromofluorobenzene	*30.5*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*30.7*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*30.0*		µg/kg wet		*30.0*		*100*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9061255 - SW846 5030 Soil (high level)										
Matrix Spike (9061255-MS1) **Source: SA96169-01**										
Prepared: 16-Jun-09 Analyzed: 17-Jun-09										
Benzene	20.8		µg/kg dry		20.0	BRL	104	70-130		
Chlorobenzene	24.3		µg/kg dry		20.0	BRL	122	70-130		
1,1-Dichloroethene	19.1		µg/kg dry		20.0	BRL	96	70-130		
Toluene	22.1		µg/kg dry		20.0	BRL	111	70-130		
Trichloroethene	22.9		µg/kg dry		20.0	BRL	115	70-130		
Surrogate: 4-Bromofluorobenzene	*30.8*		µg/kg dry		*30.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*30.7*		µg/kg dry		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.4*		µg/kg dry		*30.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*30.4*		µg/kg dry		*30.0*		*101*	*70-130*		
Matrix Spike Dup (9061255-MSD1) **Source: SA96169-01**										
Prepared: 16-Jun-09 Analyzed: 17-Jun-09										
Benzene	19.7		µg/kg dry		20.0	BRL	98	70-130	5	30
Chlorobenzene	23.7		µg/kg dry		20.0	BRL	118	70-130	3	30
1,1-Dichloroethene	20.4		µg/kg dry		20.0	BRL	102	70-130	6	30
Toluene	21.0		µg/kg dry		20.0	BRL	105	70-130	5	30
Trichloroethene	22.7		µg/kg dry		20.0	BRL	113	70-130	1	30
Surrogate: 4-Bromofluorobenzene	*29.9*		µg/kg dry		*30.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*29.5*		µg/kg dry		*30.0*		*98*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*27.8*		µg/kg dry		*30.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*29.5*		µg/kg dry		*30.0*		*98*	*70-130*		

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9060992 - SW846 3545A										
Blank (9060992-BLK1)										
Prepared: 12-Jun-09 Analyzed: 23-Jun-09										
Acenaphthene	BRL		µg/kg wet	33.2						
Acenaphthylene	BRL		µg/kg wet	33.2						
Anthracene	BRL		µg/kg wet	33.2						
Benzo (a) anthracene	BRL		µg/kg wet	33.2						
Benzo (a) pyrene	BRL		µg/kg wet	33.2						
Benzo (b) fluoranthene	BRL		µg/kg wet	33.2						
Benzo (g,h,i) perylene	BRL		µg/kg wet	33.2						
Benzo (k) fluoranthene	BRL		µg/kg wet	33.2						
Chrysene	BRL		µg/kg wet	33.2						
Dibenzo (a,h) anthracene	BRL		µg/kg wet	33.2						
Fluoranthene	BRL		µg/kg wet	33.2						
Fluorene	BRL		µg/kg wet	33.2						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg wet	33.2						
1-Methylnaphthalene	BRL		µg/kg wet	33.2						
2-Methylnaphthalene	BRL		µg/kg wet	33.2						
Naphthalene	BRL		µg/kg wet	33.2						
Phenanthrene	BRL		µg/kg wet	33.2						
Pyrene	BRL		µg/kg wet	33.2						
Surrogate: 2-Fluorobiphenyl	*1190*		µg/kg wet		*1670*		*72*	*30-130*		
Surrogate: Terphenyl-dl4	*1080*		µg/kg wet		*1670*		*65*	*30-130*		
LCS (9060992-BS1)										
Prepared: 12-Jun-09 Analyzed: 23-Jun-09										
Acenaphthene	1230		µg/kg wet	33.2	1670		74	40-140		
Acenaphthylene	1260		µg/kg wet	33.2	1670		76	40-140		
Anthracene	1360		µg/kg wet	33.2	1670		81	40-140		
Benzo (a) anthracene	1260		µg/kg wet	33.2	1670		76	40-140		
Benzo (a) pyrene	1370		µg/kg wet	33.2	1670		82	40-140		
Benzo (b) fluoranthene	1160		µg/kg wet	33.2	1670		70	40-140		
Benzo (g,h,i) perylene	1380		µg/kg wet	33.2	1670		83	40-140		
Benzo (k) fluoranthene	1520		µg/kg wet	33.2	1670		91	40-140		
Chrysene	1240		µg/kg wet	33.2	1670		74	40-140		
Dibenzo (a,h) anthracene	1440		µg/kg wet	33.2	1670		86	40-140		
Fluoranthene	1450		µg/kg wet	33.2	1670		87	40-140		
Fluorene	1290		µg/kg wet	33.2	1670		77	40-140		
Indeno (1,2,3-cd) pyrene	1370		µg/kg wet	33.2	1670		82	40-140		
1-Methylnaphthalene	1230		µg/kg wet	33.2	1670		74	40-140		
2-Methylnaphthalene	1610		µg/kg wet	33.2	1670		97	40-140		
Naphthalene	1340		µg/kg wet	33.2	1670		80	40-140		
Phenanthrene	1310		µg/kg wet	33.2	1670		79	40-140		
Pyrene	1150		µg/kg wet	33.2	1670		69	40-140		
Surrogate: 2-Fluorobiphenyl	*1160*		µg/kg wet		*1670*		*70*	*30-130*		
Surrogate: Terphenyl-dl4	*1030*		µg/kg wet		*1670*		*62*	*30-130*		
Duplicate (9060992-DUP1) **Source: SA96078-12**										
Prepared: 12-Jun-09 Analyzed: 23-Jun-09										
Acenaphthene	BRL		µg/kg dry	359		BRL				50
Acenaphthylene	231	J,QR4	µg/kg dry	359		427			60	50
Anthracene	447	QM4	µg/kg dry	359		1070			82	50
Benzo (a) anthracene	1660	QM4	µg/kg dry	359		3140			62	50
Benzo (a) pyrene	1900	QM4	µg/kg dry	359		3510			60	50

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9060992 - SW846 3545A										
Duplicate (9060992-DUP1)	**Source: SA96078-12**									
Prepared: 12-Jun-09 Analyzed: 23-Jun-09										
Benzo (b) fluoranthene	1850		µg/kg dry	359		2770			40	50
Benzo (g,h,i) perylene	627	QM4	µg/kg dry	359		1320			71	50
Benzo (k) fluoranthene	1450	QM4	µg/kg dry	359		3300			78	50
Chrysene	1770	QM4	µg/kg dry	359		3240			59	50
Dibenzo (a,h) anthracene	BRL		µg/kg dry	359		302				50
Fluoranthene	3660	QM4	µg/kg dry	359		7610			70	50
Fluorene	BRL		µg/kg dry	359		BRL				50
Indeno (1,2,3-cd) pyrene	710	QM4	µg/kg dry	359		1410			66	50
1-Methylnaphthalene	BRL		µg/kg dry	359		BRL				50
2-Methylnaphthalene	BRL		µg/kg dry	359		BRL				50
Naphthalene	BRL		µg/kg dry	359		BRL				50
Phenanthrene	1200	QM4	µg/kg dry	359		2830			81	50
Pyrene	3230	QM4	µg/kg dry	359		5970			59	50
Surrogate: 2-Fluorobiphenyl	*2530*		µg/kg dry		*3600*		*70*	*30-130*		
Surrogate: Terphenyl-dl4	*2490*		µg/kg dry		*3600*		*69*	*30-130*		
Matrix Spike (9060992-MS1)	**Source: SA96078-12**									
Prepared: 12-Jun-09 Analyzed: 24-Jun-09										
Acenaphthene	3220		µg/kg dry	365	3660	BRL	88	40-140		
Pyrene	5960	QR2	µg/kg dry	365	3660	5970	-0.3	40-140		
Surrogate: 2-Fluorobiphenyl	*3000*		µg/kg dry		*3660*		*82*	*30-130*		
Surrogate: Terphenyl-dl4	*2810*		µg/kg dry		*3660*		*77*	*30-130*		
Matrix Spike Dup (9060992-MSD1)	**Source: SA96078-12**									
Prepared: 12-Jun-09 Analyzed: 24-Jun-09										
Acenaphthene	3100		µg/kg dry	356	3570	BRL	87	40-140	2	30
Pyrene	6560	QR2	µg/kg dry	356	3570	5970	16	40-140	NR	30
Surrogate: 2-Fluorobiphenyl	*2840*		µg/kg dry		*3570*		*79*	*30-130*		
Surrogate: Terphenyl-dl4	*2600*		µg/kg dry		*3570*		*73*	*30-130*		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9061583 - General Preparation										
Duplicate (9061583-DUP1)	**Source: SA96154-10**									
Prepared & Analyzed: 19-Jun-09										
% Solids	75.2		%			77.8			3	20

Notes and Definitions

CAL1	Analyte quantified by quadratic equation type calibration.
QM4	Visual evaluation of the sample indicates the RPD is above the control limit due to a non-homogeneous sample matrix.
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.
QR4	Analyses are not controlled on RPD values from sample concentrations less than the reporting limit. QC batch accepted based on LCS and/or LCSD QC results
R05	Elevated Reporting Limits due to the presence of high levels of non-target analytes.
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.

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.

Validated by:
Hanibal C. Tayeh, Ph.D.
Kim Wisk
Nicole Leja

SA9160109 CW

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HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

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

Report To: CEA
62A Hall ST
Concord, NH

Project Mgr.: Eric Johnson

Invoice To: CEA
127 Hartwell ST
West Boylston, MA

P.O. No.: _____ RQN: _____

Project No.: RI-0011-06
Site Name: Jeffries Residence
Location: Landgrove State: VT
Sampler(s): Bill Hopper

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=_____ 10=_____

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

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Preservative	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOC 8260	PAH 8270	QA Reporting Notes: (check if needed)
SA9160109-01	B(mw)-4 7-9'	6/8/09	11:00	G	SO	meoh	2	1			✓	✓	☐ Provide MA DEP MCP CAM Report
-02	B(mw)-4 20-22'	6/9/09	10:10				2	2			✓	✓	☐ Provide CT DPH RCP Report
-03	B(mw)-5 5-7'	6/8/09	13:25				1	1			✓	✓	**QA/QC Reporting Level** [x] Standard ☐ No QC ☐ Other _____ State specific reporting standards: _____

☐ Fax results when available to (____) _____
[x] E-mail to bhopper@cea-inc.com
EDD Format PDF + Excel
Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C 2.3

Relinquished by:	Received by:	Date:	Time:
Bill Hopper (3.6)		6/10/09	1250
		6/10/09	1525

Report Date:
09-Sep-09 10:56

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
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HANIBAL TECHNOLOGY

Laboratory Report

CEA, Inc
62B Hall Street
Concord, NH 03301
Attn: Eric Johnson

Project: Jeffries Residence - Landgrove, VT
Project #: RI-0011-06

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA99960-01	MW-1	Ground Water	25-Aug-09 10:20	27-Aug-09 14:45
SA99960-02	MW-2	Ground Water	25-Aug-09 10:10	27-Aug-09 14:45
SA99960-03	MW-3	Ground Water	25-Aug-09 09:40	27-Aug-09 14:45
SA99960-04	MW-4	Ground Water	25-Aug-09 10:40	27-Aug-09 14:45
SA99960-05	MW-5	Ground Water	25-Aug-09 11:05	27-Aug-09 14:45
SA99960-06	MW-6	Ground Water	25-Aug-09 11:20	27-Aug-09 14:45
SA99960-07	MW-7	Ground Water	25-Aug-09 12:45	27-Aug-09 14:45
SA99960-08	RW-7	Ground Water	25-Aug-09 11:40	27-Aug-09 14:45
SA99960-09	PDW-1	Drinking Water	25-Aug-09 12:50	27-Aug-09 14:45
SA99960-10	Drain Line	Ground Water	25-Aug-09 08:15	27-Aug-09 14:45

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
Vermont # VT-11393

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.
Please note that this report contains 58 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supercedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report is 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).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

CASE NARRATIVE:

The sample temperature upon receipt by Spectrum Analytical courier was recorded as 2.3 degrees Celsius. The condition of these samples was further noted as refrigerated. The samples were transported on ice to the laboratory facility and the temperature was recorded at 1.8 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.

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

EPA 524.2

Blanks:

9082038-BLK1

Analyte quantified by quadratic equation type calibration.

Naphthalene

Laboratory Control Samples:

9082038 LCS/LCSD

sec-Butylbenzene recoveries (124%/121%) 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:

PDW-1

9082038-BS1

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

sec-Butylbenzene

Analyte quantified by quadratic equation type calibration.

Naphthalene

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.

1,1,2-Trichlorotrifluoroethane (Freon 113)
4-Isopropyltoluene
Bromoform
o-Xylene
tert-Butylbenzene

9082038-BSD1

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

sec-Butylbenzene

Analyte quantified by quadratic equation type calibration.

Naphthalene

EPA 524.2

Samples:

S908236-CCV1

Analyte quantified by quadratic equation type calibration.

Naphthalene

SA99960-09 *PDW-1*

Analyte quantified by quadratic equation type calibration.

Naphthalene

SW846 8260B

SW846 8260B

Laboratory Control Samples:

9082064 LCS/LCSD

1,2-Dibromo-3-chloropropane recoveries (58%/46%) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-1
MW-2
MW-3
MW-4

1,3-Dichlorobenzene recoveries (139%/138%) 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:

MW-1
MW-2
MW-3
MW-4

Bromobenzene recoveries (140%/142%) 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:

MW-1
MW-2
MW-3
MW-4

trans-1,3-Dichloropropene recoveries (68%/69%) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-1
MW-2
MW-3
MW-4

trans-1,4-Dichloro-2-butene recoveries (66%/64%) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-1
MW-2
MW-3
MW-4

9082064-BS1

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

1,2-Dibromo-3-chloropropane
1,3-Dichlorobenzene
Bromobenzene
trans-1,3-Dichloropropene
trans-1,4-Dichloro-2-butene

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.

Bromochloromethane

SW846 8260B

Laboratory Control Samples:

9082064-BSD1

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

1,2-Dibromo-3-chloropropane
1,3-Dichlorobenzene
Bromobenzene
trans-1,3-Dichloropropene
trans-1,4-Dichloro-2-butene

9090031-BS1

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.

1,1,2-Trichlorotrifluoroethane (Freon 113)
1,2-Dibromo-3-chloropropane
2-Butanone (MEK)
Acetone
Ethanol

Samples:

S908292-CCV1

Analyte percent drift/percent difference is greater than 30%, data is accepted due to all CCC analytes passing within the 20% Drift/Difference criteria

1,2-Dibromo-3-chloropropane
1,3-Dichlorobenzene
Bromobenzene
trans-1,3-Dichloropropene
trans-1,4-Dichloro-2-butene

This affected the following samples:

MW-1
MW-2
MW-3
MW-4

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SA99960-01	RI-0011-06	Ground Water	25-Aug-09 10:20	27-Aug-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	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 8260B	28-Aug-09	29-Aug-09	9082064	X
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	X
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	X
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	X
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	X
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	X
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	X
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	X
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	X
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	X
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	X
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	"	"	"	"	X
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	X
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	X
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	X
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	X
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	X
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	X
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SA99960-01	RI-0011-06	Ground Water	25-Aug-09 10:20	27-Aug-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW846 8260B	28-Aug-09	29-Aug-09	9082064	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	X
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
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	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	X
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	X
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	X
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	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	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	X
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	X
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	X
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*	*89*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*97*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	5.95	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
208-96-8	Acenaphthylene	BRL		µg/l	5.95	1	"	"	"	"	X
120-12-7	Anthracene	BRL		µg/l	5.95	1	"	"	"	"	X
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.95	1	"	"	"	"	X
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.95	1	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.95	1	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.95	1	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.95	1	"	"	"	"	X
218-01-9	Chrysene	BRL		µg/l	5.95	1	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.95	1	"	"	"	"	X
206-44-0	Fluoranthene	BRL		µg/l	5.95	1	"	"	"	"	X
86-73-7	Fluorene	BRL		µg/l	5.95	1	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.95	1	"	"	"	"	X
90-12-0	1-Methylnaphthalene	BRL		µg/l	5.95	1	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/l	5.95	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SA99960-01	RI-0011-06	Ground Water	25-Aug-09 10:20	27-Aug-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	BRL		µg/l	5.95	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
85-01-8	Phenanthrene	BRL		µg/l	5.95	1	"	"	"	"	X
129-00-0	Pyrene	BRL		µg/l	5.95	1	"	"	"	"	X
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*68*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*53*		*30-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-2	RI-0011-06	Ground Water	25-Aug-09 10:10	27-Aug-09
SA99960-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	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 8260B	28-Aug-09	29-Aug-09	9082064	X
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	X
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	X
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	X
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	X
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	X
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	X
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	X
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	X
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	X
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	X
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	"	"	"	"	X
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	X
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	X
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	X
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	X
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	X
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	X
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-2	RI-0011-06	Ground Water	25-Aug-09 10:10	27-Aug-09
SA99960-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW846 8260B	28-Aug-09	29-Aug-09	9082064	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	X
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
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	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	X
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	X
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	X
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	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	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	X
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	X
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*97*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*100*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	5.21	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
208-96-8	Acenaphthylene	BRL		µg/l	5.21	1	"	"	"	"	X
120-12-7	Anthracene	BRL		µg/l	5.21	1	"	"	"	"	X
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.21	1	"	"	"	"	X
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.21	1	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.21	1	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.21	1	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.21	1	"	"	"	"	X
218-01-9	Chrysene	BRL		µg/l	5.21	1	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.21	1	"	"	"	"	X
206-44-0	Fluoranthene	BRL		µg/l	5.21	1	"	"	"	"	X
86-73-7	Fluorene	BRL		µg/l	5.21	1	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.21	1	"	"	"	"	X
90-12-0	1-Methylnaphthalene	BRL		µg/l	5.21	1	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/l	5.21	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-2 SA99960-02	RI-0011-06	Ground Water	25-Aug-09 10:10	27-Aug-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	BRL		µg/l	5.21	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
85-01-8	Phenanthrene	BRL		µg/l	5.21	1	"	"	"	"	X
129-00-0	Pyrene	BRL		µg/l	5.21	1	"	"	"	"	X
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*59*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*44*		*30-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-3	RI-0011-06	Ground Water	25-Aug-09 09:40	27-Aug-09
SA99960-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*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 8260B	28-Aug-09	29-Aug-09	9082064	X
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	X
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	X
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	X
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	X
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	X
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	X
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	X
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	X
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	X
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	X
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	"	"	"	"	X
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	X
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	X
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	X
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	X
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	X
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	X
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-3	RI-0011-06	Ground Water	25-Aug-09 09:40	27-Aug-09
SA99960-03				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW846 8260B	28-Aug-09	29-Aug-09	9082064	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	X
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
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	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	X
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	X
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	X
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	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	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	X
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	X
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*104*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*98*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*101*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	5.26	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
208-96-8	Acenaphthylene	BRL		µg/l	5.26	1	"	"	"	"	X
120-12-7	Anthracene	BRL		µg/l	5.26	1	"	"	"	"	X
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.26	1	"	"	"	"	X
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.26	1	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.26	1	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.26	1	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.26	1	"	"	"	"	X
218-01-9	Chrysene	BRL		µg/l	5.26	1	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.26	1	"	"	"	"	X
206-44-0	Fluoranthene	BRL		µg/l	5.26	1	"	"	"	"	X
86-73-7	Fluorene	BRL		µg/l	5.26	1	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.26	1	"	"	"	"	X
90-12-0	1-Methylnaphthalene	BRL		µg/l	5.26	1	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/l	5.26	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-3 SA99960-03	RI-0011-06	Ground Water	25-Aug-09 09:40	27-Aug-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	BRL		µg/l	5.26	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
85-01-8	Phenanthrene	BRL		µg/l	5.26	1	"	"	"	"	X
129-00-0	Pyrene	BRL		µg/l	5.26	1	"	"	"	"	X
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*59*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*47*		*30-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-4	RI-0011-06	Ground Water	25-Aug-09 10:40	27-Aug-09
SA99960-04				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	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 8260B	28-Aug-09	29-Aug-09	9082064	X
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	X
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	X
71-43-2	Benzene	1.2		µg/l	1.0	1	"	"	"	"	X
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	X
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	X
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	X
104-51-8	n-Butylbenzene	2.2		µg/l	1.0	1	"	"	"	"	X
135-98-8	sec-Butylbenzene	3.7		µg/l	1.0	1	"	"	"	"	X
98-06-6	tert-Butylbenzene	2.2		µg/l	1.0	1	"	"	"	"	X
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	X
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	X
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	X
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	X
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	X
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	"	"	"	"	X
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	X
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	X
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
100-41-4	Ethylbenzene	23.2		µg/l	1.0	1	"	"	"	"	X
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	X
98-82-8	Isopropylbenzene	8.2		µg/l	1.0	1	"	"	"	"	X
99-87-6	4-Isopropyltoluene	1.8		µg/l	1.0	1	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	X
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	X
91-20-3	Naphthalene	59.6		µg/l	1.0	1	"	"	"	"	X
103-65-1	n-Propylbenzene	11.4		µg/l	1.0	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-4	RI-0011-06	Ground Water	25-Aug-09 10:40	27-Aug-09
SA99960-04				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW846 8260B	28-Aug-09	29-Aug-09	9082064	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	X
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
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	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	46.5		µg/l	1.0	1	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	18.0		µg/l	1.0	1	"	"	"	"	X
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	X
179601-23-1	m,p-Xylene	12.5		µg/l	2.0	1	"	"	"	"	X
95-47-6	o-Xylene	24.8		µg/l	1.0	1	"	"	"	"	X
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	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	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	X
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	X
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*109*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*98*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*104*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*101*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	5.26	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
208-96-8	Acenaphthylene	BRL		µg/l	5.26	1	"	"	"	"	X
120-12-7	Anthracene	BRL		µg/l	5.26	1	"	"	"	"	X
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.26	1	"	"	"	"	X
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.26	1	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.26	1	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.26	1	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.26	1	"	"	"	"	X
218-01-9	Chrysene	BRL		µg/l	5.26	1	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.26	1	"	"	"	"	X
206-44-0	Fluoranthene	BRL		µg/l	5.26	1	"	"	"	"	X
86-73-7	Fluorene	BRL		µg/l	5.26	1	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.26	1	"	"	"	"	X
90-12-0	1-Methylnaphthalene	19.5		µg/l	5.26	1	"	"	"	"	
91-57-6	2-Methylnaphthalene	15.9		µg/l	5.26	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-4 SA99960-04	RI-0011-06	Ground Water	25-Aug-09 10:40	27-Aug-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	15.1		µg/l	5.26	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
85-01-8	Phenanthrene	BRL		µg/l	5.26	1	"	"	"	"	X
129-00-0	Pyrene	BRL		µg/l	5.26	1	"	"	"	"	X
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*67*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*53*		*30-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5 SA99960-05	RI-0011-06	Ground Water	25-Aug-09 11:05	27-Aug-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	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 8260B	01-Sep-09	01-Sep-09	9090031	X
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	X
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	X
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	X
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	X
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	X
104-51-8	n-Butylbenzene	1.8		µg/l	1.0	1	"	"	"	"	X
135-98-8	sec-Butylbenzene	3.7		µg/l	1.0	1	"	"	"	"	X
98-06-6	tert-Butylbenzene	2.0		µg/l	1.0	1	"	"	"	"	X
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	X
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	X
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	X
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	X
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	X
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	"	"	"	"	X
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	X
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	X
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
100-41-4	Ethylbenzene	4.0		µg/l	1.0	1	"	"	"	"	X
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	X
98-82-8	Isopropylbenzene	4.4		µg/l	1.0	1	"	"	"	"	X
99-87-6	4-Isopropyltoluene	3.2		µg/l	1.0	1	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	X
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	X
91-20-3	Naphthalene	18.4		µg/l	1.0	1	"	"	"	"	X
103-65-1	n-Propylbenzene	6.6		µg/l	1.0	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5	RI-0011-06	Ground Water	25-Aug-09 11:05	27-Aug-09
SA99960-05				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW846 8260B	01-Sep-09	01-Sep-09	9090031	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	X
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
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	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	4.4		µg/l	1.0	1	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	18.7		µg/l	1.0	1	"	"	"	"	X
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	X
179601-23-1	m,p-Xylene	5.3		µg/l	2.0	1	"	"	"	"	X
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	X
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	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	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	X
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	X
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*107*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*89*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*97*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	6.49	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
208-96-8	Acenaphthylene	BRL		µg/l	6.49	1	"	"	"	"	X
120-12-7	Anthracene	BRL		µg/l	6.49	1	"	"	"	"	X
56-55-3	Benzo (a) anthracene	BRL		µg/l	6.49	1	"	"	"	"	X
50-32-8	Benzo (a) pyrene	BRL		µg/l	6.49	1	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	6.49	1	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	6.49	1	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	6.49	1	"	"	"	"	X
218-01-9	Chrysene	BRL		µg/l	6.49	1	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	6.49	1	"	"	"	"	X
206-44-0	Fluoranthene	BRL		µg/l	6.49	1	"	"	"	"	X
86-73-7	Fluorene	BRL		µg/l	6.49	1	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	6.49	1	"	"	"	"	X
90-12-0	1-Methylnaphthalene	BRL		µg/l	6.49	1	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/l	6.49	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5 SA99960-05	RI-0011-06	Ground Water	25-Aug-09 11:05	27-Aug-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	BRL		µg/l	6.49	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
85-01-8	Phenanthrene	BRL		µg/l	6.49	1	"	"	"	"	X
129-00-0	Pyrene	BRL		µg/l	6.49	1	"	"	"	"	X
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*67*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*47*		*30-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-6	RI-0011-06	Ground Water	25-Aug-09 11:20	27-Aug-09
SA99960-06				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	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	5.0	5	SW846 8260B	01-Sep-09	01-Sep-09	9090031	X
67-64-1	Acetone	BRL		µg/l	50.0	5	"	"	"	"	X
107-13-1	Acrylonitrile	BRL		µg/l	2.5	5	"	"	"	"	X
71-43-2	Benzene	17.6		µg/l	5.0	5	"	"	"	"	X
108-86-1	Bromobenzene	BRL		µg/l	5.0	5	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	5.0	5	"	"	"	"	X
75-27-4	Bromodichloromethane	BRL		µg/l	2.5	5	"	"	"	"	X
75-25-2	Bromoform	BRL		µg/l	5.0	5	"	"	"	"	X
74-83-9	Bromomethane	BRL		µg/l	10.0	5	"	"	"	"	X
78-93-3	2-Butanone (MEK)	BRL		µg/l	50.0	5	"	"	"	"	X
104-51-8	n-Butylbenzene	9.4		µg/l	5.0	5	"	"	"	"	X
135-98-8	sec-Butylbenzene	14.2		µg/l	5.0	5	"	"	"	"	X
98-06-6	tert-Butylbenzene	6.0		µg/l	5.0	5	"	"	"	"	X
75-15-0	Carbon disulfide	BRL		µg/l	25.0	5	"	"	"	"	X
56-23-5	Carbon tetrachloride	BRL		µg/l	5.0	5	"	"	"	"	X
108-90-7	Chlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	X
75-00-3	Chloroethane	BRL		µg/l	10.0	5	"	"	"	"	X
67-66-3	Chloroform	BRL		µg/l	5.0	5	"	"	"	"	X
74-87-3	Chloromethane	BRL		µg/l	10.0	5	"	"	"	"	X
95-49-8	2-Chlorotoluene	BRL		µg/l	5.0	5	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	5.0	5	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	10.0	5	"	"	"	"	X
124-48-1	Dibromochloromethane	BRL		µg/l	2.5	5	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	2.5	5	"	"	"	"	X
74-95-3	Dibromomethane	BRL		µg/l	5.0	5	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	10.0	5	"	"	"	"	X
75-34-3	1,1-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	X
107-06-2	1,2-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	X
75-35-4	1,1-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	X
78-87-5	1,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	X
142-28-9	1,3-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	X
594-20-7	2,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	X
563-58-6	1,1-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	2.5	5	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	2.5	5	"	"	"	"	X
100-41-4	Ethylbenzene	68.1		µg/l	5.0	5	"	"	"	"	X
87-68-3	Hexachlorobutadiene	BRL		µg/l	2.5	5	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL		µg/l	50.0	5	"	"	"	"	X
98-82-8	Isopropylbenzene	26.4		µg/l	5.0	5	"	"	"	"	X
99-87-6	4-Isopropyltoluene	9.8		µg/l	5.0	5	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	5.0	5	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	50.0	5	"	"	"	"	X
75-09-2	Methylene chloride	BRL		µg/l	25.0	5	"	"	"	"	X
91-20-3	Naphthalene	155		µg/l	5.0	5	"	"	"	"	X
103-65-1	n-Propylbenzene	44.0		µg/l	5.0	5	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-6	RI-0011-06	Ground Water	25-Aug-09 11:20	27-Aug-09
SA99960-06				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	5.0	5	SW846 8260B	01-Sep-09	01-Sep-09	9090031	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	5.0	5	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	2.5	5	"	"	"	"	X
127-18-4	Tetrachloroethene	BRL		µg/l	5.0	5	"	"	"	"	X
108-88-3	Toluene	BRL		µg/l	5.0	5	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	5.0	5	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	5.0	5	"	"	"	"	X
79-01-6	Trichloroethene	BRL		µg/l	5.0	5	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	5.0	5	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	5.0	5	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	245		µg/l	5.0	5	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	74.2		µg/l	5.0	5	"	"	"	"	X
75-01-4	Vinyl chloride	BRL		µg/l	5.0	5	"	"	"	"	X
179601-23-1	m,p-Xylene	97.4		µg/l	10.0	5	"	"	"	"	X
95-47-6	o-Xylene	78.9		µg/l	5.0	5	"	"	"	"	X
109-99-9	Tetrahydrofuran	BRL		µg/l	50.0	5	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/l	5.0	5	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/l	5.0	5	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	5.0	5	"	"	"	"	X
108-20-3	Di-isopropyl ether	BRL		µg/l	5.0	5	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	50.0	5	"	"	"	"	X
123-91-1	1,4-Dioxane	BRL		µg/l	100	5	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	25.0	5	"	"	"	"	X
64-17-5	Ethanol	BRL		µg/l	2000	5	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*100*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*87*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*100*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	5.21	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
208-96-8	Acenaphthylene	BRL		µg/l	5.21	1	"	"	"	"	X
120-12-7	Anthracene	BRL		µg/l	5.21	1	"	"	"	"	X
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.21	1	"	"	"	"	X
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.21	1	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.21	1	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.21	1	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.21	1	"	"	"	"	X
218-01-9	Chrysene	BRL		µg/l	5.21	1	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.21	1	"	"	"	"	X
206-44-0	Fluoranthene	BRL		µg/l	5.21	1	"	"	"	"	X
86-73-7	Fluorene	6.00		µg/l	5.21	1	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.21	1	"	"	"	"	X
90-12-0	1-Methylnaphthalene	50.4		µg/l	5.21	1	"	"	"	"	
91-57-6	2-Methylnaphthalene	60.0		µg/l	5.21	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-6 SA99960-06	RI-0011-06	Ground Water	25-Aug-09 11:20	27-Aug-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	64.2		µg/l	5.21	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
85-01-8	Phenanthrene	5.40		µg/l	5.21	1	"	"	"	"	X
129-00-0	Pyrene	BRL		µg/l	5.21	1	"	"	"	"	X
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*63*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*46*		*30-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-7	RI-0011-06	Ground Water	25-Aug-09 12:45	27-Aug-09
SA99960-07				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	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 8260B	01-Sep-09	01-Sep-09	9090031	X
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	X
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	X
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	X
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	X
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	X
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	X
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	X
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	X
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	X
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	X
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	"	"	"	"	X
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	X
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	X
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	X
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	X
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	X
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	X
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-7	RI-0011-06	Ground Water	25-Aug-09 12:45	27-Aug-09
SA99960-07				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW846 8260B	01-Sep-09	01-Sep-09	9090031	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	X
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
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	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	X
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	X
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	X
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	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	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	X
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	X
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*104*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*99*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*87*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*97*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	5.32	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
208-96-8	Acenaphthylene	BRL		µg/l	5.32	1	"	"	"	"	X
120-12-7	Anthracene	BRL		µg/l	5.32	1	"	"	"	"	X
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.32	1	"	"	"	"	X
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.32	1	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.32	1	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.32	1	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.32	1	"	"	"	"	X
218-01-9	Chrysene	BRL		µg/l	5.32	1	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.32	1	"	"	"	"	X
206-44-0	Fluoranthene	BRL		µg/l	5.32	1	"	"	"	"	X
86-73-7	Fluorene	BRL		µg/l	5.32	1	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.32	1	"	"	"	"	X
90-12-0	1-Methylnaphthalene	BRL		µg/l	5.32	1	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/l	5.32	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-7 SA99960-07	RI-0011-06	Ground Water	25-Aug-09 12:45	27-Aug-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	BRL		µg/l	5.32	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
85-01-8	Phenanthrene	BRL		µg/l	5.32	1	"	"	"	"	X
129-00-0	Pyrene	BRL		µg/l	5.32	1	"	"	"	"	X
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*63*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*55*		*30-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-7	RI-0011-06	Ground Water	25-Aug-09 11:40	27-Aug-09
SA99960-08				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	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 8260B	02-Sep-09	03-Sep-09	9090025	X
67-64-1	Acetone	16.1		µg/l	10.0	1	"	"	"	"	X
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	X
71-43-2	Benzene	24.2		µg/l	1.0	1	"	"	"	"	X
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	X
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	X
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	X
104-51-8	n-Butylbenzene	2.8		µg/l	1.0	1	"	"	"	"	X
135-98-8	sec-Butylbenzene	3.8		µg/l	1.0	1	"	"	"	"	X
98-06-6	tert-Butylbenzene	2.8		µg/l	1.0	1	"	"	"	"	X
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	X
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	X
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	X
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	X
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	X
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	"	"	"	"	X
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	X
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	X
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
100-41-4	Ethylbenzene	39.1		µg/l	1.0	1	"	"	"	"	X
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	X
98-82-8	Isopropylbenzene	10.6		µg/l	1.0	1	"	"	"	"	X
99-87-6	4-Isopropyltoluene	3.0		µg/l	1.0	1	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	X
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	X
91-20-3	Naphthalene	103		µg/l	1.0	1	"	"	"	"	X
103-65-1	n-Propylbenzene	13.0		µg/l	1.0	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-7	RI-0011-06	Ground Water	25-Aug-09 11:40	27-Aug-09
SA99960-08				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	1.0		µg/l	1.0	1	SW846 8260B	02-Sep-09	03-Sep-09	9090025	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	X
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
108-88-3	Toluene	1.3		µg/l	1.0	1	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
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	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	141		µg/l	1.0	1	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	45.6		µg/l	1.0	1	"	"	"	"	X
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	X
179601-23-1	m,p-Xylene	69.5		µg/l	2.0	1	"	"	"	"	X
95-47-6	o-Xylene	115		µg/l	1.0	1	"	"	"	"	X
109-99-9	Tetrahydrofuran	32.4		µg/l	10.0	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	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	X
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	X
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*110*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	83.3	5	SW846 8270C	28-Aug-09	31-Aug-09	9082016	X
208-96-8	Acenaphthylene	BRL		µg/l	83.3	5	"	"	"	"	X
120-12-7	Anthracene	BRL		µg/l	83.3	5	"	"	"	"	X
56-55-3	Benzo (a) anthracene	BRL		µg/l	83.3	5	"	"	"	"	X
50-32-8	Benzo (a) pyrene	BRL		µg/l	83.3	5	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	83.3	5	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	83.3	5	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	83.3	5	"	"	"	"	X
218-01-9	Chrysene	BRL		µg/l	83.3	5	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	83.3	5	"	"	"	"	X
206-44-0	Fluoranthene	BRL		µg/l	83.3	5	"	"	"	"	X
86-73-7	Fluorene	105		µg/l	83.3	5	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	83.3	5	"	"	"	"	X
90-12-0	1-Methylnaphthalene	517		µg/l	83.3	5	"	"	"	"	
91-57-6	2-Methylnaphthalene	812		µg/l	83.3	5	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-7 SA99960-08	RI-0011-06	Ground Water	25-Aug-09 11:40	27-Aug-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	240		µg/l	83.3	5	SW846 8270C	28-Aug-09	31-Aug-09	9082016	X
85-01-8	Phenanthrene	223		µg/l	83.3	5	"	"	"	"	X
129-00-0	Pyrene	BRL		µg/l	83.3	5	"	"	"	"	X
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*60*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*48*		*30-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
PDW-1	RI-0011-06	Drinking Water	25-Aug-09 12:50	27-Aug-09
SA99960-09				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
524.2 Purgeable Organic Compounds											
Prepared by method SW846 5030 Water MS											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	0.5	1	EPA 524.2	28-Aug-09	29-Aug-09	9082038	
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	0.5	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	0.5	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	0.5	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	0.5	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	0.5	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	0.5	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	0.5	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	0.5	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	0.5	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	0.5	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	0.5	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	0.5	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	0.5	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	0.5	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	0.5	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	0.5	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	0.5	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	0.5	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	0.5	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	0.5	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	0.5	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	0.5	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	0.5	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	0.5	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	0.5	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	0.5	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	0.5	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	0.5	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	0.5	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	0.5	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	0.5	1	"	"	"	"	
91-20-3	Naphthalene	BRL	CAL1	µg/l	0.5	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	0.5	1	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
PDW-1 SA99960-09	RI-0011-06	Drinking Water	25-Aug-09 12:50	27-Aug-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
524.2 Purgeable Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	0.5	1	EPA 524.2	28-Aug-09	29-Aug-09	9082038	
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	0.5	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	0.5	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	0.5	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	0.5	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	0.5	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	0.5	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	0.5	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	0.5	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	0.5	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	0.5	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	0.5	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	0.5	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	0.5	1	"	"	"	"	
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	1	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/l	0.5	1	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	0.5	1	"	"	"	"	
108-20-3	Di-isopropyl ether	BRL		µg/l	0.5	1	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*95*		*80-120 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*80-120 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*80-120 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*100*		*80-120 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Drain Line	RI-0011-06	Ground Water	25-Aug-09 08:15	27-Aug-09
SA99960-10				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	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 8260B	01-Sep-09	01-Sep-09	9090031	X
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	X
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	X
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	X
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	X
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	X
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	X
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	X
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	X
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	X
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	X
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	"	"	"	"	X
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	X
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	X
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	X
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	X
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	X
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	X
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Drain Line	RI-0011-06	Ground Water	25-Aug-09 08:15	27-Aug-09
SA99960-10				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW846 8260B	01-Sep-09	01-Sep-09	9090031	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	X
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
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	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	X
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	X
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	X
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	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	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	X
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	X
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*100*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*97*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*87*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*94*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	6.67	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
208-96-8	Acenaphthylene	BRL		µg/l	6.67	1	"	"	"	"	X
120-12-7	Anthracene	BRL		µg/l	6.67	1	"	"	"	"	X
56-55-3	Benzo (a) anthracene	BRL		µg/l	6.67	1	"	"	"	"	X
50-32-8	Benzo (a) pyrene	BRL		µg/l	6.67	1	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	6.67	1	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	6.67	1	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	6.67	1	"	"	"	"	X
218-01-9	Chrysene	BRL		µg/l	6.67	1	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	6.67	1	"	"	"	"	X
206-44-0	Fluoranthene	BRL		µg/l	6.67	1	"	"	"	"	X
86-73-7	Fluorene	BRL		µg/l	6.67	1	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	6.67	1	"	"	"	"	X
90-12-0	1-Methylnaphthalene	BRL		µg/l	6.67	1	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/l	6.67	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Drain Line SA99960-10	RI-0011-06	Ground Water	25-Aug-09 08:15	27-Aug-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	BRL		µg/l	6.67	1	SW846 8270C	28-Aug-09	30-Aug-09	9082016	X
85-01-8	Phenanthrene	BRL		µg/l	6.67	1	"	"	"	"	X
129-00-0	Pyrene	BRL		µg/l	6.67	1	"	"	"	"	X
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*60*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*54*		*30-130 %*			"	"	"	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9082038 - SW846 5030 Water MS										
Blank (9082038-BLK1)										
Prepared & Analyzed: 28-Aug-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	0.5						
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	0.5						
Benzene	BRL		µg/l	0.5						
Bromobenzene	BRL		µg/l	0.5						
Bromochloromethane	BRL		µg/l	0.5						
Bromodichloromethane	BRL		µg/l	0.5						
Bromoform	BRL		µg/l	0.5						
Bromomethane	BRL		µg/l	0.5						
2-Butanone (MEK)	BRL		µg/l	10.0						
n-Butylbenzene	BRL		µg/l	0.5						
sec-Butylbenzene	BRL		µg/l	0.5						
tert-Butylbenzene	BRL		µg/l	0.5						
Carbon disulfide	BRL		µg/l	0.5						
Carbon tetrachloride	BRL		µg/l	0.5						
Chlorobenzene	BRL		µg/l	0.5						
Chloroethane	BRL		µg/l	0.5						
Chloroform	BRL		µg/l	0.5						
Chloromethane	BRL		µg/l	0.5						
2-Chlorotoluene	BRL		µg/l	0.5						
4-Chlorotoluene	BRL		µg/l	0.5						
1,2-Dibromo-3-chloropropane	BRL		µg/l	0.5						
Dibromochloromethane	BRL		µg/l	0.5						
1,2-Dibromoethane (EDB)	BRL		µg/l	0.5						
Dibromomethane	BRL		µg/l	0.5						
1,2-Dichlorobenzene	BRL		µg/l	0.5						
1,3-Dichlorobenzene	BRL		µg/l	0.5						
1,4-Dichlorobenzene	BRL		µg/l	0.5						
Dichlorodifluoromethane (Freon12)	BRL		µg/l	0.5						
1,1-Dichloroethane	BRL		µg/l	0.5						
1,2-Dichloroethane	BRL		µg/l	0.5						
1,1-Dichloroethene	BRL		µg/l	0.5						
cis-1,2-Dichloroethene	BRL		µg/l	0.5						
trans-1,2-Dichloroethene	BRL		µg/l	0.5						
1,2-Dichloropropane	BRL		µg/l	0.5						
1,3-Dichloropropane	BRL		µg/l	0.5						
2,2-Dichloropropane	BRL		µg/l	0.5						
1,1-Dichloropropene	BRL		µg/l	0.5						
cis-1,3-Dichloropropene	BRL		µg/l	0.5						
trans-1,3-Dichloropropene	BRL		µg/l	0.5						
Ethylbenzene	BRL		µg/l	0.5						
Hexachlorobutadiene	BRL		µg/l	0.5						
2-Hexanone (MBK)	BRL		µg/l	10.0						
Isopropylbenzene	BRL		µg/l	0.5						
4-Isopropyltoluene	BRL		µg/l	0.5						
Methyl tert-butyl ether	BRL		µg/l	0.5						
4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0						
Methylene chloride	BRL		µg/l	0.5						
Naphthalene	BRL	CAL1	µg/l	0.5						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9082038 - SW846 5030 Water MS										
Blank (9082038-BLK1)										
Prepared & Analyzed: 28-Aug-09										
n-Propylbenzene	BRL		µg/l	0.5						
Styrene	BRL		µg/l	0.5						
1,1,1,2-Tetrachloroethane	BRL		µg/l	0.5						
1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5						
Tetrachloroethene	BRL		µg/l	0.5						
Toluene	BRL		µg/l	0.5						
1,2,3-Trichlorobenzene	BRL		µg/l	0.5						
1,2,4-Trichlorobenzene	BRL		µg/l	0.5						
1,1,1-Trichloroethane	BRL		µg/l	0.5						
1,1,2-Trichloroethane	BRL		µg/l	0.5						
Trichloroethene	BRL		µg/l	0.5						
Trichlorofluoromethane (Freon 11)	BRL		µg/l	0.5						
1,2,3-Trichloropropane	BRL		µg/l	0.5						
1,2,4-Trimethylbenzene	BRL		µg/l	0.5						
1,3,5-Trimethylbenzene	BRL		µg/l	0.5						
Vinyl chloride	BRL		µg/l	0.5						
m,p-Xylene	BRL		µg/l	0.5						
o-Xylene	BRL		µg/l	0.5						
Tetrahydrofuran	BRL		µg/l	10.0						
Tert-amyl methyl ether	BRL		µg/l	0.5						
Ethyl tert-butyl ether	BRL		µg/l	0.5						
Di-isopropyl ether	BRL		µg/l	0.5						
Tert-Butanol / butyl alcohol	BRL		µg/l	10.0						
Surrogate: 4-Bromofluorobenzene	*47.9*		µg/l		*50.0*		*96*	*80-120*		
Surrogate: Toluene-d8	*49.7*		µg/l		*50.0*		*99*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*49.9*		µg/l		*50.0*		*100*	*80-120*		
Surrogate: Dibromofluoromethane	*50.3*		µg/l		*50.0*		*101*	*80-120*		
LCS (9082038-BS1)										
Prepared & Analyzed: 28-Aug-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	24.2	QM9	µg/l		20.0		121	80-120		
Acetone	17.6		µg/l		20.0		88	70-130		
Acrylonitrile	18.8		µg/l		20.0		94	70-130		
Benzene	21.5		µg/l		20.0		108	80-120		
Bromobenzene	21.9		µg/l		20.0		109	80-120		
Bromochloromethane	21.1		µg/l		20.0		106	80-120		
Bromodichloromethane	23.0		µg/l		20.0		115	80-120		
Bromoform	24.6	QM9	µg/l		20.0		123	80-120		
Bromomethane	18.9		µg/l		20.0		95	80-120		
2-Butanone (MEK)	20.4		µg/l		20.0		102	70-130		
n-Butylbenzene	22.2		µg/l		20.0		111	80-120		
sec-Butylbenzene	24.7	QC2	µg/l		20.0		124	80-120		
tert-Butylbenzene	24.6	QM9	µg/l		20.0		123	80-120		
Carbon disulfide	19.6		µg/l		20.0		98	70-130		
Carbon tetrachloride	23.3		µg/l		20.0		116	80-120		
Chlorobenzene	21.8		µg/l		20.0		109	80-120		
Chloroethane	18.9		µg/l		20.0		94	80-120		
Chloroform	20.9		µg/l		20.0		104	80-120		
Chloromethane	18.3		µg/l		20.0		92	80-120		
2-Chlorotoluene	23.3		µg/l		20.0		117	80-120		
4-Chlorotoluene	23.1		µg/l		20.0		115	80-120		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9082038 - SW846 5030 Water MS										
LCS (9082038-BS1)										
Prepared & Analyzed: 28-Aug-09										
1,2-Dibromo-3-chloropropane	20.8		µg/l		20.0		104	80-120		
Dibromochloromethane	22.0		µg/l		20.0		110	80-120		
1,2-Dibromoethane (EDB)	21.3		µg/l		20.0		106	80-120		
Dibromomethane	20.5		µg/l		20.0		103	80-120		
1,2-Dichlorobenzene	22.6		µg/l		20.0		113	80-120		
1,3-Dichlorobenzene	23.1		µg/l		20.0		116	80-120		
1,4-Dichlorobenzene	21.0		µg/l		20.0		105	80-120		
Dichlorodifluoromethane (Freon12)	17.4		µg/l		20.0		87	80-120		
1,1-Dichloroethane	21.8		µg/l		20.0		109	80-120		
1,2-Dichloroethane	19.7		µg/l		20.0		99	80-120		
1,1-Dichloroethene	20.6		µg/l		20.0		103	80-120		
cis-1,2-Dichloroethene	22.7		µg/l		20.0		114	80-120		
trans-1,2-Dichloroethene	19.5		µg/l		20.0		97	80-120		
1,2-Dichloropropane	21.9		µg/l		20.0		110	80-120		
1,3-Dichloropropane	21.0		µg/l		20.0		105	80-120		
2,2-Dichloropropane	24.0		µg/l		20.0		120	80-120		
1,1-Dichloropropene	22.6		µg/l		20.0		113	80-120		
cis-1,3-Dichloropropene	23.1		µg/l		20.0		115	80-120		
trans-1,3-Dichloropropene	22.8		µg/l		20.0		114	80-120		
Ethylbenzene	22.8		µg/l		20.0		114	80-120		
Hexachlorobutadiene	22.8		µg/l		20.0		114	80-120		
2-Hexanone (MBK)	20.0		µg/l		20.0		100	70-130		
Isopropylbenzene	19.1		µg/l		20.0		96	80-120		
4-Isopropyltoluene	24.4	QM9	µg/l		20.0		122	80-120		
Methyl tert-butyl ether	21.2		µg/l		20.0		106	80-120		
4-Methyl-2-pentanone (MIBK)	19.9		µg/l		20.0		100	70-130		
Methylene chloride	18.8		µg/l		20.0		94	80-120		
Naphthalene	22.6	CAL1	µg/l		20.0		113	80-120		
n-Propylbenzene	22.9		µg/l		20.0		115	80-120		
Styrene	23.6		µg/l		20.0		118	80-120		
1,1,1,2-Tetrachloroethane	23.6		µg/l		20.0		118	80-120		
1,1,2,2-Tetrachloroethane	21.9		µg/l		20.0		109	80-120		
Tetrachloroethene	21.5		µg/l		20.0		108	80-120		
Toluene	21.3		µg/l		20.0		106	80-120		
1,2,3-Trichlorobenzene	19.6		µg/l		20.0		98	80-120		
1,2,4-Trichlorobenzene	19.3		µg/l		20.0		96	80-120		
1,1,1-Trichloroethane	22.0		µg/l		20.0		110	80-120		
1,1,2-Trichloroethane	21.4		µg/l		20.0		107	80-120		
Trichloroethene	22.3		µg/l		20.0		112	80-120		
Trichlorofluoromethane (Freon 11)	21.5		µg/l		20.0		107	80-120		
1,2,3-Trichloropropane	23.4		µg/l		20.0		117	80-120		
1,2,4-Trimethylbenzene	24.0		µg/l		20.0		120	80-120		
1,3,5-Trimethylbenzene	23.8		µg/l		20.0		119	80-120		
Vinyl chloride	18.8		µg/l		20.0		94	80-120		
m,p-Xylene	47.1		µg/l		40.0		118	80-120		
o-Xylene	24.2	QM9	µg/l		20.0		121	80-120		
Tetrahydrofuran	19.7		µg/l		20.0		99	70-130		
Tert-amyl methyl ether	20.8		µg/l		20.0		104	70-130		
Ethyl tert-butyl ether	21.3		µg/l		20.0		106	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9082038 - SW846 5030 Water MS										
LCS (9082038-BS1)										
Prepared & Analyzed: 28-Aug-09										
Di-isopropyl ether	21.4		µg/l		20.0		107	70-130		
Tert-Butanol / butyl alcohol	176		µg/l		200		88	70-130		
Surrogate: 4-Bromofluorobenzene	*50.9*		µg/l		*50.0*		*102*	*80-120*		
Surrogate: Toluene-d8	*49.2*		µg/l		*50.0*		*98*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*47.6*		µg/l		*50.0*		*95*	*80-120*		
Surrogate: Dibromofluoromethane	*49.8*		µg/l		*50.0*		*100*	*80-120*		
LCS Dup (9082038-BSD1)										
Prepared & Analyzed: 28-Aug-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	23.2		µg/l		20.0		116	80-120	4	20
Acetone	17.3		µg/l		20.0		86	70-130	2	30
Acrylonitrile	18.7		µg/l		20.0		94	70-130	0.2	30
Benzene	21.0		µg/l		20.0		105	80-120	3	20
Bromobenzene	21.2		µg/l		20.0		106	80-120	3	20
Bromochloromethane	20.7		µg/l		20.0		104	80-120	2	20
Bromodichloromethane	22.2		µg/l		20.0		111	80-120	4	20
Bromoform	24.0		µg/l		20.0		120	80-120	3	20
Bromomethane	18.4		µg/l		20.0		92	80-120	3	20
2-Butanone (MEK)	20.5		µg/l		20.0		103	70-130	0.6	30
n-Butylbenzene	21.6		µg/l		20.0		108	80-120	3	20
sec-Butylbenzene	24.2	QC2	µg/l		20.0		121	80-120	2	20
tert-Butylbenzene	23.8		µg/l		20.0		119	80-120	3	20
Carbon disulfide	18.8		µg/l		20.0		94	70-130	4	30
Carbon tetrachloride	22.4		µg/l		20.0		112	80-120	4	20
Chlorobenzene	21.1		µg/l		20.0		106	80-120	3	20
Chloroethane	18.4		µg/l		20.0		92	80-120	2	20
Chloroform	20.4		µg/l		20.0		102	80-120	2	20
Chloromethane	17.9		µg/l		20.0		89	80-120	2	20
2-Chlorotoluene	22.6		µg/l		20.0		113	80-120	3	20
4-Chlorotoluene	22.6		µg/l		20.0		113	80-120	2	20
1,2-Dibromo-3-chloropropane	20.4		µg/l		20.0		102	80-120	2	20
Dibromochloromethane	21.3		µg/l		20.0		106	80-120	3	20
1,2-Dibromoethane (EDB)	20.7		µg/l		20.0		104	80-120	3	20
Dibromomethane	20.2		µg/l		20.0		101	80-120	1	20
1,2-Dichlorobenzene	22.2		µg/l		20.0		111	80-120	2	20
1,3-Dichlorobenzene	22.6		µg/l		20.0		113	80-120	2	20
1,4-Dichlorobenzene	20.6		µg/l		20.0		103	80-120	2	20
Dichlorodifluoromethane (Freon12)	17.0		µg/l		20.0		85	80-120	3	20
1,1-Dichloroethane	21.2		µg/l		20.0		106	80-120	3	20
1,2-Dichloroethane	19.3		µg/l		20.0		96	80-120	2	20
1,1-Dichloroethene	20.0		µg/l		20.0		100	80-120	3	20
cis-1,2-Dichloroethene	22.2		µg/l		20.0		111	80-120	2	20
trans-1,2-Dichloroethene	18.9		µg/l		20.0		95	80-120	3	20
1,2-Dichloropropane	21.4		µg/l		20.0		107	80-120	3	20
1,3-Dichloropropane	20.5		µg/l		20.0		102	80-120	2	20
2,2-Dichloropropane	22.8		µg/l		20.0		114	80-120	5	20
1,1-Dichloropropene	21.7		µg/l		20.0		109	80-120	4	20
cis-1,3-Dichloropropene	22.2		µg/l		20.0		111	80-120	4	20
trans-1,3-Dichloropropene	22.1		µg/l		20.0		110	80-120	3	20
Ethylbenzene	22.1		µg/l		20.0		110	80-120	3	20
Hexachlorobutadiene	22.1		µg/l		20.0		110	80-120	3	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9082038 - SW846 5030 Water MS										
LCS Dup (9082038-BSD1)										
Prepared & Analyzed: 28-Aug-09										
2-Hexanone (MBK)	19.4		µg/l		20.0		97	70-130	3	30
Isopropylbenzene	18.6		µg/l		20.0		93	80-120	3	20
4-Isopropyltoluene	23.8		µg/l		20.0		119	80-120	3	20
Methyl tert-butyl ether	20.6		µg/l		20.0		103	80-120	2	20
4-Methyl-2-pentanone (MIBK)	19.5		µg/l		20.0		97	70-130	2	30
Methylene chloride	18.3		µg/l		20.0		91	80-120	3	20
Naphthalene	21.6	CAL1	µg/l		20.0		108	80-120	5	20
n-Propylbenzene	22.2		µg/l		20.0		111	80-120	3	20
Styrene	22.8		µg/l		20.0		114	80-120	3	20
1,1,1,2-Tetrachloroethane	23.1		µg/l		20.0		116	80-120	2	20
1,1,2,2-Tetrachloroethane	21.4		µg/l		20.0		107	80-120	2	20
Tetrachloroethene	20.7		µg/l		20.0		104	80-120	4	20
Toluene	20.6		µg/l		20.0		103	80-120	3	20
1,2,3-Trichlorobenzene	19.0		µg/l		20.0		95	80-120	3	20
1,2,4-Trichlorobenzene	18.5		µg/l		20.0		92	80-120	4	20
1,1,1-Trichloroethane	21.3		µg/l		20.0		106	80-120	3	20
1,1,2-Trichloroethane	21.3		µg/l		20.0		106	80-120	0.6	20
Trichloroethene	21.2		µg/l		20.0		106	80-120	5	20
Trichlorofluoromethane (Freon 11)	20.9		µg/l		20.0		104	80-120	3	20
1,2,3-Trichloropropane	22.8		µg/l		20.0		114	80-120	3	20
1,2,4-Trimethylbenzene	23.4		µg/l		20.0		117	80-120	3	20
1,3,5-Trimethylbenzene	23.1		µg/l		20.0		115	80-120	3	20
Vinyl chloride	18.3		µg/l		20.0		91	80-120	3	20
m,p-Xylene	45.9		µg/l		40.0		115	80-120	2	20
o-Xylene	23.8		µg/l		20.0		119	80-120	2	20
Tetrahydrofuran	19.3		µg/l		20.0		97	70-130	2	30
Tert-amyl methyl ether	20.4		µg/l		20.0		102	70-130	2	30
Ethyl tert-butyl ether	20.8		µg/l		20.0		104	70-130	3	30
Di-isopropyl ether	20.9		µg/l		20.0		105	70-130	2	30
Tert-Butanol / butyl alcohol	173		µg/l		200		87	70-130	1	30
Surrogate: 4-Bromofluorobenzene	*50.8*		µg/l		*50.0*		*102*	*80-120*		
Surrogate: Toluene-d8	*49.2*		µg/l		*50.0*		*98*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*47.7*		µg/l		*50.0*		*95*	*80-120*		
Surrogate: Dibromofluoromethane	*49.5*		µg/l		*50.0*		*99*	*80-120*		
Batch 9082064 - SW846 5030 Water MS										
Blank (9082064-BLK1)										
Prepared & Analyzed: 28-Aug-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0						
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	0.5						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	0.5						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
2-Butanone (MEK)	BRL		µg/l	10.0						
n-Butylbenzene	BRL		µg/l	1.0						
sec-Butylbenzene	BRL		µg/l	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9082064 - SW846 5030 Water MS										
Blank (9082064-BLK1)										
Prepared & Analyzed: 28-Aug-09										
tert-Butylbenzene	BRL		µg/l	1.0						
Carbon disulfide	BRL		µg/l	5.0						
Carbon tetrachloride	BRL		µg/l	1.0						
Chlorobenzene	BRL		µg/l	1.0						
Chloroethane	BRL		µg/l	2.0						
Chloroform	BRL		µg/l	1.0						
Chloromethane	BRL		µg/l	2.0						
2-Chlorotoluene	BRL		µg/l	1.0						
4-Chlorotoluene	BRL		µg/l	1.0						
1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0						
Dibromochloromethane	BRL		µg/l	0.5						
1,2-Dibromoethane (EDB)	BRL		µg/l	0.5						
Dibromomethane	BRL		µg/l	1.0						
1,2-Dichlorobenzene	BRL		µg/l	1.0						
1,3-Dichlorobenzene	BRL		µg/l	1.0						
1,4-Dichlorobenzene	BRL		µg/l	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0						
1,1-Dichloroethane	BRL		µg/l	1.0						
1,2-Dichloroethane	BRL		µg/l	1.0						
1,1-Dichloroethene	BRL		µg/l	1.0						
cis-1,2-Dichloroethene	BRL		µg/l	1.0						
trans-1,2-Dichloroethene	BRL		µg/l	1.0						
1,2-Dichloropropane	BRL		µg/l	1.0						
1,3-Dichloropropane	BRL		µg/l	1.0						
2,2-Dichloropropane	BRL		µg/l	1.0						
1,1-Dichloropropene	BRL		µg/l	1.0						
cis-1,3-Dichloropropene	BRL		µg/l	0.5						
trans-1,3-Dichloropropene	BRL		µg/l	0.5						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	0.5						
2-Hexanone (MBK)	BRL		µg/l	10.0						
Isopropylbenzene	BRL		µg/l	1.0						
4-Isopropyltoluene	BRL		µg/l	1.0						
Methyl tert-butyl ether	BRL		µg/l	1.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0						
Methylene chloride	BRL		µg/l	5.0						
Naphthalene	BRL		µg/l	1.0						
n-Propylbenzene	BRL		µg/l	1.0						
Styrene	BRL		µg/l	1.0						
1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	BRL		µg/l	1.0						
1,2,3-Trichlorobenzene	BRL		µg/l	1.0						
1,2,4-Trichlorobenzene	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	BRL		µg/l	1.0						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,1,2-Trichloroethane	BRL		µg/l	1.0						
Trichloroethene	BRL		µg/l	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9082064 - SW846 5030 Water MS										
Blank (9082064-BLK1)										
Prepared & Analyzed: 28-Aug-09										
Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0						
1,2,3-Trichloropropane	BRL		µg/l	1.0						
1,2,4-Trimethylbenzene	BRL		µg/l	1.0						
1,3,5-Trimethylbenzene	BRL		µg/l	1.0						
Vinyl chloride	BRL		µg/l	1.0						
m,p-Xylene	BRL		µg/l	2.0						
o-Xylene	BRL		µg/l	1.0						
Tetrahydrofuran	BRL		µg/l	10.0						
Ethyl ether	BRL		µg/l	1.0						
Tert-amyl methyl ether	BRL		µg/l	1.0						
Ethyl tert-butyl ether	BRL		µg/l	1.0						
Di-isopropyl ether	BRL		µg/l	1.0						
Tert-Butanol / butyl alcohol	BRL		µg/l	10.0						
1,4-Dioxane	BRL		µg/l	20.0						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	400						
Surrogate: 4-Bromofluorobenzene	*30.3*		µg/l		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*29.1*		µg/l		*30.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.1*		µg/l		*30.0*		*94*	*70-130*		
Surrogate: Dibromofluoromethane	*28.2*		µg/l		*30.0*		*94*	*70-130*		
LCS (9082064-BS1)										
Prepared & Analyzed: 28-Aug-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	24.4		µg/l		20.0		122	70-130		
Acetone	14.9		µg/l		20.0		74	52.2-144		
Acrylonitrile	17.3		µg/l		20.0		86	70-130		
Benzene	20.0		µg/l		20.0		100	70-130		
Bromobenzene	28.0	QC2	µg/l		20.0		140	70-130		
Bromochloromethane	26.7	QM9	µg/l		20.0		133	70-130		
Bromodichloromethane	19.0		µg/l		20.0		95	70-130		
Bromoform	17.5		µg/l		20.0		88	70-130		
Bromomethane	18.4		µg/l		20.0		92	40-167		
2-Butanone (MEK)	16.2		µg/l		20.0		81	57.7-141		
n-Butylbenzene	15.1		µg/l		20.0		76	70-130		
sec-Butylbenzene	22.6		µg/l		20.0		113	70-130		
tert-Butylbenzene	25.9		µg/l		20.0		130	70-130		
Carbon disulfide	16.1		µg/l		20.0		80	70-130		
Carbon tetrachloride	23.4		µg/l		20.0		117	70-130		
Chlorobenzene	24.9		µg/l		20.0		125	70-130		
Chloroethane	16.6		µg/l		20.0		83	65.1-130		
Chloroform	21.6		µg/l		20.0		108	70-130		
Chloromethane	20.1		µg/l		20.0		101	70-130		
2-Chlorotoluene	22.9		µg/l		20.0		114	70-130		
4-Chlorotoluene	23.2		µg/l		20.0		116	70-130		
1,2-Dibromo-3-chloropropane	11.5	QC2	µg/l		20.0		58	70-130		
Dibromochloromethane	17.0		µg/l		20.0		85	55.6-155		
1,2-Dibromoethane (EDB)	20.4		µg/l		20.0		102	70-130		
Dibromomethane	19.3		µg/l		20.0		97	70-130		
1,2-Dichlorobenzene	21.6		µg/l		20.0		108	70-130		
1,3-Dichlorobenzene	27.8	QC2	µg/l		20.0		139	70-130		
1,4-Dichlorobenzene	20.9		µg/l		20.0		105	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9082064 - SW846 5030 Water MS										
LCS (9082064-BS1)										
Prepared & Analyzed: 28-Aug-09										
Dichlorodifluoromethane (Freon12)	25.4		µg/l		20.0		127	45.8-135		
1,1-Dichloroethane	22.2		µg/l		20.0		111	70-130		
1,2-Dichloroethane	18.8		µg/l		20.0		94	70-130		
1,1-Dichloroethene	20.0		µg/l		20.0		100	70-130		
cis-1,2-Dichloroethene	23.1		µg/l		20.0		116	70-130		
trans-1,2-Dichloroethene	19.0		µg/l		20.0		95	70-130		
1,2-Dichloropropane	18.6		µg/l		20.0		93	70-130		
1,3-Dichloropropane	17.4		µg/l		20.0		87	70-130		
2,2-Dichloropropane	20.7		µg/l		20.0		103	70-130		
1,1-Dichloropropene	20.8		µg/l		20.0		104	70-130		
cis-1,3-Dichloropropene	15.3		µg/l		20.0		77	70-130		
trans-1,3-Dichloropropene	13.7	QC2	µg/l		20.0		68	70-130		
Ethylbenzene	24.3		µg/l		20.0		121	70-130		
Hexachlorobutadiene	16.4		µg/l		20.0		82	63.3-141		
2-Hexanone (MBK)	14.3		µg/l		20.0		72	70-130		
Isopropylbenzene	21.1		µg/l		20.0		106	70-130		
4-Isopropyltoluene	19.4		µg/l		20.0		97	70-130		
Methyl tert-butyl ether	23.6		µg/l		20.0		118	70-130		
4-Methyl-2-pentanone (MIBK)	14.5		µg/l		20.0		72	40-157		
Methylene chloride	17.7		µg/l		20.0		89	70-130		
Naphthalene	15.1		µg/l		20.0		75	70-130		
n-Propylbenzene	22.7		µg/l		20.0		113	70-130		
Styrene	24.3		µg/l		20.0		121	70-130		
1,1,1,2-Tetrachloroethane	19.4		µg/l		20.0		97	70-130		
1,1,2,2-Tetrachloroethane	18.1		µg/l		20.0		90	70-130		
Tetrachloroethene	25.1		µg/l		20.0		125	70-130		
Toluene	19.5		µg/l		20.0		97	70-130		
1,2,3-Trichlorobenzene	17.3		µg/l		20.0		86	70-130		
1,2,4-Trichlorobenzene	17.4		µg/l		20.0		87	70-130		
1,3,5-Trichlorobenzene	18.6		µg/l		20.0		93	70-130		
1,1,1-Trichloroethane	22.4		µg/l		20.0		112	70-130		
1,1,2-Trichloroethane	20.6		µg/l		20.0		103	70-130		
Trichloroethene	23.4		µg/l		20.0		117	70-130		
Trichlorofluoromethane (Freon 11)	19.8		µg/l		20.0		99	61.9-167		
1,2,3-Trichloropropane	19.6		µg/l		20.0		98	70-130		
1,2,4-Trimethylbenzene	23.6		µg/l		20.0		118	70-130		
1,3,5-Trimethylbenzene	25.0		µg/l		20.0		125	70-130		
Vinyl chloride	19.4		µg/l		20.0		97	70-130		
m,p-Xylene	49.7		µg/l		40.0		124	70-130		
o-Xylene	25.2		µg/l		20.0		126	70-130		
Tetrahydrofuran	17.9		µg/l		20.0		90	70-130		
Ethyl ether	16.2		µg/l		20.0		81	70-133		
Tert-amyl methyl ether	18.8		µg/l		20.0		94	70-130		
Ethyl tert-butyl ether	18.4		µg/l		20.0		92	70-130		
Di-isopropyl ether	18.0		µg/l		20.0		90	70-130		
Tert-Butanol / butyl alcohol	164		µg/l		200		82	70-130		
1,4-Dioxane	212		µg/l		200		106	50.6-156		
trans-1,4-Dichloro-2-butene	13.1	QC2	µg/l		20.0		66	70-130		
Ethanol	369		µg/l		400		92	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9082064 - SW846 5030 Water MS										
LCS (9082064-BS1)										
Prepared & Analyzed: 28-Aug-09										
Surrogate: 4-Bromofluorobenzene	*32.0*		µg/l		*30.0*		*107*	*70-130*		
Surrogate: Toluene-d8	*28.9*		µg/l		*30.0*		*96*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*27.5*		µg/l		*30.0*		*92*	*70-130*		
Surrogate: Dibromofluoromethane	*32.9*		µg/l		*30.0*		*110*	*70-130*		
LCS Dup (9082064-BSD1)										
Prepared & Analyzed: 28-Aug-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	23.6		µg/l		20.0		118	70-130	3	25
Acetone	14.6		µg/l		20.0		73	52.2-144	2	50
Acrylonitrile	17.2		µg/l		20.0		86	70-130	0.6	25
Benzene	19.4		µg/l		20.0		97	70-130	3	25
Bromobenzene	28.4	QC2	µg/l		20.0		142	70-130	1	25
Bromochloromethane	25.1		µg/l		20.0		126	70-130	6	25
Bromodichloromethane	18.5		µg/l		20.0		92	70-130	3	25
Bromoform	17.9		µg/l		20.0		90	70-130	2	25
Bromomethane	16.9		µg/l		20.0		84	40-167	8	50
2-Butanone (MEK)	16.0		µg/l		20.0		80	57.7-141	2	50
n-Butylbenzene	15.0		µg/l		20.0		75	70-130	1	25
sec-Butylbenzene	21.9		µg/l		20.0		109	70-130	3	25
tert-Butylbenzene	25.4		µg/l		20.0		127	70-130	2	25
Carbon disulfide	15.2		µg/l		20.0		76	70-130	5	25
Carbon tetrachloride	23.0		µg/l		20.0		115	70-130	2	25
Chlorobenzene	24.1		µg/l		20.0		120	70-130	4	25
Chloroethane	15.8		µg/l		20.0		79	65.1-130	5	50
Chloroform	21.4		µg/l		20.0		107	70-130	0.7	25
Chloromethane	19.1		µg/l		20.0		95	70-130	5	25
2-Chlorotoluene	23.7		µg/l		20.0		118	70-130	4	25
4-Chlorotoluene	22.5		µg/l		20.0		112	70-130	3	25
1,2-Dibromo-3-chloropropane	9.1	QC2	µg/l		20.0		46	70-130	23	25
Dibromochloromethane	17.3		µg/l		20.0		86	55.6-155	2	50
1,2-Dibromoethane (EDB)	20.6		µg/l		20.0		103	70-130	1	25
Dibromomethane	19.3		µg/l		20.0		96	70-130	0.3	25
1,2-Dichlorobenzene	21.2		µg/l		20.0		106	70-130	2	25
1,3-Dichlorobenzene	27.6	QC2	µg/l		20.0		138	70-130	0.8	25
1,4-Dichlorobenzene	20.3		µg/l		20.0		101	70-130	3	25
Dichlorodifluoromethane (Freon12)	24.1		µg/l		20.0		121	45.8-135	5	50
1,1-Dichloroethane	20.3		µg/l		20.0		102	70-130	9	25
1,2-Dichloroethane	18.6		µg/l		20.0		93	70-130	1	25
1,1-Dichloroethene	19.3		µg/l		20.0		96	70-130	4	25
cis-1,2-Dichloroethene	22.2		µg/l		20.0		111	70-130	4	25
trans-1,2-Dichloroethene	18.6		µg/l		20.0		93	70-130	2	25
1,2-Dichloropropane	18.3		µg/l		20.0		92	70-130	2	25
1,3-Dichloropropane	17.5		µg/l		20.0		87	70-130	0.3	25
2,2-Dichloropropane	20.0		µg/l		20.0		100	70-130	3	25
1,1-Dichloropropene	20.8		µg/l		20.0		104	70-130	0.4	25
cis-1,3-Dichloropropene	15.8		µg/l		20.0		79	70-130	3	25
trans-1,3-Dichloropropene	13.8	QC2	µg/l		20.0		69	70-130	0.9	25
Ethylbenzene	23.4		µg/l		20.0		117	70-130	4	25
Hexachlorobutadiene	15.2		µg/l		20.0		76	63.3-141	8	50
2-Hexanone (MBK)	14.2		µg/l		20.0		71	70-130	0.7	25
Isopropylbenzene	20.7		µg/l		20.0		104	70-130	2	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9082064 - SW846 5030 Water MS										
LCS Dup (9082064-BSD1)										
Prepared & Analyzed: 28-Aug-09										
4-Isopropyltoluene	19.0		µg/l		20.0		95	70-130	2	25
Methyl tert-butyl ether	23.5		µg/l		20.0		117	70-130	0.3	25
4-Methyl-2-pentanone (MIBK)	14.5		µg/l		20.0		73	40-157	0.4	50
Methylene chloride	17.1		µg/l		20.0		85	70-130	4	25
Naphthalene	15.4		µg/l		20.0		77	70-130	2	25
n-Propylbenzene	21.4		µg/l		20.0		107	70-130	6	25
Styrene	22.9		µg/l		20.0		114	70-130	6	25
1,1,1,2-Tetrachloroethane	19.6		µg/l		20.0		98	70-130	0.6	25
1,1,2,2-Tetrachloroethane	17.4		µg/l		20.0		87	70-130	4	25
Tetrachloroethene	25.0		µg/l		20.0		125	70-130	0.4	25
Toluene	19.1		µg/l		20.0		95	70-130	2	25
1,2,3-Trichlorobenzene	17.3		µg/l		20.0		87	70-130	0.2	25
1,2,4-Trichlorobenzene	17.2		µg/l		20.0		86	70-130	2	25
1,3,5-Trichlorobenzene	18.5		µg/l		20.0		92	70-130	0.5	25
1,1,1-Trichloroethane	21.3		µg/l		20.0		106	70-130	5	25
1,1,2-Trichloroethane	20.7		µg/l		20.0		104	70-130	0.5	25
Trichloroethene	22.4		µg/l		20.0		112	70-130	5	25
Trichlorofluoromethane (Freon 11)	19.2		µg/l		20.0		96	61.9-167	3	50
1,2,3-Trichloropropane	19.9		µg/l		20.0		99	70-130	1	25
1,2,4-Trimethylbenzene	23.4		µg/l		20.0		117	70-130	1	25
1,3,5-Trimethylbenzene	24.2		µg/l		20.0		121	70-130	3	25
Vinyl chloride	18.2		µg/l		20.0		91	70-130	6	25
m,p-Xylene	47.8		µg/l		40.0		120	70-130	4	25
o-Xylene	24.6		µg/l		20.0		123	70-130	3	25
Tetrahydrofuran	18.6		µg/l		20.0		93	70-130	4	25
Ethyl ether	16.6		µg/l		20.0		83	70-133	3	50
Tert-amyl methyl ether	18.2		µg/l		20.0		91	70-130	3	25
Ethyl tert-butyl ether	18.1		µg/l		20.0		91	70-130	2	25
Di-isopropyl ether	17.8		µg/l		20.0		89	70-130	1	25
Tert-Butanol / butyl alcohol	173		µg/l		200		87	70-130	5	25
1,4-Dioxane	194		µg/l		200		97	50.6-156	9	25
trans-1,4-Dichloro-2-butene	12.8	QC2	µg/l		20.0		64	70-130	3	25
Ethanol	370		µg/l		400		93	70-130	0.4	30
Surrogate: 4-Bromofluorobenzene	*32.2*		µg/l		*30.0*		*107*	*70-130*		
Surrogate: Toluene-d8	*29.0*		µg/l		*30.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*27.2*		µg/l		*30.0*		*91*	*70-130*		
Surrogate: Dibromofluoromethane	*32.5*		µg/l		*30.0*		*108*	*70-130*		
Batch 9090025 - SW846 5030 Water MS										
Blank (9090025-BLK1)										
Prepared & Analyzed: 03-Sep-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0						
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	0.5						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	0.5						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9090025 - SW846 5030 Water MS										
Blank (9090025-BLK1)										
Prepared & Analyzed: 03-Sep-09										
2-Butanone (MEK)	BRL		µg/l	10.0						
n-Butylbenzene	BRL		µg/l	1.0						
sec-Butylbenzene	BRL		µg/l	1.0						
tert-Butylbenzene	BRL		µg/l	1.0						
Carbon disulfide	BRL		µg/l	5.0						
Carbon tetrachloride	BRL		µg/l	1.0						
Chlorobenzene	BRL		µg/l	1.0						
Chloroethane	BRL		µg/l	2.0						
Chloroform	BRL		µg/l	1.0						
Chloromethane	BRL		µg/l	2.0						
2-Chlorotoluene	BRL		µg/l	1.0						
4-Chlorotoluene	BRL		µg/l	1.0						
1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0						
Dibromochloromethane	BRL		µg/l	0.5						
1,2-Dibromoethane (EDB)	BRL		µg/l	0.5						
Dibromomethane	BRL		µg/l	1.0						
1,2-Dichlorobenzene	BRL		µg/l	1.0						
1,3-Dichlorobenzene	BRL		µg/l	1.0						
1,4-Dichlorobenzene	BRL		µg/l	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0						
1,1-Dichloroethane	BRL		µg/l	1.0						
1,2-Dichloroethane	BRL		µg/l	1.0						
1,1-Dichloroethene	BRL		µg/l	1.0						
cis-1,2-Dichloroethene	BRL		µg/l	1.0						
trans-1,2-Dichloroethene	BRL		µg/l	1.0						
1,2-Dichloropropane	BRL		µg/l	1.0						
1,3-Dichloropropane	BRL		µg/l	1.0						
2,2-Dichloropropane	BRL		µg/l	1.0						
1,1-Dichloropropene	BRL		µg/l	1.0						
cis-1,3-Dichloropropene	BRL		µg/l	0.5						
trans-1,3-Dichloropropene	BRL		µg/l	0.5						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	0.5						
2-Hexanone (MBK)	BRL		µg/l	10.0						
Isopropylbenzene	BRL		µg/l	1.0						
4-Isopropyltoluene	BRL		µg/l	1.0						
Methyl tert-butyl ether	BRL		µg/l	1.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0						
Methylene chloride	BRL		µg/l	5.0						
Naphthalene	BRL		µg/l	1.0						
n-Propylbenzene	BRL		µg/l	1.0						
Styrene	BRL		µg/l	1.0						
1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	BRL		µg/l	1.0						
1,2,3-Trichlorobenzene	BRL		µg/l	1.0						
1,2,4-Trichlorobenzene	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	BRL		µg/l	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9090025 - SW846 5030 Water MS										
Blank (9090025-BLK1)										
Prepared & Analyzed: 03-Sep-09										
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,1,2-Trichloroethane	BRL		µg/l	1.0						
Trichloroethene	BRL		µg/l	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0						
1,2,3-Trichloropropane	BRL		µg/l	1.0						
1,2,4-Trimethylbenzene	BRL		µg/l	1.0						
1,3,5-Trimethylbenzene	BRL		µg/l	1.0						
Vinyl chloride	BRL		µg/l	1.0						
m,p-Xylene	BRL		µg/l	2.0						
o-Xylene	BRL		µg/l	1.0						
Tetrahydrofuran	BRL		µg/l	5.0						
Ethyl ether	BRL		µg/l	1.0						
Tert-amyl methyl ether	BRL		µg/l	1.0						
Ethyl tert-butyl ether	BRL		µg/l	1.0						
Di-isopropyl ether	BRL		µg/l	1.0						
Tert-Butanol / butyl alcohol	BRL		µg/l	10.0						
1,4-Dioxane	BRL		µg/l	20.0						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	400						
Surrogate: 4-Bromofluorobenzene	*47.6*		µg/l		*50.0*		*95*	*70-130*		
Surrogate: Toluene-d8	*51.9*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*51.3*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*55.1*		µg/l		*50.0*		*110*	*70-130*		
LCS (9090025-BS1)										
Prepared & Analyzed: 03-Sep-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	25.5		µg/l		20.0		127	70-130		
Acetone	22.6		µg/l		20.0		113	52.2-144		
Acrylonitrile	18.7		µg/l		20.0		94	70-130		
Benzene	20.5		µg/l		20.0		103	70-130		
Bromobenzene	21.9		µg/l		20.0		109	70-130		
Bromochloromethane	21.6		µg/l		20.0		108	70-130		
Bromodichloromethane	22.0		µg/l		20.0		110	70-130		
Bromoform	17.2		µg/l		20.0		86	70-130		
Bromomethane	15.0		µg/l		20.0		75	40-167		
2-Butanone (MEK)	22.5		µg/l		20.0		113	57.7-141		
n-Butylbenzene	16.4		µg/l		20.0		82	70-130		
sec-Butylbenzene	19.1		µg/l		20.0		95	70-130		
tert-Butylbenzene	20.0		µg/l		20.0		100	70-130		
Carbon disulfide	17.9		µg/l		20.0		89	70-130		
Carbon tetrachloride	20.9		µg/l		20.0		105	70-130		
Chlorobenzene	22.2		µg/l		20.0		111	70-130		
Chloroethane	17.8		µg/l		20.0		89	65.1-130		
Chloroform	20.2		µg/l		20.0		101	70-130		
Chloromethane	16.4		µg/l		20.0		82	70-130		
2-Chlorotoluene	21.6		µg/l		20.0		108	70-130		
4-Chlorotoluene	22.8		µg/l		20.0		114	70-130		
1,2-Dibromo-3-chloropropane	18.1		µg/l		20.0		91	70-130		
Dibromochloromethane	21.7		µg/l		20.0		109	55.6-155		
1,2-Dibromoethane (EDB)	22.8		µg/l		20.0		114	70-130		
Dibromomethane	20.2		µg/l		20.0		101	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9090025 - SW846 5030 Water MS										
LCS (9090025-BS1)										
Prepared & Analyzed: 03-Sep-09										
1,2-Dichlorobenzene	20.3		µg/l		20.0		101	70-130		
1,3-Dichlorobenzene	22.8		µg/l		20.0		114	70-130		
1,4-Dichlorobenzene	19.0		µg/l		20.0		95	70-130		
Dichlorodifluoromethane (Freon12)	16.9		µg/l		20.0		84	45.8-135		
1,1-Dichloroethane	18.7		µg/l		20.0		94	70-130		
1,2-Dichloroethane	21.6		µg/l		20.0		108	70-130		
1,1-Dichloroethene	21.3		µg/l		20.0		106	70-130		
cis-1,2-Dichloroethene	21.6		µg/l		20.0		108	70-130		
trans-1,2-Dichloroethene	19.6		µg/l		20.0		98	70-130		
1,2-Dichloropropane	20.6		µg/l		20.0		103	70-130		
1,3-Dichloropropane	21.3		µg/l		20.0		106	70-130		
2,2-Dichloropropane	16.9		µg/l		20.0		84	70-130		
1,1-Dichloropropene	20.9		µg/l		20.0		104	70-130		
cis-1,3-Dichloropropene	19.7		µg/l		20.0		98	70-130		
trans-1,3-Dichloropropene	19.1		µg/l		20.0		96	70-130		
Ethylbenzene	21.4		µg/l		20.0		107	70-130		
Hexachlorobutadiene	19.1		µg/l		20.0		96	63.3-141		
2-Hexanone (MBK)	22.1		µg/l		20.0		111	70-130		
Isopropylbenzene	17.8		µg/l		20.0		89	70-130		
4-Isopropyltoluene	17.1		µg/l		20.0		86	70-130		
Methyl tert-butyl ether	20.2		µg/l		20.0		101	70-130		
4-Methyl-2-pentanone (MIBK)	20.9		µg/l		20.0		104	40-157		
Methylene chloride	19.1		µg/l		20.0		96	70-130		
Naphthalene	16.7		µg/l		20.0		83	70-130		
n-Propylbenzene	19.0		µg/l		20.0		95	70-130		
Styrene	21.8		µg/l		20.0		109	70-130		
1,1,1,2-Tetrachloroethane	22.4		µg/l		20.0		112	70-130		
1,1,2,2-Tetrachloroethane	21.2		µg/l		20.0		106	70-130		
Tetrachloroethene	21.7		µg/l		20.0		108	70-130		
Toluene	21.1		µg/l		20.0		105	70-130		
1,2,3-Trichlorobenzene	20.5		µg/l		20.0		103	70-130		
1,2,4-Trichlorobenzene	19.4		µg/l		20.0		97	70-130		
1,3,5-Trichlorobenzene	20.2		µg/l		20.0		101	70-130		
1,1,1-Trichloroethane	20.6		µg/l		20.0		103	70-130		
1,1,2-Trichloroethane	21.2		µg/l		20.0		106	70-130		
Trichloroethene	22.7		µg/l		20.0		113	70-130		
Trichlorofluoromethane (Freon 11)	22.3		µg/l		20.0		112	61.9-167		
1,2,3-Trichloropropane	22.9		µg/l		20.0		114	70-130		
1,2,4-Trimethylbenzene	19.2		µg/l		20.0		96	70-130		
1,3,5-Trimethylbenzene	21.8		µg/l		20.0		109	70-130		
Vinyl chloride	21.9		µg/l		20.0		109	70-130		
m,p-Xylene	44.4		µg/l		40.0		111	70-130		
o-Xylene	22.3		µg/l		20.0		112	70-130		
Tetrahydrofuran	21.4		µg/l		20.0		107	70-130		
Ethyl ether	20.9		µg/l		20.0		105	70-133		
Tert-amyl methyl ether	22.5		µg/l		20.0		112	70-130		
Ethyl tert-butyl ether	19.8		µg/l		20.0		99	70-130		
Di-isopropyl ether	20.8		µg/l		20.0		104	70-130		
Tert-Butanol / butyl alcohol	198		µg/l		200		99	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9090025 - SW846 5030 Water MS										
LCS (9090025-BS1)										
Prepared & Analyzed: 03-Sep-09										
1,4-Dioxane	227		µg/l		200		113	50.6-156		
trans-1,4-Dichloro-2-butene	19.0		µg/l		20.0		95	70-130		
Ethanol	474		µg/l		400		119	70-130		
Surrogate: 4-Bromofluorobenzene	*52.8*		µg/l		*50.0*		*106*	*70-130*		
Surrogate: Toluene-d8	*51.9*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*51.6*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*52.0*		µg/l		*50.0*		*104*	*70-130*		
LCS Dup (9090025-BSD1)										
Prepared & Analyzed: 03-Sep-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	23.6		µg/l		20.0		118	70-130	8	25
Acetone	21.4		µg/l		20.0		107	52.2-144	5	50
Acrylonitrile	19.9		µg/l		20.0		99	70-130	6	25
Benzene	19.7		µg/l		20.0		98	70-130	4	25
Bromobenzene	20.5		µg/l		20.0		103	70-130	6	25
Bromochloromethane	19.8		µg/l		20.0		99	70-130	8	25
Bromodichloromethane	21.3		µg/l		20.0		107	70-130	3	25
Bromoform	16.4		µg/l		20.0		82	70-130	5	25
Bromomethane	14.0		µg/l		20.0		70	40-167	7	50
2-Butanone (MEK)	23.6		µg/l		20.0		118	57.7-141	5	50
n-Butylbenzene	16.1		µg/l		20.0		81	70-130	2	25
sec-Butylbenzene	18.3		µg/l		20.0		91	70-130	4	25
tert-Butylbenzene	18.9		µg/l		20.0		94	70-130	6	25
Carbon disulfide	17.2		µg/l		20.0		86	70-130	4	25
Carbon tetrachloride	19.7		µg/l		20.0		98	70-130	6	25
Chlorobenzene	20.8		µg/l		20.0		104	70-130	6	25
Chloroethane	17.6		µg/l		20.0		88	65.1-130	1	50
Chloroform	19.4		µg/l		20.0		97	70-130	4	25
Chloromethane	15.3		µg/l		20.0		76	70-130	7	25
2-Chlorotoluene	20.9		µg/l		20.0		105	70-130	3	25
4-Chlorotoluene	21.4		µg/l		20.0		107	70-130	6	25
1,2-Dibromo-3-chloropropane	18.3		µg/l		20.0		92	70-130	0.9	25
Dibromochloromethane	20.3		µg/l		20.0		102	55.6-155	7	50
1,2-Dibromoethane (EDB)	22.1		µg/l		20.0		110	70-130	3	25
Dibromomethane	20.1		µg/l		20.0		101	70-130	0.7	25
1,2-Dichlorobenzene	20.0		µg/l		20.0		100	70-130	1	25
1,3-Dichlorobenzene	22.1		µg/l		20.0		110	70-130	3	25
1,4-Dichlorobenzene	18.8		µg/l		20.0		94	70-130	1	25
Dichlorodifluoromethane (Freon12)	16.0		µg/l		20.0		80	45.8-135	5	50
1,1-Dichloroethane	18.1		µg/l		20.0		91	70-130	3	25
1,2-Dichloroethane	20.8		µg/l		20.0		104	70-130	4	25
1,1-Dichloroethene	20.4		µg/l		20.0		102	70-130	4	25
cis-1,2-Dichloroethene	20.8		µg/l		20.0		104	70-130	4	25
trans-1,2-Dichloroethene	18.7		µg/l		20.0		93	70-130	5	25
1,2-Dichloropropane	20.0		µg/l		20.0		100	70-130	3	25
1,3-Dichloropropane	21.3		µg/l		20.0		107	70-130	0.3	25
2,2-Dichloropropane	14.8		µg/l		20.0		74	70-130	14	25
1,1-Dichloropropene	20.1		µg/l		20.0		100	70-130	4	25
cis-1,3-Dichloropropene	18.8		µg/l		20.0		94	70-130	5	25
trans-1,3-Dichloropropene	18.7		µg/l		20.0		93	70-130	2	25
Ethylbenzene	20.4		µg/l		20.0		102	70-130	5	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9090025 - SW846 5030 Water MS										
LCS Dup (9090025-BSD1)										
Prepared & Analyzed: 03-Sep-09										
Hexachlorobutadiene	19.0		µg/l		20.0		95	63.3-141	0.7	50
2-Hexanone (MBK)	22.2		µg/l		20.0		111	70-130	0.1	25
Isopropylbenzene	17.9		µg/l		20.0		90	70-130	0.6	25
4-Isopropyltoluene	16.7		µg/l		20.0		84	70-130	2	25
Methyl tert-butyl ether	19.7		µg/l		20.0		98	70-130	3	25
4-Methyl-2-pentanone (MIBK)	21.4		µg/l		20.0		107	40-157	2	50
Methylene chloride	19.2		µg/l		20.0		96	70-130	0.6	25
Naphthalene	16.3		µg/l		20.0		82	70-130	2	25
n-Propylbenzene	18.2		µg/l		20.0		91	70-130	4	25
Styrene	20.9		µg/l		20.0		104	70-130	4	25
1,1,1,2-Tetrachloroethane	21.9		µg/l		20.0		110	70-130	2	25
1,1,2,2-Tetrachloroethane	21.0		µg/l		20.0		105	70-130	1	25
Tetrachloroethene	21.6		µg/l		20.0		108	70-130	0.4	25
Toluene	20.1		µg/l		20.0		100	70-130	5	25
1,2,3-Trichlorobenzene	19.6		µg/l		20.0		98	70-130	4	25
1,2,4-Trichlorobenzene	18.4		µg/l		20.0		92	70-130	5	25
1,3,5-Trichlorobenzene	18.7		µg/l		20.0		93	70-130	8	25
1,1,1-Trichloroethane	19.4		µg/l		20.0		97	70-130	6	25
1,1,2-Trichloroethane	20.1		µg/l		20.0		100	70-130	5	25
Trichloroethene	21.8		µg/l		20.0		109	70-130	4	25
Trichlorofluoromethane (Freon 11)	20.9		µg/l		20.0		105	61.9-167	7	50
1,2,3-Trichloropropane	23.0		µg/l		20.0		115	70-130	0.5	25
1,2,4-Trimethylbenzene	18.5		µg/l		20.0		92	70-130	4	25
1,3,5-Trimethylbenzene	21.1		µg/l		20.0		105	70-130	3	25
Vinyl chloride	19.9		µg/l		20.0		99	70-130	10	25
m,p-Xylene	43.5		µg/l		40.0		109	70-130	2	25
o-Xylene	21.7		µg/l		20.0		109	70-130	3	25
Tetrahydrofuran	20.6		µg/l		20.0		103	70-130	4	25
Ethyl ether	19.4		µg/l		20.0		97	70-133	8	50
Tert-amyl methyl ether	22.2		µg/l		20.0		111	70-130	1	25
Ethyl tert-butyl ether	18.8		µg/l		20.0		94	70-130	5	25
Di-isopropyl ether	19.6		µg/l		20.0		98	70-130	6	25
Tert-Butanol / butyl alcohol	197		µg/l		200		98	70-130	0.6	25
1,4-Dioxane	220		µg/l		200		110	50.6-156	3	25
trans-1,4-Dichloro-2-butene	18.7		µg/l		20.0		93	70-130	2	25
Ethanol	494		µg/l		400		123	70-130	4	30
Surrogate: 4-Bromofluorobenzene	*52.4*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*51.3*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.4*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*52.4*		µg/l		*50.0*		*105*	*70-130*		
Batch 9090031 - SW846 5030 Water MS										
Blank (9090031-BLK1)										
Prepared & Analyzed: 01-Sep-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0						
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	0.5						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9090031 - SW846 5030 Water MS										
Blank (9090031-BLK1)										
Prepared & Analyzed: 01-Sep-09										
Bromodichloromethane	BRL		µg/l	0.5						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
2-Butanone (MEK)	BRL		µg/l	10.0						
n-Butylbenzene	BRL		µg/l	1.0						
sec-Butylbenzene	BRL		µg/l	1.0						
tert-Butylbenzene	BRL		µg/l	1.0						
Carbon disulfide	BRL		µg/l	5.0						
Carbon tetrachloride	BRL		µg/l	1.0						
Chlorobenzene	BRL		µg/l	1.0						
Chloroethane	BRL		µg/l	2.0						
Chloroform	BRL		µg/l	1.0						
Chloromethane	BRL		µg/l	2.0						
2-Chlorotoluene	BRL		µg/l	1.0						
4-Chlorotoluene	BRL		µg/l	1.0						
1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0						
Dibromochloromethane	BRL		µg/l	0.5						
1,2-Dibromoethane (EDB)	BRL		µg/l	0.5						
Dibromomethane	BRL		µg/l	1.0						
1,2-Dichlorobenzene	BRL		µg/l	1.0						
1,3-Dichlorobenzene	BRL		µg/l	1.0						
1,4-Dichlorobenzene	BRL		µg/l	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0						
1,1-Dichloroethane	BRL		µg/l	1.0						
1,2-Dichloroethane	BRL		µg/l	1.0						
1,1-Dichloroethene	BRL		µg/l	1.0						
cis-1,2-Dichloroethene	BRL		µg/l	1.0						
trans-1,2-Dichloroethene	BRL		µg/l	1.0						
1,2-Dichloropropane	BRL		µg/l	1.0						
1,3-Dichloropropane	BRL		µg/l	1.0						
2,2-Dichloropropane	BRL		µg/l	1.0						
1,1-Dichloropropene	BRL		µg/l	1.0						
cis-1,3-Dichloropropene	BRL		µg/l	0.5						
trans-1,3-Dichloropropene	BRL		µg/l	0.5						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	0.5						
2-Hexanone (MBK)	BRL		µg/l	10.0						
Isopropylbenzene	BRL		µg/l	1.0						
4-Isopropyltoluene	BRL		µg/l	1.0						
Methyl tert-butyl ether	BRL		µg/l	1.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0						
Methylene chloride	BRL		µg/l	5.0						
Naphthalene	BRL		µg/l	1.0						
n-Propylbenzene	BRL		µg/l	1.0						
Styrene	BRL		µg/l	1.0						
1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	BRL		µg/l	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9090031 - SW846 5030 Water MS										
Blank (9090031-BLK1)										
Prepared & Analyzed: 01-Sep-09										
1,2,3-Trichlorobenzene	BRL		µg/l	1.0						
1,2,4-Trichlorobenzene	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	BRL		µg/l	1.0						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,1,2-Trichloroethane	BRL		µg/l	1.0						
Trichloroethene	BRL		µg/l	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0						
1,2,3-Trichloropropane	BRL		µg/l	1.0						
1,2,4-Trimethylbenzene	BRL		µg/l	1.0						
1,3,5-Trimethylbenzene	BRL		µg/l	1.0						
Vinyl chloride	BRL		µg/l	1.0						
m,p-Xylene	BRL		µg/l	2.0						
o-Xylene	BRL		µg/l	1.0						
Tetrahydrofuran	BRL		µg/l	10.0						
Ethyl ether	BRL		µg/l	1.0						
Tert-amyl methyl ether	BRL		µg/l	1.0						
Ethyl tert-butyl ether	BRL		µg/l	1.0						
Di-isopropyl ether	BRL		µg/l	1.0						
Tert-Butanol / butyl alcohol	BRL		µg/l	10.0						
1,4-Dioxane	BRL		µg/l	20.0						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	400						
Surrogate: 4-Bromofluorobenzene	*29.1*		µg/l		*30.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*29.2*		µg/l		*30.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*27.8*		µg/l		*30.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*28.3*		µg/l		*30.0*		*94*	*70-130*		
LCS (9090031-BS1)										
Prepared & Analyzed: 01-Sep-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	27.5	QM9	µg/l		20.0		137	70-130		
Acetone	29.6	QM9	µg/l		20.0		148	52.2-144		
Acrylonitrile	25.3		µg/l		20.0		127	70-130		
Benzene	22.1		µg/l		20.0		111	70-130		
Bromobenzene	22.4		µg/l		20.0		112	70-130		
Bromochloromethane	21.4		µg/l		20.0		107	70-130		
Bromodichloromethane	23.6		µg/l		20.0		118	70-130		
Bromoform	21.0		µg/l		20.0		105	70-130		
Bromomethane	22.3		µg/l		20.0		111	40-167		
2-Butanone (MEK)	28.5	QM9	µg/l		20.0		142	57.7-141		
n-Butylbenzene	23.1		µg/l		20.0		116	70-130		
sec-Butylbenzene	24.9		µg/l		20.0		124	70-130		
tert-Butylbenzene	24.0		µg/l		20.0		120	70-130		
Carbon disulfide	21.6		µg/l		20.0		108	70-130		
Carbon tetrachloride	21.8		µg/l		20.0		109	70-130		
Chlorobenzene	22.9		µg/l		20.0		115	70-130		
Chloroethane	20.3		µg/l		20.0		101	65.1-130		
Chloroform	20.9		µg/l		20.0		105	70-130		
Chloromethane	20.7		µg/l		20.0		104	70-130		
2-Chlorotoluene	21.3		µg/l		20.0		107	70-130		
4-Chlorotoluene	22.8		µg/l		20.0		114	70-130		
1,2-Dibromo-3-chloropropane	27.5	QM9	µg/l		20.0		138	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9090031 - SW846 5030 Water MS										
LCS (9090031-BS1)										
Prepared & Analyzed: 01-Sep-09										
Dibromochloromethane	19.7		µg/l		20.0		99	55.6-155		
1,2-Dibromoethane (EDB)	23.3		µg/l		20.0		117	70-130		
Dibromomethane	22.2		µg/l		20.0		111	70-130		
1,2-Dichlorobenzene	22.6		µg/l		20.0		113	70-130		
1,3-Dichlorobenzene	23.6		µg/l		20.0		118	70-130		
1,4-Dichlorobenzene	22.2		µg/l		20.0		111	70-130		
Dichlorodifluoromethane (Freon12)	20.9		µg/l		20.0		104	45.8-135		
1,1-Dichloroethane	22.1		µg/l		20.0		110	70-130		
1,2-Dichloroethane	19.9		µg/l		20.0		100	70-130		
1,1-Dichloroethene	22.8		µg/l		20.0		114	70-130		
cis-1,2-Dichloroethene	23.2		µg/l		20.0		116	70-130		
trans-1,2-Dichloroethene	21.7		µg/l		20.0		108	70-130		
1,2-Dichloropropane	23.6		µg/l		20.0		118	70-130		
1,3-Dichloropropane	22.0		µg/l		20.0		110	70-130		
2,2-Dichloropropane	22.5		µg/l		20.0		112	70-130		
1,1-Dichloropropene	22.3		µg/l		20.0		112	70-130		
cis-1,3-Dichloropropene	21.5		µg/l		20.0		108	70-130		
trans-1,3-Dichloropropene	20.4		µg/l		20.0		102	70-130		
Ethylbenzene	22.2		µg/l		20.0		111	70-130		
Hexachlorobutadiene	24.8		µg/l		20.0		124	63.3-141		
2-Hexanone (MBK)	25.0		µg/l		20.0		125	70-130		
Isopropylbenzene	19.2		µg/l		20.0		96	70-130		
4-Isopropyltoluene	24.1		µg/l		20.0		120	70-130		
Methyl tert-butyl ether	22.7		µg/l		20.0		114	70-130		
4-Methyl-2-pentanone (MIBK)	25.3		µg/l		20.0		127	40-157		
Methylene chloride	20.6		µg/l		20.0		103	70-130		
Naphthalene	25.7		µg/l		20.0		128	70-130		
n-Propylbenzene	24.1		µg/l		20.0		121	70-130		
Styrene	24.3		µg/l		20.0		122	70-130		
1,1,1,2-Tetrachloroethane	23.3		µg/l		20.0		117	70-130		
1,1,2,2-Tetrachloroethane	23.3		µg/l		20.0		116	70-130		
Tetrachloroethene	21.9		µg/l		20.0		110	70-130		
Toluene	22.0		µg/l		20.0		110	70-130		
1,2,3-Trichlorobenzene	25.8		µg/l		20.0		129	70-130		
1,2,4-Trichlorobenzene	24.6		µg/l		20.0		123	70-130		
1,3,5-Trichlorobenzene	23.3		µg/l		20.0		116	70-130		
1,1,1-Trichloroethane	22.7		µg/l		20.0		113	70-130		
1,1,2-Trichloroethane	24.1		µg/l		20.0		120	70-130		
Trichloroethene	24.0		µg/l		20.0		120	70-130		
Trichlorofluoromethane (Freon 11)	24.0		µg/l		20.0		120	61.9-167		
1,2,3-Trichloropropane	25.0		µg/l		20.0		125	70-130		
1,2,4-Trimethylbenzene	23.0		µg/l		20.0		115	70-130		
1,3,5-Trimethylbenzene	22.8		µg/l		20.0		114	70-130		
Vinyl chloride	25.1		µg/l		20.0		125	70-130		
m,p-Xylene	47.0		µg/l		40.0		118	70-130		
o-Xylene	24.4		µg/l		20.0		122	70-130		
Tetrahydrofuran	23.9		µg/l		20.0		120	70-130		
Ethyl ether	22.7		µg/l		20.0		113	70-133		
Tert-amyl methyl ether	22.9		µg/l		20.0		114	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9090031 - SW846 5030 Water MS										
LCS (9090031-BS1)										
Prepared & Analyzed: 01-Sep-09										
Ethyl tert-butyl ether	21.0		µg/l		20.0		105	70-130		
Di-isopropyl ether	21.2		µg/l		20.0		106	70-130		
Tert-Butanol / butyl alcohol	252		µg/l		200		126	70-130		
1,4-Dioxane	259		µg/l		200		130	50.6-156		
trans-1,4-Dichloro-2-butene	23.2		µg/l		20.0		116	70-130		
Ethanol	537	QM9	µg/l		400		134	70-130		
Surrogate: 4-Bromofluorobenzene	*29.5*		µg/l		*30.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*30.1*		µg/l		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*27.8*		µg/l		*30.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*28.6*		µg/l		*30.0*		*95*	*70-130*		
LCS Dup (9090031-BSD1)										
Prepared & Analyzed: 01-Sep-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	25.8		µg/l		20.0		129	70-130	6	25
Acetone	25.3		µg/l		20.0		126	52.2-144	16	50
Acrylonitrile	23.5		µg/l		20.0		118	70-130	7	25
Benzene	21.6		µg/l		20.0		108	70-130	2	25
Bromobenzene	21.6		µg/l		20.0		108	70-130	4	25
Bromochloromethane	21.2		µg/l		20.0		106	70-130	0.7	25
Bromodichloromethane	22.1		µg/l		20.0		110	70-130	7	25
Bromoform	20.2		µg/l		20.0		101	70-130	4	25
Bromomethane	21.3		µg/l		20.0		107	40-167	4	50
2-Butanone (MEK)	26.0		µg/l		20.0		130	57.7-141	9	50
n-Butylbenzene	22.0		µg/l		20.0		110	70-130	5	25
sec-Butylbenzene	23.2		µg/l		20.0		116	70-130	7	25
tert-Butylbenzene	22.4		µg/l		20.0		112	70-130	7	25
Carbon disulfide	19.9		µg/l		20.0		99	70-130	8	25
Carbon tetrachloride	19.7		µg/l		20.0		99	70-130	10	25
Chlorobenzene	22.3		µg/l		20.0		111	70-130	3	25
Chloroethane	19.1		µg/l		20.0		95	65.1-130	6	50
Chloroform	19.4		µg/l		20.0		97	70-130	7	25
Chloromethane	19.1		µg/l		20.0		95	70-130	8	25
2-Chlorotoluene	20.3		µg/l		20.0		102	70-130	5	25
4-Chlorotoluene	22.0		µg/l		20.0		110	70-130	3	25
1,2-Dibromo-3-chloropropane	22.6		µg/l		20.0		113	70-130	19	25
Dibromochloromethane	19.0		µg/l		20.0		95	55.6-155	4	50
1,2-Dibromoethane (EDB)	22.8		µg/l		20.0		114	70-130	2	25
Dibromomethane	21.4		µg/l		20.0		107	70-130	4	25
1,2-Dichlorobenzene	21.8		µg/l		20.0		109	70-130	3	25
1,3-Dichlorobenzene	22.3		µg/l		20.0		112	70-130	6	25
1,4-Dichlorobenzene	21.2		µg/l		20.0		106	70-130	4	25
Dichlorodifluoromethane (Freon12)	18.3		µg/l		20.0		91	45.8-135	13	50
1,1-Dichloroethane	21.4		µg/l		20.0		107	70-130	3	25
1,2-Dichloroethane	19.2		µg/l		20.0		96	70-130	4	25
1,1-Dichloroethene	21.6		µg/l		20.0		108	70-130	5	25
cis-1,2-Dichloroethene	22.3		µg/l		20.0		112	70-130	4	25
trans-1,2-Dichloroethene	20.4		µg/l		20.0		102	70-130	6	25
1,2-Dichloropropane	23.2		µg/l		20.0		116	70-130	2	25
1,3-Dichloropropane	21.9		µg/l		20.0		109	70-130	0.7	25
2,2-Dichloropropane	20.3		µg/l		20.0		102	70-130	10	25
1,1-Dichloropropene	20.8		µg/l		20.0		104	70-130	7	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9090031 - SW846 5030 Water MS										
LCS Dup (9090031-BSD1)										
Prepared & Analyzed: 01-Sep-09										
cis-1,3-Dichloropropene	20.1		µg/l		20.0		100	70-130	7	25
trans-1,3-Dichloropropene	18.9		µg/l		20.0		94	70-130	8	25
Ethylbenzene	21.3		µg/l		20.0		106	70-130	4	25
Hexachlorobutadiene	22.4		µg/l		20.0		112	63.3-141	10	50
2-Hexanone (MBK)	23.6		µg/l		20.0		118	70-130	6	25
Isopropylbenzene	18.5		µg/l		20.0		92	70-130	4	25
4-Isopropyltoluene	22.2		µg/l		20.0		111	70-130	8	25
Methyl tert-butyl ether	21.3		µg/l		20.0		107	70-130	6	25
4-Methyl-2-pentanone (MIBK)	22.2		µg/l		20.0		111	40-157	13	50
Methylene chloride	19.4		µg/l		20.0		97	70-130	6	25
Naphthalene	23.3		µg/l		20.0		117	70-130	10	25
n-Propylbenzene	23.5		µg/l		20.0		117	70-130	3	25
Styrene	23.0		µg/l		20.0		115	70-130	5	25
1,1,1,2-Tetrachloroethane	22.5		µg/l		20.0		113	70-130	4	25
1,1,2,2-Tetrachloroethane	23.7		µg/l		20.0		118	70-130	2	25
Tetrachloroethene	20.5		µg/l		20.0		102	70-130	7	25
Toluene	20.4		µg/l		20.0		102	70-130	8	25
1,2,3-Trichlorobenzene	23.8		µg/l		20.0		119	70-130	8	25
1,2,4-Trichlorobenzene	23.1		µg/l		20.0		116	70-130	6	25
1,3,5-Trichlorobenzene	21.4		µg/l		20.0		107	70-130	8	25
1,1,1-Trichloroethane	20.8		µg/l		20.0		104	70-130	9	25
1,1,2-Trichloroethane	23.1		µg/l		20.0		116	70-130	4	25
Trichloroethene	21.8		µg/l		20.0		109	70-130	9	25
Trichlorofluoromethane (Freon 11)	22.9		µg/l		20.0		114	61.9-167	5	50
1,2,3-Trichloropropane	23.7		µg/l		20.0		119	70-130	5	25
1,2,4-Trimethylbenzene	21.8		µg/l		20.0		109	70-130	6	25
1,3,5-Trimethylbenzene	22.1		µg/l		20.0		110	70-130	3	25
Vinyl chloride	23.1		µg/l		20.0		116	70-130	8	25
m,p-Xylene	46.2		µg/l		40.0		116	70-130	2	25
o-Xylene	23.1		µg/l		20.0		116	70-130	6	25
Tetrahydrofuran	24.1		µg/l		20.0		120	70-130	0.6	25
Ethyl ether	21.0		µg/l		20.0		105	70-133	7	50
Tert-amyl methyl ether	21.5		µg/l		20.0		107	70-130	6	25
Ethyl tert-butyl ether	20.0		µg/l		20.0		100	70-130	5	25
Di-isopropyl ether	20.2		µg/l		20.0		101	70-130	5	25
Tert-Butanol / butyl alcohol	220		µg/l		200		110	70-130	13	25
1,4-Dioxane	222		µg/l		200		111	50.6-156	15	25
trans-1,4-Dichloro-2-butene	21.3		µg/l		20.0		106	70-130	9	25
Ethanol	512		µg/l		400		128	70-130	5	30
Surrogate: 4-Bromofluorobenzene	*29.2*		µg/l		*30.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*29.2*		µg/l		*30.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*27.6*		µg/l		*30.0*		*92*	*70-130*		
Surrogate: Dibromofluoromethane	*28.8*		µg/l		*30.0*		*96*	*70-130*		
Matrix Spike (9090031-MS1)	**Source: SA99960-10**									
Prepared & Analyzed: 01-Sep-09										
Benzene	22.9		µg/l		20.0	BRL	114	70-130		
Chlorobenzene	25.0		µg/l		20.0	BRL	125	70-130		
1,1-Dichloroethene	24.8		µg/l		20.0	BRL	124	70-130		
Toluene	22.8		µg/l		20.0	BRL	114	70-130		
Trichloroethene	23.7		µg/l		20.0	BRL	118	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9090031 - SW846 5030 Water MS										
Matrix Spike (9090031-MS1)	**Source: SA99960-10**									
Prepared & Analyzed: 01-Sep-09										
Surrogate: 4-Bromofluorobenzene	*30.3*		µg/l		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*30.5*		µg/l		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*26.2*		µg/l		*30.0*		*87*	*70-130*		
Surrogate: Dibromofluoromethane	*29.4*		µg/l		*30.0*		*98*	*70-130*		
Matrix Spike Dup (9090031-MSD1)	**Source: SA99960-10**									
Prepared & Analyzed: 01-Sep-09										
Benzene	21.6		µg/l		20.0	BRL	108	70-130	6	30
Chlorobenzene	24.8		µg/l		20.0	BRL	124	70-130	0.6	30
1,1-Dichloroethene	24.8		µg/l		20.0	BRL	124	70-130	0	30
Toluene	23.0		µg/l		20.0	BRL	115	70-130	0.5	30
Trichloroethene	23.2		µg/l		20.0	BRL	116	70-130	2	30
Surrogate: 4-Bromofluorobenzene	*31.8*		µg/l		*30.0*		*106*	*70-130*		
Surrogate: Toluene-d8	*30.0*		µg/l		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*26.4*		µg/l		*30.0*		*88*	*70-130*		
Surrogate: Dibromofluoromethane	*29.8*		µg/l		*30.0*		*100*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9082016 - SW846 3510C										
Blank (9082016-BLK1)										
Prepared: 28-Aug-09 Analyzed: 30-Aug-09										
Acenaphthene	BRL		µg/l	2.50						
Acenaphthylene	BRL		µg/l	2.50						
Anthracene	BRL		µg/l	2.50						
Benzo (a) anthracene	BRL		µg/l	2.50						
Benzo (a) pyrene	BRL		µg/l	2.50						
Benzo (b) fluoranthene	BRL		µg/l	2.50						
Benzo (g,h,i) perylene	BRL		µg/l	2.50						
Benzo (k) fluoranthene	BRL		µg/l	2.50						
Chrysene	BRL		µg/l	2.50						
Dibenzo (a,h) anthracene	BRL		µg/l	2.50						
Fluoranthene	BRL		µg/l	2.50						
Fluorene	BRL		µg/l	2.50						
Indeno (1,2,3-cd) pyrene	BRL		µg/l	2.50						
1-Methylnaphthalene	BRL		µg/l	2.50						
2-Methylnaphthalene	BRL		µg/l	2.50						
Naphthalene	BRL		µg/l	2.50						
Phenanthrene	BRL		µg/l	2.50						
Pyrene	BRL		µg/l	2.50						
Surrogate: 2-Fluorobiphenyl	*28.8*		µg/l		*50.0*		*58*	*30-130*		
Surrogate: Terphenyl-dl4	*26.7*		µg/l		*50.0*		*53*	*30-130*		
LCS (9082016-BS1)										
Prepared: 28-Aug-09 Analyzed: 30-Aug-09										
Acenaphthene	41.7		µg/l	2.50	50.0		83	40-140		
Acenaphthylene	38.5		µg/l	2.50	50.0		77	40-140		
Anthracene	38.9		µg/l	2.50	50.0		78	40-140		
Benzo (a) anthracene	37.6		µg/l	2.50	50.0		75	40-140		
Benzo (a) pyrene	39.5		µg/l	2.50	50.0		79	40-140		
Benzo (b) fluoranthene	39.0		µg/l	2.50	50.0		78	40-140		
Benzo (g,h,i) perylene	39.2		µg/l	2.50	50.0		78	40-140		
Benzo (k) fluoranthene	40.5		µg/l	2.50	50.0		81	40-140		
Chrysene	38.5		µg/l	2.50	50.0		77	40-140		
Dibenzo (a,h) anthracene	45.3		µg/l	2.50	50.0		91	40-140		
Fluoranthene	41.1		µg/l	2.50	50.0		82	40-140		
Fluorene	39.6		µg/l	2.50	50.0		79	40-140		
Indeno (1,2,3-cd) pyrene	42.8		µg/l	2.50	50.0		86	40-140		
1-Methylnaphthalene	37.6		µg/l	2.50	50.0		75	40-140		
2-Methylnaphthalene	36.7		µg/l	2.50	50.0		73	40-140		
Naphthalene	37.1		µg/l	2.50	50.0		74	40-140		
Phenanthrene	37.7		µg/l	2.50	50.0		75	40-140		
Pyrene	36.6		µg/l	2.50	50.0		73	40-140		
Surrogate: 2-Fluorobiphenyl	*31.0*		µg/l		*50.0*		*62*	*30-130*		
Surrogate: Terphenyl-dl4	*28.1*		µg/l		*50.0*		*56*	*30-130*		
LCS Dup (9082016-BSD1)										
Prepared: 28-Aug-09 Analyzed: 30-Aug-09										
Acenaphthene	40.0		µg/l	2.50	50.0		80	40-140	4	20
Acenaphthylene	36.5		µg/l	2.50	50.0		73	40-140	5	20
Anthracene	36.7		µg/l	2.50	50.0		73	40-140	6	20
Benzo (a) anthracene	36.5		µg/l	2.50	50.0		73	40-140	3	20
Benzo (a) pyrene	38.0		µg/l	2.50	50.0		76	40-140	4	20

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9082016 - SW846 3510C										
LCS Dup (9082016-BSD1)										
Prepared: 28-Aug-09 Analyzed: 30-Aug-09										
Benzo (b) fluoranthene	38.4		µg/l	2.50	50.0		77	40-140	2	20
Benzo (g,h,i) perylene	37.6		µg/l	2.50	50.0		75	40-140	4	20
Benzo (k) fluoranthene	34.9		µg/l	2.50	50.0		70	40-140	15	20
Chrysene	36.4		µg/l	2.50	50.0		73	40-140	6	20
Dibenzo (a,h) anthracene	41.8		µg/l	2.50	50.0		84	40-140	8	20
Fluoranthene	38.8		µg/l	2.50	50.0		78	40-140	6	20
Fluorene	37.8		µg/l	2.50	50.0		76	40-140	4	20
Indeno (1,2,3-cd) pyrene	40.2		µg/l	2.50	50.0		80	40-140	6	20
1-Methylnaphthalene	36.5		µg/l	2.50	50.0		73	40-140	3	20
2-Methylnaphthalene	34.8		µg/l	2.50	50.0		70	40-140	5	20
Naphthalene	35.5		µg/l	2.50	50.0		71	40-140	5	20
Phenanthrene	36.4		µg/l	2.50	50.0		73	40-140	4	20
Pyrene	35.2		µg/l	2.50	50.0		70	40-140	4	20
Surrogate: 2-Fluorobiphenyl	*30.9*		µg/l		*50.0*		*62*	*30-130*		
Surrogate: Terphenyl-dl4	*28.5*		µg/l		*50.0*		*57*	*30-130*		
Duplicate (9082016-DUP1) **Source: SA99960-01**										
Prepared: 28-Aug-09 Analyzed: 30-Aug-09										
Acenaphthene	BRL		µg/l	5.38		BRL				50
Acenaphthylene	BRL		µg/l	5.38		BRL				50
Anthracene	BRL		µg/l	5.38		BRL				50
Benzo (a) anthracene	BRL		µg/l	5.38		BRL				50
Benzo (a) pyrene	BRL		µg/l	5.38		BRL				50
Benzo (b) fluoranthene	BRL		µg/l	5.38		BRL				50
Benzo (g,h,i) perylene	BRL		µg/l	5.38		BRL				50
Benzo (k) fluoranthene	BRL		µg/l	5.38		BRL				50
Chrysene	BRL		µg/l	5.38		BRL				50
Dibenzo (a,h) anthracene	BRL		µg/l	5.38		BRL				50
Fluoranthene	BRL		µg/l	5.38		BRL				50
Fluorene	BRL		µg/l	5.38		BRL				50
Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.38		BRL				50
1-Methylnaphthalene	BRL		µg/l	5.38		BRL				50
2-Methylnaphthalene	BRL		µg/l	5.38		BRL				50
Naphthalene	BRL		µg/l	5.38		BRL				50
Phenanthrene	BRL		µg/l	5.38		BRL				50
Pyrene	BRL		µg/l	5.38		BRL				50
Surrogate: 2-Fluorobiphenyl	*34.1*		µg/l		*53.8*		*63*	*30-130*		
Surrogate: Terphenyl-dl4	*28.6*		µg/l		*53.8*		*53*	*30-130*		

Notes and Definitions

CAL1	Analyte quantified by quadratic equation type calibration.
CAL2	Analyte percent drift/percent difference is greater than 30%, data is accepted due to all CCC analytes passing within the 20% Drift/Difference criteria
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
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.
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.

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.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Leja

SAT 99960

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: _____
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: CEA
62A Hall ST
Concord, NH

Project Mgr.: Bill Hoffer
Telephone #: 603-225-7402

Invoice To: CEA
127 Hartwell ST
West Boylston, MA

P.O. No.: _____ RQN: _____

Project No.: RI-0011-06
Site Name: ~~Lead~~ Jefferies Residence
Location: Londonderry State: VT
Sampler(s): B. Hoffer

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=_____ 10=_____ 11=_____

List preservative code below:

QA/QC Reporting Notes:
(check as needed)

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

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOC 8260	VOC SIM 1,2	PAH 8270	
99960-01	MW-1	8/25/09	10:20	GW	G	2	2			✓		✓	
-02	MW-2		10:10			2	2			✓		✓	
-03	MW-3		9:40			2	2			✓		✓	
-04	MW-4		10:40			2	2			✓		✓	
-05	MW-5		11:05			2	2			✓		✓	
-06	MW-6		11:20			2	2			✓		✓	
-07	MW-7		12:45			2	2			✓		✓	
-08	RW-7		11:40			3	2			✓		✓	
-09	PDW-1		12:50	DW		2				✓	✓		
-10	Drain Line	8/25/09	8:15	GW	G	3	2			✓		✓	

☐ Provide MA DEP MCP CAM Report
☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☑ Standard ☐ No QC
☐ Other _____

State specific reporting standards: _____

EDD Format PDF + Excel
☑ E-mail to khoffer@cea-inc.com

Condition upon receipt: ☐ Iced ☐ Ambient ☒ 2.3 °C REF

Relinquished by:	Received by:	Date:	Time:
		8-27-9	1041
		8/27/09	14 45

1.8

Report Date:
08-Jul-09 10:37

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

CEA, Inc
62B Hall Street
Concord, NH 03301
Attn: William Hopper

Project: Jeffries Residence - Landgrove, VT
Project RI-0011-06

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SA96879-01	MW-5	Ground Water	24-Jun-09 13:00	25-Jun-09 17:55
SA96879-02	MW-4	Ground Water	24-Jun-09 13:15	25-Jun-09 17:55
SA96879-03	MW-6	Ground Water	24-Jun-09 13:30	25-Jun-09 17:55
SA96879-04	MW-7	Ground Water	24-Jun-09 13:45	25-Jun-09 17:55

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
Vermont # VT-11393

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.
Please note that this report contains 30 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supercedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report is 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).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

CASE NARRATIVE:

The sample temperature upon receipt by Spectrum Analytical courier was recorded as 5.6 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 2.2 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.

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

SW846 8260B

Laboratory Control Samples:

9070039-BS1

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.

1,1,2-Trichlorotrifluoroethane (Freon 113)
Ethanol

9070225-BS1

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

4-Methyl-2-pentanone (MIBK)

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.

Bromomethane

9070225-BSD1

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

4-Methyl-2-pentanone (MIBK)

Samples:

S906205-CCV1

Analyte percent drift/percent difference is greater than 30%, data is accepted due to all CCC analytes passing within the 20% Drift/Difference criteria

4-Methyl-2-pentanone (MIBK)
Bromomethane

This affected the following samples:

MW-4
MW-5
MW-7

SW846 8270C

SW846 8270C

Duplicates:

9062199-DUP1 *Source: SA96879-01*

Analyses are not controlled on RPD values from sample concentrations less than the reporting limit. QC batch accepted based on LCS and/or LCSD QC results

Phenanthrene

Elevated Reporting Limits due to limited sample volume.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5 SA96879-01	RI-0011-06	Ground Water	24-Jun-09 13:00	25-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	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 8260B	06-Jul-09	06-Jul-09	9070225	X
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	X
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	X
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	X
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	X
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	X
104-51-8	n-Butylbenzene	2.8		µg/l	1.0	1	"	"	"	"	X
135-98-8	sec-Butylbenzene	2.7		µg/l	1.0	1	"	"	"	"	X
98-06-6	tert-Butylbenzene	2.7		µg/l	1.0	1	"	"	"	"	X
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	X
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	X
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	X
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	X
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	X
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	"	"	"	"	X
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	X
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	X
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
100-41-4	Ethylbenzene	12.3		µg/l	1.0	1	"	"	"	"	X
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	X
98-82-8	Isopropylbenzene	4.9		µg/l	1.0	1	"	"	"	"	X
99-87-6	4-Isopropyltoluene	4.0		µg/l	1.0	1	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	X
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	X
91-20-3	Naphthalene	52.0		µg/l	1.0	1	"	"	"	"	X
103-65-1	n-Propylbenzene	5.2		µg/l	1.0	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5 SA96879-01	RI-0011-06	Ground Water	24-Jun-09 13:00	25-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW846 8260B	06-Jul-09	06-Jul-09	9070225	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	X
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
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	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	24.9		µg/l	1.0	1	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	32.6		µg/l	1.0	1	"	"	"	"	X
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	X
179601-23-1	m,p-Xylene	12.2		µg/l	2.0	1	"	"	"	"	X
95-47-6	o-Xylene	2.0		µg/l	1.0	1	"	"	"	"	X
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	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	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	X
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	X
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*100*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*108*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*101*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	8.33	1	SW846 8270C	30-Jun-09	30-Jun-09	9062199	X
208-96-8	Acenaphthylene	BRL		µg/l	8.33	1	"	"	"	"	X
120-12-7	Anthracene	BRL		µg/l	8.33	1	"	"	"	"	X
56-55-3	Benzo (a) anthracene	BRL		µg/l	8.33	1	"	"	"	"	X
50-32-8	Benzo (a) pyrene	BRL		µg/l	8.33	1	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	8.33	1	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	8.33	1	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	8.33	1	"	"	"	"	X
218-01-9	Chrysene	BRL		µg/l	8.33	1	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	8.33	1	"	"	"	"	X
206-44-0	Fluoranthene	BRL		µg/l	8.33	1	"	"	"	"	X
86-73-7	Fluorene	BRL		µg/l	8.33	1	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	8.33	1	"	"	"	"	X
90-12-0	1-Methylnaphthalene	BRL		µg/l	8.33	1	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/l	8.33	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5 SA96879-01	RI-0011-06	Ground Water	24-Jun-09 13:00	25-Jun-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	BRL		µg/l	8.33	1	SW846 8270C	30-Jun-09	30-Jun-09	9062199	X
85-01-8	Phenanthrene	BRL		µg/l	8.33	1	"	"	"	"	X
129-00-0	Pyrene	BRL		µg/l	8.33	1	"	"	"	"	X
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*67*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*45*		*30-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-4 SA96879-02	RI-0011-06	Ground Water	24-Jun-09 13:15	25-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	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 8260B	06-Jul-09	06-Jul-09	9070225	X
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	X
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	X
71-43-2	Benzene	3.3		µg/l	1.0	1	"	"	"	"	X
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	X
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	X
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	X
104-51-8	n-Butylbenzene	4.4		µg/l	1.0	1	"	"	"	"	X
135-98-8	sec-Butylbenzene	5.1		µg/l	1.0	1	"	"	"	"	X
98-06-6	tert-Butylbenzene	3.0		µg/l	1.0	1	"	"	"	"	X
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	X
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	X
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	X
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	X
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	X
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	"	"	"	"	X
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	X
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	X
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
100-41-4	Ethylbenzene	34.7		µg/l	1.0	1	"	"	"	"	X
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	X
98-82-8	Isopropylbenzene	11.7		µg/l	1.0	1	"	"	"	"	X
99-87-6	4-Isopropyltoluene	3.3		µg/l	1.0	1	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	X
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	X
91-20-3	Naphthalene	78.2		µg/l	1.0	1	"	"	"	"	X
103-65-1	n-Propylbenzene	14.7		µg/l	1.0	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-4 SA96879-02	RI-0011-06	Ground Water	24-Jun-09 13:15	25-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW846 8260B	06-Jul-09	06-Jul-09	9070225	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	X
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
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	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	87.9		µg/l	1.0	1	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	34.2		µg/l	1.0	1	"	"	"	"	X
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	X
179601-23-1	m,p-Xylene	32.1		µg/l	2.0	1	"	"	"	"	X
95-47-6	o-Xylene	33.2		µg/l	1.0	1	"	"	"	"	X
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	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	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	X
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	X
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*99*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*95*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*90*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	5.43	1	SW846 8270C	30-Jun-09	30-Jun-09	9062199	X
208-96-8	Acenaphthylene	BRL		µg/l	5.43	1	"	"	"	"	X
120-12-7	Anthracene	BRL		µg/l	5.43	1	"	"	"	"	X
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.43	1	"	"	"	"	X
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.43	1	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.43	1	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.43	1	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.43	1	"	"	"	"	X
218-01-9	Chrysene	BRL		µg/l	5.43	1	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.43	1	"	"	"	"	X
206-44-0	Fluoranthene	BRL		µg/l	5.43	1	"	"	"	"	X
86-73-7	Fluorene	BRL		µg/l	5.43	1	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.43	1	"	"	"	"	X
90-12-0	1-Methylnaphthalene	12.6		µg/l	5.43	1	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/l	5.43	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-4 SA96879-02	RI-0011-06	Ground Water	24-Jun-09 13:15	25-Jun-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	BRL		µg/l	5.43	1	SW846 8270C	30-Jun-09	30-Jun-09	9062199	X
85-01-8	Phenanthrene	BRL		µg/l	5.43	1	"	"	"	"	X
129-00-0	Pyrene	BRL		µg/l	5.43	1	"	"	"	"	X
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*69*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*61*		*30-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-6	RI-0011-06	Ground Water	24-Jun-09 13:30	25-Jun-09
SA96879-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*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	5.0	5	SW846 8260B	01-Jul-09	02-Jul-09	9070039	X
67-64-1	Acetone	BRL		µg/l	50.0	5	"	"	"	"	X
107-13-1	Acrylonitrile	BRL		µg/l	2.5	5	"	"	"	"	X
71-43-2	Benzene	18.3		µg/l	5.0	5	"	"	"	"	X
108-86-1	Bromobenzene	BRL		µg/l	5.0	5	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	5.0	5	"	"	"	"	X
75-27-4	Bromodichloromethane	BRL		µg/l	2.5	5	"	"	"	"	X
75-25-2	Bromoform	BRL		µg/l	5.0	5	"	"	"	"	X
74-83-9	Bromomethane	BRL		µg/l	10.0	5	"	"	"	"	X
78-93-3	2-Butanone (MEK)	BRL		µg/l	50.0	5	"	"	"	"	X
104-51-8	n-Butylbenzene	8.8		µg/l	5.0	5	"	"	"	"	X
135-98-8	sec-Butylbenzene	11.0		µg/l	5.0	5	"	"	"	"	X
98-06-6	tert-Butylbenzene	5.2		µg/l	5.0	5	"	"	"	"	X
75-15-0	Carbon disulfide	BRL		µg/l	25.0	5	"	"	"	"	X
56-23-5	Carbon tetrachloride	BRL		µg/l	5.0	5	"	"	"	"	X
108-90-7	Chlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	X
75-00-3	Chloroethane	BRL		µg/l	10.0	5	"	"	"	"	X
67-66-3	Chloroform	BRL		µg/l	5.0	5	"	"	"	"	X
74-87-3	Chloromethane	BRL		µg/l	10.0	5	"	"	"	"	X
95-49-8	2-Chlorotoluene	BRL		µg/l	5.0	5	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	5.0	5	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	10.0	5	"	"	"	"	X
124-48-1	Dibromochloromethane	BRL		µg/l	2.5	5	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	2.5	5	"	"	"	"	X
74-95-3	Dibromomethane	BRL		µg/l	5.0	5	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	10.0	5	"	"	"	"	X
75-34-3	1,1-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	X
107-06-2	1,2-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	X
75-35-4	1,1-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	X
78-87-5	1,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	X
142-28-9	1,3-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	X
594-20-7	2,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	X
563-58-6	1,1-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	2.5	5	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	2.5	5	"	"	"	"	X
100-41-4	Ethylbenzene	70.4		µg/l	5.0	5	"	"	"	"	X
87-68-3	Hexachlorobutadiene	BRL		µg/l	2.5	5	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL		µg/l	50.0	5	"	"	"	"	X
98-82-8	Isopropylbenzene	22.7		µg/l	5.0	5	"	"	"	"	X
99-87-6	4-Isopropyltoluene	9.2		µg/l	5.0	5	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	5.0	5	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	50.0	5	"	"	"	"	X
75-09-2	Methylene chloride	BRL		µg/l	25.0	5	"	"	"	"	X
91-20-3	Naphthalene	225		µg/l	5.0	5	"	"	"	"	X
103-65-1	n-Propylbenzene	33.8		µg/l	5.0	5	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-6 SA96879-03	RI-0011-06	Ground Water	24-Jun-09 13:30	25-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	5.0	5	SW846 8260B	01-Jul-09	02-Jul-09	9070039	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	5.0	5	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	2.5	5	"	"	"	"	X
127-18-4	Tetrachloroethene	BRL		µg/l	5.0	5	"	"	"	"	X
108-88-3	Toluene	BRL		µg/l	5.0	5	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	5.0	5	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	5.0	5	"	"	"	"	X
79-01-6	Trichloroethene	BRL		µg/l	5.0	5	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	5.0	5	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	5.0	5	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	278		µg/l	5.0	5	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	77.7		µg/l	5.0	5	"	"	"	"	X
75-01-4	Vinyl chloride	BRL		µg/l	5.0	5	"	"	"	"	X
179601-23-1	m,p-Xylene	128		µg/l	10.0	5	"	"	"	"	X
95-47-6	o-Xylene	121		µg/l	5.0	5	"	"	"	"	X
109-99-9	Tetrahydrofuran	BRL		µg/l	50.0	5	"	"	"	"	
60-29-7	Ethyl ether	BRL		µg/l	5.0	5	"	"	"	"	
994-05-8	Tert-amyl methyl ether	BRL		µg/l	5.0	5	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	5.0	5	"	"	"	"	X
108-20-3	Di-isopropyl ether	BRL		µg/l	5.0	5	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	50.0	5	"	"	"	"	X
123-91-1	1,4-Dioxane	BRL		µg/l	100	5	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	25.0	5	"	"	"	"	X
64-17-5	Ethanol	BRL		µg/l	2000	5	"	"	"	"	X
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*	*104*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*103*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	11.0		µg/l	5.43	1	SW846 8270C	30-Jun-09	30-Jun-09	9062199	X
208-96-8	Acenaphthylene	BRL		µg/l	5.43	1	"	"	"	"	X
120-12-7	Anthracene	BRL		µg/l	5.43	1	"	"	"	"	X
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.43	1	"	"	"	"	X
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.43	1	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.43	1	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.43	1	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.43	1	"	"	"	"	X
218-01-9	Chrysene	BRL		µg/l	5.43	1	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.43	1	"	"	"	"	X
206-44-0	Fluoranthene	BRL		µg/l	5.43	1	"	"	"	"	X
86-73-7	Fluorene	13.6		µg/l	5.43	1	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.43	1	"	"	"	"	X
90-12-0	1-Methylnaphthalene	88.4		µg/l	5.43	1	"	"	"	"	
91-57-6	2-Methylnaphthalene	96.7		µg/l	5.43	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-6 SA96879-03	RI-0011-06	Ground Water	24-Jun-09 13:30	25-Jun-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	83.0		µg/l	5.43	1	SW846 8270C	30-Jun-09	30-Jun-09	9062199	X
85-01-8	Phenanthrene	21.6		µg/l	5.43	1	"	"	"	"	X
129-00-0	Pyrene	BRL		µg/l	5.43	1	"	"	"	"	X
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*59*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*51*		*30-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-7	RI-0011-06	Ground Water	24-Jun-09 13:45	25-Jun-09
SA96879-04				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	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 8260B	06-Jul-09	06-Jul-09	9070225	X
67-64-1	Acetone	BRL		µg/l	10.0	1	"	"	"	"	X
107-13-1	Acrylonitrile	BRL		µg/l	0.5	1	"	"	"	"	X
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-27-4	Bromodichloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	X
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	X
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	X
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	X
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	X
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	X
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	X
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	X
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	"	"	"	"	X
124-48-1	Dibromochloromethane	BRL		µg/l	0.5	1	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	X
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	X
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	0.5	1	"	"	"	"	X
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
87-68-3	Hexachlorobutadiene	BRL		µg/l	0.5	1	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	X
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	X
75-09-2	Methylene chloride	BRL		µg/l	5.0	1	"	"	"	"	X
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	X
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-7 SA96879-04	RI-0011-06	Ground Water	24-Jun-09 13:45	25-Jun-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
100-42-5	Styrene	BRL		µg/l	1.0	1	SW846 8260B	06-Jul-09	06-Jul-09	9070225	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5	1	"	"	"	"	X
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	X
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	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	X
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	X
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	X
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	X
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	X
109-99-9	Tetrahydrofuran	BRL		µg/l	10.0	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	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
108-20-3	Di-isopropyl ether	BRL		µg/l	1.0	1	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/l	10.0	1	"	"	"	"	X
123-91-1	1,4-Dioxane	BRL		µg/l	20.0	1	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0	1	"	"	"	"	X
64-17-5	Ethanol	BRL		µg/l	400	1	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*90*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*106*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*95*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*90*		*70-130 %*			"	"	"	"	
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
83-32-9	Acenaphthene	BRL		µg/l	5.56	1	SW846 8270C	30-Jun-09	30-Jun-09	9062199	X
208-96-8	Acenaphthylene	BRL		µg/l	5.56	1	"	"	"	"	X
120-12-7	Anthracene	BRL		µg/l	5.56	1	"	"	"	"	X
56-55-3	Benzo (a) anthracene	BRL		µg/l	5.56	1	"	"	"	"	X
50-32-8	Benzo (a) pyrene	BRL		µg/l	5.56	1	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	BRL		µg/l	5.56	1	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	BRL		µg/l	5.56	1	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	BRL		µg/l	5.56	1	"	"	"	"	X
218-01-9	Chrysene	BRL		µg/l	5.56	1	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/l	5.56	1	"	"	"	"	X
206-44-0	Fluoranthene	BRL		µg/l	5.56	1	"	"	"	"	X
86-73-7	Fluorene	BRL		µg/l	5.56	1	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/l	5.56	1	"	"	"	"	X
90-12-0	1-Methylnaphthalene	BRL		µg/l	5.56	1	"	"	"	"	
91-57-6	2-Methylnaphthalene	BRL		µg/l	5.56	1	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-7 SA96879-04	RI-0011-06	Ground Water	24-Jun-09 13:45	25-Jun-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS											
PAHs by SW846 8270C											
Prepared by method SW846 3510C											
91-20-3	Naphthalene	BRL		µg/l	5.56	1	SW846 8270C	30-Jun-09	30-Jun-09	9062199	X
85-01-8	Phenanthrene	BRL		µg/l	5.56	1	"	"	"	"	X
129-00-0	Pyrene	BRL		µg/l	5.56	1	"	"	"	"	X
Surrogate recoveries:											
321-60-8	*2-Fluorobiphenyl*	*67*		*30-130 %*			"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*64*		*30-130 %*			"	"	"	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9070039 - SW846 5030 Water MS										
Blank (9070039-BLK1)										
Prepared & Analyzed: 01-Jul-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0						
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	0.5						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	0.5						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
2-Butanone (MEK)	BRL		µg/l	10.0						
n-Butylbenzene	BRL		µg/l	1.0						
sec-Butylbenzene	BRL		µg/l	1.0						
tert-Butylbenzene	BRL		µg/l	1.0						
Carbon disulfide	BRL		µg/l	5.0						
Carbon tetrachloride	BRL		µg/l	1.0						
Chlorobenzene	BRL		µg/l	1.0						
Chloroethane	BRL		µg/l	2.0						
Chloroform	BRL		µg/l	1.0						
Chloromethane	BRL		µg/l	2.0						
2-Chlorotoluene	BRL		µg/l	1.0						
4-Chlorotoluene	BRL		µg/l	1.0						
1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0						
Dibromochloromethane	BRL		µg/l	0.5						
1,2-Dibromoethane (EDB)	BRL		µg/l	0.5						
Dibromomethane	BRL		µg/l	1.0						
1,2-Dichlorobenzene	BRL		µg/l	1.0						
1,3-Dichlorobenzene	BRL		µg/l	1.0						
1,4-Dichlorobenzene	BRL		µg/l	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0						
1,1-Dichloroethane	BRL		µg/l	1.0						
1,2-Dichloroethane	BRL		µg/l	1.0						
1,1-Dichloroethene	BRL		µg/l	1.0						
cis-1,2-Dichloroethene	BRL		µg/l	1.0						
trans-1,2-Dichloroethene	BRL		µg/l	1.0						
1,2-Dichloropropane	BRL		µg/l	1.0						
1,3-Dichloropropane	BRL		µg/l	1.0						
2,2-Dichloropropane	BRL		µg/l	1.0						
1,1-Dichloropropene	BRL		µg/l	1.0						
cis-1,3-Dichloropropene	BRL		µg/l	0.5						
trans-1,3-Dichloropropene	BRL		µg/l	0.5						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	0.5						
2-Hexanone (MBK)	BRL		µg/l	10.0						
Isopropylbenzene	BRL		µg/l	1.0						
4-Isopropyltoluene	BRL		µg/l	1.0						
Methyl tert-butyl ether	BRL		µg/l	1.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0						
Methylene chloride	BRL		µg/l	5.0						
Naphthalene	BRL		µg/l	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9070039 - SW846 5030 Water MS										
Blank (9070039-BLK1)										
Prepared & Analyzed: 01-Jul-09										
n-Propylbenzene	BRL		µg/l	1.0						
Styrene	BRL		µg/l	1.0						
1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	BRL		µg/l	1.0						
1,2,3-Trichlorobenzene	BRL		µg/l	1.0						
1,2,4-Trichlorobenzene	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	BRL		µg/l	1.0						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,1,2-Trichloroethane	BRL		µg/l	1.0						
Trichloroethene	BRL		µg/l	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0						
1,2,3-Trichloropropane	BRL		µg/l	1.0						
1,2,4-Trimethylbenzene	BRL		µg/l	1.0						
1,3,5-Trimethylbenzene	BRL		µg/l	1.0						
Vinyl chloride	BRL		µg/l	1.0						
m,p-Xylene	BRL		µg/l	2.0						
o-Xylene	BRL		µg/l	1.0						
Tetrahydrofuran	BRL		µg/l	10.0						
Ethyl ether	BRL		µg/l	1.0						
Tert-amyl methyl ether	BRL		µg/l	1.0						
Ethyl tert-butyl ether	BRL		µg/l	1.0						
Di-isopropyl ether	BRL		µg/l	1.0						
Tert-Butanol / butyl alcohol	BRL		µg/l	10.0						
1,4-Dioxane	BRL		µg/l	20.0						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	400						
Surrogate: 4-Bromofluorobenzene	*46.5*		µg/l		*50.0*		*93*	*70-130*		
Surrogate: Toluene-d8	*46.9*		µg/l		*50.0*		*94*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*52.4*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Dibromofluoromethane	*51.3*		µg/l		*50.0*		*103*	*70-130*		
LCS (9070039-BS1)										
Prepared & Analyzed: 01-Jul-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	28.1	QM9	µg/l		20.0		141	70-130		
Acetone	22.2		µg/l		20.0		111	41.6-158		
Acrylonitrile	22.6		µg/l		20.0		113	70-130		
Benzene	21.9		µg/l		20.0		109	70-130		
Bromobenzene	20.8		µg/l		20.0		104	70-130		
Bromochloromethane	20.7		µg/l		20.0		103	70-130		
Bromodichloromethane	23.9		µg/l		20.0		119	70-130		
Bromoform	24.3		µg/l		20.0		121	70-130		
Bromomethane	19.7		µg/l		20.0		99	47-147		
2-Butanone (MEK)	23.6		µg/l		20.0		118	60.9-144		
n-Butylbenzene	24.6		µg/l		20.0		123	70-130		
sec-Butylbenzene	24.4		µg/l		20.0		122	70-130		
tert-Butylbenzene	23.6		µg/l		20.0		118	70-130		
Carbon disulfide	21.2		µg/l		20.0		106	70-130		
Carbon tetrachloride	25.6		µg/l		20.0		128	70-130		
Chlorobenzene	21.5		µg/l		20.0		108	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9070039 - SW846 5030 Water MS										
LCS (9070039-BS1)										
Prepared & Analyzed: 01-Jul-09										
Chloroethane	21.1		µg/l		20.0		105	63.6-131		
Chloroform	21.4		µg/l		20.0		107	70-130		
Chloromethane	21.1		µg/l		20.0		106	70-130		
2-Chlorotoluene	22.5		µg/l		20.0		113	70-130		
4-Chlorotoluene	22.3		µg/l		20.0		112	70-130		
1,2-Dibromo-3-chloropropane	20.4		µg/l		20.0		102	70-130		
Dibromochloromethane	20.8		µg/l		20.0		104	58.8-145		
1,2-Dibromoethane (EDB)	21.4		µg/l		20.0		107	70-130		
Dibromomethane	21.2		µg/l		20.0		106	70-130		
1,2-Dichlorobenzene	21.8		µg/l		20.0		109	70-130		
1,3-Dichlorobenzene	22.8		µg/l		20.0		114	70-130		
1,4-Dichlorobenzene	21.1		µg/l		20.0		106	70-130		
Dichlorodifluoromethane (Freon12)	18.7		µg/l		20.0		94	56.6-137		
1,1-Dichloroethane	23.0		µg/l		20.0		115	70-130		
1,2-Dichloroethane	22.3		µg/l		20.0		111	70-130		
1,1-Dichloroethene	22.5		µg/l		20.0		112	70-130		
cis-1,2-Dichloroethene	23.1		µg/l		20.0		115	70-130		
trans-1,2-Dichloroethene	21.2		µg/l		20.0		106	70-130		
1,2-Dichloropropane	22.3		µg/l		20.0		111	70-130		
1,3-Dichloropropane	21.0		µg/l		20.0		105	70-130		
2,2-Dichloropropane	22.2		µg/l		20.0		111	70-130		
1,1-Dichloropropene	23.4		µg/l		20.0		117	70-130		
cis-1,3-Dichloropropene	24.1		µg/l		20.0		121	70-130		
trans-1,3-Dichloropropene	20.7		µg/l		20.0		104	70-130		
Ethylbenzene	22.2		µg/l		20.0		111	70-130		
Hexachlorobutadiene	21.9		µg/l		20.0		109	70-134		
2-Hexanone (MBK)	20.5		µg/l		20.0		103	70-130		
Isopropylbenzene	19.3		µg/l		20.0		96	70-130		
4-Isopropyltoluene	22.8		µg/l		20.0		114	70-130		
Methyl tert-butyl ether	22.6		µg/l		20.0		113	70-130		
4-Methyl-2-pentanone (MIBK)	21.8		µg/l		20.0		109	64.8-130		
Methylene chloride	20.2		µg/l		20.0		101	70-130		
Naphthalene	17.2		µg/l		20.0		86	70-130		
n-Propylbenzene	22.4		µg/l		20.0		112	70-130		
Styrene	23.0		µg/l		20.0		115	70-130		
1,1,1,2-Tetrachloroethane	23.4		µg/l		20.0		117	70-130		
1,1,2,2-Tetrachloroethane	22.6		µg/l		20.0		113	70-130		
Tetrachloroethene	21.6		µg/l		20.0		108	70-130		
Toluene	20.6		µg/l		20.0		103	70-130		
1,2,3-Trichlorobenzene	19.3		µg/l		20.0		96	70-130		
1,2,4-Trichlorobenzene	18.5		µg/l		20.0		92	70-130		
1,3,5-Trichlorobenzene	20.7		µg/l		20.0		103	70-130		
1,1,1-Trichloroethane	24.2		µg/l		20.0		121	70-130		
1,1,2-Trichloroethane	20.8		µg/l		20.0		104	70-130		
Trichloroethene	24.6		µg/l		20.0		123	70-130		
Trichlorofluoromethane (Freon 11)	25.2		µg/l		20.0		126	70-152		
1,2,3-Trichloropropane	23.8		µg/l		20.0		119	70-130		
1,2,4-Trimethylbenzene	22.7		µg/l		20.0		114	70-130		
1,3,5-Trimethylbenzene	22.3		µg/l		20.0		111	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9070039 - SW846 5030 Water MS										
LCS (9070039-BS1)										
Prepared & Analyzed: 01-Jul-09										
Vinyl chloride	21.8		µg/l		20.0		109	70-130		
m,p-Xylene	45.4		µg/l		40.0		114	70-130		
o-Xylene	23.4		µg/l		20.0		117	70-130		
Tetrahydrofuran	21.1		µg/l		20.0		106	70-130		
Ethyl ether	22.2		µg/l		20.0		111	70-133		
Tert-amyl methyl ether	23.5		µg/l		20.0		118	70-130		
Ethyl tert-butyl ether	23.0		µg/l		20.0		115	70-130		
Di-isopropyl ether	23.6		µg/l		20.0		118	70-130		
Tert-Butanol / butyl alcohol	236		µg/l		200		118	70-130		
1,4-Dioxane	252		µg/l		200		126	53.1-139		
trans-1,4-Dichloro-2-butene	20.3		µg/l		20.0		101	70-130		
Ethanol	545	QM9	µg/l		400		136	70-130		
Surrogate: 4-Bromofluorobenzene	*50.1*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*47.8*		µg/l		*50.0*		*96*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*52.1*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: Dibromofluoromethane	*51.6*		µg/l		*50.0*		*103*	*70-130*		
LCS Dup (9070039-BSD1)										
Prepared & Analyzed: 01-Jul-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	25.6		µg/l		20.0		128	70-130	10	25
Acetone	20.5		µg/l		20.0		103	41.6-158	8	50
Acrylonitrile	21.7		µg/l		20.0		108	70-130	4	25
Benzene	21.0		µg/l		20.0		105	70-130	4	25
Bromobenzene	20.8		µg/l		20.0		104	70-130	0.2	25
Bromochloromethane	20.1		µg/l		20.0		101	70-130	3	25
Bromodichloromethane	23.2		µg/l		20.0		116	70-130	3	25
Bromoform	22.9		µg/l		20.0		114	70-130	6	25
Bromomethane	18.6		µg/l		20.0		93	47-147	6	50
2-Butanone (MEK)	22.2		µg/l		20.0		111	60.9-144	6	50
n-Butylbenzene	23.4		µg/l		20.0		117	70-130	5	25
sec-Butylbenzene	23.2		µg/l		20.0		116	70-130	5	25
tert-Butylbenzene	22.4		µg/l		20.0		112	70-130	5	25
Carbon disulfide	19.8		µg/l		20.0		99	70-130	7	25
Carbon tetrachloride	24.3		µg/l		20.0		121	70-130	5	25
Chlorobenzene	21.2		µg/l		20.0		106	70-130	1	25
Chloroethane	19.8		µg/l		20.0		99	63.6-131	6	50
Chloroform	21.1		µg/l		20.0		105	70-130	1	25
Chloromethane	20.0		µg/l		20.0		100	70-130	5	25
2-Chlorotoluene	21.9		µg/l		20.0		110	70-130	3	25
4-Chlorotoluene	22.0		µg/l		20.0		110	70-130	1	25
1,2-Dibromo-3-chloropropane	19.0		µg/l		20.0		95	70-130	7	25
Dibromochloromethane	20.1		µg/l		20.0		101	58.8-145	3	50
1,2-Dibromoethane (EDB)	21.0		µg/l		20.0		105	70-130	2	25
Dibromomethane	20.9		µg/l		20.0		104	70-130	2	25
1,2-Dichlorobenzene	22.1		µg/l		20.0		110	70-130	1	25
1,3-Dichlorobenzene	22.3		µg/l		20.0		111	70-130	2	25
1,4-Dichlorobenzene	20.5		µg/l		20.0		102	70-130	3	25
Dichlorodifluoromethane (Freon12)	16.6		µg/l		20.0		83	56.6-137	12	50
1,1-Dichloroethane	22.0		µg/l		20.0		110	70-130	4	25
1,2-Dichloroethane	21.8		µg/l		20.0		109	70-130	2	25
1,1-Dichloroethene	21.1		µg/l		20.0		106	70-130	6	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9070039 - SW846 5030 Water MS										
LCS Dup (9070039-BSD1)										
Prepared & Analyzed: 01-Jul-09										
cis-1,2-Dichloroethene	21.9		µg/l		20.0		109	70-130	5	25
trans-1,2-Dichloroethene	19.9		µg/l		20.0		99	70-130	7	25
1,2-Dichloropropane	21.6		µg/l		20.0		108	70-130	3	25
1,3-Dichloropropane	20.6		µg/l		20.0		103	70-130	2	25
2,2-Dichloropropane	20.7		µg/l		20.0		104	70-130	7	25
1,1-Dichloropropene	22.2		µg/l		20.0		111	70-130	5	25
cis-1,3-Dichloropropene	20.8		µg/l		20.0		104	70-130	15	25
trans-1,3-Dichloropropene	20.6		µg/l		20.0		103	70-130	0.7	25
Ethylbenzene	21.4		µg/l		20.0		107	70-130	4	25
Hexachlorobutadiene	20.9		µg/l		20.0		105	70-134	5	50
2-Hexanone (MBK)	20.5		µg/l		20.0		102	70-130	0.1	25
Isopropylbenzene	18.5		µg/l		20.0		92	70-130	4	25
4-Isopropyltoluene	22.1		µg/l		20.0		110	70-130	3	25
Methyl tert-butyl ether	22.1		µg/l		20.0		110	70-130	3	25
4-Methyl-2-pentanone (MIBK)	20.8		µg/l		20.0		104	64.8-130	5	50
Methylene chloride	20.2		µg/l		20.0		101	70-130	0	25
Naphthalene	16.9		µg/l		20.0		85	70-130	2	25
n-Propylbenzene	21.6		µg/l		20.0		108	70-130	3	25
Styrene	22.3		µg/l		20.0		111	70-130	3	25
1,1,1,2-Tetrachloroethane	23.0		µg/l		20.0		115	70-130	2	25
1,1,2,2-Tetrachloroethane	22.3		µg/l		20.0		112	70-130	1	25
Tetrachloroethene	20.6		µg/l		20.0		103	70-130	5	25
Toluene	20.0		µg/l		20.0		100	70-130	2	25
1,2,3-Trichlorobenzene	18.3		µg/l		20.0		92	70-130	5	25
1,2,4-Trichlorobenzene	17.7		µg/l		20.0		89	70-130	4	25
1,3,5-Trichlorobenzene	20.1		µg/l		20.0		100	70-130	3	25
1,1,1-Trichloroethane	22.9		µg/l		20.0		114	70-130	5	25
1,1,2-Trichloroethane	20.2		µg/l		20.0		101	70-130	3	25
Trichloroethene	23.6		µg/l		20.0		118	70-130	4	25
Trichlorofluoromethane (Freon 11)	23.1		µg/l		20.0		115	70-152	9	50
1,2,3-Trichloropropane	23.7		µg/l		20.0		118	70-130	0.5	25
1,2,4-Trimethylbenzene	22.2		µg/l		20.0		111	70-130	2	25
1,3,5-Trimethylbenzene	21.7		µg/l		20.0		108	70-130	3	25
Vinyl chloride	20.2		µg/l		20.0		101	70-130	8	25
m,p-Xylene	43.7		µg/l		40.0		109	70-130	4	25
o-Xylene	22.7		µg/l		20.0		114	70-130	3	25
Tetrahydrofuran	19.4		µg/l		20.0		97	70-130	9	25
Ethyl ether	21.7		µg/l		20.0		108	70-133	2	50
Tert-amyl methyl ether	22.7		µg/l		20.0		114	70-130	4	25
Ethyl tert-butyl ether	22.6		µg/l		20.0		113	70-130	2	25
Di-isopropyl ether	23.0		µg/l		20.0		115	70-130	3	25
Tert-Butanol / butyl alcohol	222		µg/l		200		111	70-130	6	25
1,4-Dioxane	217		µg/l		200		109	53.1-139	15	25
trans-1,4-Dichloro-2-butene	19.7		µg/l		20.0		99	70-130	3	25
Ethanol	485		µg/l		400		121	70-130	12	30
Surrogate: 4-Bromofluorobenzene	*49.9*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*47.4*		µg/l		*50.0*		*95*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*51.5*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*50.9*		µg/l		*50.0*		*102*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9070225 - SW846 5030 Water MS										
Blank (9070225-BLK1)										
Prepared & Analyzed: 06-Jul-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	1.0						
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	0.5						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	0.5						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
2-Butanone (MEK)	BRL		µg/l	10.0						
n-Butylbenzene	BRL		µg/l	1.0						
sec-Butylbenzene	BRL		µg/l	1.0						
tert-Butylbenzene	BRL		µg/l	1.0						
Carbon disulfide	BRL		µg/l	5.0						
Carbon tetrachloride	BRL		µg/l	1.0						
Chlorobenzene	BRL		µg/l	1.0						
Chloroethane	BRL		µg/l	2.0						
Chloroform	BRL		µg/l	1.0						
Chloromethane	BRL		µg/l	2.0						
2-Chlorotoluene	BRL		µg/l	1.0						
4-Chlorotoluene	BRL		µg/l	1.0						
1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0						
Dibromochloromethane	BRL		µg/l	0.5						
1,2-Dibromoethane (EDB)	BRL		µg/l	0.5						
Dibromomethane	BRL		µg/l	1.0						
1,2-Dichlorobenzene	BRL		µg/l	1.0						
1,3-Dichlorobenzene	BRL		µg/l	1.0						
1,4-Dichlorobenzene	BRL		µg/l	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0						
1,1-Dichloroethane	BRL		µg/l	1.0						
1,2-Dichloroethane	BRL		µg/l	1.0						
1,1-Dichloroethene	BRL		µg/l	1.0						
cis-1,2-Dichloroethene	BRL		µg/l	1.0						
trans-1,2-Dichloroethene	BRL		µg/l	1.0						
1,2-Dichloropropane	BRL		µg/l	1.0						
1,3-Dichloropropane	BRL		µg/l	1.0						
2,2-Dichloropropane	BRL		µg/l	1.0						
1,1-Dichloropropene	BRL		µg/l	1.0						
cis-1,3-Dichloropropene	BRL		µg/l	0.5						
trans-1,3-Dichloropropene	BRL		µg/l	0.5						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	0.5						
2-Hexanone (MBK)	BRL		µg/l	10.0						
Isopropylbenzene	BRL		µg/l	1.0						
4-Isopropyltoluene	BRL		µg/l	1.0						
Methyl tert-butyl ether	BRL		µg/l	1.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0						
Methylene chloride	BRL		µg/l	5.0						
Naphthalene	BRL		µg/l	1.0						
n-Propylbenzene	BRL		µg/l	1.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9070225 - SW846 5030 Water MS										
Blank (9070225-BLK1)										
Prepared & Analyzed: 06-Jul-09										
Styrene	BRL		µg/l	1.0						
1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	BRL		µg/l	1.0						
1,2,3-Trichlorobenzene	BRL		µg/l	1.0						
1,2,4-Trichlorobenzene	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	BRL		µg/l	1.0						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,1,2-Trichloroethane	BRL		µg/l	1.0						
Trichloroethene	BRL		µg/l	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0						
1,2,3-Trichloropropane	BRL		µg/l	1.0						
1,2,4-Trimethylbenzene	BRL		µg/l	1.0						
1,3,5-Trimethylbenzene	BRL		µg/l	1.0						
Vinyl chloride	BRL		µg/l	1.0						
m,p-Xylene	BRL		µg/l	2.0						
o-Xylene	BRL		µg/l	1.0						
Tetrahydrofuran	BRL		µg/l	10.0						
Ethyl ether	BRL		µg/l	1.0						
Tert-amyl methyl ether	BRL		µg/l	1.0						
Ethyl tert-butyl ether	BRL		µg/l	1.0						
Di-isopropyl ether	BRL		µg/l	1.0						
Tert-Butanol / butyl alcohol	BRL		µg/l	10.0						
1,4-Dioxane	BRL		µg/l	20.0						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	400						
Surrogate: 4-Bromofluorobenzene	*28.1*		µg/l		*30.0*		*94*	*70-130*		
Surrogate: Toluene-d8	*32.7*		µg/l		*30.0*		*109*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*27.6*		µg/l		*30.0*		*92*	*70-130*		
Surrogate: Dibromofluoromethane	*27.2*		µg/l		*30.0*		*90*	*70-130*		
Blank (9070225-BLK2)										
Prepared & Analyzed: 06-Jul-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/l	5.0						
Acetone	BRL		µg/l	50.0						
Acrylonitrile	BRL		µg/l	2.5						
Benzene	BRL		µg/l	5.0						
Bromobenzene	BRL		µg/l	5.0						
Bromochloromethane	BRL		µg/l	5.0						
Bromodichloromethane	BRL		µg/l	2.5						
Bromoform	BRL		µg/l	5.0						
Bromomethane	BRL		µg/l	10.0						
2-Butanone (MEK)	BRL		µg/l	50.0						
n-Butylbenzene	BRL		µg/l	5.0						
sec-Butylbenzene	BRL		µg/l	5.0						
tert-Butylbenzene	BRL		µg/l	5.0						
Carbon disulfide	BRL		µg/l	25.0						
Carbon tetrachloride	BRL		µg/l	5.0						
Chlorobenzene	BRL		µg/l	5.0						
Chloroethane	BRL		µg/l	10.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9070225 - SW846 5030 Water MS										
Blank (9070225-BLK2)										
Prepared & Analyzed: 06-Jul-09										
Chloroform	BRL		µg/l	5.0						
Chloromethane	BRL		µg/l	10.0						
2-Chlorotoluene	BRL		µg/l	5.0						
4-Chlorotoluene	BRL		µg/l	5.0						
1,2-Dibromo-3-chloropropane	BRL		µg/l	10.0						
Dibromochloromethane	BRL		µg/l	2.5						
1,2-Dibromoethane (EDB)	BRL		µg/l	2.5						
Dibromomethane	BRL		µg/l	5.0						
1,2-Dichlorobenzene	BRL		µg/l	5.0						
1,3-Dichlorobenzene	BRL		µg/l	5.0						
1,4-Dichlorobenzene	BRL		µg/l	5.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/l	10.0						
1,1-Dichloroethane	BRL		µg/l	5.0						
1,2-Dichloroethane	BRL		µg/l	5.0						
1,1-Dichloroethene	BRL		µg/l	5.0						
cis-1,2-Dichloroethene	BRL		µg/l	5.0						
trans-1,2-Dichloroethene	BRL		µg/l	5.0						
1,2-Dichloropropane	BRL		µg/l	5.0						
1,3-Dichloropropane	BRL		µg/l	5.0						
2,2-Dichloropropane	BRL		µg/l	5.0						
1,1-Dichloropropene	BRL		µg/l	5.0						
cis-1,3-Dichloropropene	BRL		µg/l	2.5						
trans-1,3-Dichloropropene	BRL		µg/l	2.5						
Ethylbenzene	BRL		µg/l	5.0						
Hexachlorobutadiene	BRL		µg/l	2.5						
2-Hexanone (MBK)	BRL		µg/l	50.0						
Isopropylbenzene	BRL		µg/l	5.0						
4-Isopropyltoluene	BRL		µg/l	5.0						
Methyl tert-butyl ether	BRL		µg/l	5.0						
4-Methyl-2-pentanone (MIBK)	BRL		µg/l	50.0						
Methylene chloride	BRL		µg/l	25.0						
Naphthalene	BRL		µg/l	5.0						
n-Propylbenzene	BRL		µg/l	5.0						
Styrene	BRL		µg/l	5.0						
1,1,1,2-Tetrachloroethane	BRL		µg/l	5.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	2.5						
Tetrachloroethene	BRL		µg/l	5.0						
Toluene	BRL		µg/l	5.0						
1,2,3-Trichlorobenzene	BRL		µg/l	5.0						
1,2,4-Trichlorobenzene	BRL		µg/l	5.0						
1,3,5-Trichlorobenzene	BRL		µg/l	5.0						
1,1,1-Trichloroethane	BRL		µg/l	5.0						
1,1,2-Trichloroethane	BRL		µg/l	5.0						
Trichloroethene	BRL		µg/l	5.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/l	5.0						
1,2,3-Trichloropropane	BRL		µg/l	5.0						
1,2,4-Trimethylbenzene	BRL		µg/l	5.0						
1,3,5-Trimethylbenzene	BRL		µg/l	5.0						
Vinyl chloride	BRL		µg/l	5.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9070225 - SW846 5030 Water MS										
Blank (9070225-BLK2)										
Prepared & Analyzed: 06-Jul-09										
m,p-Xylene	BRL		µg/l	10.0						
o-Xylene	BRL		µg/l	5.0						
Tetrahydrofuran	BRL		µg/l	50.0						
Ethyl ether	BRL		µg/l	5.0						
Tert-amyl methyl ether	BRL		µg/l	5.0						
Ethyl tert-butyl ether	BRL		µg/l	5.0						
Di-isopropyl ether	BRL		µg/l	5.0						
Tert-Butanol / butyl alcohol	BRL		µg/l	50.0						
1,4-Dioxane	BRL		µg/l	100						
trans-1,4-Dichloro-2-butene	BRL		µg/l	25.0						
Ethanol	BRL		µg/l	2000						
Surrogate: 4-Bromofluorobenzene	*23.6*		µg/l		*30.0*		*78*	*70-130*		
Surrogate: Toluene-d8	*27.8*		µg/l		*30.0*		*93*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*31.4*		µg/l		*30.0*		*105*	*70-130*		
Surrogate: Dibromofluoromethane	*29.1*		µg/l		*30.0*		*97*	*70-130*		
LCS (9070225-BS1)										
Prepared & Analyzed: 06-Jul-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.7		µg/l		20.0		104	70-130		
Acetone	16.8		µg/l		20.0		84	41.6-158		
Acrylonitrile	17.5		µg/l		20.0		88	70-130		
Benzene	18.2		µg/l		20.0		91	70-130		
Bromobenzene	21.2		µg/l		20.0		106	70-130		
Bromochloromethane	19.2		µg/l		20.0		96	70-130		
Bromodichloromethane	18.0		µg/l		20.0		90	70-130		
Bromoform	16.9		µg/l		20.0		85	70-130		
Bromomethane	30.3	QM9	µg/l		20.0		152	47-147		
2-Butanone (MEK)	18.2		µg/l		20.0		91	60.9-144		
n-Butylbenzene	18.1		µg/l		20.0		91	70-130		
sec-Butylbenzene	19.3		µg/l		20.0		97	70-130		
tert-Butylbenzene	19.6		µg/l		20.0		98	70-130		
Carbon disulfide	19.2		µg/l		20.0		96	70-130		
Carbon tetrachloride	17.8		µg/l		20.0		89	70-130		
Chlorobenzene	20.0		µg/l		20.0		100	70-130		
Chloroethane	16.2		µg/l		20.0		81	63.6-131		
Chloroform	18.2		µg/l		20.0		91	70-130		
Chloromethane	16.2		µg/l		20.0		81	70-130		
2-Chlorotoluene	21.3		µg/l		20.0		106	70-130		
4-Chlorotoluene	21.6		µg/l		20.0		108	70-130		
1,2-Dibromo-3-chloropropane	14.9		µg/l		20.0		74	70-130		
Dibromochloromethane	17.2		µg/l		20.0		86	58.8-145		
1,2-Dibromoethane (EDB)	22.5		µg/l		20.0		113	70-130		
Dibromomethane	19.7		µg/l		20.0		98	70-130		
1,2-Dichlorobenzene	21.9		µg/l		20.0		109	70-130		
1,3-Dichlorobenzene	21.5		µg/l		20.0		108	70-130		
1,4-Dichlorobenzene	19.5		µg/l		20.0		97	70-130		
Dichlorodifluoromethane (Freon12)	15.7		µg/l		20.0		78	56.6-137		
1,1-Dichloroethane	18.3		µg/l		20.0		91	70-130		
1,2-Dichloroethane	17.5		µg/l		20.0		88	70-130		
1,1-Dichloroethene	18.3		µg/l		20.0		92	70-130		
cis-1,2-Dichloroethene	19.7		µg/l		20.0		98	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9070225 - SW846 5030 Water MS										
LCS (9070225-BS1)										
Prepared & Analyzed: 06-Jul-09										
trans-1,2-Dichloroethene	17.8		µg/l		20.0		89	70-130		
1,2-Dichloropropane	21.0		µg/l		20.0		105	70-130		
1,3-Dichloropropane	21.0		µg/l		20.0		105	70-130		
2,2-Dichloropropane	19.9		µg/l		20.0		100	70-130		
1,1-Dichloropropene	18.8		µg/l		20.0		94	70-130		
cis-1,3-Dichloropropene	19.1		µg/l		20.0		95	70-130		
trans-1,3-Dichloropropene	18.7		µg/l		20.0		94	70-130		
Ethylbenzene	21.5		µg/l		20.0		107	70-130		
Hexachlorobutadiene	19.8		µg/l		20.0		99	70-134		
2-Hexanone (MBK)	18.4		µg/l		20.0		92	70-130		
Isopropylbenzene	17.6		µg/l		20.0		88	70-130		
4-Isopropyltoluene	18.9		µg/l		20.0		95	70-130		
Methyl tert-butyl ether	20.1		µg/l		20.0		101	70-130		
4-Methyl-2-pentanone (MIBK)	26.5	QC2	µg/l		20.0		132	64.8-130		
Methylene chloride	17.6		µg/l		20.0		88	70-130		
Naphthalene	20.2		µg/l		20.0		101	70-130		
n-Propylbenzene	18.1		µg/l		20.0		91	70-130		
Styrene	18.0		µg/l		20.0		90	70-130		
1,1,1,2-Tetrachloroethane	22.9		µg/l		20.0		114	70-130		
1,1,2,2-Tetrachloroethane	19.3		µg/l		20.0		97	70-130		
Tetrachloroethene	22.0		µg/l		20.0		110	70-130		
Toluene	21.1		µg/l		20.0		106	70-130		
1,2,3-Trichlorobenzene	23.1		µg/l		20.0		115	70-130		
1,2,4-Trichlorobenzene	23.5		µg/l		20.0		117	70-130		
1,3,5-Trichlorobenzene	21.4		µg/l		20.0		107	70-130		
1,1,1-Trichloroethane	18.9		µg/l		20.0		95	70-130		
1,1,2-Trichloroethane	21.9		µg/l		20.0		110	70-130		
Trichloroethene	21.8		µg/l		20.0		109	70-130		
Trichlorofluoromethane (Freon 11)	18.6		µg/l		20.0		93	70-152		
1,2,3-Trichloropropane	20.7		µg/l		20.0		104	70-130		
1,2,4-Trimethylbenzene	18.7		µg/l		20.0		94	70-130		
1,3,5-Trimethylbenzene	18.7		µg/l		20.0		93	70-130		
Vinyl chloride	19.1		µg/l		20.0		96	70-130		
m,p-Xylene	40.0		µg/l		40.0		100	70-130		
o-Xylene	20.6		µg/l		20.0		103	70-130		
Tetrahydrofuran	19.2		µg/l		20.0		96	70-130		
Ethyl ether	18.6		µg/l		20.0		93	70-133		
Tert-amyl methyl ether	21.6		µg/l		20.0		108	70-130		
Ethyl tert-butyl ether	19.8		µg/l		20.0		99	70-130		
Di-isopropyl ether	16.8		µg/l		20.0		84	70-130		
Tert-Butanol / butyl alcohol	207		µg/l		200		104	70-130		
1,4-Dioxane	233		µg/l		200		117	53.1-139		
trans-1,4-Dichloro-2-butene	16.8		µg/l		20.0		84	70-130		
Ethanol	360		µg/l		400		90	70-130		
Surrogate: 4-Bromofluorobenzene	*30.0*		µg/l		*30.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*33.4*		µg/l		*30.0*		*112*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*27.8*		µg/l		*30.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*28.2*		µg/l		*30.0*		*94*	*70-130*		
LCS Dup (9070225-BSD1)										
Prepared & Analyzed: 06-Jul-09										

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9070225 - SW846 5030 Water MS										
LCS Dup (9070225-BSD1)										
Prepared & Analyzed: 06-Jul-09										
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.6		µg/l		20.0		103	70-130	0.5	25
Acetone	17.2		µg/l		20.0		86	41.6-158	2	50
Acrylonitrile	17.7		µg/l		20.0		88	70-130	0.7	25
Benzene	17.6		µg/l		20.0		88	70-130	3	25
Bromobenzene	21.1		µg/l		20.0		106	70-130	0.4	25
Bromochloromethane	18.3		µg/l		20.0		92	70-130	4	25
Bromodichloromethane	17.9		µg/l		20.0		89	70-130	1	25
Bromoform	16.7		µg/l		20.0		84	70-130	1	25
Bromomethane	28.4		µg/l		20.0		142	47-147	7	50
2-Butanone (MEK)	20.4		µg/l		20.0		102	60.9-144	11	50
n-Butylbenzene	18.3		µg/l		20.0		92	70-130	1	25
sec-Butylbenzene	19.0		µg/l		20.0		95	70-130	2	25
tert-Butylbenzene	19.0		µg/l		20.0		95	70-130	3	25
Carbon disulfide	18.2		µg/l		20.0		91	70-130	5	25
Carbon tetrachloride	17.1		µg/l		20.0		86	70-130	4	25
Chlorobenzene	20.0		µg/l		20.0		100	70-130	0.1	25
Chloroethane	15.1		µg/l		20.0		75	63.6-131	7	50
Chloroform	17.4		µg/l		20.0		87	70-130	5	25
Chloromethane	15.6		µg/l		20.0		78	70-130	4	25
2-Chlorotoluene	21.0		µg/l		20.0		105	70-130	1	25
4-Chlorotoluene	20.9		µg/l		20.0		104	70-130	3	25
1,2-Dibromo-3-chloropropane	15.5		µg/l		20.0		78	70-130	4	25
Dibromochloromethane	16.8		µg/l		20.0		84	58.8-145	3	50
1,2-Dibromoethane (EDB)	22.1		µg/l		20.0		110	70-130	2	25
Dibromomethane	19.5		µg/l		20.0		98	70-130	0.8	25
1,2-Dichlorobenzene	21.9		µg/l		20.0		110	70-130	0.3	25
1,3-Dichlorobenzene	21.3		µg/l		20.0		106	70-130	1	25
1,4-Dichlorobenzene	19.6		µg/l		20.0		98	70-130	0.7	25
Dichlorodifluoromethane (Freon12)	15.3		µg/l		20.0		77	56.6-137	2	50
1,1-Dichloroethane	17.5		µg/l		20.0		88	70-130	4	25
1,2-Dichloroethane	17.2		µg/l		20.0		86	70-130	2	25
1,1-Dichloroethene	17.5		µg/l		20.0		88	70-130	4	25
cis-1,2-Dichloroethene	18.8		µg/l		20.0		94	70-130	4	25
trans-1,2-Dichloroethene	16.9		µg/l		20.0		85	70-130	5	25
1,2-Dichloropropane	20.4		µg/l		20.0		102	70-130	3	25
1,3-Dichloropropane	20.7		µg/l		20.0		103	70-130	2	25
2,2-Dichloropropane	18.5		µg/l		20.0		92	70-130	7	25
1,1-Dichloropropene	18.0		µg/l		20.0		90	70-130	5	25
cis-1,3-Dichloropropene	18.5		µg/l		20.0		93	70-130	3	25
trans-1,3-Dichloropropene	18.0		µg/l		20.0		90	70-130	4	25
Ethylbenzene	21.0		µg/l		20.0		105	70-130	2	25
Hexachlorobutadiene	19.2		µg/l		20.0		96	70-134	3	50
2-Hexanone (MBK)	17.7		µg/l		20.0		88	70-130	4	25
Isopropylbenzene	17.1		µg/l		20.0		85	70-130	3	25
4-Isopropyltoluene	19.1		µg/l		20.0		96	70-130	1	25
Methyl tert-butyl ether	20.0		µg/l		20.0		100	70-130	0.7	25
4-Methyl-2-pentanone (MIBK)	26.3	QC2	µg/l		20.0		131	64.8-130	0.8	50
Methylene chloride	16.8		µg/l		20.0		84	70-130	4	25
Naphthalene	20.7		µg/l		20.0		104	70-130	2	25

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9070225 - SW846 5030 Water MS										
LCS Dup (9070225-BSD1)										
Prepared & Analyzed: 06-Jul-09										
n-Propylbenzene	17.5		µg/l		20.0		88	70-130	3	25
Styrene	17.9		µg/l		20.0		89	70-130	0.7	25
1,1,1,2-Tetrachloroethane	22.6		µg/l		20.0		113	70-130	1	25
1,1,2,2-Tetrachloroethane	19.7		µg/l		20.0		99	70-130	2	25
Tetrachloroethene	21.0		µg/l		20.0		105	70-130	5	25
Toluene	20.2		µg/l		20.0		101	70-130	4	25
1,2,3-Trichlorobenzene	22.7		µg/l		20.0		114	70-130	2	25
1,2,4-Trichlorobenzene	23.4		µg/l		20.0		117	70-130	0.6	25
1,3,5-Trichlorobenzene	21.4		µg/l		20.0		107	70-130	0.1	25
1,1,1-Trichloroethane	17.6		µg/l		20.0		88	70-130	7	25
1,1,2-Trichloroethane	21.4		µg/l		20.0		107	70-130	2	25
Trichloroethene	21.1		µg/l		20.0		106	70-130	3	25
Trichlorofluoromethane (Freon 11)	17.9		µg/l		20.0		89	70-152	4	50
1,2,3-Trichloropropane	21.5		µg/l		20.0		107	70-130	3	25
1,2,4-Trimethylbenzene	18.4		µg/l		20.0		92	70-130	2	25
1,3,5-Trimethylbenzene	18.1		µg/l		20.0		91	70-130	3	25
Vinyl chloride	18.1		µg/l		20.0		91	70-130	5	25
m,p-Xylene	39.2		µg/l		40.0		98	70-130	2	25
o-Xylene	20.4		µg/l		20.0		102	70-130	1	25
Tetrahydrofuran	17.6		µg/l		20.0		88	70-130	9	25
Ethyl ether	18.0		µg/l		20.0		90	70-133	3	50
Tert-amyl methyl ether	21.1		µg/l		20.0		106	70-130	2	25
Ethyl tert-butyl ether	19.1		µg/l		20.0		96	70-130	3	25
Di-isopropyl ether	16.2		µg/l		20.0		81	70-130	4	25
Tert-Butanol / butyl alcohol	205		µg/l		200		102	70-130	1	25
1,4-Dioxane	221		µg/l		200		111	53.1-139	5	25
trans-1,4-Dichloro-2-butene	17.3		µg/l		20.0		86	70-130	3	25
Ethanol	341		µg/l		400		85	70-130	5	30
Surrogate: 4-Bromofluorobenzene	*29.5*		µg/l		*30.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*31.9*		µg/l		*30.0*		*106*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*26.6*		µg/l		*30.0*		*89*	*70-130*		
Surrogate: Dibromofluoromethane	*27.0*		µg/l		*30.0*		*90*	*70-130*		

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9062199 - SW846 3510C										
Blank (9062199-BLK1)										
Prepared & Analyzed: 30-Jun-09										
Acenaphthene	BRL		µg/l	2.50						
Acenaphthylene	BRL		µg/l	2.50						
Anthracene	BRL		µg/l	2.50						
Benzo (a) anthracene	BRL		µg/l	2.50						
Benzo (a) pyrene	BRL		µg/l	2.50						
Benzo (b) fluoranthene	BRL		µg/l	2.50						
Benzo (g,h,i) perylene	BRL		µg/l	2.50						
Benzo (k) fluoranthene	BRL		µg/l	2.50						
Chrysene	BRL		µg/l	2.50						
Dibenzo (a,h) anthracene	BRL		µg/l	2.50						
Fluoranthene	BRL		µg/l	2.50						
Fluorene	BRL		µg/l	2.50						
Indeno (1,2,3-cd) pyrene	BRL		µg/l	2.50						
1-Methylnaphthalene	BRL		µg/l	2.50						
2-Methylnaphthalene	BRL		µg/l	2.50						
Naphthalene	BRL		µg/l	2.50						
Phenanthrene	BRL		µg/l	2.50						
Pyrene	BRL		µg/l	2.50						
Surrogate: 2-Fluorobiphenyl	*28.9*		µg/l		*50.0*		*58*	*30-130*		
Surrogate: Terphenyl-dl4	*27.7*		µg/l		*50.0*		*55*	*30-130*		
LCS (9062199-BS1)										
Prepared & Analyzed: 30-Jun-09										
Acenaphthene	35.8		µg/l	2.50	50.0		72	40-140		
Acenaphthylene	34.9		µg/l	2.50	50.0		70	40-140		
Anthracene	35.7		µg/l	2.50	50.0		71	40-140		
Benzo (a) anthracene	36.8		µg/l	2.50	50.0		74	40-140		
Benzo (a) pyrene	35.8		µg/l	2.50	50.0		72	40-140		
Benzo (b) fluoranthene	40.2		µg/l	2.50	50.0		80	40-140		
Benzo (g,h,i) perylene	39.3		µg/l	2.50	50.0		79	40-140		
Benzo (k) fluoranthene	25.1		µg/l	2.50	50.0		50	40-140		
Chrysene	36.7		µg/l	2.50	50.0		73	40-140		
Dibenzo (a,h) anthracene	37.8		µg/l	2.50	50.0		76	40-140		
Fluoranthene	35.2		µg/l	2.50	50.0		70	40-140		
Fluorene	34.5		µg/l	2.50	50.0		69	40-140		
Indeno (1,2,3-cd) pyrene	39.0		µg/l	2.50	50.0		78	40-140		
1-Methylnaphthalene	34.1		µg/l	2.50	50.0		68	40-140		
2-Methylnaphthalene	33.9		µg/l	2.50	50.0		68	40-140		
Naphthalene	33.8		µg/l	2.50	50.0		68	40-140		
Phenanthrene	31.5		µg/l	2.50	50.0		63	40-140		
Pyrene	36.7		µg/l	2.50	50.0		73	40-140		
Surrogate: 2-Fluorobiphenyl	*29.7*		µg/l		*50.0*		*59*	*30-130*		
Surrogate: Terphenyl-dl4	*32.4*		µg/l		*50.0*		*65*	*30-130*		
LCS Dup (9062199-BSD1)										
Prepared & Analyzed: 30-Jun-09										
Acenaphthene	38.5		µg/l	2.50	50.0		77	40-140	7	200
Acenaphthylene	37.2		µg/l	2.50	50.0		74	40-140	6	200
Anthracene	39.2		µg/l	2.50	50.0		78	40-140	9	200
Benzo (a) anthracene	40.5		µg/l	2.50	50.0		81	40-140	10	200
Benzo (a) pyrene	40.3		µg/l	2.50	50.0		81	40-140	12	200

Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9062199 - SW846 3510C										
LCS Dup (9062199-BSD1)										
Prepared & Analyzed: 30-Jun-09										
Benzo (b) fluoranthene	42.9		µg/l	2.50	50.0		86	40-140	6	200
Benzo (g,h,i) perylene	44.4		µg/l	2.50	50.0		89	40-140	12	200
Benzo (k) fluoranthene	29.8		µg/l	2.50	50.0		60	40-140	17	200
Chrysene	40.2		µg/l	2.50	50.0		80	40-140	9	200
Dibenzo (a,h) anthracene	41.7		µg/l	2.50	50.0		83	40-140	10	200
Fluoranthene	38.8		µg/l	2.50	50.0		78	40-140	10	200
Fluorene	36.4		µg/l	2.50	50.0		73	40-140	5	200
Indeno (1,2,3-cd) pyrene	43.8		µg/l	2.50	50.0		88	40-140	12	200
1-Methylnaphthalene	36.5		µg/l	2.50	50.0		73	40-140	7	200
2-Methylnaphthalene	36.3		µg/l	2.50	50.0		73	40-140	7	200
Naphthalene	36.4		µg/l	2.50	50.0		73	40-140	7	200
Phenanthrene	33.4		µg/l	2.50	50.0		67	40-140	6	200
Pyrene	39.9		µg/l	2.50	50.0		80	40-140	8	200
Surrogate: 2-Fluorobiphenyl	*30.5*		µg/l		*50.0*		*61*	*30-130*		
Surrogate: Terphenyl-dl4	*33.6*		µg/l		*50.0*		*67*	*30-130*		
Duplicate (9062199-DUP1)	**Source: SA96879-01**	R02								
Prepared & Analyzed: 30-Jun-09										
Acenaphthene	2.26	J	µg/l	6.58		2.57			13	50
Acenaphthylene	BRL		µg/l	6.58		BRL				50
Anthracene	BRL		µg/l	6.58		BRL				50
Benzo (a) anthracene	BRL		µg/l	6.58		BRL				50
Benzo (a) pyrene	BRL		µg/l	6.58		BRL				50
Benzo (b) fluoranthene	BRL		µg/l	6.58		BRL				50
Benzo (g,h,i) perylene	BRL		µg/l	6.58		BRL				50
Benzo (k) fluoranthene	BRL		µg/l	6.58		BRL				50
Chrysene	BRL		µg/l	6.58		BRL				50
Dibenzo (a,h) anthracene	BRL		µg/l	6.58		BRL				50
Fluoranthene	BRL		µg/l	6.58		BRL				50
Fluorene	3.87	J	µg/l	6.58		4.80			21	50
Indeno (1,2,3-cd) pyrene	BRL		µg/l	6.58		BRL				50
1-Methylnaphthalene	4.08	J	µg/l	6.58		4.03			1	50
2-Methylnaphthalene	BRL		µg/l	6.58		BRL				50
Naphthalene	BRL		µg/l	6.58		BRL				50
Phenanthrene	1.34	J,QR4	µg/l	6.58		2.47			59	50
Pyrene	1.58	J	µg/l	6.58		1.83			15	50
Surrogate: 2-Fluorobiphenyl	*37.6*		µg/l		*65.8*		*57*	*30-130*		
Surrogate: Terphenyl-dl4	*28.6*		µg/l		*65.8*		*43*	*30-130*		

Notes and Definitions

CAL2	Analyte percent drift/percent difference is greater than 30%, data is accepted due to all CCC analytes passing within the 20% Drift/Difference criteria
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
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.
QR4	Analyses are not controlled on RPD values from sample concentrations less than the reporting limit. QC batch accepted based on LCS and/or LCSD QC results
R02	Elevated Reporting Limits due to limited sample volume.
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.

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.

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Leja

SA9L0879 Clk

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: _____
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: CEA
62A Hall ST
Concord, NH

Project Mgr.: B Hoffer
Telephone #: 603-225-7400

Invoice To: CEA
127 Hartwell ST
West Boylston, MA

P.O. No.: _____ RQN: _____

Project No.: RI-0011-06
Site Name: Jefferies Residence
Location: Londgrove State: VT
Sampler(s): B. Hoffer

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9=_____ 10=_____ 11=_____

List preservative code below: 2 –

QA/QC Reporting Notes: (check as needed)

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

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOC 8260	PAH 8270
SA9L0879-01	MW-4	6/24/09	13:00	G	GW	3	2			✓	✓
02	MW-5	↓	13:15	G	GW	3	2			✓	✓
03	MW-6		13:30	G	GW	3	2			✓	✓
04	MW-7		13:45	G	GW	3	2			✓	✓

☐ Provide MA DEP MCP CAM Report
☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☑ Standard ☐ No QC
☐ Other _____

State specific reporting standards: _____

EDD Format PDF + Excel
☑ E-mail to bhoffer@cea-inc.com

Condition upon receipt: ☐ Iced ☐ Ambient ☑ °C 5.6

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	6/25/09	1502
[signature]	[signature]	6/25/09	1755

2.2

SA9685 79 CK

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: _____
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: CEA
62A Hall ST
Concord, NH

Project Mgr.: B Hoppen
Telephone #: 603-225-7400

Invoice To: CEA
127 Hartwell ST
West Boylston, MA

P.O. No.: _____ RQN: _____

Project No.: RI-0011-06
Site Name: Jefferies Residence
Location: Landgrove State: VT
Sampler(s): B. Hoppen

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=_____ 10=_____ 11=_____

List preservative code below: 2 – –

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

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOC 8260	PAH 8270
SA9685 79	MW-5	6/24/09	13:00	G	GW	3	2			✓	✓
02	MW-4		13:15	G	GW	3	2			✓	✓
03	MW-6		13:30	G	GW	3	2			✓	✓
04	MW-7		13:45	G	GW	3	2			✓	✓

QA/QC Reporting Notes: (check as needed)
- ☐ Provide MA DEP MCP CAM Report
- ☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☑ Standard ☐ No QC
☐ Other _____

State specific reporting standards: _____

see attached 7.2

EDD Format PDF + Excel
☑ E-mail to bhoppen@cea-inc.com

Condition upon receipt: ☐ Iced ☐ Ambient ☑ °C 5.6

Relinquished by:	Received by:	Date:	Time:
		6/25/09	1502
		6/25/09	1755

Report Date:
07-Jul-09 10:02

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

CEA, Inc
62B Hall Street
Concord, NH 03301
Attn: William Hopper

Project: Jeffries Residence - Landgrove, VT
Project RI-0011-06

Laboratory ID	Client Sample ID	Container	Matrix	Date Sampled	Date Received
SA96849-01	Basement	Summa canister 6 liter	Air	24-Jun-09 12:20	25-Jun-09 17:48
SA96849-02	1st Floor LR	Summa canister 6 liter	Air	24-Jun-09 12:20	25-Jun-09 17:48
SA96849-03	Ambient	Summa canister 6 liter	Air	24-Jun-09 12:20	25-Jun-09 17:48

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
Vermont # VT-11393

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.
Please note that this report contains 13 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supercedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report is 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).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

CASE NARRATIVE:

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.

Required site-specific Matrix Spike/Matrix Spike Duplicate (MS/MSD) must be requested by the client and sufficient sample must be submitted for the additional analyses. Samples submitted with insufficient volume/weight will not be analyzed for site specific MS/MSD, however a batch MS/MSD may be analyzed from a non-site specific sample.

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

EPA TO-15

Samples:

SA96849-01 *Basement*

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4-Bromofluorobenzene

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Basement SA96849-01	RI-0011-06	Air	24-Jun-09 12:20	25-Jun-09

CAS No.	Analyte(s)	Result ppbv	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Cert.
Air Quality Analyses										
EPA TO-15			Prepared 30-Jun-09				Can pressure: -1			
115-07-1	Propene	BRL	0.500	BRL	0.86		EPA TO-15	30-Jun-09	9070029	
75-71-8	Dichlorodifluoromethane (Freon12)	5.11	0.500	25.27	2.47		"	"	"	X
74-87-3	Chloromethane	BRL	0.500	BRL	1.03		"	"	"	X
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500	BRL	3.49		"	"	"	
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.28		"	"	"	X
106-99-0	1,3-Butadiene	BRL	0.500	BRL	1.10		"	"	"	X
74-83-9	Bromomethane	BRL	0.500	BRL	1.94		"	"	"	X
75-00-3	Chloroethane	BRL	0.500	BRL	1.32		"	"	"	X
67-64-1	Acetone	13.5	0.500	32.08	1.19		"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	1.16	0.500	6.52	2.81		"	"	"	X
64-17-5	Ethanol	6.39	0.500	12.05	0.94		"	"	"	
107-13-1	Acrylonitrile	BRL	0.500	BRL	1.08		"	"	"	
75-35-4	1,1-Dichloroethene	BRL	0.500	BRL	1.98		"	"	"	X
75-09-2	Methylene chloride	BRL	0.500	BRL	1.74		"	"	"	X
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500	BRL	3.83		"	"	"	X
75-15-0	Carbon disulfide	BRL	0.500	BRL	1.56		"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL	0.500	BRL	1.98		"	"	"	X
75-34-3	1,1-Dichloroethane	BRL	0.500	BRL	2.02		"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL	0.500	BRL	1.80		"	"	"	X
67-63-0	Isopropyl alcohol	0.720	0.500	1.77	1.23		"	"	"	X
78-93-3	2-Butanone (MEK)	1.90	0.500	5.60	1.47		"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL	0.500	BRL	1.98		"	"	"	X
110-54-3	Hexane	BRL	0.500	BRL	1.76		"	"	"	X
141-78-6	Ethyl acetate	BRL	0.500	BRL	1.80		"	"	"	
67-66-3	Chloroform	BRL	0.500	BRL	2.43		"	"	"	X
109-99-9	Tetrahydrofuran	BRL	0.500	BRL	1.47		"	"	"	
107-06-2	1,2-Dichloroethane	BRL	0.500	BRL	2.02		"	"	"	X
71-55-6	1,1,1-Trichloroethane	BRL	0.500	BRL	2.73		"	"	"	X
71-43-2	Benzene	BRL	0.500	BRL	1.60		"	"	"	X
56-23-5	Carbon tetrachloride	BRL	0.500	BRL	3.15		"	"	"	X
110-82-7	Cyclohexane	1.21	0.500	4.16	1.72		"	"	"	X
78-87-5	1,2-Dichloropropane	BRL	0.500	BRL	2.31		"	"	"	X
75-27-4	Bromodichloromethane	BRL	0.500	BRL	3.35		"	"	"	X
79-01-6	Trichloroethene	BRL	0.500	BRL	2.69		"	"	"	X
123-91-1	1,4-Dioxane	BRL	0.500	BRL	1.80		"	"	"	
142-82-5	n-Heptane	1.89	0.500	7.75	2.05		"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	41.3	0.500	169.25	2.05		"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500	BRL	2.27		"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500	BRL	2.27		"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL	0.500	BRL	2.73		"	"	"	X
108-88-3	Toluene	11.2	0.500	42.14	1.88		"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL	0.500	BRL	2.05		"	"	"	
124-48-1	Dibromochloromethane	BRL	0.500	BRL	4.26		"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500	BRL	3.84		"	"	"	X
127-18-4	Tetrachloroethene	BRL	0.500	BRL	3.39		"	"	"	X
108-90-7	Chlorobenzene	BRL	0.500	BRL	2.30		"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL	0.500	BRL	3.44		"	"	"	
100-41-4	Ethylbenzene	2.62	0.500	11.36	2.17		"	"	"	X
179601-23-1	m,p-Xylene	13.4	0.500	58.09	2.17		"	"	"	X
75-25-2	Bromoform	BRL	0.500	BRL	5.17		"	"	"	X
100-42-5	Styrene	BRL	0.500	BRL	2.13		"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Basement SA96849-01	RI-0011-06	Air	24-Jun-09 12:20	25-Jun-09

CAS No.	*Analyte(s)*	*Result ppbv*	**RDL*	*Result ug/m³*	**RDL*	*Flag*	*Method Ref.*	*Analyzed*	*Batch*	*Cert.*
Air Quality Analyses										
EPA TO-15			Prepared 30-Jun-09				Can pressure: -1			
95-47-6	o-Xylene	4.78	0.500	20.72	2.17		EPA TO-15	30-Jun-09	9070029	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500	BRL	3.43		"	"	"	X
98-82-8	Isopropylbenzene	0.540	0.500	2.65	2.46		"	"	"	
108-67-8	1,3,5-Trimethylbenzene	1.88	0.500	9.24	2.46		"	"	"	X
622-96-8	4-Ethyltoluene	1.45	0.500	7.13	2.46		"	"	"	
95-63-6	1,2,4-Trimethylbenzene	3.61	0.500	17.75	2.46		"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL	0.500	BRL	3.01		"	"	"	X
100-44-7	Benzyl chloride	BRL	0.500	BRL	2.58		"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL	0.500	BRL	3.01		"	"	"	X
135-98-8	sec-Butylbenzene	BRL	0.500	BRL	2.74		"	"	"	
99-87-6	4-Isopropyltoluene	0.630	0.500	3.38	2.68		"	"	"	
95-50-1	1,2-Dichlorobenzene	0.950	0.500	5.71	3.01		"	"	"	X
104-51-8	n-Butylbenzene	BRL	0.500	BRL	2.74		"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500	BRL	3.71		"	"	"	X
87-68-3	Hexachlorobutadiene	BRL	0.500	BRL	5.33		"	"	"	X
Surrogate recoveries:										
460-00-4	*4-Bromofluorobenzene*	*134*	*70-130 %*			S02	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
1st Floor LR	RI-0011-06	Air	24-Jun-09 12:20	25-Jun-09
SA96849-02				

CAS No.	*Analyte(s)*	*Result ppbv*	**RDL*	*Result ug/m³*	**RDL*	*Flag*	*Method Ref.*	*Analyzed*	*Batch*	*Cert.*
Air Quality Analyses										
EPA TO-15			Prepared 30-Jun-09				Can pressure: -2			
115-07-1	Propene	BRL	0.500	BRL	0.86		EPA TO-15	30-Jun-09	9070029	
75-71-8	Dichlorodifluoromethane (Freon12)	1.40	0.500	6.92	2.47		"	"	"	X
74-87-3	Chloromethane	0.520	0.500	1.07	1.03		"	"	"	X
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500	BRL	3.49		"	"	"	
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.28		"	"	"	X
106-99-0	1,3-Butadiene	BRL	0.500	BRL	1.10		"	"	"	X
74-83-9	Bromomethane	BRL	0.500	BRL	1.94		"	"	"	X
75-00-3	Chloroethane	BRL	0.500	BRL	1.32		"	"	"	X
67-64-1	Acetone	19.2	0.500	45.62	1.19		"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	1.64	0.500	9.22	2.81		"	"	"	X
64-17-5	Ethanol	34.8	0.500	65.61	0.94		"	"	"	
107-13-1	Acrylonitrile	BRL	0.500	BRL	1.08		"	"	"	
75-35-4	1,1-Dichloroethene	BRL	0.500	BRL	1.98		"	"	"	X
75-09-2	Methylene chloride	BRL	0.500	BRL	1.74		"	"	"	X
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500	BRL	3.83		"	"	"	X
75-15-0	Carbon disulfide	BRL	0.500	BRL	1.56		"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL	0.500	BRL	1.98		"	"	"	X
75-34-3	1,1-Dichloroethane	BRL	0.500	BRL	2.02		"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL	0.500	BRL	1.80		"	"	"	X
67-63-0	Isopropyl alcohol	1.06	0.500	2.60	1.23		"	"	"	X
78-93-3	2-Butanone (MEK)	2.75	0.500	8.11	1.47		"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL	0.500	BRL	1.98		"	"	"	X
110-54-3	Hexane	BRL	0.500	BRL	1.76		"	"	"	X
141-78-6	Ethyl acetate	BRL	0.500	BRL	1.80		"	"	"	
67-66-3	Chloroform	BRL	0.500	BRL	2.43		"	"	"	X
109-99-9	Tetrahydrofuran	BRL	0.500	BRL	1.47		"	"	"	
107-06-2	1,2-Dichloroethane	BRL	0.500	BRL	2.02		"	"	"	X
71-55-6	1,1,1-Trichloroethane	BRL	0.500	BRL	2.73		"	"	"	X
71-43-2	Benzene	BRL	0.500	BRL	1.60		"	"	"	X
56-23-5	Carbon tetrachloride	BRL	0.500	BRL	3.15		"	"	"	X
110-82-7	Cyclohexane	1.38	0.500	4.75	1.72		"	"	"	X
78-87-5	1,2-Dichloropropane	BRL	0.500	BRL	2.31		"	"	"	X
75-27-4	Bromodichloromethane	BRL	0.500	BRL	3.35		"	"	"	X
79-01-6	Trichloroethene	BRL	0.500	BRL	2.69		"	"	"	X
123-91-1	1,4-Dioxane	BRL	0.500	BRL	1.80		"	"	"	
142-82-5	n-Heptane	1.09	0.500	4.47	2.05		"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500	BRL	2.05		"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500	BRL	2.27		"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500	BRL	2.27		"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL	0.500	BRL	2.73		"	"	"	X
108-88-3	Toluene	4.43	0.500	16.67	1.88		"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL	0.500	BRL	2.05		"	"	"	
124-48-1	Dibromochloromethane	BRL	0.500	BRL	4.26		"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500	BRL	3.84		"	"	"	X
127-18-4	Tetrachloroethene	29.0	0.500	196.65	3.39		"	"	"	X
108-90-7	Chlorobenzene	BRL	0.500	BRL	2.30		"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL	0.500	BRL	3.44		"	"	"	
100-41-4	Ethylbenzene	BRL	0.500	BRL	2.17		"	"	"	X
179601-23-1	m,p-Xylene	0.580	0.500	2.51	2.17		"	"	"	X
75-25-2	Bromoform	BRL	0.500	BRL	5.17		"	"	"	X
100-42-5	Styrene	BRL	0.500	BRL	2.13		"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
1st Floor LR SA96849-02	RI-0011-06	Air	24-Jun-09 12:20	25-Jun-09

CAS No.	*Analyte(s)*	*Result ppbv*	**RDL*	*Result ug/m³*	**RDL*	*Flag*	*Method Ref.*	*Analyzed*	*Batch*	*Cert.*
Air Quality Analyses										
EPA TO-15			Prepared 30-Jun-09				Can pressure: -2			
95-47-6	o-Xylene	BRL	0.500	BRL	2.17		EPA TO-15	30-Jun-09	9070029	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500	BRL	3.43		"	"	"	X
98-82-8	Isopropylbenzene	BRL	0.500	BRL	2.46		"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL	0.500	BRL	2.46		"	"	"	X
622-96-8	4-Ethyltoluene	BRL	0.500	BRL	2.46		"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL	0.500	BRL	2.46		"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL	0.500	BRL	3.01		"	"	"	X
100-44-7	Benzyl chloride	BRL	0.500	BRL	2.58		"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL	0.500	BRL	3.01		"	"	"	X
135-98-8	sec-Butylbenzene	BRL	0.500	BRL	2.74		"	"	"	
99-87-6	4-Isopropyltoluene	BRL	0.500	BRL	2.68		"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL	0.500	BRL	3.01		"	"	"	X
104-51-8	n-Butylbenzene	BRL	0.500	BRL	2.74		"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500	BRL	3.71		"	"	"	X
87-68-3	Hexachlorobutadiene	BRL	0.500	BRL	5.33		"	"	"	X
Surrogate recoveries:										
460-00-4	*4-Bromofluorobenzene*	*99*	*70-130 %*				"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Ambient	RI-0011-06	Air	24-Jun-09 12:20	25-Jun-09
SA96849-03				

CAS No.	Analyte(s)	Result ppbv	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Cert.
Air Quality Analyses										
EPA TO-15			Prepared 30-Jun-09				Can pressure: -2			
115-07-1	Propene	BRL	0.500	BRL	0.86		EPA TO-15	30-Jun-09	9070029	
75-71-8	Dichlorodifluoromethane (Freon12)	0.590	0.500	2.92	2.47		"	"	"	X
74-87-3	Chloromethane	0.510	0.500	1.05	1.03		"	"	"	X
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500	BRL	3.49		"	"	"	
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.28		"	"	"	X
106-99-0	1,3-Butadiene	BRL	0.500	BRL	1.10		"	"	"	X
74-83-9	Bromomethane	BRL	0.500	BRL	1.94		"	"	"	X
75-00-3	Chloroethane	BRL	0.500	BRL	1.32		"	"	"	X
67-64-1	Acetone	3.09	0.500	7.34	1.19		"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	BRL	0.500	BRL	2.81		"	"	"	X
64-17-5	Ethanol	2.01	0.500	3.79	0.94		"	"	"	
107-13-1	Acrylonitrile	BRL	0.500	BRL	1.08		"	"	"	
75-35-4	1,1-Dichloroethene	BRL	0.500	BRL	1.98		"	"	"	X
75-09-2	Methylene chloride	BRL	0.500	BRL	1.74		"	"	"	X
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500	BRL	3.83		"	"	"	X
75-15-0	Carbon disulfide	BRL	0.500	BRL	1.56		"	"	"	X
156-60-5	trans-1,2-Dichloroethene	BRL	0.500	BRL	1.98		"	"	"	X
75-34-3	1,1-Dichloroethane	BRL	0.500	BRL	2.02		"	"	"	X
1634-04-4	Methyl tert-butyl ether	BRL	0.500	BRL	1.80		"	"	"	X
67-63-0	Isopropyl alcohol	1.62	0.500	3.98	1.23		"	"	"	X
78-93-3	2-Butanone (MEK)	BRL	0.500	BRL	1.47		"	"	"	X
156-59-2	cis-1,2-Dichloroethene	BRL	0.500	BRL	1.98		"	"	"	X
110-54-3	Hexane	BRL	0.500	BRL	1.76		"	"	"	X
141-78-6	Ethyl acetate	BRL	0.500	BRL	1.80		"	"	"	
67-66-3	Chloroform	BRL	0.500	BRL	2.43		"	"	"	X
109-99-9	Tetrahydrofuran	BRL	0.500	BRL	1.47		"	"	"	
107-06-2	1,2-Dichloroethane	BRL	0.500	BRL	2.02		"	"	"	X
71-55-6	1,1,1-Trichloroethane	BRL	0.500	BRL	2.73		"	"	"	X
71-43-2	Benzene	BRL	0.500	BRL	1.60		"	"	"	X
56-23-5	Carbon tetrachloride	BRL	0.500	BRL	3.15		"	"	"	X
110-82-7	Cyclohexane	BRL	0.500	BRL	1.72		"	"	"	X
78-87-5	1,2-Dichloropropane	BRL	0.500	BRL	2.31		"	"	"	X
75-27-4	Bromodichloromethane	BRL	0.500	BRL	3.35		"	"	"	X
79-01-6	Trichloroethene	BRL	0.500	BRL	2.69		"	"	"	X
123-91-1	1,4-Dioxane	BRL	0.500	BRL	1.80		"	"	"	
142-82-5	n-Heptane	BRL	0.500	BRL	2.05		"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500	BRL	2.05		"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	BRL	0.500	BRL	2.27		"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	BRL	0.500	BRL	2.27		"	"	"	X
79-00-5	1,1,2-Trichloroethane	BRL	0.500	BRL	2.73		"	"	"	X
108-88-3	Toluene	BRL	0.500	BRL	1.88		"	"	"	X
591-78-6	2-Hexanone (MBK)	BRL	0.500	BRL	2.05		"	"	"	
124-48-1	Dibromochloromethane	BRL	0.500	BRL	4.26		"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	BRL	0.500	BRL	3.84		"	"	"	X
127-18-4	Tetrachloroethene	BRL	0.500	BRL	3.39		"	"	"	X
108-90-7	Chlorobenzene	BRL	0.500	BRL	2.30		"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	BRL	0.500	BRL	3.44		"	"	"	
100-41-4	Ethylbenzene	BRL	0.500	BRL	2.17		"	"	"	X
179601-23-1	m,p-Xylene	BRL	0.500	BRL	2.17		"	"	"	X
75-25-2	Bromoform	BRL	0.500	BRL	5.17		"	"	"	X
100-42-5	Styrene	BRL	0.500	BRL	2.13		"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Ambient SA96849-03	RI-0011-06	Air	24-Jun-09 12:20	25-Jun-09

CAS No.	*Analyte(s)*	*Result ppbv*	**RDL*	*Result ug/m³*	**RDL*	*Flag*	*Method Ref.*	*Analyzed*	*Batch*	*Cert.*
Air Quality Analyses										
EPA TO-15			Prepared 30-Jun-09				Can pressure: -2			
95-47-6	o-Xylene	BRL	0.500	BRL	2.17		EPA TO-15	30-Jun-09	9070029	X
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500	BRL	3.43		"	"	"	X
98-82-8	Isopropylbenzene	BRL	0.500	BRL	2.46		"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL	0.500	BRL	2.46		"	"	"	X
622-96-8	4-Ethyltoluene	BRL	0.500	BRL	2.46		"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL	0.500	BRL	2.46		"	"	"	X
541-73-1	1,3-Dichlorobenzene	BRL	0.500	BRL	3.01		"	"	"	X
100-44-7	Benzyl chloride	BRL	0.500	BRL	2.58		"	"	"	X
106-46-7	1,4-Dichlorobenzene	BRL	0.500	BRL	3.01		"	"	"	X
135-98-8	sec-Butylbenzene	BRL	0.500	BRL	2.74		"	"	"	
99-87-6	4-Isopropyltoluene	BRL	0.500	BRL	2.68		"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL	0.500	BRL	3.01		"	"	"	X
104-51-8	n-Butylbenzene	BRL	0.500	BRL	2.74		"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL	0.500	BRL	3.71		"	"	"	X
87-68-3	Hexachlorobutadiene	BRL	0.500	BRL	5.33		"	"	"	X
Surrogate recoveries:										
460-00-4	*4-Bromofluorobenzene*	*98*	*70-130 %*				"	"	"	

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 9070029 - General Air Prep										
Blank (9070029-BLK1)				Prepared & Analyzed: 30-Jun-09						
Propene	BRL	0.500	ppbv							
Dichlorodifluoromethane (Freon12)	BRL	0.500	ppbv							
Chloromethane	BRL	0.500	ppbv							
1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500	ppbv							
Vinyl chloride	BRL	0.500	ppbv							
1,3-Butadiene	BRL	0.500	ppbv							
Bromomethane	BRL	0.500	ppbv							
Chloroethane	BRL	0.500	ppbv							
Acetone	BRL	0.500	ppbv							
Trichlorofluoromethane (Freon 11)	BRL	0.500	ppbv							
Ethanol	BRL	0.500	ppbv							
Acrylonitrile	BRL	0.500	ppbv							
1,1-Dichloroethene	BRL	0.500	ppbv							
Methylene chloride	BRL	0.500	ppbv							
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500	ppbv							
Carbon disulfide	BRL	0.500	ppbv							
trans-1,2-Dichloroethene	BRL	0.500	ppbv							
1,1-Dichloroethane	BRL	0.500	ppbv							
Methyl tert-butyl ether	BRL	0.500	ppbv							
Isopropyl alcohol	BRL	0.500	ppbv							
2-Butanone (MEK)	BRL	0.500	ppbv							
cis-1,2-Dichloroethene	BRL	0.500	ppbv							
Hexane	BRL	0.500	ppbv							
Ethyl acetate	BRL	0.500	ppbv							
Chloroform	BRL	0.500	ppbv							
Tetrahydrofuran	BRL	0.500	ppbv							
1,2-Dichloroethane	BRL	0.500	ppbv							
1,1,1-Trichloroethane	BRL	0.500	ppbv							
Benzene	BRL	0.500	ppbv							
Carbon tetrachloride	BRL	0.500	ppbv							
Cyclohexane	BRL	0.500	ppbv							
1,2-Dichloropropane	BRL	0.500	ppbv							
Bromodichloromethane	BRL	0.500	ppbv							
Trichloroethene	BRL	0.500	ppbv							
1,4-Dioxane	BRL	0.500	ppbv							
n-Heptane	BRL	0.500	ppbv							
4-Methyl-2-pentanone (MIBK)	BRL	0.500	ppbv							
cis-1,3-Dichloropropene	BRL	0.500	ppbv							
trans-1,3-Dichloropropene	BRL	0.500	ppbv							
1,1,2-Trichloroethane	BRL	0.500	ppbv							
Toluene	BRL	0.500	ppbv							
2-Hexanone (MBK)	BRL	0.500	ppbv							
Dibromochloromethane	BRL	0.500	ppbv							
1,2-Dibromoethane (EDB)	BRL	0.500	ppbv							
Tetrachloroethene	BRL	0.500	ppbv							
Chlorobenzene	BRL	0.500	ppbv							
1,1,1,2-Tetrachloroethane	BRL	0.500	ppbv							
Ethylbenzene	BRL	0.500	ppbv							
m,p-Xylene	BRL	0.500	ppbv							
Bromoform	BRL	0.500	ppbv							
Styrene	BRL	0.500	ppbv							
o-Xylene	BRL	0.500	ppbv							
1,1,2,2-Tetrachloroethane	BRL	0.500	ppbv							
Isopropylbenzene	BRL	0.500	ppbv							

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 9070029 - General Air Prep										
Blank (9070029-BLK1)				Prepared & Analyzed: 30-Jun-09						
1,3,5-Trimethylbenzene	BRL	0.500	ppbv							
4-Ethyltoluene	BRL	0.500	ppbv							
1,2,4-Trimethylbenzene	BRL	0.500	ppbv							
1,3-Dichlorobenzene	BRL	0.500	ppbv							
Benzyl chloride	BRL	0.500	ppbv							
1,4-Dichlorobenzene	BRL	0.500	ppbv							
sec-Butylbenzene	BRL	0.500	ppbv							
4-Isopropyltoluene	BRL	0.500	ppbv							
1,2-Dichlorobenzene	BRL	0.500	ppbv							
n-Butylbenzene	BRL	0.500	ppbv							
1,2,4-Trichlorobenzene	BRL	0.500	ppbv							
Hexachlorobutadiene	BRL	0.500	ppbv							
Surrogate: 4-Bromofluorobenzene	*9.59*		ppbv	*10.0*		*96*	*70-130*			
LCS (9070029-BS1)				Prepared & Analyzed: 30-Jun-09						
Propene	9.55		ppbv	10.0		96	70-130			
Dichlorodifluoromethane (Freon12)	8.67		ppbv	10.0		87	70-130			
Chloromethane	9.90		ppbv	10.0		99	70-130			
1,2-Dichlorotetrafluoroethane (Freon 114)	9.29		ppbv	10.0		93	70-130			
Vinyl chloride	9.77		ppbv	10.0		98	70-130			
1,3-Butadiene	10.0		ppbv	10.0		100	70-130			
Bromomethane	9.02		ppbv	10.0		90	70-130			
Chloroethane	8.86		ppbv	10.0		89	70-130			
Acetone	9.55		ppbv	10.0		96	70-130			
Trichlorofluoromethane (Freon 11)	9.00		ppbv	10.0		90	70-130			
Ethanol	11.0		ppbv	10.0		110	56.7-135			
Acrylonitrile	9.16		ppbv	10.0		92	60-160			
1,1-Dichloroethene	8.85		ppbv	10.0		88	70-130			
Methylene chloride	8.77		ppbv	10.0		88	70-130			
1,1,2-Trichlorotrifluoroethane (Freon 113)	8.65		ppbv	10.0		86	70-130			
Carbon disulfide	9.60		ppbv	10.0		96	70-130			
trans-1,2-Dichloroethene	8.49		ppbv	10.0		85	70-130			
1,1-Dichloroethane	8.74		ppbv	10.0		87	70-130			
Methyl tert-butyl ether	8.37		ppbv	10.0		84	70-130			
Isopropyl alcohol	9.40		ppbv	10.0		94	70-130			
2-Butanone (MEK)	8.71		ppbv	10.0		87	70-130			
cis-1,2-Dichloroethene	9.14		ppbv	10.0		91	70-130			
Hexane	9.54		ppbv	10.0		95	70-130			
Ethyl acetate	9.82		ppbv	10.0		98	70-130			
Chloroform	8.67		ppbv	10.0		87	70-130			
Tetrahydrofuran	9.38		ppbv	10.0		94	70-130			
1,2-Dichloroethane	8.65		ppbv	10.0		86	70-130			
1,1,1-Trichloroethane	8.66		ppbv	10.0		87	70-130			
Benzene	8.98		ppbv	10.0		90	70-130			
Carbon tetrachloride	8.05		ppbv	10.0		80	70-130			
Cyclohexane	9.75		ppbv	10.0		98	70-130			
1,2-Dichloropropane	8.82		ppbv	10.0		88	70-130			
Bromodichloromethane	8.58		ppbv	10.0		86	70-130			
Trichloroethene	8.99		ppbv	10.0		90	70-130			
1,4-Dioxane	10.2		ppbv	10.0		102	60-160			
n-Heptane	9.52		ppbv	10.0		95	70-130			
4-Methyl-2-pentanone (MIBK)	8.65		ppbv	10.0		86	70-130			
cis-1,3-Dichloropropene	8.86		ppbv	10.0		89	70-130			
trans-1,3-Dichloropropene	8.85		ppbv	10.0		88	70-130			

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 9070029 - General Air Prep										
LCS (9070029-BS1)				Prepared & Analyzed: 30-Jun-09						
1,1,2-Trichloroethane	8.77		ppbv	10.0		88	70-130			
Toluene	9.00		ppbv	10.0		90	70-130			
2-Hexanone (MBK)	7.78		ppbv	10.0		78	70-130			
Dibromochloromethane	7.78		ppbv	10.0		78	70-130			
1,2-Dibromoethane (EDB)	8.51		ppbv	10.0		85	70-130			
Tetrachloroethene	8.76		ppbv	10.0		88	70-130			
Chlorobenzene	9.45		ppbv	10.0		94	70-130			
1,1,1,2-Tetrachloroethane	9.49		ppbv	10.0		95	60-160			
Ethylbenzene	10.0		ppbv	10.0		100	70-130			
m,p-Xylene	20.2		ppbv	20.0		101	70-130			
Bromoform	7.19		ppbv	10.0		72	70-130			
Styrene	10.1		ppbv	10.0		101	70-130			
o-Xylene	10.4		ppbv	10.0		104	70-130			
1,1,2,2-Tetrachloroethane	9.74		ppbv	10.0		97	70-130			
Isopropylbenzene	10.0		ppbv	10.0		100	60-160			
1,3,5-Trimethylbenzene	10.3		ppbv	10.0		103	70-130			
4-Ethyltoluene	10.1		ppbv	10.0		101	70-130			
1,2,4-Trimethylbenzene	10.4		ppbv	10.0		104	70-130			
1,3-Dichlorobenzene	10.4		ppbv	10.0		104	70-130			
Benzyl chloride	9.62		ppbv	10.0		96	70-130			
1,4-Dichlorobenzene	10.1		ppbv	10.0		101	70-130			
sec-Butylbenzene	12.2		ppbv	10.0		122	60-160			
4-Isopropyltoluene	10.8		ppbv	10.0		108	60-160			
1,2-Dichlorobenzene	10.4		ppbv	10.0		104	70-130			
n-Butylbenzene	10.3		ppbv	10.0		103	60-160			
1,2,4-Trichlorobenzene	9.96		ppbv	10.0		100	70-130			
Hexachlorobutadiene	8.77		ppbv	10.0		88	70-130			
Surrogate: 4-Bromofluorobenzene	*10.1*		ppbv	*10.0*		*101*	*70-130*			
Duplicate (9070029-DUP1)		**Source: SA96849-01**		Prepared & Analyzed: 30-Jun-09						
Propene	BRL	0.500	ppbv		BRL				30	
Dichlorodifluoromethane (Freon12)	5.05	0.500	ppbv		5.11			1	30	
Chloromethane	BRL	0.500	ppbv		BRL				30	
1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500	ppbv		BRL				30	
Vinyl chloride	BRL	0.500	ppbv		BRL				30	
1,3-Butadiene	BRL	0.500	ppbv		BRL				30	
Bromomethane	BRL	0.500	ppbv		BRL				30	
Chloroethane	BRL	0.500	ppbv		BRL				30	
Acetone	12.8	0.500	ppbv		13.5			5	30	
Trichlorofluoromethane (Freon 11)	0.980	0.500	ppbv		1.16			17	30	
Ethanol	6.51	0.500	ppbv		6.39			2	30	
Acrylonitrile	BRL	0.500	ppbv		BRL				30	
1,1-Dichloroethene	BRL	0.500	ppbv		BRL				30	
Methylene chloride	BRL	0.500	ppbv		BRL				30	
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500	ppbv		BRL				30	
Carbon disulfide	BRL	0.500	ppbv		BRL				30	
trans-1,2-Dichloroethene	BRL	0.500	ppbv		BRL				30	
1,1-Dichloroethane	BRL	0.500	ppbv		BRL				30	
Methyl tert-butyl ether	BRL	0.500	ppbv		BRL				30	
Isopropyl alcohol	0.680	0.500	ppbv		0.720			6	30	
2-Butanone (MEK)	1.75	0.500	ppbv		1.90			8	30	
cis-1,2-Dichloroethene	BRL	0.500	ppbv		BRL				30	
Hexane	0.510	0.500	ppbv		0.430			17	30	
Ethyl acetate	BRL	0.500	ppbv		BRL				30	

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 9070029 - General Air Prep										
Duplicate (9070029-DUP1)	**Source: SA96849-01**			Prepared & Analyzed: 30-Jun-09						
Chloroform	BRL	0.500	ppbv		BRL				30	
Tetrahydrofuran	BRL	0.500	ppbv		BRL				30	
1,2-Dichloroethane	BRL	0.500	ppbv		BRL				30	
1,1,1-Trichloroethane	0.220	0.500	ppbv		0.220			0	30	J
Benzene	BRL	0.500	ppbv		BRL				30	
Carbon tetrachloride	BRL	0.500	ppbv		BRL				30	
Cyclohexane	1.34	0.500	ppbv		1.21			10	30	
1,2-Dichloropropane	BRL	0.500	ppbv		BRL				30	
Bromodichloromethane	BRL	0.500	ppbv		BRL				30	
Trichloroethene	BRL	0.500	ppbv		BRL				30	
1,4-Dioxane	BRL	0.500	ppbv		BRL				30	
n-Heptane	2.00	0.500	ppbv		1.89			6	30	
4-Methyl-2-pentanone (MIBK)	38.9	0.500	ppbv		41.3			6	30	
cis-1,3-Dichloropropene	BRL	0.500	ppbv		BRL				30	
trans-1,3-Dichloropropene	BRL	0.500	ppbv		BRL				30	
1,1,2-Trichloroethane	BRL	0.500	ppbv		BRL				30	
Toluene	11.3	0.500	ppbv		11.2			1	30	
2-Hexanone (MBK)	BRL	0.500	ppbv		BRL				30	
Dibromochloromethane	BRL	0.500	ppbv		BRL				30	
1,2-Dibromoethane (EDB)	BRL	0.500	ppbv		BRL				30	
Tetrachloroethene	BRL	0.500	ppbv		BRL				30	
Chlorobenzene	BRL	0.500	ppbv		BRL				30	
1,1,1,2-Tetrachloroethane	BRL	0.500	ppbv		BRL				30	
Ethylbenzene	2.65	0.500	ppbv		2.62			1	30	
m,p-Xylene	13.2	0.500	ppbv		13.4			2	30	
Bromoform	BRL	0.500	ppbv		BRL				30	
Styrene	0.300	0.500	ppbv		0.290			3	30	J
o-Xylene	4.69	0.500	ppbv		4.78			2	30	
1,1,2,2-Tetrachloroethane	BRL	0.500	ppbv		BRL				30	
Isopropylbenzene	0.530	0.500	ppbv		0.540			2	30	
1,3,5-Trimethylbenzene	1.70	0.500	ppbv		1.88			10	30	
4-Ethyltoluene	1.36	0.500	ppbv		1.45			6	30	
1,2,4-Trimethylbenzene	3.28	0.500	ppbv		3.61			10	30	
1,3-Dichlorobenzene	BRL	0.500	ppbv		BRL				30	
Benzyl chloride	BRL	0.500	ppbv		BRL				30	
1,4-Dichlorobenzene	BRL	0.500	ppbv		BRL				30	
sec-Butylbenzene	BRL	0.500	ppbv		BRL				30	
4-Isopropyltoluene	0.580	0.500	ppbv		0.630			8	30	
1,2-Dichlorobenzene	0.820	0.500	ppbv		0.950			15	30	
n-Butylbenzene	BRL	0.500	ppbv		BRL				30	
1,2,4-Trichlorobenzene	BRL	0.500	ppbv		BRL				30	
Hexachlorobutadiene	BRL	0.500	ppbv		BRL				30	
Surrogate: 4-Bromofluorobenzene	*12.6*		ppbv	*10.0*		*126*	*70-130*			

Notes and Definitions

S02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
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.

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.

Validated by:
Hanibal C. Tayeh, Ph.D.
Kim Wisk

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Chain of Custody Record/Field Test Data Sheets for Air Analyses

SA9108419 CK

Page 1 of 1

Special Handling:
☐ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed: _____

All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.

Report To: CEA 62A Hall ST Concord, NH	**Invoice To:** CEA 127 Hartwell ST West Boylston, MA	**Project No.:** RI-0011-06 **Site Name:** Jeffries Residence **Location:** Landgrove **State:** VT
Tel #:	**Attn:**	**Sampler (s):** B. Hopper
Project Manager: B Hopper	**P.O. No.:** **RQN:**	

Can ID	Can Size (L)	Outgoing Canister Pressure ("Hg) (Lab)	Incoming Canister Pressure ("Hg) (Lab)	Flow Reg. ID	Flow Controller Readout (ml/min)	Lab Id:	Sample Id:	Sample Date(s)	Time Start (24 hr clock)	Time Stop (24 hr clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Analysis: TO-15	Matrix: Indoor /Ambient Air	Matrix: Soil Gas	Check box if canister is returned unused
LABORATORY USE ONLY																		
B93	6	-30		1309	206	-01	Basement	6/24/09	8:10	12:20	28	0	72	72	✓	✓		
0667	L	L		14	203	-02	1ST Floor LR	↓	8:10	12:20	28	0	65	65	✓	✓		
7632	L	L		2867	212	-03	Ambient		8:11	12:20	28	0	65	70	✓	✓		

Client Use		Ambient Temperature (Fahrenheit) Maximum	Ambient Temperature (Fahrenheit) Minimum	Ambient Pressure (inches of Hg) Maximum	Ambient Pressure (inches of Hg) Minimum
	Start				
	Stop				

Special Instructions/QC Requirements & Comments:

Date of Request: 6/16/09
Requested by: William Hopper
Company: CEA
Location: Concord NH

Summa Canisters: 3
Flow Controllers: 3
Flow Rate/Setting: 4 hrs
Date Needed:

*I attest that that all media relinquished from Spectrum Analytical, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document.**

Signed: William Hopper Date: 6/7/09
Printed: William Hopper

* *Please contact SA's Air Department immediately at (800) 789-9115 if you experience any technical difficulties or suspect any QC issue(s) with air media.*

☐ E-mail results _____
EDD format

Relinquished by:	Received by:	Date:	Time:
William Hopper		6/25/09	1502
		6/25/09	1748

11 Almgren Drive • Agawam, MA 01001 • 1-800-789-9115 • 413-789-9018 • FAX 413-789-4076 • www.spectrum-analytical.com

APPENDIX B

Boring Logs and Monitoring Well Construction Details

CORPORATE ENVIRONMENTAL ADVISORS, INC.

Assessments – Remediation – Emergency Response
62A HALL STREET, CONCORD, NH 03301

TEST BORING LOG
BORING NO. B(MW)–4

PROJECT: JEFFERY RESIDENCE, 8 NICHOLS ROAD, LANDGROVE, VERMONT
CLIENT: NATIONAL GRANGE MUTUAL INSURANCE COMPANY
BORING CONTRACTOR: DRILEX ENVIRONMENTAL
SHEET NO. 1 OF 1
JOB NO. RI–0011–06
TOR ELEVATION
DATE STARTED 6/8/09
DATE FINISHED 6/9/09
DRILLER J. Fluet
INSPECTOR WHH
DRILL RIG CME–55

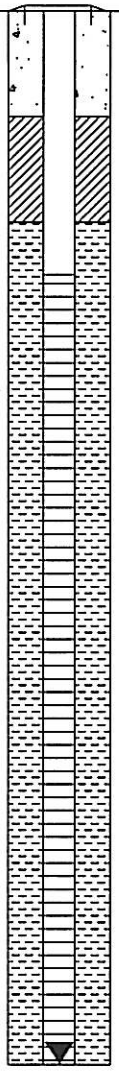
GROUNDWATER:

DATE	TIME	WATER DEPTH	REFERENCE

	CAS.	SAMPLE	CORE	TUBE
TYPE	HSA	S.S.		
DIA.	4.25"	2"		
WT.		140 LB.		
FALL		30"		

WELL CONSTRUCTION

Flush mounted manhole cover
Sakrete Mix
Medium Chip Bentonite
Riser: 2" PVC
#1 Filter Sand
Screen: 2" PVC with 0.010" slots
Silt Trap



DEPTH (FEET)	SAMPLE NO.	REC. (FT.)	BLOWS PER 0.5 FOOT	CLASSIFICATION	PID
				5.0	
5'	S–1	1.75	6 8 12 10	Tan, fine SAND and Silt. Moist. 7.0	<1.0
	S–2	1.5	7 8 10 15	Tan, SILT. Moist. Collected analytical sample. 9.0	<1.0
10'				Air hammered through large boulder from 8.75 to 10 feet bgs.	
15'				Air hammered through numerous other large boulders to 20 feet bgs. 20.0	
20'	S–3	1.0	15 12 19 12	Grey, coarse to medium to fine SAND and Silt. Interpreted as glacial till. Rock fragments in tip of spoon. Wet. Collected analytical sample. 22.0	139
25'				End of boring @ 22' bgs.	

CAD FILENAME B(MW)–4

CORPORATE ENVIRONMENTAL ADVISORS, INC.

Groundwater – Geotechnical and Environmental Services
62A HALL STREET, CONCORD, NH

TEST BORING LOG
BORING NO. B(MW)-5

PROJECT: JEFFERY RESIDENCE, 8 NICHOLS ROAD, LANDGROVE, VERMONT
CLIENT: NATIONAL GRANGE MUTUAL INSURANCE COMPANY
BORING CONTRACTOR: DRILEX ENVIRONMENTAL
SHEET NO. 1 OF 1
JOB NO. RI-0011-06
TOR ELEVATION
DATE STARTED 6/8/09
DATE FINISHED 6/8/09
DRILLER J. Fluet
INSPECTOR WHH
DRILL RIG CME-55

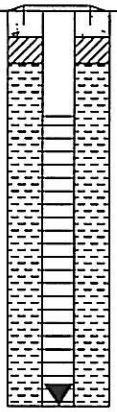
GROUNDWATER:

DATE	TIME	WATER DEPTH	REFERENCE

	CAS.	SAMPLE	CORE	TUBE
TYPE	HSA	S.S.		
DIA.	4.25"	2"		
WT.		140 LB.		
FALL		30"		

WELL CONSTRUCTION

Flush mounted manhole cover
Sakrete Mix
Medium Chip Bentonite
Riser: 2" PVC
#1 Filter Sand
Screen: 2" PVC with 0.010" slots
Silt Trap



DEPTH (FEET)	SAMPLE NO.	REC. (FT.)	BLOWS PER 0.5 FOOT	CLASSIFICATION	PID
				5.0	
5'	S-1	1.25	2 4 8 7	Grey, SILT. Moist to wet. Very tight. Collected analytical sample.	130
				7.0	
				Auger refusal on large boulder at 7.5 feet bgs. End of boring.	
10'					
15'					
20'					
25'					

CAD FILENAME B(MW)-5

CORPORATE ENVIRONMENTAL ADVISORS, INC.

Groundwater – Geotechnical and Environmental Services
62A HALL STREET, CONCORD, NH

TEST BORING LOG
BORING NO. B(MW)-6

PROJECT: JEFFERY RESIDENCE, 8 NICHOLS ROAD, LANDGROVE, VERMONT
CLIENT: NATIONAL GRANGE MUTUAL INSURANCE COMPANY
BORING CONTRACTOR: DRILEX ENVIRONMENTAL

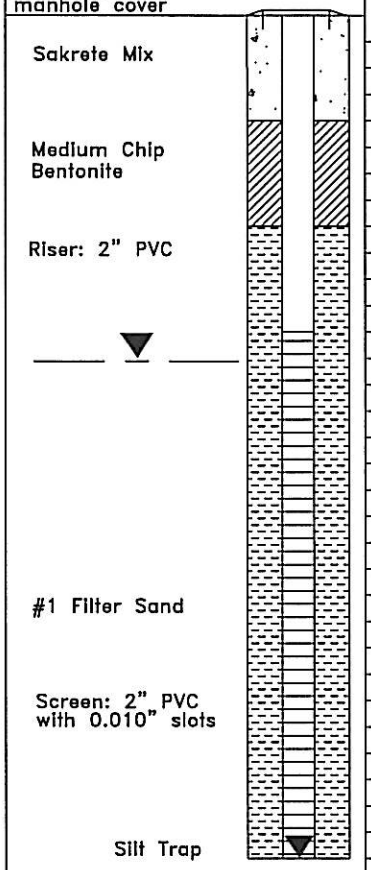
SHEET NO. 1 OF 1
JOB NO. RI-0011-06
TOR ELEVATION
DATE STARTED 6/8/09
DATE FINISHED 6/8/09
DRILLER J. Fluet
INSPECTOR WHH
DRILL RIG CME-55

GROUNDWATER:

DATE	TIME	WATER DEPTH	REFERENCE

	CAS.	SAMPLE	CORE	TUBE
TYPE	HSA	S.S.		
DIA.	4.25"	2"		
WT.		140 LB.		
FALL		30"		

WELL CONSTRUCTION



DEPTH (FEET)	SAMPLE NO.	SAMPLE REC. (FT.)	SAMPLE BLOWS PER 0.5 FOOT	CLASSIFICATION	PID
				5.0	
5'	S-1	--	0" for 100	No Recovery. 7.0	
				Air hammered from 5 to 16 feet bgs. Large boulder from 5 to 12 feet bgs. 16.0	
10'					
15'					
				End of boring at 16.0 feet bgs.	
20'					
25'					

CAD FILENAME B(MW)-6

CORPORATE ENVIRONMENTAL ADVISORS, INC.

Groundwater – Geotechnical and Environmental Services
62A HALL STREET, CONCORD, NH

TEST BORING LOG
BORING NO. B(MW)-7

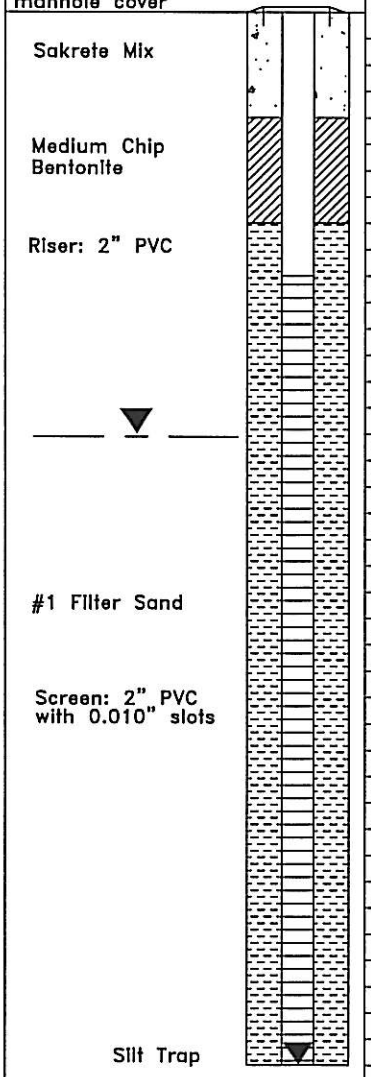
PROJECT: JEFFERY RESIDENCE, 8 NICHOLS ROAD, LANDGROVE, VERMONT
CLIENT: NATIONAL GRANGE MUTUAL INSURANCE COMPANY
BORING CONTRACTOR: DRILEX ENVIRONMENTAL
SHEET NO. 1 OF 1
JOB NO. RI-0011-06
TOR ELEVATION
DATE STARTED 6/9/09
DATE FINISHED 6/9/09
DRILLER J. Fluet
INSPECTOR WHH
DRILL RIG CME-55

GROUNDWATER:

DATE	TIME	WATER DEPTH	REFERENCE

	CAS.	SAMPLE	CORE	TUBE
TYPE	HSA	S.S.		
DIA.	4.25"	2"		
WT.		140 LB.		
FALL		30"		

WELL CONSTRUCTION



DEPTH (FEET)	SAMPLE NO.	SAMPLE REC. (FT.)	BLOWS PER 0.5 FOOT	CLASSIFICATION	PID
				3.5	
5'				Auger refusal. Air hammered through large boulder from 3.5 to 7.5 feet bgs. 7.5	
10'				11.5	
15'				Air hammered through several large boulders 11.5 to 16.5 feet bgs. 16.5	
				20.0	
20'				End of boring at 20.0 feet bgs.	
25'					

CAD FILENAME B(MW)-7