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Technical Memorandum

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Date: December 23, 2009

To: Ed Waddles, MTD Products Inc.

cc: Karen Crawford
RMT Project Team

From: Britney Barnes

Project No.: 00-71360.27

Subject: Summary of *In Situ* Soil and Groundwater Chemical Oxidation Interim Corrective Measure (ICM) for Groundwater – Expanded MW-13S Area, Columbia Manufacturing Company (CMC), Westfield, Massachusetts

The purpose of this memorandum is to document and communicate the results of an expanded soil and groundwater ICM that was conducted at the MW-13S area of the CMC facility (site) in Westfield, Massachusetts, during October and November 2009. MW-13S is located in the northern portion of the site, west (side-gradient) of the former vapor degreasing room (Figure 1, Attachment 1). This ICM included soil excavation, lime stabilization, and treatment and *in situ* soil blending of caustic-catalyzed sodium persulfate.

A prior ICM was conducted in the MW-13S area during October 2007 and summarized in a technical memorandum titled *Summary of Groundwater ISCO – MW-13S Area (RMT, June 2008).* Based on the performance groundwater data collected following the October 2007 groundwater injection event, tetrachloroethene (PCE) concentrations were successfully reduced to below the site media protection standard (MPS) of 1.2 mg/L (protective of human potential for exposure to organic vapors in indoor air). During early 2009, building demolition activities were conducted at the site whereby most of the older building structures were demolished and a soil cap was installed atop where the former manufacturing buildings had been located. The facility building that was formerly situated atop the MW-13S area was included in these building demolition activities. Following removal of all building debris, a site-wide groundwater sampling event was conducted by RMT in May 2009. Evaluation of the May 2009 data revealed that a significant increase in the PCE concentrations was observed in monitoring well MW-13SR. An increase in PCE concentrations (from 0.089 mg/L in May 2008 to 9.61 mg/L in May 2009) suggested the potential for a previously unknown and residual source of PCE proximal to this monitoring well. Because of the enhanced access around MW-13SR following building demolition, a more thorough investigation could be conducted of both the soil and the groundwater of this area. Increased accessibility also meant that a more focused remedial response could be applied to mitigate further increases in VOC concentrations and potential expansion of the PCE into the North End Groundwater where only dilute concentrations of chlorinated volatile constituents (CVOCs) still remain.

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Background

Several pilot studies were conducted at the site using the sodium persulfate oxidation technology – the first pilot study was conducted during July and August 2006, followed by another pilot study conducted during October and November 2006. Both these pilot studies were conducted in the northern portion of the site and were designed to evaluate the effectiveness of sodium persulfate oxidation technology in reducing the volatile organic compound (VOC) concentrations in the groundwater, as well as assessing the potential for site health and safety concerns attributed to excessive heat or vapor generated by the oxidation reactions. As described in RMT's October 12, 2006, and June 6, 2007, Technical Memoranda, the observed concentration of CVOCs in groundwater were reduced by more than 90 percent within the applied treatment zones. There was also no evidence of excessive heat or organic vapor generation that would otherwise restrict application of caustic-catalyzed sodium persulfate injections within the manufacturing buildings. Additionally, the pilot study conducted in the former vapor degreasing room was useful in that it allowed RMT to evaluate the effectiveness of caustic-catalyzed sodium persulfate injection as an *in situ* treatment technology for reducing the concentration of CVOCs in the unsaturated (vadose zone) soils, as well as the groundwater beneath and downgradient of the former vapor degreasing room. Consistent with the outcome of the first pilot study, the overall results of this study were also extremely positive. The observed concentration of CVOCs in groundwater was reduced by more than 90 percent within the treatment zone and there was qualitative evidence suggesting that residual VOC concentrations within the unsaturated soil had also been significantly reduced.

Refinement of Target Treatment Area

RMT mobilized to the site in October 2009, to conduct a direct-push soil and groundwater investigation and refine the targeted treatment area around MW-13S. The results of the direct push sampling identified only a small area where both PCE and trichloroethene (TCE) were detected at concentrations above their applicable MPS for soil and groundwater. The analytical results for these soil and groundwater samples are summarized and compared to the MPS on Table 1 in Attachment 2.

The direct-push results were used to define the target treatment area for subsequent remediation. The target treatment area was based on soil or groundwater results above an MPS. The target treatment area is shown on Figure 1 in Attachment 1.

In Situ ICM Activities

This ICM included excavation and soil stabilization of approximately 330 cubic yards of unsaturated soil with quicklime and *in situ* blending of quicklime activated sodium persulfate within approximately 455 cubic yards of saturated soil. The sodium persulfate was delivered to the site as a powder in super sack bags and mixed with powdered quicklime, also delivered to the site in super sack bags. The mixing of these two chemicals was conducted *in situ* to produce an oxidant mixture of approximately 20 percent (by weight) sodium persulfate and 5 percent (by weight) quicklime with the saturated soils.

Excavation activities included removal of the top 6-inches of unaffected top soil, which was staged just outside the treatment area; removal of 12 to 14 inches of unaffected fill material (debris from recent building demolition activities) that was staged outside the treatment area; and removal of approximately

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7 to 8 feet of PCE and TCE affected soil located above the water table. The affected soil was staged in the immediate vicinity of the excavation and thoroughly mixed with quicklime to effectively volatilize CVOCs that might be present in the soil. After the unsaturated soil were treated and staged, the quicklime activated sodium persulfate was blended *in situ* with the saturated soil present beneath the water table. Saturated soils were treated to depths ranging from 15 to 20 feet below ground surface (bgs). A total of approximately 52,400 lbs of quicklime was mixed into the unsaturated soil present above the water table and approximately 41,100 lbs of quicklime catalyzed sodium persulfate was blended *in situ* with the saturated soil.

During this ICM, MW-13SR (a replacement well installed following completion of building demolition activities) was removed and replaced with MW-13SRR to monitor the long-term effectiveness of the ICM. Additionally, a fill pipe was found during the excavation activities that appeared to contain some residual petroleum product. This fill pipe, along with an in-place abandoned underground storage tank (UST), were removed during the excavation activities. It is suspected that the fill pipe and UST may have been the continuing source of the PCE in the soil and groundwater in this area of the site.

Baseline Sampling Activities

As discussed previously in this memorandum, prior to conducting the excavation and treatment and *in situ* blending activities, a direct-push soil and groundwater investigation was conducted. Both soil and groundwater samples were collected from a total of 18 direct-push locations during the baseline sampling event. Soil samples were screened with a photoionization detector (PID) and the samples that had the highest PID readings at each direct-push location were sampled for laboratory analysis. Groundwater samples were collected using the Geoprobe® sampling tools which included a 2-foot stainless steel screen from which samples for laboratory analysis were collected. The groundwater samples were collected from the 2-foot interval at the bottom of the surficial aquifer to evaluate CVOC concentrations. The bottom of the surficial aquifer is the zone where highest CVOC levels have been observed and is defined by a glacial lacustrine unit comprised of varved silts and clays. This unit was typically encountered between 15 and 20 feet bgs.

Soil and groundwater samples were analyzed on a quick-turn basis for the primary constituents of concern, including PCE, TCE, *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride. The locations where the direct-push samples were collected are shown on Figure 1 in Attachment 1. The results of the soil and groundwater samples compared to the MPS are provided on Table 1 in Attachment 2. The laboratory analytical data is provided as Attachment 3.

Post-injection Performance Monitoring Results

Once the *in situ* treatment was completed, a second direct-push soil and groundwater sampling event was conducted to evaluate the performance effectiveness of the ICM. This sampling event was conducted approximately 4 weeks following completion of the i*n situ* chemical oxidation (ISCO) activities, December 15 and 16, 2009. During this performance sampling event, soil and groundwater samples were collected at the same locations and depths as the initial direct push sampling event. This sampling event was focused within the target treatment area only. The results from this performance

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sampling event are provided on Table 1, Attachment 2. The laboratory analytical data is provided as Attachment 3. The sample ID for the performance sampling results designated by an "A" following the direct push or soil sampling number. The soil and groundwater samples were analyzed for the same constituents that were included in the baseline sampling event.

The following items represent significant findings drived from RMT's evaluation of the data:

- Of the soil samples collected during the baseline sampling event, PCE and/or TCE were detected above the MPS at only two of the 18 locations (SB-203 and SB-204). Of these two locations, PCE was detected at its highest concentration of 123 mg/kg in the 12 to 13 foot sample collected at SB-203. This observed level is above the MPS for PCE of 10 mg/kg. The performance sample collected at this location and depth showed a greater than 99 percent reduction following the ISCO treatment, with PCE not detected above the laboratory reporting limit of <0.0046 mg/kg. The TCE concentration detected in the baseline sample collected from SB-203 (2.59 mg/kg versus an MPS of 2.0 mg/kg) was also reduced by greater than 99 percent following the ISCO treatment. This is a good indication that the *in situ* blending of the sodium persulfate was effective and successful.
- Most of the other locations where soil samples indicated detections of CVOCs during the baseline sampling also showed a greater than a 90 percent reduction in their observed CVOC concentrations during the performance sampling event.
- Of the groundwater samples collected during the baseline sampling event, PCE and/or TCE were detected above the MPS at only two of the 18 locations (SB-205 and SB-206). PCE was detected at its highest concentration at location SB-206, 62.7 mg/L versus an MPS of 1.2 mg/L. The performance sample collected at this location following the ISCO treatment revealed greater than 90 percent reduction in the PCE concentration, 0.288 mg/L (below the MPS of 1.2 mg/L). TCE was also detected in the baseline sample collected from this location at a concentration above its MPS of 0.8 mg/L. The performance sample showed a 100 percent reduction of TCE at this location following the ISCO treatment. Again, this was indicative that the *in situ* blending of the sodium persulfate with CVOC-effected soil was effective and successful.
- The groundwater sample collected from well MW-13SR during May 2009 identified PCE at a concentration of 9.61mg/L, above the MPS of 1.2 mg/L. The performance sample collected from replacement well MW-13SRR during December 2009 identified PCE at a concentrations of 0.252 mg/L, below the MPS.
- There were four isolated locations where soil samples collected during the performance sampling event identified TCE at concentrations just above the MPS (SB-201, SB-202, SB-204, and SB-206). As the performance sampling event was conducted only 4 weeks following the ISCO treatment, and field observations (odor and conductivity levels in the groundwater) indicate that active sodium persulfate remained present within the treatment area. It is anticipated that these slightly elevated concentrations will continue to decline with time, until the sodium persulfate has fully reacted and exhausted.
- There is one isolated location (DP-202A) where groundwater samples collected during the performance sampling event identified PCE at a concentration above the MPS. Although the

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concentration of PCE is well above the MPS, 49.5 mg/L versus 1.2 mg/L, field observations (odor and conductivity of the groundwater) indicate that there was still reactive sodium persulfate present within the treatment area during the performance sampling event. It is believed that the concentration of PCE will be further reduced by the active persulfate that remains within the treatment area and rebound of the PCE should not be expected in the downgradient monitoring wells.

Based on RMT's evaluation of the groundwater quality data, caustic-catalyzed sodium persulfate has performed well and continues to be an effective treatment technology for reducing organics concentrations in the groundwater and the soil of this site. Ongoing evaluation of the effectiveness of the sodium persulfate in reducing residual source level organics concentrations within the groundwater will continue to be conducted during future groundwater sampling events. RMT will be specifically looking for any evidence or signs of rebound effects in the groundwater of the source area and immediate downgradient areas.

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Attachment 1
Figure

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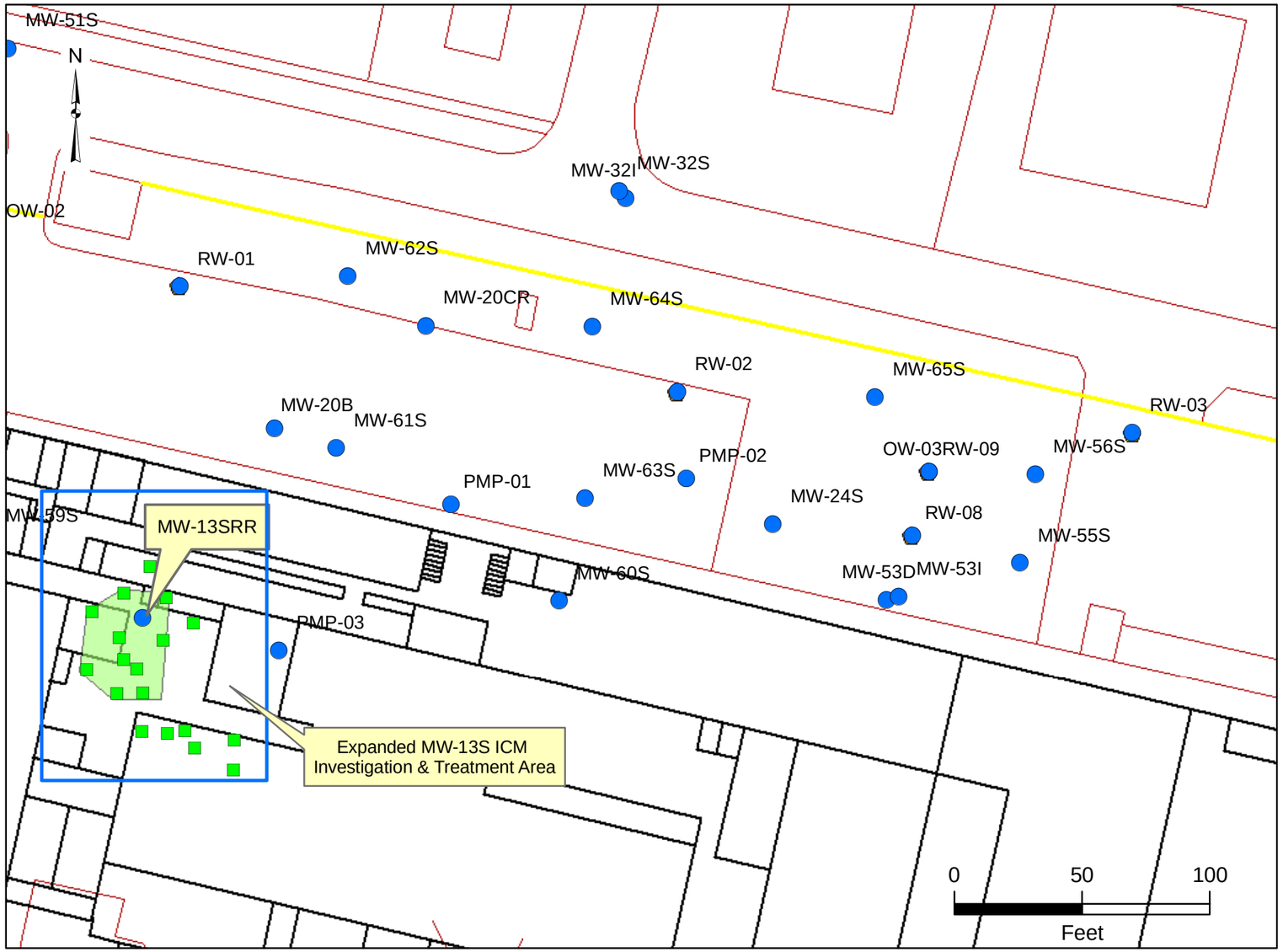

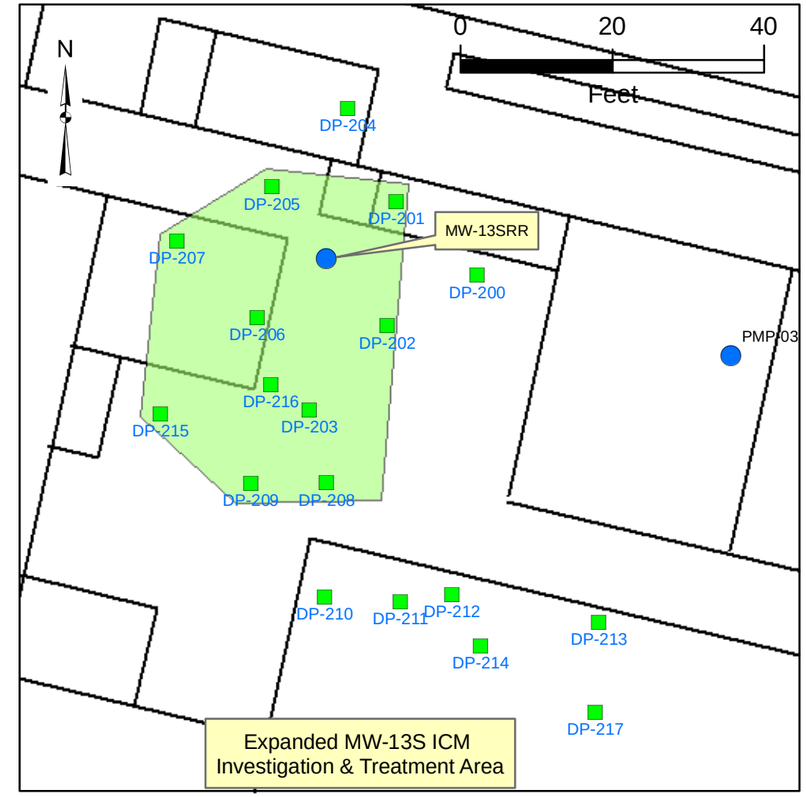

LEGEND

- Groundwater Monitoring Wells
- Recover Wells
- Property Boundary
- November 2009 Target Treatment Area
- October & December 2009 Direct Push Locations

MTD PRODUCTS, INC
WESTFIELD MASS

EXPANDED MW-13S ICM AREA
DATA POINT LOCATION MAP

DRAWN BY: BCB	SCALE AS NOTED	PROJECT NO.: 71360.31
CHECKED BY: JEP		DATE: DECEMBER 2009
APPROVED BY: MAM		FIGURE NO.: 1

RMT
Patewood Plaza One, Suite 100
30 Patewood Drive
Greenville, SC 29615-3535
Phone: 864-281-0030
FAX: 864-281-0288

Map Document: (P:\Hydro\71360\ArcGIS9\CMS Figures January 2010\December 2009 Expanded ICM MW-13s Area\Figure 1 - data point locatio map.mxd)
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Attachment 2
Tables

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Table 1
Expanded MW-135 Area
Pre- and Post-ICM Soil and Groundwater Results
Columbia Manufacturing Company, Westfield, Massachusetts
MTD Products Inc.

LOCATION	MATRIX	DATE	SAMPLE ID/ SAMPLE DEPTH	CONSTITUENT/CONCENTRATION (ppm)			
				PCE S=10 GW=1.2	TCE S=2 GW=0.8	*cis* -1,2-DCE S=4 GW=14	VINYL CHLORIDE S=0.7 GW=0.013
Location 200	Soil	10/06/09	SB-200/9	<0.884 D	<0.884 D	**2.21 D**	<0.884 D
		12/15/09	SB-200A/7	<0.806 D	<0.806 D	**1.88 D**	<0.806 D
		12/15/09	SB-200A/9.5	<0.0539 D	<0.0539 D	<0.0539 D	<0.0539 D
	Groundwater	10/06/09	DP-200	**0.0261**	**0.107**	**0.225**	**0.0778**
		12/15/09	DP-200A	<0.005	**0.0148**	**0.432**	**0.346**
Location 201	Soil	10/06/09	SB-201/9	<0.0422 D	<0.0422 D	<0.0422 D	<0.0422 D
		12/15/09	SB-201A/9	**1.56 D**	**3.47 D**	<0.389 D	<0.389 D
	Groundwater	10/06/09	DP-201	**0.498**	**0.0986**	**0.178**	**0.0695**
		12/15/09	DP-201A	<0.025 D	<0.025 D	<0.025 D	<0.025 D
Location 202	Soil	10/06/09	SB-202/9	<0.242 D	<0.242 D	<0.242 D	<0.242 D
		10/06/09	SB-202/18	**0.0452**	**0.0085**	**0.0094**	<0.0035
		12/15/09	SB-202A/9	**0.323 D**	**2.19 D**	<0.201 D	<0.201 D
		12/15/09	SB-202A/18	**1.47 D2**	<0.0578 D2	<0.0578 D2	<0.0578 D2
	Groundwater	10/06/09	DP-202	**0.0437 PH, M**	**0.152 PH, M**	**0.169 PH, M**	**0.0876 PH, M**
		12/15/09	DP-202A	**49.5**	<1	<1	<1
Location 203	Soil	10/06/09	SB-203/4.5	**0.314**	**2.59**	**0.079**	<0.0724
		10/06/09	SB-203/8	<0.628 D	<0.628 D	<0.628 D	<0.628 D
		10/06/09	SB-203/12-13	**123**	<0.134	<0.134	<0.134
		10/06/09	SB-203/17-18	**0.172**	<0.0402	<0.0402	<0.0402
		12/15/09	SB-203A/4-5	**0.0084**	**0.132**	<0.0055	<0.0055
		12/15/09	SB-203A/8	<0.34 D	<0.34 D	<0.34 D	<0.34 D
		12/15/09	SB-203A/12-13	<0.0046	<0.0046	<0.0046	<0.0046
		12/15/09	SB-203A/17-18	<0.0038	<0.0038	<0.0038	<0.0038
	Groundwater	10/06/09	DP-203	**0.17**	**0.104**	**0.161**	**0.0556**
		12/15/09	DP-203A	**0.156 D**	<0.05 D	<0.05 D	<0.05 D
Location 204	Soil	10/06/09	SB-204/8.8-9.5	**4.93 D**	<0.146 D	<0.146 D	<0.146 D
		12/16/09	SB-204A/8-9	**0.897 D**	**2.77 D**	<0.659 D	<0.659 D
	Groundwater	10/06/09	DP-204	**0.505**	**0.0201**	**0.0201**	<0.01
		12/16/09	DP-204/A	<0.025 D	<0.025 D	<0.025 D	<0.025 D

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MTD Products Inc.

LOCATION	MATRIX	DATE	SAMPLE ID/ SAMPLE DEPTH	CONSTITUENT/CONCENTRATION (ppm)			
				PCE S=10 GW=1.2	TCE S=2 GW=0.8	*cis* -1,2-DCE S=4 GW=14	VINYL CHLORIDE S=0.7 GW=0.013
Location 205	Soil	10/06/09	SB-205/9	<0.478 D	<0.478 D	<0.478 D	<0.478 D
		10/06/09	SB-205/15	**1.11**	<0.0358	<0.0358	<0.0358
		12/16/09	SB-205/9	<0.478 D	<0.478 D	<0.478 D	<0.478 D
		12/16/09	SB-205A/15	**0.0053**	**0.0436**	**0.0267**	**0.0043**
	Groundwater	10/06/09	DP-205	**3.75**	**0.182**	**0.172**	**0.0452**
		12/16/09	DP-205/A	<0.01 D	**0.0461 D**	**0.0257 D**	<0.01 D
Location 206	Soil	10/06/09	SB-206/8.5-9	<0.0396 D	<0.0396 D	<0.0396 D	<0.0396 D
		12/16/09	SB-206A/8.5-9	**0.998 D2**	**2.3 D2**	<0.0788 D2	<0.0788 D2
	Groundwater	10/06/09	DP-206	**62.7**	**1.16**	**0.316**	<0.2
		12/16/09	DP-206/A	**0.288 PH, D**	<0.2 PH, D	<0.2 PH, D	<0.2 PH, D
Location 207	Soil	10/06/09	SB-207/9.5	<0.346 D	<0.346 D	<0.346 D	<0.346 D
		12/16/09	SB-207A/9.5	<0.397 D	<0.397 D	<0.397 D	<0.397 D
	Groundwater	10/06/09	DP-207	**0.0492**	**0.308**	**0.271**	**0.049**
		12/16/09	DP-207/A	<0.005 D	<0.005 D	<0.005 D	<0.005 D
Location 208	Soil	10/06/09	SB-208/7	<0.595 D	<0.595 D	<0.595 D	<0.595 D
		10/06/09	SB-208/8	<0.425 D	<0.425 D	<0.425 D	<0.425 D
		12/16/09	SB-208A/7	<0.836 D	<0.836 D	<0.836 D	<0.836 D
		12/16/09	SB-208A/8.5	<0.0051	<0.0051	<0.0051	**0.0093**
	Groundwater	10/06/09	DP-208	**0.0131**	**0.179**	**0.184**	**0.0508**
		12/16/09	DP-208A	<0.005 D	<0.005 D	<0.005 D	<0.005 D
Location 209	Soil	10/07/09	SB-209/9	<0.109 D	<0.109 D	<0.109 D	<0.109 D
	Groundwater	10/07/09	DP-209	<0.005	**0.131**	**0.17**	**0.0378**
Location 210	Soil	10/07/09	SB-210/8	<0.49 D	<0.49 D	<0.49 D	<0.49 D
	Groundwater	10/07/09	DP-210	<0.01 M	**0.106 M**	**0.159 M**	**0.0355 M**
Location 211	Soil	10/07/09	SB-211/7-7.5	<1.26 D	<1.26 D	<1.26 D	<1.26 D
	Groundwater	10/07/09	DP-211	<0.005	**0.163**	**0.187**	**0.066**
Location 212	Soil	10/07/09	SB-212/7-8	<5.25 D	<5.25 D	<5.25 D	<5.25 D
	Groundwater	10/07/09	DP-212	<0.01 M	**0.129 M**	**0.241 M**	**0.13 M**
Location 213	Soil	10/07/09	SB-213/7.5	<0.22 D	<0.22 D	<0.22 D	<0.22 D
	Groundwater	10/07/09	DP-213	<0.001	**0.224**	**0.32**	**0.167**

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				PCE S=10 GW=1.2	TCE S=2 GW=0.8	*cis* -1,2-DCE S=4 GW=14	VINYL CHLORIDE S=0.7 GW=0.013
Location 214	Soil	10/07/09	SB-214/8	<0.738 D	<0.738 D	<0.738 D	<0.738 D
	Groundwater	10/07/09	DP-214	<0.005	**0.247**	**0.243**	**0.0742**
Location 215	Soil	10/07/09	SB-215/7	<0.0439 D	<0.0439 D	<0.0439 D	<0.0439 D
		12/16/09	SB-215A/7	<0.722 D	<0.722 D	<0.722 D	<0.722 D
	Groundwater	10/07/09	DP-215	<0.001	**0.218**	**0.172**	**0.0232**
		12/16/09	DP-215A	<0.005 PH, D	<0.005 PH, D	<0.005 PH, D	<0.005 PH, D
Location 216	Soil	10/07/09	SB-216/7.5	<0.611 D	<0.611 D	<0.611 D	<0.611 D
		12/16/09	SB-216A/7.5	<0.354 D	<0.354 D	<0.354 D	<0.354 D
		12/16/09	SB-216A/10.5	<0.0885 D	<0.0885 D	<0.0885 D	<0.0885 D
	Groundwater	10/07/09	DP-216	**0.209**	**0.142**	**0.174**	**0.0427**
		12/16/09	DP-216A	<0.005 PH, D	<0.005 PH, D	<0.005 PH, D	<0.005 PH, D
Location 217	Soil	10/07/09	SB-217/7	<0.243 D	<0.243 D	<0.243 D	<0.243 D
	Groundwater	10/07/09	DP-217	<0.001	**0.0577**	**0.0988**	**0.019**

D Elevated reporting limits due to the presence of high levels of non-target analytes.

D2 Sample dilution required for high concentration of target analytes to be within the instrument calibration range

M The reporting limit has been raised to account for matrix interference.

PH Insufficient preservative to reduce the sample pH to less than 2.

MPS: S - soil default standard for S-2, GW-2 groundwater

GW - groundwater default standard for GW-2 groundwater

Highlighted values exceed their respective Media Clean-up Standards

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Attachment 3
Laboratory Analytical Data Sheets

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Report Date:
07-Oct-09 12:31

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB01929-01	MW-13SR	Ground Water	06-Oct-09 10:00	06-Oct-09 13:45
SB01929-02	DP-200	Ground Water	06-Oct-09 09:45	06-Oct-09 13:45
SB01929-03	SB-200/9	Soil	06-Oct-09 09:50	06-Oct-09 13:45
SB01929-04	DP-201	Ground Water	06-Oct-09 10:20	06-Oct-09 13:45
SB01929-05	SB-201/9	Soil	06-Oct-09 10:30	06-Oct-09 13:45
SB01929-06	DP-202	Ground Water	06-Oct-09 11:20	06-Oct-09 13:45
SB01929-07	SB-202/9	Soil	06-Oct-09 11:00	06-Oct-09 13:45
SB01929-08	SB-202/18	Soil	06-Oct-09 11:30	06-Oct-09 13:45
SB01929-09	TBLK 09401	Deionized Water	06-Oct-09 00:00	06-Oct-09 13:45
SB01929-10	SB-203/4.5	Soil	06-Oct-09 12:00	06-Oct-09 13:45
SB01929-11	SB-203/8'	Soil	06-Oct-09 12:10	06-Oct-09 13:45

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 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 28 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.

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

Close File

CASE NARRATIVE:

The samples were received 10.0 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.

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

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

According to WSC-CAM 5/2004 Rev.4, Table 11 A-1, recovery for some VOC analytes have been deemed potentially difficult. Although they may still be within the recommended 70%-130% recovery range, a range has been set based on historical control limits.

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

SW846 8260B

Samples:

S909487-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

trans-1,3-Dichloropropene

This affected the following samples:

DP-202

SB01929-03 *SB-200/9*

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

SB01929-05 *SB-201/9*

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

SB01929-06 *DP-202*

Insufficient preservative to reduce the sample pH to less than 2.

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

SB01929-07 *SB-202/9*

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

SB01929-11 *SB-203/8'*

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

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-13SR	71360.31	Ground Water	06-Oct-09 10:00	06-Oct-09
SB01929-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	285		µg/l	100	100	SW846 8260B	06-Oct-09	06-Oct-09	9100380	
127-18-4	Tetrachloroethene	5,940		µg/l	100	100	"	"	"	"	
79-01-6	Trichloroethene	263		µg/l	100	100	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	100	100	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*93*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*98*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*95*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-200 SB01929-02	71360.31	Ground Water	06-Oct-09 09:45	06-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	225		µg/l	5.0	5	SW846 8260B	06-Oct-09	06-Oct-09	9100380	
127-18-4	Tetrachloroethene	26.1		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	107		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	77.8		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*97*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*97*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-200/9 SB01929-03	71360.31	Soil	06-Oct-09 09:50	06-Oct-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	06-Oct-09	06-Oct-09	9100429	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 13.4 g						
156-59-2	cis-1,2-Dichloroethene	2,210		µg/kg dry	884	500	SW846 8260B	06-Oct-09	06-Oct-09	9100377	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	884	500	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	884	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	884	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*107*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*86*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	76.6		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100400	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-201 SB01929-04	71360.31	Ground Water	06-Oct-09 10:20	06-Oct-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	178		µg/l	10.0	10	SW846 8260B	06-Oct-09	06-Oct-09	9100380	
127-18-4	Tetrachloroethene	498		µg/l	10.0	10	"	"	"	"	
79-01-6	Trichloroethene	98.6		µg/l	10.0	10	"	"	"	"	
75-01-4	Vinyl chloride	69.5		µg/l	10.0	10	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*100*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-201/9 SB01929-05	71360.31	Soil	06-Oct-09 10:30	06-Oct-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	06-Oct-09	06-Oct-09	9100429	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 25.13 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	42.2	50	SW846 8260B	06-Oct-09	07-Oct-09	9100420	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	42.2	50	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	42.2	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	42.2	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*107*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*82*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	86.6		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100400	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-202 SB01929-06	71360.31	Ground Water	06-Oct-09 11:20	06-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B			PH, R01								
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	169		µg/l	10.0	10	SW846 8260B	07-Oct-09	07-Oct-09	9100496	
127-18-4	Tetrachloroethene	43.7		µg/l	10.0	10	"	"	"	"	
79-01-6	Trichloroethene	152		µg/l	10.0	10	"	"	"	"	
75-01-4	Vinyl chloride	87.6		µg/l	10.0	10	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*104*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-202/9 SB01929-07	71360.31	Soil	06-Oct-09 11:00	06-Oct-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	06-Oct-09	06-Oct-09	9100429	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 21.24 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	242	200	SW846 8260B	06-Oct-09	06-Oct-09	9100377	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	242	200	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	242	200	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	242	200	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*121*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*83*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	77.3		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100400	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-202/18 SB01929-08	71360.31	Soil	06-Oct-09 11:30	06-Oct-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	06-Oct-09	06-Oct-09	9100429	
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Soil (high level)					Initial weight: 28.85 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	37.3	50	SW846 8260B	06-Oct-09	06-Oct-09	9100387	
127-18-4	Tetrachloroethene	45.2		µg/kg dry	37.3	50	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	37.3	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	37.3	50	"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5035A Soil (low level)											
156-59-2	cis-1,2-Dichloroethene	9.4		µg/kg dry	3.5	1	SW846 8260B	07-Oct-09	07-Oct-09	9100386	
127-18-4	Tetrachloroethene	31.7		µg/kg dry	3.5	1	"	"	"	"	
79-01-6	Trichloroethene	8.5		µg/kg dry	3.5	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	3.5	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*107*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*109*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	87.0		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100400	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK 09401	71360.31	Deionized Water	06-Oct-09 00:00	06-Oct-09
SB01929-09				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	SW846 8260B	06-Oct-09	06-Oct-09	9100380	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*95*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*98*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*107*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-203/4.5 SB01929-10	71360.31	Soil	06-Oct-09 12:00	06-Oct-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	06-Oct-09	06-Oct-09	9100429	
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Soil (high level)					Initial weight: 19.19 g						
156-59-2	cis-1,2-Dichloroethene	79.0		µg/kg dry	72.4	50	SW846 8260B	06-Oct-09	06-Oct-09	9100387	
127-18-4	Tetrachloroethene	314		µg/kg dry	72.4	50	"	"	"	"	
79-01-6	Trichloroethene	2,590		µg/kg dry	72.4	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	72.4	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*108*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*96*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	72.8		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100400	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-203/8' SB01929-11	71360.31	Soil	06-Oct-09 12:10	06-Oct-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	06-Oct-09	06-Oct-09	9100429	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 19.86 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	628	500	SW846 8260B	06-Oct-09	06-Oct-09	9100387	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	628	500	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	628	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	628	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*98*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*93*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	77.8		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100400	

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100377 - SW846 5030 Soil (high level)										
Blank (9100377-BLK1)										
Prepared & Analyzed: 06-Oct-09										
Benzene	BRL		µg/kg wet we	1.0						
Bromodichloromethane	BRL		µg/kg wet we	1.0						
Bromoform	BRL		µg/kg wet we	1.0						
Bromomethane	BRL		µg/kg wet we	2.0						
Carbon tetrachloride	BRL		µg/kg wet we	1.0						
Chlorobenzene	BRL		µg/kg wet we	1.0						
Chloroethane	BRL		µg/kg wet we	2.0						
Chloroform	BRL		µg/kg wet we	1.0						
Chloromethane	BRL		µg/kg wet we	2.0						
Dibromochloromethane	BRL		µg/kg wet we	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	2.0						
1,1-Dichloroethane	BRL		µg/kg wet we	1.0						
1,2-Dichloroethane	BRL		µg/kg wet we	1.0						
1,1-Dichloroethene	BRL		µg/kg wet we	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
1,2-Dichloropropane	BRL		µg/kg wet we	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
Methylene chloride	BRL		µg/kg wet we	5.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	1.0						
Tetrachloroethene	BRL		µg/kg wet we	1.0						
Toluene	BRL		µg/kg wet we	1.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	1.0						
Trichloroethene	BRL		µg/kg wet we	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	1.0						
Vinyl chloride	BRL		µg/kg wet we	1.0						
Surrogate: 4-Bromofluorobenzene	*30.0*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*30.0*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.0*		µg/l wet		*30.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*26.1*		µg/l wet		*30.0*		*87*	*70-130*		
LCS (9100377-BS1)										
Prepared & Analyzed: 06-Oct-09										
Bromodichloromethane	18.8		µg/l wet		20.0		94	70-130		
Bromoform	16.4		µg/l wet		20.0		82	70-130		
Bromomethane	15.4		µg/l wet		20.0		77	70-130		
Carbon tetrachloride	17.2		µg/l wet		20.0		86	70-130		
Chlorobenzene	20.8		µg/l wet		20.0		104	70-130		
Chloroethane	16.4		µg/l wet		20.0		82	70-130		
Chloroform	19.3		µg/l wet		20.0		96	70-130		
Chloromethane	17.7		µg/l wet		20.0		89	70-130		
Dibromochloromethane	17.2		µg/l wet		20.0		86	70-130		
1,2-Dichlorobenzene	22.4		µg/l wet		20.0		112	70-130		
1,3-Dichlorobenzene	20.9		µg/l wet		20.0		105	70-130		
1,4-Dichlorobenzene	20.8		µg/l wet		20.0		104	70-130		
1,1-Dichloroethane	19.7		µg/l wet		20.0		98	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100377 - SW846 5030 Soil (high level)										
LCS (9100377-BS1)										
Prepared & Analyzed: 06-Oct-09										
1,2-Dichloroethane	21.2		µg/l wet		20.0		106	70-130		
1,1-Dichloroethene	17.1		µg/l wet		20.0		85	70-130		
cis-1,2-Dichloroethene	22.1		µg/l wet		20.0		111	70-130		
trans-1,2-Dichloroethene	16.7		µg/l wet		20.0		83	70-130		
1,2-Dichloropropane	21.3		µg/l wet		20.0		106	70-130		
cis-1,3-Dichloropropene	18.3		µg/l wet		20.0		92	70-130		
trans-1,3-Dichloropropene	18.2		µg/l wet		20.0		91	70-130		
Methylene chloride	17.2		µg/l wet		20.0		86	70-130		
1,1,2,2-Tetrachloroethane	23.2		µg/l wet		20.0		116	70-130		
Tetrachloroethene	20.4		µg/l wet		20.0		102	70-130		
1,1,1-Trichloroethane	17.1		µg/l wet		20.0		85	70-130		
1,1,2-Trichloroethane	22.7		µg/l wet		20.0		113	70-130		
Trichloroethene	21.3		µg/l wet		20.0		107	70-130		
Trichlorofluoromethane (Freon 11)	19.6		µg/l wet		20.0		98	70-130		
Vinyl chloride	17.4		µg/l wet		20.0		87	70-130		
Surrogate: 4-Bromofluorobenzene	*30.7*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*30.4*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.5*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: Dibromofluoromethane	*29.4*		µg/l wet		*30.0*		*98*	*70-130*		
LCS Dup (9100377-BSD1)										
Prepared & Analyzed: 06-Oct-09										
Bromodichloromethane	18.7		µg/l wet		20.0		93	70-130	0.5	25
Bromoform	17.2		µg/l wet		20.0		86	70-130	5	25
Bromomethane	16.2		µg/l wet		20.0		81	70-130	5	50
Carbon tetrachloride	17.2		µg/l wet		20.0		86	70-130	0.3	25
Chlorobenzene	20.5		µg/l wet		20.0		102	70-130	2	25
Chloroethane	15.1		µg/l wet		20.0		75	70-130	8	50
Chloroform	18.4		µg/l wet		20.0		92	70-130	5	25
Chloromethane	16.6		µg/l wet		20.0		83	70-130	6	25
Dibromochloromethane	17.2		µg/l wet		20.0		86	70-130	0.2	50
1,2-Dichlorobenzene	22.0		µg/l wet		20.0		110	70-130	2	25
1,3-Dichlorobenzene	22.2		µg/l wet		20.0		111	70-130	6	25
1,4-Dichlorobenzene	20.2		µg/l wet		20.0		101	70-130	3	25
1,1-Dichloroethane	19.4		µg/l wet		20.0		97	70-130	1	25
1,2-Dichloroethane	20.7		µg/l wet		20.0		104	70-130	3	25
1,1-Dichloroethene	16.3		µg/l wet		20.0		81	70-130	5	25
cis-1,2-Dichloroethene	21.2		µg/l wet		20.0		106	70-130	4	25
trans-1,2-Dichloroethene	16.4		µg/l wet		20.0		82	70-130	2	25
1,2-Dichloropropane	20.5		µg/l wet		20.0		102	70-130	4	25
cis-1,3-Dichloropropene	18.1		µg/l wet		20.0		91	70-130	0.9	25
trans-1,3-Dichloropropene	17.2		µg/l wet		20.0		86	70-130	5	25
Methylene chloride	16.8		µg/l wet		20.0		84	70-130	3	25
1,1,2,2-Tetrachloroethane	22.8		µg/l wet		20.0		114	70-130	2	25
Tetrachloroethene	20.3		µg/l wet		20.0		102	70-130	0.2	25
1,1,1-Trichloroethane	16.1		µg/l wet		20.0		81	70-130	6	25
1,1,2-Trichloroethane	22.4		µg/l wet		20.0		112	70-130	1	25
Trichloroethene	19.7		µg/l wet		20.0		98	70-130	8	25
Trichlorofluoromethane (Freon 11)	19.2		µg/l wet		20.0		96	70-130	2	25
Vinyl chloride	16.2		µg/l wet		20.0		81	70-130	8	50
Surrogate: 4-Bromofluorobenzene	*31.3*		µg/l wet		*30.0*		*104*	*70-130*		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100377 - SW846 5030 Soil (high level)										
LCS Dup (9100377-BSD1)										
Prepared & Analyzed: 06-Oct-09										
Surrogate: Toluene-d8	*30.6*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.1*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.5*		µg/l wet		*30.0*		*98*	*70-130*		
Batch 9100380 - SW846 5030 Water MS										
Blank (9100380-BLK1)										
Prepared & Analyzed: 06-Oct-09										
Benzene	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
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						
Dibromochloromethane	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						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Methylene chloride	BRL		µg/l	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	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						
Vinyl chloride	BRL		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*46.8*		µg/l		*50.0*		*94*	*70-130*		
Surrogate: Toluene-d8	*49.1*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.8*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*48.1*		µg/l		*50.0*		*96*	*70-130*		
LCS (9100380-BS1)										
Prepared & Analyzed: 06-Oct-09										
Bromodichloromethane	21.0		µg/l		20.0		105	70-130		
Bromoform	22.0		µg/l		20.0		110	70-130		
Bromomethane	21.8		µg/l		20.0		109	70-130		
Carbon tetrachloride	22.6		µg/l		20.0		113	70-130		
Chlorobenzene	21.4		µg/l		20.0		107	70-130		
Chloroethane	20.2		µg/l		20.0		101	70-130		

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100380 - SW846 5030 Water MS										
LCS (9100380-BS1)										
Prepared & Analyzed: 06-Oct-09										
Chloroform	22.2		µg/l		20.0		111	70-130		
Chloromethane	24.5		µg/l		20.0		122	70-130		
Dibromochloromethane	20.2		µg/l		20.0		101	70-130		
1,2-Dichlorobenzene	22.2		µg/l		20.0		111	70-130		
1,3-Dichlorobenzene	22.2		µg/l		20.0		111	70-130		
1,4-Dichlorobenzene	21.0		µg/l		20.0		105	70-130		
1,1-Dichloroethane	22.0		µg/l		20.0		110	70-130		
1,2-Dichloroethane	18.5		µg/l		20.0		92	70-130		
1,1-Dichloroethene	22.1		µg/l		20.0		110	70-130		
cis-1,2-Dichloroethene	20.7		µg/l		20.0		104	70-130		
trans-1,2-Dichloroethene	19.7		µg/l		20.0		98	70-130		
1,2-Dichloropropane	21.0		µg/l		20.0		105	70-130		
cis-1,3-Dichloropropene	22.2		µg/l		20.0		111	70-130		
trans-1,3-Dichloropropene	22.1		µg/l		20.0		111	70-130		
Methylene chloride	21.9		µg/l		20.0		110	70-130		
1,1,2,2-Tetrachloroethane	20.4		µg/l		20.0		102	70-130		
Tetrachloroethene	21.7		µg/l		20.0		108	70-130		
1,1,1-Trichloroethane	20.5		µg/l		20.0		102	70-130		
1,1,2-Trichloroethane	20.6		µg/l		20.0		103	70-130		
Trichloroethene	19.6		µg/l		20.0		98	70-130		
Trichlorofluoromethane (Freon 11)	21.3		µg/l		20.0		107	70-130		
Vinyl chloride	25.2		µg/l		20.0		126	70-130		
Surrogate: 4-Bromofluorobenzene	*50.5*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*49.6*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*47.0*		µg/l		*50.0*		*94*	*70-130*		
Surrogate: Dibromofluoromethane	*51.2*		µg/l		*50.0*		*102*	*70-130*		
LCS Dup (9100380-BSD1)										
Prepared & Analyzed: 06-Oct-09										
Bromodichloromethane	20.2		µg/l		20.0		101	70-130	4	30
Bromoform	20.9		µg/l		20.0		105	70-130	5	30
Bromomethane	20.3		µg/l		20.0		101	70-130	7	30
Carbon tetrachloride	21.1		µg/l		20.0		105	70-130	7	30
Chlorobenzene	20.4		µg/l		20.0		102	70-130	5	30
Chloroethane	18.6		µg/l		20.0		93	70-130	8	30
Chloroform	21.0		µg/l		20.0		105	70-130	6	30
Chloromethane	22.8		µg/l		20.0		114	70-130	7	30
Dibromochloromethane	19.1		µg/l		20.0		95	70-130	6	30
1,2-Dichlorobenzene	20.9		µg/l		20.0		105	70-130	6	30
1,3-Dichlorobenzene	21.2		µg/l		20.0		106	70-130	5	30
1,4-Dichlorobenzene	19.8		µg/l		20.0		99	70-130	6	30
1,1-Dichloroethane	21.1		µg/l		20.0		106	70-130	4	30
1,2-Dichloroethane	18.0		µg/l		20.0		90	70-130	3	30
1,1-Dichloroethene	19.4		µg/l		20.0		97	70-130	13	30
cis-1,2-Dichloroethene	19.5		µg/l		20.0		97	70-130	6	30
trans-1,2-Dichloroethene	18.4		µg/l		20.0		92	70-130	7	30
1,2-Dichloropropane	20.1		µg/l		20.0		101	70-130	4	30
cis-1,3-Dichloropropene	21.2		µg/l		20.0		106	70-130	5	30
trans-1,3-Dichloropropene	21.0		µg/l		20.0		105	70-130	5	30
Methylene chloride	21.8		µg/l		20.0		109	70-130	0.5	30
1,1,2,2-Tetrachloroethane	20.7		µg/l		20.0		104	70-130	1	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100380 - SW846 5030 Water MS										
LCS Dup (9100380-BSD1)										
Prepared & Analyzed: 06-Oct-09										
Tetrachloroethene	19.7		µg/l		20.0		99	70-130	10	30
1,1,1-Trichloroethane	18.9		µg/l		20.0		94	70-130	8	30
1,1,2-Trichloroethane	20.3		µg/l		20.0		101	70-130	1	30
Trichloroethene	18.7		µg/l		20.0		94	70-130	4	30
Trichlorofluoromethane (Freon 11)	19.4		µg/l		20.0		97	70-130	10	30
Vinyl chloride	22.1		µg/l		20.0		111	70-130	13	30
Surrogate: 4-Bromofluorobenzene	*51.2*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*49.1*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*45.6*		µg/l		*50.0*		*91*	*70-130*		
Surrogate: Dibromofluoromethane	*46.5*		µg/l		*50.0*		*93*	*70-130*		
Batch 9100386 - SW846 5035A Soil (low level)										
Blank (9100386-BLK1)										
Prepared & Analyzed: 06-Oct-09										
Benzene	BRL		µg/kg wet we	5.0						
Bromodichloromethane	BRL		µg/kg wet we	5.0						
Bromoform	BRL		µg/kg wet we	5.0						
Bromomethane	BRL		µg/kg wet we	10.0						
Carbon tetrachloride	BRL		µg/kg wet we	5.0						
Chlorobenzene	BRL		µg/kg wet we	5.0						
Chloroethane	BRL		µg/kg wet we	10.0						
Chloroform	BRL		µg/kg wet we	5.0						
Chloromethane	BRL		µg/kg wet we	10.0						
Dibromochloromethane	BRL		µg/kg wet we	5.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	5.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	5.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	5.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	10.0						
1,1-Dichloroethane	BRL		µg/kg wet we	5.0						
1,2-Dichloroethane	BRL		µg/kg wet we	5.0						
1,1-Dichloroethene	BRL		µg/kg wet we	5.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	5.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	5.0						
1,2-Dichloropropane	BRL		µg/kg wet we	5.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	5.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	5.0						
Methylene chloride	BRL		µg/kg wet we	50.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	5.0						
Tetrachloroethene	BRL		µg/kg wet we	5.0						
Toluene	BRL		µg/kg wet we	5.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	5.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	5.0						
Trichloroethene	BRL		µg/kg wet we	5.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	5.0						
Vinyl chloride	BRL		µg/kg wet we	5.0						
Surrogate: 4-Bromofluorobenzene	*48.7*		µg/l wet		*50.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*49.7*		µg/l wet		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*53.4*		µg/l wet		*50.0*		*107*	*70-130*		
Surrogate: Dibromofluoromethane	*49.4*		µg/l wet		*50.0*		*99*	*70-130*		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100386 - SW846 5035A Soil (low level)										
LCS (9100386-BS1)										
Prepared & Analyzed: 06-Oct-09										
Bromodichloromethane	18.7		µg/l wet		20.0		94	70-130		
Bromoform	17.9		µg/l wet		20.0		89	70-130		
Bromomethane	18.9		µg/l wet		20.0		94	70-130		
Carbon tetrachloride	17.4		µg/l wet		20.0		87	70-130		
Chlorobenzene	20.6		µg/l wet		20.0		103	70-130		
Chloroethane	19.1		µg/l wet		20.0		96	70-130		
Chloroform	18.2		µg/l wet		20.0		91	70-130		
Chloromethane	19.4		µg/l wet		20.0		97	70-130		
Dibromochloromethane	16.6		µg/l wet		20.0		83	70-130		
1,2-Dichlorobenzene	20.6		µg/l wet		20.0		103	70-130		
1,3-Dichlorobenzene	21.5		µg/l wet		20.0		108	70-130		
1,4-Dichlorobenzene	19.3		µg/l wet		20.0		96	70-130		
1,1-Dichloroethane	19.2		µg/l wet		20.0		96	70-130		
1,2-Dichloroethane	17.8		µg/l wet		20.0		89	70-130		
1,1-Dichloroethene	20.5		µg/l wet		20.0		102	70-130		
cis-1,2-Dichloroethene	21.0		µg/l wet		20.0		105	70-130		
trans-1,2-Dichloroethene	19.2		µg/l wet		20.0		96	70-130		
1,2-Dichloropropane	20.1		µg/l wet		20.0		100	70-130		
cis-1,3-Dichloropropene	16.8		µg/l wet		20.0		84	70-130		
trans-1,3-Dichloropropene	16.2		µg/l wet		20.0		81	70-130		
Methylene chloride	18.3		µg/l wet		20.0		91	70-130		
1,1,2,2-Tetrachloroethane	21.1		µg/l wet		20.0		106	70-130		
Tetrachloroethene	18.6		µg/l wet		20.0		93	70-130		
1,1,1-Trichloroethane	17.4		µg/l wet		20.0		87	70-130		
1,1,2-Trichloroethane	20.7		µg/l wet		20.0		104	70-130		
Trichloroethene	19.3		µg/l wet		20.0		97	70-130		
Trichlorofluoromethane (Freon 11)	18.8		µg/l wet		20.0		94	70-130		
Vinyl chloride	20.8		µg/l wet		20.0		104	70-130		
Surrogate: 4-Bromofluorobenzene	*50.9*		µg/l wet		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*49.2*		µg/l wet		*50.0*		*98*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*44.9*		µg/l wet		*50.0*		*90*	*70-130*		
Surrogate: Dibromofluoromethane	*47.1*		µg/l wet		*50.0*		*94*	*70-130*		
LCS Dup (9100386-BSD1)										
Prepared & Analyzed: 06-Oct-09										
Bromodichloromethane	19.4		µg/l wet		20.0		97	70-130	3	30
Bromoform	18.1		µg/l wet		20.0		91	70-130	1	30
Bromomethane	19.3		µg/l wet		20.0		97	70-130	2	30
Carbon tetrachloride	18.0		µg/l wet		20.0		90	70-130	4	30
Chlorobenzene	20.6		µg/l wet		20.0		103	70-130	0.1	30
Chloroethane	20.3		µg/l wet		20.0		102	70-130	6	30
Chloroform	18.9		µg/l wet		20.0		95	70-130	4	30
Chloromethane	20.4		µg/l wet		20.0		102	70-130	5	30
Dibromochloromethane	17.6		µg/l wet		20.0		88	70-130	6	30
1,2-Dichlorobenzene	21.6		µg/l wet		20.0		108	70-130	5	30
1,3-Dichlorobenzene	23.0		µg/l wet		20.0		115	70-130	7	30
1,4-Dichlorobenzene	20.1		µg/l wet		20.0		100	70-130	4	30
1,1-Dichloroethane	20.1		µg/l wet		20.0		100	70-130	4	30
1,2-Dichloroethane	18.0		µg/l wet		20.0		90	70-130	0.9	30
1,1-Dichloroethene	21.6		µg/l wet		20.0		108	70-130	5	30
cis-1,2-Dichloroethene	21.4		µg/l wet		20.0		107	70-130	2	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100386 - SW846 5035A Soil (low level)										
LCS Dup (9100386-BSD1)										
Prepared & Analyzed: 06-Oct-09										
trans-1,2-Dichloroethene	20.2		µg/l wet		20.0		101	70-130	5	30
1,2-Dichloropropane	20.7		µg/l wet		20.0		103	70-130	3	30
cis-1,3-Dichloropropene	17.2		µg/l wet		20.0		86	70-130	3	30
trans-1,3-Dichloropropene	16.4		µg/l wet		20.0		82	70-130	0.9	30
Methylene chloride	20.0		µg/l wet		20.0		100	70-130	9	30
1,1,2,2-Tetrachloroethane	21.5		µg/l wet		20.0		108	70-130	2	30
Tetrachloroethene	19.0		µg/l wet		20.0		95	70-130	2	30
1,1,1-Trichloroethane	17.8		µg/l wet		20.0		89	70-130	2	30
1,1,2-Trichloroethane	21.0		µg/l wet		20.0		105	70-130	1	30
Trichloroethene	20.1		µg/l wet		20.0		100	70-130	4	30
Trichlorofluoromethane (Freon 11)	19.7		µg/l wet		20.0		99	70-130	5	30
Vinyl chloride	21.4		µg/l wet		20.0		107	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*52.4*		µg/l wet		*50.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*49.6*		µg/l wet		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*44.1*		µg/l wet		*50.0*		*88*	*70-130*		
Surrogate: Dibromofluoromethane	*46.6*		µg/l wet		*50.0*		*93*	*70-130*		
Batch 9100387 - SW846 5030 Soil (high level)										
Blank (9100387-BLK1)										
Prepared & Analyzed: 06-Oct-09										
Benzene	BRL		µg/kg wet we	1.0						
Bromodichloromethane	BRL		µg/kg wet we	1.0						
Bromoform	BRL		µg/kg wet we	1.0						
Bromomethane	BRL		µg/kg wet we	2.0						
Carbon tetrachloride	BRL		µg/kg wet we	1.0						
Chlorobenzene	BRL		µg/kg wet we	1.0						
Chloroethane	BRL		µg/kg wet we	2.0						
Chloroform	BRL		µg/kg wet we	1.0						
Chloromethane	BRL		µg/kg wet we	2.0						
Dibromochloromethane	BRL		µg/kg wet we	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	2.0						
1,1-Dichloroethane	BRL		µg/kg wet we	1.0						
1,2-Dichloroethane	BRL		µg/kg wet we	1.0						
1,1-Dichloroethene	BRL		µg/kg wet we	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
1,2-Dichloropropane	BRL		µg/kg wet we	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
Methylene chloride	BRL		µg/kg wet we	5.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	1.0						
Tetrachloroethene	BRL		µg/kg wet we	1.0						
Toluene	BRL		µg/kg wet we	1.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	1.0						
Trichloroethene	BRL		µg/kg wet we	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	1.0						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100387 - SW846 5030 Soil (high level)										
Blank (9100387-BLK1)										
Prepared & Analyzed: 06-Oct-09										
Vinyl chloride	BRL		µg/kg wet we	1.0						
Surrogate: 4-Bromofluorobenzene	*29.5*		µg/l wet		*30.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*30.1*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.1*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*24.1*		µg/l wet		*30.0*		*80*	*70-130*		
LCS (9100387-BS1)										
Prepared & Analyzed: 06-Oct-09										
Bromodichloromethane	21.3		µg/l wet		20.0		107	70-130		
Bromoform	19.9		µg/l wet		20.0		100	70-130		
Bromomethane	18.9		µg/l wet		20.0		94	70-130		
Carbon tetrachloride	18.6		µg/l wet		20.0		93	70-130		
Chlorobenzene	21.0		µg/l wet		20.0		105	70-130		
Chloroethane	19.9		µg/l wet		20.0		100	70-130		
Chloroform	15.8		µg/l wet		20.0		79	70-130		
Chloromethane	19.2		µg/l wet		20.0		96	70-130		
Dibromochloromethane	17.7		µg/l wet		20.0		89	70-130		
1,2-Dichlorobenzene	22.0		µg/l wet		20.0		110	70-130		
1,3-Dichlorobenzene	20.7		µg/l wet		20.0		103	70-130		
1,4-Dichlorobenzene	20.8		µg/l wet		20.0		104	70-130		
1,1-Dichloroethane	18.8		µg/l wet		20.0		94	70-130		
1,2-Dichloroethane	18.6		µg/l wet		20.0		93	70-130		
1,1-Dichloroethene	21.5		µg/l wet		20.0		107	70-130		
cis-1,2-Dichloroethene	16.3		µg/l wet		20.0		82	70-130		
trans-1,2-Dichloroethene	18.6		µg/l wet		20.0		93	70-130		
1,2-Dichloropropane	20.1		µg/l wet		20.0		101	70-130		
cis-1,3-Dichloropropene	17.6		µg/l wet		20.0		88	70-130		
trans-1,3-Dichloropropene	15.8		µg/l wet		20.0		79	70-130		
Methylene chloride	19.1		µg/l wet		20.0		95	70-130		
1,1,2,2-Tetrachloroethane	17.7		µg/l wet		20.0		89	70-130		
Tetrachloroethene	20.1		µg/l wet		20.0		100	70-130		
1,1,1-Trichloroethane	19.3		µg/l wet		20.0		97	70-130		
1,1,2-Trichloroethane	18.8		µg/l wet		20.0		94	70-130		
Trichloroethene	20.5		µg/l wet		20.0		102	70-130		
Trichlorofluoromethane (Freon 11)	23.3		µg/l wet		20.0		117	70-130		
Vinyl chloride	23.9		µg/l wet		20.0		120	70-130		
Surrogate: 4-Bromofluorobenzene	*28.7*		µg/l wet		*30.0*		*96*	*70-130*		
Surrogate: Toluene-d8	*29.2*		µg/l wet		*30.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*25.8*		µg/l wet		*30.0*		*86*	*70-130*		
Surrogate: Dibromofluoromethane	*29.1*		µg/l wet		*30.0*		*97*	*70-130*		
LCS Dup (9100387-BSD1)										
Prepared & Analyzed: 06-Oct-09										
Bromodichloromethane	22.1		µg/l wet		20.0		111	70-130	4	25
Bromoform	20.5		µg/l wet		20.0		102	70-130	3	25
Bromomethane	20.2		µg/l wet		20.0		101	70-130	6	50
Carbon tetrachloride	19.9		µg/l wet		20.0		100	70-130	7	25
Chlorobenzene	21.7		µg/l wet		20.0		108	70-130	3	25
Chloroethane	19.4		µg/l wet		20.0		97	70-130	3	50
Chloroform	19.6		µg/l wet		20.0		98	70-130	21	25
Chloromethane	19.6		µg/l wet		20.0		98	70-130	2	25
Dibromochloromethane	18.2		µg/l wet		20.0		91	70-130	3	50

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100387 - SW846 5030 Soil (high level)										
LCS Dup (9100387-BSD1)										
Prepared & Analyzed: 06-Oct-09										
1,2-Dichlorobenzene	22.1		µg/l wet		20.0		110	70-130	0.2	25
1,3-Dichlorobenzene	21.6		µg/l wet		20.0		108	70-130	4	25
1,4-Dichlorobenzene	21.3		µg/l wet		20.0		106	70-130	3	25
1,1-Dichloroethane	19.8		µg/l wet		20.0		99	70-130	5	25
1,2-Dichloroethane	19.2		µg/l wet		20.0		96	70-130	3	25
1,1-Dichloroethene	22.5		µg/l wet		20.0		113	70-130	5	25
cis-1,2-Dichloroethene	17.4		µg/l wet		20.0		87	70-130	6	25
trans-1,2-Dichloroethene	19.4		µg/l wet		20.0		97	70-130	4	25
1,2-Dichloropropane	20.7		µg/l wet		20.0		104	70-130	3	25
cis-1,3-Dichloropropene	18.2		µg/l wet		20.0		91	70-130	3	25
trans-1,3-Dichloropropene	16.3		µg/l wet		20.0		82	70-130	3	25
Methylene chloride	20.0		µg/l wet		20.0		100	70-130	5	25
1,1,2,2-Tetrachloroethane	18.3		µg/l wet		20.0		92	70-130	3	25
Tetrachloroethene	20.9		µg/l wet		20.0		105	70-130	4	25
1,1,1-Trichloroethane	20.6		µg/l wet		20.0		103	70-130	6	25
1,1,2-Trichloroethane	19.2		µg/l wet		20.0		96	70-130	2	25
Trichloroethene	21.3		µg/l wet		20.0		107	70-130	4	25
Trichlorofluoromethane (Freon 11)	24.5		µg/l wet		20.0		122	70-130	5	25
Vinyl chloride	22.8		µg/l wet		20.0		114	70-130	5	50
Surrogate: 4-Bromofluorobenzene	*28.0*		µg/l wet		*30.0*		*93*	*70-130*		
Surrogate: Toluene-d8	*30.7*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*26.5*		µg/l wet		*30.0*		*88*	*70-130*		
Surrogate: Dibromofluoromethane	*29.9*		µg/l wet		*30.0*		*100*	*70-130*		
Batch 9100420 - SW846 5030 Soil (high level)										
Blank (9100420-BLK1)										
Prepared & Analyzed: 06-Oct-09										
Benzene	BRL		µg/kg wet we	1.0						
Bromodichloromethane	BRL		µg/kg wet we	1.0						
Bromoform	BRL		µg/kg wet we	1.0						
Bromomethane	BRL		µg/kg wet we	2.0						
Carbon tetrachloride	BRL		µg/kg wet we	1.0						
Chlorobenzene	BRL		µg/kg wet we	1.0						
Chloroethane	BRL		µg/kg wet we	2.0						
Chloroform	BRL		µg/kg wet we	1.0						
Chloromethane	BRL		µg/kg wet we	2.0						
Dibromochloromethane	BRL		µg/kg wet we	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	2.0						
1,1-Dichloroethane	BRL		µg/kg wet we	1.0						
1,2-Dichloroethane	BRL		µg/kg wet we	1.0						
1,1-Dichloroethene	BRL		µg/kg wet we	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
1,2-Dichloropropane	BRL		µg/kg wet we	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
Methylene chloride	BRL		µg/kg wet we	10.0						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100420 - SW846 5030 Soil (high level)										
Blank (9100420-BLK1)										
Prepared & Analyzed: 06-Oct-09										
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	1.0						
Tetrachloroethene	BRL		µg/kg wet we	1.0						
Toluene	BRL		µg/kg wet we	1.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	1.0						
Trichloroethene	BRL		µg/kg wet we	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	1.0						
Vinyl chloride	BRL		µg/kg wet we	1.0						
Surrogate: 4-Bromofluorobenzene	*29.4*		µg/l wet		*30.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*29.6*		µg/l wet		*30.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.0*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*26.0*		µg/l wet		*30.0*		*87*	*70-130*		
LCS (9100420-BS1)										
Prepared & Analyzed: 06-Oct-09										
Bromodichloromethane	18.4		µg/l wet		20.0		92	70-130		
Bromoform	16.9		µg/l wet		20.0		84	70-130		
Bromomethane	15.3		µg/l wet		20.0		76	70-130		
Carbon tetrachloride	18.3		µg/l wet		20.0		92	70-130		
Chlorobenzene	22.9		µg/l wet		20.0		114	70-130		
Chloroethane	15.9		µg/l wet		20.0		80	70-130		
Chloroform	19.3		µg/l wet		20.0		96	70-130		
Chloromethane	16.4		µg/l wet		20.0		82	70-130		
Dibromochloromethane	17.0		µg/l wet		20.0		85	70-130		
1,2-Dichlorobenzene	22.7		µg/l wet		20.0		113	70-130		
1,3-Dichlorobenzene	23.3		µg/l wet		20.0		116	70-130		
1,4-Dichlorobenzene	21.2		µg/l wet		20.0		106	70-130		
1,1-Dichloroethane	21.0		µg/l wet		20.0		105	70-130		
1,2-Dichloroethane	19.6		µg/l wet		20.0		98	70-130		
1,1-Dichloroethene	18.2		µg/l wet		20.0		91	70-130		
cis-1,2-Dichloroethene	23.2		µg/l wet		20.0		116	70-130		
trans-1,2-Dichloroethene	17.3		µg/l wet		20.0		87	70-130		
1,2-Dichloropropane	21.0		µg/l wet		20.0		105	70-130		
cis-1,3-Dichloropropene	18.7		µg/l wet		20.0		93	70-130		
trans-1,3-Dichloropropene	17.8		µg/l wet		20.0		89	70-130		
Methylene chloride	16.6		µg/l wet		20.0		83	70-130		
1,1,2,2-Tetrachloroethane	21.0		µg/l wet		20.0		105	70-130		
Tetrachloroethene	22.5		µg/l wet		20.0		112	70-130		
1,1,1-Trichloroethane	18.8		µg/l wet		20.0		94	70-130		
1,1,2-Trichloroethane	22.4		µg/l wet		20.0		112	70-130		
Trichloroethene	22.1		µg/l wet		20.0		111	70-130		
Trichlorofluoromethane (Freon 11)	20.3		µg/l wet		20.0		102	70-130		
Vinyl chloride	16.1		µg/l wet		20.0		80	70-130		
Surrogate: 4-Bromofluorobenzene	*30.7*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*29.5*		µg/l wet		*30.0*		*98*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.2*		µg/l wet		*30.0*		*94*	*70-130*		
Surrogate: Dibromofluoromethane	*28.9*		µg/l wet		*30.0*		*96*	*70-130*		
LCS Dup (9100420-BSD1)										
Prepared & Analyzed: 06-Oct-09										
Bromodichloromethane	17.6		µg/l wet		20.0		88	70-130	4	30
Bromoform	15.5		µg/l wet		20.0		78	70-130	9	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100420 - SW846 5030 Soil (high level)										
LCS Dup (9100420-BSD1)										
Prepared & Analyzed: 06-Oct-09										
Bromomethane	14.2		µg/l wet		20.0		71	70-130	7	30
Carbon tetrachloride	17.5		µg/l wet		20.0		87	70-130	5	30
Chlorobenzene	20.7		µg/l wet		20.0		103	70-130	10	30
Chloroethane	15.0		µg/l wet		20.0		75	70-130	6	30
Chloroform	18.3		µg/l wet		20.0		92	70-130	5	30
Chloromethane	16.3		µg/l wet		20.0		81	70-130	0.9	30
Dibromochloromethane	16.4		µg/l wet		20.0		82	70-130	3	30
1,2-Dichlorobenzene	21.6		µg/l wet		20.0		108	70-130	5	30
1,3-Dichlorobenzene	20.9		µg/l wet		20.0		104	70-130	11	30
1,4-Dichlorobenzene	19.1		µg/l wet		20.0		96	70-130	10	30
1,1-Dichloroethane	18.7		µg/l wet		20.0		93	70-130	12	30
1,2-Dichloroethane	19.4		µg/l wet		20.0		97	70-130	1	30
1,1-Dichloroethene	17.3		µg/l wet		20.0		87	70-130	5	30
cis-1,2-Dichloroethene	21.8		µg/l wet		20.0		109	70-130	6	30
trans-1,2-Dichloroethene	16.3		µg/l wet		20.0		82	70-130	6	30
1,2-Dichloropropane	19.8		µg/l wet		20.0		99	70-130	6	30
cis-1,3-Dichloropropene	17.9		µg/l wet		20.0		90	70-130	4	30
trans-1,3-Dichloropropene	17.0		µg/l wet		20.0		85	70-130	5	30
Methylene chloride	16.4		µg/l wet		20.0		82	70-130	2	30
1,1,2,2-Tetrachloroethane	20.7		µg/l wet		20.0		103	70-130	2	30
Tetrachloroethene	20.0		µg/l wet		20.0		100	70-130	12	30
1,1,1-Trichloroethane	17.3		µg/l wet		20.0		87	70-130	8	30
1,1,2-Trichloroethane	21.0		µg/l wet		20.0		105	70-130	7	30
Trichloroethene	21.0		µg/l wet		20.0		105	70-130	5	30
Trichlorofluoromethane (Freon 11)	18.9		µg/l wet		20.0		94	70-130	7	30
Vinyl chloride	15.2		µg/l wet		20.0		76	70-130	5	30
Surrogate: 4-Bromofluorobenzene	*30.7*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*29.7*		µg/l wet		*30.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.8*		µg/l wet		*30.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*28.9*		µg/l wet		*30.0*		*96*	*70-130*		
Batch 9100496 - SW846 5030 Water MS										
Blank (9100496-BLK1)										
Prepared & Analyzed: 07-Oct-09										
Benzene	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
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						
Dibromochloromethane	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						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100496 - SW846 5030 Water MS										
Blank (9100496-BLK1)										
Prepared & Analyzed: 07-Oct-09										
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						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Methylene chloride	BRL		µg/l	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	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						
Vinyl chloride	BRL		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*47.3*		µg/l		*50.0*		*95*	*70-130*		
Surrogate: Toluene-d8	*49.5*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.4*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*55.3*		µg/l		*50.0*		*111*	*70-130*		
LCS (9100496-BS1)										
Prepared & Analyzed: 07-Oct-09										
Bromodichloromethane	21.7		µg/l		20.0		108	70-130		
Bromoform	22.2		µg/l		20.0		111	70-130		
Bromomethane	21.8		µg/l		20.0		109	70-130		
Carbon tetrachloride	24.3		µg/l		20.0		121	70-130		
Chlorobenzene	20.4		µg/l		20.0		102	70-130		
Chloroethane	18.3		µg/l		20.0		91	70-130		
Chloroform	22.2		µg/l		20.0		111	70-130		
Chloromethane	25.1		µg/l		20.0		126	70-130		
Dibromochloromethane	20.9		µg/l		20.0		104	70-130		
1,2-Dichlorobenzene	21.4		µg/l		20.0		107	70-130		
1,3-Dichlorobenzene	20.6		µg/l		20.0		103	70-130		
1,4-Dichlorobenzene	20.0		µg/l		20.0		100	70-130		
1,1-Dichloroethane	22.3		µg/l		20.0		112	70-130		
1,2-Dichloroethane	19.5		µg/l		20.0		98	70-130		
1,1-Dichloroethene	21.2		µg/l		20.0		106	70-130		
cis-1,2-Dichloroethene	20.3		µg/l		20.0		101	70-130		
trans-1,2-Dichloroethene	18.8		µg/l		20.0		94	70-130		
1,2-Dichloropropane	20.7		µg/l		20.0		103	70-130		
cis-1,3-Dichloropropene	22.6		µg/l		20.0		113	70-130		
trans-1,3-Dichloropropene	24.7		µg/l		20.0		124	70-130		
Methylene chloride	21.4		µg/l		20.0		107	70-130		
1,1,2,2-Tetrachloroethane	20.7		µg/l		20.0		104	70-130		
Tetrachloroethene	20.4		µg/l		20.0		102	70-130		
1,1,1-Trichloroethane	22.3		µg/l		20.0		112	70-130		
1,1,2-Trichloroethane	21.0		µg/l		20.0		105	70-130		
Trichloroethene	19.5		µg/l		20.0		98	70-130		
Trichlorofluoromethane (Freon 11)	21.1		µg/l		20.0		106	70-130		
Vinyl chloride	24.9		µg/l		20.0		125	70-130		
Surrogate: 4-Bromofluorobenzene	*50.1*		µg/l		*50.0*		*100*	*70-130*		

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100496 - SW846 5030 Water MS										
LCS (9100496-BS1)										
Prepared & Analyzed: 07-Oct-09										
Surrogate: Toluene-d8	*49.4*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.8*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*52.1*		µg/l		*50.0*		*104*	*70-130*		
LCS Dup (9100496-BSD1)										
Prepared & Analyzed: 07-Oct-09										
Bromodichloromethane	21.1		µg/l		20.0		105	70-130	3	30
Bromoform	21.3		µg/l		20.0		106	70-130	4	30
Bromomethane	20.5		µg/l		20.0		102	70-130	6	30
Carbon tetrachloride	21.8		µg/l		20.0		109	70-130	11	30
Chlorobenzene	19.2		µg/l		20.0		96	70-130	6	30
Chloroethane	18.4		µg/l		20.0		92	70-130	0.7	30
Chloroform	21.1		µg/l		20.0		106	70-130	5	30
Chloromethane	23.8		µg/l		20.0		119	70-130	6	30
Dibromochloromethane	19.9		µg/l		20.0		99	70-130	5	30
1,2-Dichlorobenzene	20.8		µg/l		20.0		104	70-130	3	30
1,3-Dichlorobenzene	19.1		µg/l		20.0		96	70-130	8	30
1,4-Dichlorobenzene	19.0		µg/l		20.0		95	70-130	5	30
1,1-Dichloroethane	21.0		µg/l		20.0		105	70-130	6	30
1,2-Dichloroethane	18.8		µg/l		20.0		94	70-130	4	30
1,1-Dichloroethene	19.2		µg/l		20.0		96	70-130	10	30
cis-1,2-Dichloroethene	19.4		µg/l		20.0		97	70-130	4	30
trans-1,2-Dichloroethene	18.0		µg/l		20.0		90	70-130	4	30
1,2-Dichloropropane	19.6		µg/l		20.0		98	70-130	5	30
cis-1,3-Dichloropropene	21.2		µg/l		20.0		106	70-130	6	30
trans-1,3-Dichloropropene	21.5		µg/l		20.0		108	70-130	14	30
Methylene chloride	21.0		µg/l		20.0		105	70-130	2	30
1,1,2,2-Tetrachloroethane	20.7		µg/l		20.0		103	70-130	0.3	30
Tetrachloroethene	19.2		µg/l		20.0		96	70-130	6	30
1,1,1-Trichloroethane	19.7		µg/l		20.0		98	70-130	13	30
1,1,2-Trichloroethane	20.4		µg/l		20.0		102	70-130	3	30
Trichloroethene	18.4		µg/l		20.0		92	70-130	6	30
Trichlorofluoromethane (Freon 11)	19.1		µg/l		20.0		95	70-130	10	30
Vinyl chloride	22.9		µg/l		20.0		115	70-130	8	30
Surrogate: 4-Bromofluorobenzene	*50.8*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*48.6*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*49.4*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*51.3*		µg/l		*50.0*		*103*	*70-130*		

Close File

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
PH	Insufficient preservative to reduce the sample pH to less than 2.
R01	The Reporting Limit has been raised to account for matrix interference.
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

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.
June O'Connor
Kim Wisk

Close File

MADEP MCP ANALYTICAL METHOD REPORT CERTIFICATION FORM

Laboratory Name: Spectrum Analytical, Inc. - Agawam, MA	Project #: 71360.31
Project Location: MTD-Columbia Manufacturing-Westfield, MA	MADEP RTN [1]:

This form provides certifications for the following data set:

SB01929-01 through SB01929-11

Sample matrices:	Deionized Water Ground Water Soil				
MCP SW-846 Methods Used	☑ 8260B	☐ 8151A	☐ 8330	☐ 6010B	☐ 7470A/1A
	☐ 8270C	☐ 8081A	☐ VPH	☐ 6020	☐ 9014M [2]
	☐ 8082	☐ 8021B	☐ EPH	☐ 7000S [3]	☐ 7196A

1 List Release Tracking Number (RTN), if known
2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method
3 S - SW-846 Methods 7000 Series List individual method and analyte

An affirmative response to questions A, B, C and D is required for "Presumptive Certainty" status

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain of Custody documentation for the data set?	☑ Yes ☐ No
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	☑ Yes ☐ No
C	Does the data included in this report meet all the analytical requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes ☐ No
D	***VPH and EPH methods only***: Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective methods)?	☐ Yes ☐ No

A response to questions E and F below is required for "Presumptive Certainty" status

E	Were all analytical QC performance standards and recommendations for the specified methods achieved?	☑ Yes ☐ No
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	☐ Yes ☑ No

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

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

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

Date: 10/7/2009

SB 01929 Em

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 2

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

Report To: Britney Barnes, Terry Hertz

Project Mgr.: Steve Webb
Telephone #: 864 281 0030

Invoice To: Accounts Payable, RMT, Inc., Madison WI

P.O. No.: _____ RQN: _____

Project No.: 71360.31
Site Name: Columbia Manufacturing
Location: Westfield State: MA
Sampler(s): Bill Medlin, Britney Barnes

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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs - PCE, TCE, cis-1,2DCE, VC
01929 01	MW-13SR	10-6-09	1000	G	GW	3				X
02	DP-200	10-6-09	0945	G	GW	3				X
03	SB-200/9		0950	G	SO	2		1		X
04	DP-201		1020	G	GW	3				X
05	SB-201/9		1030	G	SO	2		1		X
06	DP-202		1120	G	GW	3				X
07	SB-202/9		1100	G	SO	2		1		X
08	SB-202/18		1130	G	SO	2		1		X
09	TBLK 09401	—	—		DI	1				X
10	SB-203/4.5	10-6-09	1200	G	SO	2		1		X

Analyses:

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

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

State specific reporting standards: _____

Screening level results requested ASAP please call Britney Barnes @ 864 414 8021

EDD Format Britney Barnes, Terry Hertz
☒ E-mail to " "

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	10/6/09	1345

Condition upon receipt: ☒ Iced ☐ Ambient ☐ °C 10

SB 01929 TEY

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 2 of 2

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

Report To: Britney Barnes

Project Mgr.: Steve Webb

Telephone #:

Invoice To: Accounts Payable

P.O. No.: RQN:

Project No.: fo 71360.31

Site Name: Columbia Manufacturing

Location: Westfield State: MA

Sampler(s): BJB, WEM

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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	PLE	TLE	CS1ZDLE	VC	VOS
01929-11	SB-203/8'	10-6-09	1210	G	SO	2		1						X

Analyses:

☐ 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
☐ E-mail to

Relinquished by:	Received by:	Date:	Time:
BrBarnes	[illegible]	10/6/09	1345

Condition upon receipt: ☒ Iced ☐ Ambient ☐ °C 10

Close File

Report Date:
11-Jan-10 15:27

☐ Final Report
☐ Re-Issued Report
☑ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB01971-01	SB-203/12-13	Soil	06-Oct-09 12:20	06-Oct-09 17:44
SB01971-02	SB-203/17-18	Soil	06-Oct-09 12:30	06-Oct-09 17:44
SB01971-03	DP-203	Ground Water	06-Oct-09 12:40	06-Oct-09 17:44
SB01971-04	SB-204/8.8-9.5	Soil	06-Oct-09 13:25	06-Oct-09 17:44
SB01971-05	DP-204	Ground Water	06-Oct-09 13:40	06-Oct-09 17:44
SB01971-06	SB-205/9	Soil	06-Oct-09 14:20	06-Oct-09 17:44
SB01971-07	DP-205	Ground Water	06-Oct-09 14:30	06-Oct-09 17:44
SB01971-08	SB-205/15	Soil	06-Oct-09 14:45	06-Oct-09 17:44
SB01971-09	SB-206/8.5-9	Soil	06-Oct-09 15:15	06-Oct-09 17:44
SB01971-10	DP-206	Ground Water	06-Oct-09 15:30	06-Oct-09 17:44
SB01971-11	DP-207	Ground Water	06-Oct-09 16:10	06-Oct-09 17:44
SB01971-12	SB-207/9.5	Soil	06-Oct-09 16:00	06-Oct-09 17:44
SB01971-13	SB-208/7	Soil	06-Oct-09 16:40	06-Oct-09 17:44
SB01971-14	SB-208/8	Soil	06-Oct-09 16:45	06-Oct-09 17:44
SB01971-15	DP-208	Ground Water	06-Oct-09 16:55	06-Oct-09 17:44
SB01971-16	TBLK 09402	Deionized Water	06-Oct-09 00:00	06-Oct-09 17:44

Close File

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 29 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.

Close File

CASE NARRATIVE:

The samples were received 9.6 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.

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.

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

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

SW846 8260B

Close File

SW846 8260B

Samples:

S909487-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

trans-1,3-Dichloropropene (30.6%)

This affected the following samples:

DP-203
DP-204

S909513-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

Bromomethane (32.9%)

This affected the following samples:

DP-205
DP-206
DP-207
DP-208
TBLK 09402

SB01971-01 *SB-203/12-13*

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

Tetrachloroethene

SB01971-04 *SB-204/8.8-9.5*

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

SB01971-06 *SB-205/9*

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

SB01971-07 *DP-205*

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

Tetrachloroethene

SB01971-09 *SB-206/8.5-9*

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

SB01971-10 *DP-206*

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

Tetrachloroethene

SB01971-12 *SB-207/9.5*

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

SB01971-13 *SB-208/7*

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

Close File

SW846 8260B

Samples:

SB01971-14 *SB-208/8*

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

SB01971-15 *DP-208*

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

cis-1,2-Dichloroethene
Trichloroethene
Vinyl chloride

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-203/12-13 SB01971-01	71360.31	Soil	06-Oct-09 12:20	06-Oct-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	06-Oct-09	06-Oct-09	9100449	
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Soil (high level)						Initial weight: 25.13 g					
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	134	200	SW846 8260B	07-Oct-09	07-Oct-09	9100494	
127-18-4	Tetrachloroethene	105,000	E	µg/kg dry	134	200	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	134	200	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	134	200	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*102*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*98*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*95*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*		*70-130 %*			"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Soil (high level)											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	1680	2500	SW846 8260B	07-Oct-09	07-Oct-09	9100494	
127-18-4	Tetrachloroethene	123,000		µg/kg dry	1680	2500	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	1680	2500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	1680	2500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*107*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*99*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*97*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	95.5		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100446	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-203/17-18 SB01971-02	71360.31	Soil	06-Oct-09 12:30	06-Oct-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	06-Oct-09	06-Oct-09	9100449	
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Soil (high level)					Initial weight: 32.5 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	40.2	50	SW846 8260B	07-Oct-09	07-Oct-09	9100494	
127-18-4	Tetrachloroethene	172		µg/kg dry	40.2	50	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	40.2	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	40.2	50	"	"	"	"	
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*	*96*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*91*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	81.1		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100446	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-203 SB01971-03	71360.31	Ground Water	06-Oct-09 12:40	06-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	161		µg/l	5.0	5	SW846 8260B	07-Oct-09	07-Oct-09	9100496	
127-18-4	Tetrachloroethene	170		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	104		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	55.6		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*99*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*97*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*88*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*94*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-204/8.8-9.5 SB01971-04	71360.31	Soil	06-Oct-09 13:25	06-Oct-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	06-Oct-09	06-Oct-09	9100449	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 32.55 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	146	250	SW846 8260B	07-Oct-09	07-Oct-09	9100494	
127-18-4	Tetrachloroethene	4,930		µg/kg dry	146	250	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	146	250	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	146	250	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*105*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*97*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*96*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	92.3		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100446	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-204 SB01971-05	71360.31	Ground Water	06-Oct-09 13:40	06-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	20.1		µg/l	10.0	10	SW846 8260B	07-Oct-09	07-Oct-09	9100496	
127-18-4	Tetrachloroethene	505		µg/l	10.0	10	"	"	"	"	
79-01-6	Trichloroethene	20.1		µg/l	10.0	10	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	10.0	10	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*96*		*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 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-205/9 SB01971-06	71360.31	Soil	06-Oct-09 14:20	06-Oct-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	06-Oct-09	06-Oct-09	9100449	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 25.49 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	478	500	SW846 8260B	07-Oct-09	07-Oct-09	9100494	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	478	500	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	478	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	478	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*99*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*95*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*96*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*97*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	81.2		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100446	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-205 SB01971-07	71360.31	Ground Water	06-Oct-09 14:30	06-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	156		µg/l	5.0	5	SW846 8260B	07-Oct-09	07-Oct-09	9100492	
127-18-4	Tetrachloroethene	2,030	E	µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	131		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	42.0		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*91*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*119*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*105*		*70-130 %*			"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	172		µg/l	25.0	25	SW846 8260B	07-Oct-09	07-Oct-09	9100492	
127-18-4	Tetrachloroethene	3,750		µg/l	25.0	25	"	"	"	"	
79-01-6	Trichloroethene	182		µg/l	25.0	25	"	"	"	"	
75-01-4	Vinyl chloride	45.2		µg/l	25.0	25	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*92*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*122*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*106*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-205/15 SB01971-08	71360.31	Soil	06-Oct-09 14:45	06-Oct-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	06-Oct-09	06-Oct-09	9100449	
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Soil (high level)					Initial weight: 29.23 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	35.8	50	SW846 8260B	07-Oct-09	07-Oct-09	9100494	
127-18-4	Tetrachloroethene	1,110		µg/kg dry	35.8	50	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	35.8	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	35.8	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*105*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*94*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	88.2		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100446	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-206/8.5-9 SB01971-09	71360.31	Soil	06-Oct-09 15:15	06-Oct-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	06-Oct-09	06-Oct-09	9100449	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 39.24 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	39.6	50	SW846 8260B	07-Oct-09	07-Oct-09	9100494	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	39.6	50	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	39.6	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	39.6	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*110*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*96*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*96*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	77.2		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100446	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-206	71360.31	Ground Water	06-Oct-09 15:30	06-Oct-09
SB01971-10				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	316		µg/l	200	200	SW846 8260B	07-Oct-09	07-Oct-09	9100492	
127-18-4	Tetrachloroethene	55,100	E	µg/l	200	200	"	"	"	"	
79-01-6	Trichloroethene	966		µg/l	200	200	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	200	200	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*91*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*121*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*107*		*70-130 %*			"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	500	500	SW846 8260B	07-Oct-09	07-Oct-09	9100492	
127-18-4	Tetrachloroethene	62,700		µg/l	500	500	"	"	"	"	
79-01-6	Trichloroethene	1,160		µg/l	500	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	500	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*91*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*118*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*106*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-207 SB01971-11	71360.31	Ground Water	06-Oct-09 16:10	06-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	271		µg/l	5.0	5	SW846 8260B	07-Oct-09	07-Oct-09	9100492	
127-18-4	Tetrachloroethene	49.2		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	308		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	49.0		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*94*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*122*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*107*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-207/9.5 SB01971-12	71360.31	Soil	06-Oct-09 16:00	06-Oct-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	06-Oct-09	06-Oct-09	9100449	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 25.89 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	346	250	SW846 8260B	07-Oct-09	07-Oct-09	9100494	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	346	250	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	346	250	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	346	250	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*104*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	66.3		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100446	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-208/7 SB01971-13	71360.31	Soil	06-Oct-09 16:40	06-Oct-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	06-Oct-09	06-Oct-09	9100449	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 20.49 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	595	500	SW846 8260B	07-Oct-09	07-Oct-09	9100494	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	595	500	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	595	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	595	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*99*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*105*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*103*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	79.1		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100446	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-208/8 SB01971-14	71360.31	Soil	06-Oct-09 16:45	06-Oct-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	06-Oct-09	06-Oct-09	9100449	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 31.38 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	425	500	SW846 8260B	07-Oct-09	07-Oct-09	9100494	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	425	500	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	425	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	425	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*118*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*94*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*94*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	79.9		%		1	SM2540 G Mod.	06-Oct-09	06-Oct-09	9100446	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-208 SB01971-15	71360.31	Ground Water	06-Oct-09 16:55	06-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	219	E	µg/l	1.0	1	SW846 8260B	07-Oct-09	07-Oct-09	9100492	
127-18-4	Tetrachloroethene	13.1		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	209	E	µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	56.0	E	µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*120*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*105*		*70-130 %*			"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	184		µg/l	5.0	5	SW846 8260B	07-Oct-09	07-Oct-09	9100492	
127-18-4	Tetrachloroethene	8.5		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	179		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	50.8		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*94*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*121*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK 09402 SB01971-16	71360.31	Deionized Water	06-Oct-09 00:00	06-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	SW846 8260B	07-Oct-09	07-Oct-09	9100492	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*91*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*120*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*109*		*70-130 %*			"	"	"	"	

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100492 - SW846 5030 Water MS										
Blank (9100492-BLK1)										
Prepared & Analyzed: 07-Oct-09										
Benzene	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
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						
Dibromochloromethane	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						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Methylene chloride	BRL		µg/l	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	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						
Vinyl chloride	BRL		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*46.9*		µg/l		*50.0*		*94*	*70-130*		
Surrogate: Toluene-d8	*50.5*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*58.5*		µg/l		*50.0*		*117*	*70-130*		
Surrogate: Dibromofluoromethane	*52.6*		µg/l		*50.0*		*105*	*70-130*		
LCS (9100492-BS1)										
Prepared & Analyzed: 07-Oct-09										
Bromodichloromethane	22.2		µg/l		20.0		111	70-130		
Bromoform	18.4		µg/l		20.0		92	70-130		
Bromomethane	14.2		µg/l		20.0		71	70-130		
Carbon tetrachloride	19.5		µg/l		20.0		98	70-130		
Chlorobenzene	19.0		µg/l		20.0		95	70-130		
Chloroethane	17.0		µg/l		20.0		85	70-130		
Chloroform	21.6		µg/l		20.0		108	70-130		
Chloromethane	18.5		µg/l		20.0		92	70-130		
Dibromochloromethane	21.2		µg/l		20.0		106	70-130		
1,2-Dichlorobenzene	21.3		µg/l		20.0		106	70-130		
1,3-Dichlorobenzene	18.7		µg/l		20.0		94	70-130		
1,4-Dichlorobenzene	20.2		µg/l		20.0		101	70-130		
1,1-Dichloroethane	19.8		µg/l		20.0		99	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100492 - SW846 5030 Water MS										
LCS (9100492-BS1)										
Prepared & Analyzed: 07-Oct-09										
1,2-Dichloroethane	21.8		µg/l		20.0		109	70-130		
1,1-Dichloroethene	19.2		µg/l		20.0		96	70-130		
cis-1,2-Dichloroethene	19.9		µg/l		20.0		99	70-130		
trans-1,2-Dichloroethene	18.8		µg/l		20.0		94	70-130		
1,2-Dichloropropane	19.2		µg/l		20.0		96	70-130		
cis-1,3-Dichloropropene	19.2		µg/l		20.0		96	70-130		
trans-1,3-Dichloropropene	19.6		µg/l		20.0		98	70-130		
Methylene chloride	21.2		µg/l		20.0		106	70-130		
1,1,2,2-Tetrachloroethane	19.8		µg/l		20.0		99	70-130		
Tetrachloroethene	18.5		µg/l		20.0		92	70-130		
1,1,1-Trichloroethane	19.6		µg/l		20.0		98	70-130		
1,1,2-Trichloroethane	20.9		µg/l		20.0		105	70-130		
Trichloroethene	19.2		µg/l		20.0		96	70-130		
Trichlorofluoromethane (Freon 11)	22.8		µg/l		20.0		114	70-130		
Vinyl chloride	20.4		µg/l		20.0		102	70-130		
Surrogate: 4-Bromofluorobenzene	*47.7*		µg/l		*50.0*		*95*	*70-130*		
Surrogate: Toluene-d8	*49.8*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*56.5*		µg/l		*50.0*		*113*	*70-130*		
Surrogate: Dibromofluoromethane	*52.2*		µg/l		*50.0*		*104*	*70-130*		
LCS Dup (9100492-BSD1)										
Prepared & Analyzed: 07-Oct-09										
Bromodichloromethane	21.3		µg/l		20.0		106	70-130	4	30
Bromoform	19.8		µg/l		20.0		99	70-130	7	30
Bromomethane	14.1		µg/l		20.0		71	70-130	0.7	30
Carbon tetrachloride	19.0		µg/l		20.0		95	70-130	3	30
Chlorobenzene	19.0		µg/l		20.0		95	70-130	0.2	30
Chloroethane	14.8		µg/l		20.0		74	70-130	14	30
Chloroform	21.2		µg/l		20.0		106	70-130	2	30
Chloromethane	18.1		µg/l		20.0		90	70-130	2	30
Dibromochloromethane	20.0		µg/l		20.0		100	70-130	6	30
1,2-Dichlorobenzene	20.5		µg/l		20.0		102	70-130	4	30
1,3-Dichlorobenzene	18.7		µg/l		20.0		94	70-130	0.2	30
1,4-Dichlorobenzene	20.2		µg/l		20.0		101	70-130	0.4	30
1,1-Dichloroethane	19.5		µg/l		20.0		98	70-130	1	30
1,2-Dichloroethane	21.4		µg/l		20.0		107	70-130	2	30
1,1-Dichloroethene	18.3		µg/l		20.0		92	70-130	5	30
cis-1,2-Dichloroethene	19.3		µg/l		20.0		97	70-130	3	30
trans-1,2-Dichloroethene	18.4		µg/l		20.0		92	70-130	2	30
1,2-Dichloropropane	19.4		µg/l		20.0		97	70-130	1	30
cis-1,3-Dichloropropene	18.7		µg/l		20.0		93	70-130	3	30
trans-1,3-Dichloropropene	19.6		µg/l		20.0		98	70-130	0.1	30
Methylene chloride	20.6		µg/l		20.0		103	70-130	3	30
1,1,2,2-Tetrachloroethane	20.3		µg/l		20.0		102	70-130	2	30
Tetrachloroethene	17.8		µg/l		20.0		89	70-130	4	30
1,1,1-Trichloroethane	19.2		µg/l		20.0		96	70-130	2	30
1,1,2-Trichloroethane	20.6		µg/l		20.0		103	70-130	1	30
Trichloroethene	19.1		µg/l		20.0		95	70-130	0.5	30
Trichlorofluoromethane (Freon 11)	21.7		µg/l		20.0		109	70-130	5	30
Vinyl chloride	19.9		µg/l		20.0		99	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*48.4*		µg/l		*50.0*		*97*	*70-130*		

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100492 - SW846 5030 Water MS										
LCS Dup (9100492-BSD1)										
Prepared & Analyzed: 07-Oct-09										
Surrogate: Toluene-d8	*49.7*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*57.2*		µg/l		*50.0*		*114*	*70-130*		
Surrogate: Dibromofluoromethane	*50.4*		µg/l		*50.0*		*101*	*70-130*		
Batch 9100494 - SW846 5030 Soil (high level)										
Blank (9100494-BLK1)										
Prepared & Analyzed: 07-Oct-09										
Benzene	BRL		µg/kg wet we	1.0						
Bromodichloromethane	BRL		µg/kg wet we	1.0						
Bromoform	BRL		µg/kg wet we	1.0						
Bromomethane	BRL		µg/kg wet we	2.0						
Carbon tetrachloride	BRL		µg/kg wet we	1.0						
Chlorobenzene	BRL		µg/kg wet we	1.0						
Chloroethane	BRL		µg/kg wet we	2.0						
Chloroform	BRL		µg/kg wet we	1.0						
Chloromethane	BRL		µg/kg wet we	2.0						
Dibromochloromethane	BRL		µg/kg wet we	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	2.0						
1,1-Dichloroethane	BRL		µg/kg wet we	1.0						
1,2-Dichloroethane	BRL		µg/kg wet we	1.0						
1,1-Dichloroethene	BRL		µg/kg wet we	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
1,2-Dichloropropane	BRL		µg/kg wet we	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
Methylene chloride	BRL		µg/kg wet we	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	1.0						
Tetrachloroethene	BRL		µg/kg wet we	1.0						
Toluene	BRL		µg/kg wet we	1.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	1.0						
Trichloroethene	BRL		µg/kg wet we	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	1.0						
Vinyl chloride	BRL		µg/kg wet we	1.0						
Surrogate: 4-Bromofluorobenzene	*29.5*		µg/kg wet		*30.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*29.6*		µg/kg wet		*30.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*28.9*		µg/kg wet		*30.0*		*96*	*70-130*		
LCS (9100494-BS1)										
Prepared & Analyzed: 07-Oct-09										
Bromodichloromethane	21.8		µg/kg wet		20.0		109	70-130		
Bromoform	23.5		µg/kg wet		20.0		117	70-130		
Bromomethane	19.3		µg/kg wet		20.0		97	70-130		
Carbon tetrachloride	19.6		µg/kg wet		20.0		98	70-130		
Chlorobenzene	20.6		µg/kg wet		20.0		103	70-130		
Chloroethane	20.0		µg/kg wet		20.0		100	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100494 - SW846 5030 Soil (high level)										
LCS (9100494-BS1)										
Prepared & Analyzed: 07-Oct-09										
Chloroform	15.8		µg/kg wet		20.0		79	70-130		
Chloromethane	18.7		µg/kg wet		20.0		94	70-130		
Dibromochloromethane	18.8		µg/kg wet		20.0		94	70-130		
1,2-Dichlorobenzene	22.5		µg/kg wet		20.0		113	70-130		
1,3-Dichlorobenzene	21.3		µg/kg wet		20.0		106	70-130		
1,4-Dichlorobenzene	21.5		µg/kg wet		20.0		107	70-130		
1,1-Dichloroethane	18.8		µg/kg wet		20.0		94	70-130		
1,2-Dichloroethane	20.7		µg/kg wet		20.0		104	70-130		
1,1-Dichloroethene	21.7		µg/kg wet		20.0		108	70-130		
cis-1,2-Dichloroethene	16.7		µg/kg wet		20.0		84	70-130		
trans-1,2-Dichloroethene	19.0		µg/kg wet		20.0		95	70-130		
1,2-Dichloropropane	21.1		µg/kg wet		20.0		105	70-130		
cis-1,3-Dichloropropene	18.2		µg/kg wet		20.0		91	70-130		
trans-1,3-Dichloropropene	16.4		µg/kg wet		20.0		82	70-130		
Methylene chloride	19.1		µg/kg wet		20.0		95	70-130		
1,1,2,2-Tetrachloroethane	23.6		µg/kg wet		20.0		118	70-130		
Tetrachloroethene	19.5		µg/kg wet		20.0		98	70-130		
1,1,1-Trichloroethane	19.7		µg/kg wet		20.0		98	70-130		
1,1,2-Trichloroethane	22.7		µg/kg wet		20.0		114	70-130		
Trichloroethene	20.7		µg/kg wet		20.0		104	70-130		
Trichlorofluoromethane (Freon 11)	21.7		µg/kg wet		20.0		109	70-130		
Vinyl chloride	23.1		µg/kg wet		20.0		116	70-130		
Surrogate: 4-Bromofluorobenzene	*29.9*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*30.9*		µg/kg wet		*30.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.6*		µg/kg wet		*30.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*23.8*		µg/kg wet		*30.0*		*79*	*70-130*		
LCS Dup (9100494-BSD1)										
Prepared & Analyzed: 07-Oct-09										
Bromodichloromethane	22.6		µg/kg wet		20.0		113	70-130	4	30
Bromoform	24.3		µg/kg wet		20.0		122	70-130	4	30
Bromomethane	20.2		µg/kg wet		20.0		101	70-130	4	30
Carbon tetrachloride	19.6		µg/kg wet		20.0		98	70-130	0.1	30
Chlorobenzene	22.1		µg/kg wet		20.0		110	70-130	7	30
Chloroethane	20.2		µg/kg wet		20.0		101	70-130	1	30
Chloroform	16.2		µg/kg wet		20.0		81	70-130	3	30
Chloromethane	20.2		µg/kg wet		20.0		101	70-130	7	30
Dibromochloromethane	19.6		µg/kg wet		20.0		98	70-130	4	30
1,2-Dichlorobenzene	22.0		µg/kg wet		20.0		110	70-130	2	30
1,3-Dichlorobenzene	22.5		µg/kg wet		20.0		113	70-130	6	30
1,4-Dichlorobenzene	21.8		µg/kg wet		20.0		109	70-130	1	30
1,1-Dichloroethane	18.7		µg/kg wet		20.0		93	70-130	0.3	30
1,2-Dichloroethane	20.6		µg/kg wet		20.0		103	70-130	0.8	30
1,1-Dichloroethene	23.2		µg/kg wet		20.0		116	70-130	7	30
cis-1,2-Dichloroethene	17.6		µg/kg wet		20.0		88	70-130	5	30
trans-1,2-Dichloroethene	19.8		µg/kg wet		20.0		99	70-130	4	30
1,2-Dichloropropane	21.4		µg/kg wet		20.0		107	70-130	2	30
cis-1,3-Dichloropropene	18.4		µg/kg wet		20.0		92	70-130	0.8	30
trans-1,3-Dichloropropene	16.7		µg/kg wet		20.0		84	70-130	2	30
Methylene chloride	20.6		µg/kg wet		20.0		103	70-130	8	30
1,1,2,2-Tetrachloroethane	23.8		µg/kg wet		20.0		119	70-130	0.8	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100494 - SW846 5030 Soil (high level)										
LCS Dup (9100494-BSD1)										
Prepared & Analyzed: 07-Oct-09										
Tetrachloroethene	21.2		µg/kg wet		20.0		106	70-130	8	30
1,1,1-Trichloroethane	20.4		µg/kg wet		20.0		102	70-130	3	30
1,1,2-Trichloroethane	22.3		µg/kg wet		20.0		111	70-130	2	30
Trichloroethene	20.7		µg/kg wet		20.0		103	70-130	0.2	30
Trichlorofluoromethane (Freon 11)	23.9		µg/kg wet		20.0		120	70-130	10	30
Vinyl chloride	22.9		µg/kg wet		20.0		115	70-130	0.8	30
Surrogate: 4-Bromofluorobenzene	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*29.0*		µg/kg wet		*30.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.5*		µg/kg wet		*30.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*28.2*		µg/kg wet		*30.0*		*94*	*70-130*		
Batch 9100496 - SW846 5030 Water MS										
Blank (9100496-BLK1)										
Prepared & Analyzed: 07-Oct-09										
Benzene	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
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						
Dibromochloromethane	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						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Methylene chloride	BRL		µg/l	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	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						
Vinyl chloride	BRL		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*47.3*		µg/l		*50.0*		*95*	*70-130*		
Surrogate: Toluene-d8	*49.5*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.4*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*55.3*		µg/l		*50.0*		*111*	*70-130*		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100496 - SW846 5030 Water MS										
LCS (9100496-BS1)										
Prepared & Analyzed: 07-Oct-09										
Bromodichloromethane	21.7		µg/l		20.0		108	70-130		
Bromoform	22.2		µg/l		20.0		111	70-130		
Bromomethane	21.8		µg/l		20.0		109	70-130		
Carbon tetrachloride	24.3		µg/l		20.0		121	70-130		
Chlorobenzene	20.4		µg/l		20.0		102	70-130		
Chloroethane	18.3		µg/l		20.0		91	70-130		
Chloroform	22.2		µg/l		20.0		111	70-130		
Chloromethane	25.1		µg/l		20.0		126	70-130		
Dibromochloromethane	20.9		µg/l		20.0		104	70-130		
1,2-Dichlorobenzene	21.4		µg/l		20.0		107	70-130		
1,3-Dichlorobenzene	20.6		µg/l		20.0		103	70-130		
1,4-Dichlorobenzene	20.0		µg/l		20.0		100	70-130		
1,1-Dichloroethane	22.3		µg/l		20.0		112	70-130		
1,2-Dichloroethane	19.5		µg/l		20.0		98	70-130		
1,1-Dichloroethene	21.2		µg/l		20.0		106	70-130		
cis-1,2-Dichloroethene	20.3		µg/l		20.0		101	70-130		
trans-1,2-Dichloroethene	18.8		µg/l		20.0		94	70-130		
1,2-Dichloropropane	20.7		µg/l		20.0		103	70-130		
cis-1,3-Dichloropropene	22.6		µg/l		20.0		113	70-130		
trans-1,3-Dichloropropene	24.7		µg/l		20.0		124	70-130		
Methylene chloride	21.4		µg/l		20.0		107	70-130		
1,1,2,2-Tetrachloroethane	20.7		µg/l		20.0		104	70-130		
Tetrachloroethene	20.4		µg/l		20.0		102	70-130		
1,1,1-Trichloroethane	22.3		µg/l		20.0		112	70-130		
1,1,2-Trichloroethane	21.0		µg/l		20.0		105	70-130		
Trichloroethene	19.5		µg/l		20.0		98	70-130		
Trichlorofluoromethane (Freon 11)	21.1		µg/l		20.0		106	70-130		
Vinyl chloride	24.9		µg/l		20.0		125	70-130		
Surrogate: 4-Bromofluorobenzene	*50.1*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*49.4*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.8*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*52.1*		µg/l		*50.0*		*104*	*70-130*		
LCS Dup (9100496-BSD1)										
Prepared & Analyzed: 07-Oct-09										
Bromodichloromethane	21.1		µg/l		20.0		105	70-130	3	30
Bromoform	21.3		µg/l		20.0		106	70-130	4	30
Bromomethane	20.5		µg/l		20.0		102	70-130	6	30
Carbon tetrachloride	21.8		µg/l		20.0		109	70-130	11	30
Chlorobenzene	19.2		µg/l		20.0		96	70-130	6	30
Chloroethane	18.4		µg/l		20.0		92	70-130	0.7	30
Chloroform	21.1		µg/l		20.0		106	70-130	5	30
Chloromethane	23.8		µg/l		20.0		119	70-130	6	30
Dibromochloromethane	19.9		µg/l		20.0		99	70-130	5	30
1,2-Dichlorobenzene	20.8		µg/l		20.0		104	70-130	3	30
1,3-Dichlorobenzene	19.1		µg/l		20.0		96	70-130	8	30
1,4-Dichlorobenzene	19.0		µg/l		20.0		95	70-130	5	30
1,1-Dichloroethane	21.0		µg/l		20.0		105	70-130	6	30
1,2-Dichloroethane	18.8		µg/l		20.0		94	70-130	4	30
1,1-Dichloroethene	19.2		µg/l		20.0		96	70-130	10	30
cis-1,2-Dichloroethene	19.4		µg/l		20.0		97	70-130	4	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100496 - SW846 5030 Water MS										
LCS Dup (9100496-BSD1)										
Prepared & Analyzed: 07-Oct-09										
trans-1,2-Dichloroethene	18.0		µg/l		20.0		90	70-130	4	30
1,2-Dichloropropane	19.6		µg/l		20.0		98	70-130	5	30
cis-1,3-Dichloropropene	21.2		µg/l		20.0		106	70-130	6	30
trans-1,3-Dichloropropene	21.5		µg/l		20.0		108	70-130	14	30
Methylene chloride	21.0		µg/l		20.0		105	70-130	2	30
1,1,2,2-Tetrachloroethane	20.7		µg/l		20.0		103	70-130	0.3	30
Tetrachloroethene	19.2		µg/l		20.0		96	70-130	6	30
1,1,1-Trichloroethane	19.7		µg/l		20.0		98	70-130	13	30
1,1,2-Trichloroethane	20.4		µg/l		20.0		102	70-130	3	30
Trichloroethene	18.4		µg/l		20.0		92	70-130	6	30
Trichlorofluoromethane (Freon 11)	19.1		µg/l		20.0		95	70-130	10	30
Vinyl chloride	22.9		µg/l		20.0		115	70-130	8	30
Surrogate: 4-Bromofluorobenzene	*50.8*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*48.6*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*49.4*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*51.3*		µg/l		*50.0*		*103*	*70-130*		

Close File

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

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

SB 01971 EM

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 2

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

Report To: Britney Barnes
Terry Hertz

Project Mgr.: Steve Weldo
Telephone #: 864 281 0030

Invoice To: Acounts Payable
RMT, inc
Madison WI

P.O. No.: _____ RQN: _____

Project No.: 71360.31
Site Name: Columbia Manufacturing
Location: Westfield State: MA
Sampler(s): BCB, WEM

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 | 7

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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs 8260 TCE, PCE, VC, cis 12DCE	VOCs 8260 TCE, PCE, VC, cis 12DCE
01971 01	SB-203/12-13	10-6-09	1220	G	SO	2		1		X	X
02	SB-203/17-18	10-6-09	1230		SO	2		1			X
03	~~SB~~ DP-203	10-6-09	1240		GW	3				X	
04	SB-204/BB-95	10-6-09	1325		SO	2		1			X
05	DP-204	10-6-09	1340		GW	3				X	
06	SB-205/9	10-6-09	1420		SO	2		1			X
07	DP-205	10-6-09	1430		GW	3				X	
08	SB-205/15	10-6-09	1445		SO	2		1			X
09	SB-206/5.5-9.5	10-6-09	1515		SO	2		1			
10	DP-206	10-6-09	1530		GW	3				X	X

Analyses:

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

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

State specific reporting standards: _____

Please call w/ screening level data on gws as soon as available 864 414 8021

EDD Format _____
☐ E-mail to _____

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	10/6/09	1744

Condition upon receipt: ☒ Iced ☐ Ambient ☒ °C 9.6

SB 01971 [illegible]

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 2 of 2

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

Report To: Brittney Barnes

Project Mgr.:

Telephone #:

Invoice To: RMT, INC
Madison WI

P.O. No.: RQN:

Project No.: 71360.31

Site Name: Columbia Manufacturing

Location: State:

Sampler(s): BLB / WEM

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 7

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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs RE TCE cis,12DCE VC	"							
01971-11	DP-207	10-6-09	1610	G	GW	3				X								
12	SB-207/9.5		1600		SO	2		1			X							
13	SB-208/7		1640		SO	2		1			X							
14	SB-208/8		1645		SO	2		1			X							
15	DP-208		1655		GW	3				X								
16	TBLK09402				DI	1				X								

Analyses:

☒ 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
☐ E-mail to

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	10/6/09	1744

Condition upon receipt: ☒ Iced ☐ Ambient ☒ °C 9.6

Close File

Report Date:
08-Oct-09 13:40

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB02012-01	SB-209/9'	Soil	07-Oct-09 08:15	07-Oct-09 14:29
SB02012-02	DP-209	Ground Water	07-Oct-09 08:30	07-Oct-09 14:29
SB02012-03	SB-210/8'	Soil	07-Oct-09 09:20	07-Oct-09 14:29
SB02012-04	DP-210	Ground Water	07-Oct-09 09:35	07-Oct-09 14:29
SB02012-05	SB-211/7-7.5'	Soil	07-Oct-09 10:15	07-Oct-09 14:29
SB02012-06	DP-211	Ground Water	07-Oct-09 10:30	07-Oct-09 14:29
SB02012-07	SB-212/7-8'	Soil	07-Oct-09 11:30	07-Oct-09 14:29
SB02012-08	DP-212	Ground Water	07-Oct-09 12:00	07-Oct-09 14:29

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 14 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.

Close File

CASE NARRATIVE:

The samples were received 3.3 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.

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

Samples:

SB02012-01 *SB-209/9'*

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

SB02012-03 *SB-210/8'*

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

SB02012-04 *DP-210*

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

SB02012-05 *SB-211/7-7.5'*

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

SB02012-07 *SB-212/7-8'*

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

SB02012-08 *DP-212*

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

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-209/9' SB02012-01	71360.31	Soil	07-Oct-09 08:15	07-Oct-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	07-Oct-09	07-Oct-09	9100527	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)						Initial weight: 29.22 g					
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	109	100	SW846 8260B	08-Oct-09	08-Oct-09	9100570	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	109	100	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	109	100	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	109	100	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*118*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*105*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*92*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	72.4		%		1	SM2540 G Mod.	07-Oct-09	07-Oct-09	9100509	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-209 SB02012-02	71360.31	Ground Water	07-Oct-09 08:30	07-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	170		µg/l	5.0	5	SW846 8260B	07-Oct-09	08-Oct-09	9100498	
127-18-4	Tetrachloroethene	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	131		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	37.8		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*96*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*98*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*91*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*95*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-210/8' SB02012-03	71360.31	Soil	07-Oct-09 09:20	07-Oct-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	07-Oct-09	07-Oct-09	9100527	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)						Initial weight: 27.74 g					
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	490	500	SW846 8260B	08-Oct-09	08-Oct-09	9100570	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	490	500	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	490	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	490	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*109*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*97*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*91*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	77.8		%		1	SM2540 G Mod.	07-Oct-09	07-Oct-09	9100509	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-210 SB02012-04	71360.31	Ground Water	07-Oct-09 09:35	07-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B			R01								
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	159		µg/l	10.0	10	SW846 8260B	07-Oct-09	08-Oct-09	9100498	
127-18-4	Tetrachloroethene	BRL		µg/l	10.0	10	"	"	"	"	
79-01-6	Trichloroethene	106		µg/l	10.0	10	"	"	"	"	
75-01-4	Vinyl chloride	35.5		µg/l	10.0	10	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*95*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*89*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-211/7-7.5' SB02012-05	71360.31	Soil	07-Oct-09 10:15	07-Oct-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	07-Oct-09	07-Oct-09	9100527	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)						Initial weight: 20.82 g					
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	1260	1000	SW846 8260B	07-Oct-09	08-Oct-09	9100520	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	1260	1000	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	1260	1000	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	1260	1000	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*109*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*89*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	76.2		%		1	SM2540 G Mod.	07-Oct-09	07-Oct-09	9100509	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-211 SB02012-06	71360.31	Ground Water	07-Oct-09 10:30	07-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	187		µg/l	5.0	5	SW846 8260B	07-Oct-09	08-Oct-09	9100498	
127-18-4	Tetrachloroethene	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	163		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	66.0		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*97*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*88*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*94*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-212/7-8' SB02012-07	71360.31	Soil	07-Oct-09 11:30	07-Oct-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	07-Oct-09	07-Oct-09	9100527	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)						Initial weight: 26.2 g					
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	5250	5000	SW846 8260B	07-Oct-09	08-Oct-09	9100520	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	5250	5000	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	5250	5000	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	5250	5000	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*112*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*103*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	76.7		%		1	SM2540 G Mod.	07-Oct-09	07-Oct-09	9100509	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-212 SB02012-08	71360.31	Ground Water	07-Oct-09 12:00	07-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B			R01								
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	241		µg/l	10.0	10	SW846 8260B	07-Oct-09	08-Oct-09	9100498	
127-18-4	Tetrachloroethene	BRL		µg/l	10.0	10	"	"	"	"	
79-01-6	Trichloroethene	129		µg/l	10.0	10	"	"	"	"	
75-01-4	Vinyl chloride	130		µg/l	10.0	10	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*95*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*99*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*86*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*94*		*70-130 %*			"	"	"	"	

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100498 - SW846 5030 Water MS										
Blank (9100498-BLK1)										
Prepared & Analyzed: 07-Oct-09										
Benzene	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
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						
Dibromochloromethane	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						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Methylene chloride	BRL		µg/l	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	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						
Vinyl chloride	BRL		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*46.6*		µg/l		*50.0*		*93*	*70-130*		
Surrogate: Toluene-d8	*49.1*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.0*		µg/l		*50.0*		*92*	*70-130*		
Surrogate: Dibromofluoromethane	*46.9*		µg/l		*50.0*		*94*	*70-130*		
LCS (9100498-BS1)										
Prepared & Analyzed: 07-Oct-09										
Bromodichloromethane	19.8		µg/l		20.0		99	70-130		
Bromoform	20.2		µg/l		20.0		101	70-130		
Bromomethane	17.9		µg/l		20.0		89	70-130		
Carbon tetrachloride	21.1		µg/l		20.0		106	70-130		
Chlorobenzene	20.9		µg/l		20.0		104	70-130		
Chloroethane	18.3		µg/l		20.0		91	70-130		
Chloroform	20.0		µg/l		20.0		100	70-130		
Chloromethane	23.3		µg/l		20.0		117	70-130		
Dibromochloromethane	18.9		µg/l		20.0		94	70-130		
1,2-Dichlorobenzene	21.2		µg/l		20.0		106	70-130		
1,3-Dichlorobenzene	20.9		µg/l		20.0		105	70-130		
1,4-Dichlorobenzene	20.3		µg/l		20.0		101	70-130		
1,1-Dichloroethane	20.4		µg/l		20.0		102	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100498 - SW846 5030 Water MS										
LCS (9100498-BS1)										
Prepared & Analyzed: 07-Oct-09										
1,2-Dichloroethane	16.8		µg/l		20.0		84	70-130		
1,1-Dichloroethene	19.5		µg/l		20.0		98	70-130		
cis-1,2-Dichloroethene	18.7		µg/l		20.0		93	70-130		
trans-1,2-Dichloroethene	17.8		µg/l		20.0		89	70-130		
1,2-Dichloropropane	19.0		µg/l		20.0		95	70-130		
cis-1,3-Dichloropropene	20.8		µg/l		20.0		104	70-130		
trans-1,3-Dichloropropene	20.3		µg/l		20.0		102	70-130		
Methylene chloride	19.8		µg/l		20.0		99	70-130		
1,1,2,2-Tetrachloroethane	19.7		µg/l		20.0		99	70-130		
Tetrachloroethene	18.8		µg/l		20.0		94	70-130		
1,1,1-Trichloroethane	18.9		µg/l		20.0		95	70-130		
1,1,2-Trichloroethane	18.6		µg/l		20.0		93	70-130		
Trichloroethene	19.0		µg/l		20.0		95	70-130		
Trichlorofluoromethane (Freon 11)	19.2		µg/l		20.0		96	70-130		
Vinyl chloride	23.2		µg/l		20.0		116	70-130		
Surrogate: 4-Bromofluorobenzene	*49.2*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*49.7*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*42.8*		µg/l		*50.0*		*86*	*70-130*		
Surrogate: Dibromofluoromethane	*46.1*		µg/l		*50.0*		*92*	*70-130*		
LCS Dup (9100498-BSD1)										
Prepared & Analyzed: 07-Oct-09										
Bromodichloromethane	18.8		µg/l		20.0		94	70-130	5	30
Bromoform	19.4		µg/l		20.0		97	70-130	4	30
Bromomethane	16.6		µg/l		20.0		83	70-130	7	30
Carbon tetrachloride	19.1		µg/l		20.0		96	70-130	10	30
Chlorobenzene	20.1		µg/l		20.0		101	70-130	4	30
Chloroethane	16.0		µg/l		20.0		80	70-130	13	30
Chloroform	18.9		µg/l		20.0		94	70-130	6	30
Chloromethane	20.8		µg/l		20.0		104	70-130	11	30
Dibromochloromethane	18.2		µg/l		20.0		91	70-130	3	30
1,2-Dichlorobenzene	20.1		µg/l		20.0		100	70-130	6	30
1,3-Dichlorobenzene	19.7		µg/l		20.0		99	70-130	6	30
1,4-Dichlorobenzene	19.1		µg/l		20.0		95	70-130	6	30
1,1-Dichloroethane	19.3		µg/l		20.0		97	70-130	6	30
1,2-Dichloroethane	16.7		µg/l		20.0		83	70-130	1	30
1,1-Dichloroethene	17.9		µg/l		20.0		90	70-130	9	30
cis-1,2-Dichloroethene	17.6		µg/l		20.0		88	70-130	6	30
trans-1,2-Dichloroethene	16.2		µg/l		20.0		81	70-130	10	30
1,2-Dichloropropane	18.7		µg/l		20.0		93	70-130	2	30
cis-1,3-Dichloropropene	19.7		µg/l		20.0		99	70-130	5	30
trans-1,3-Dichloropropene	19.1		µg/l		20.0		96	70-130	6	30
Methylene chloride	18.6		µg/l		20.0		93	70-130	6	30
1,1,2,2-Tetrachloroethane	19.6		µg/l		20.0		98	70-130	0.7	30
Tetrachloroethene	17.8		µg/l		20.0		89	70-130	5	30
1,1,1-Trichloroethane	17.2		µg/l		20.0		86	70-130	9	30
1,1,2-Trichloroethane	18.4		µg/l		20.0		92	70-130	0.9	30
Trichloroethene	17.3		µg/l		20.0		87	70-130	9	30
Trichlorofluoromethane (Freon 11)	17.8		µg/l		20.0		89	70-130	8	30
Vinyl chloride	20.4		µg/l		20.0		102	70-130	13	30
Surrogate: 4-Bromofluorobenzene	*50.2*		µg/l		*50.0*		*100*	*70-130*		

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100498 - SW846 5030 Water MS										
LCS Dup (9100498-BSD1)										
Prepared & Analyzed: 07-Oct-09										
Surrogate: Toluene-d8	*49.9*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*42.0*		µg/l		*50.0*		*84*	*70-130*		
Surrogate: Dibromofluoromethane	*46.4*		µg/l		*50.0*		*93*	*70-130*		
Batch 9100520 - SW846 5030 Soil (high level)										
Blank (9100520-BLK1)										
Prepared & Analyzed: 07-Oct-09										
Benzene	BRL		µg/kg wet we	1.0						
Bromodichloromethane	BRL		µg/kg wet we	1.0						
Bromoform	BRL		µg/kg wet we	1.0						
Bromomethane	BRL		µg/kg wet we	2.0						
Carbon tetrachloride	BRL		µg/kg wet we	1.0						
Chlorobenzene	BRL		µg/kg wet we	1.0						
Chloroethane	BRL		µg/kg wet we	2.0						
Chloroform	BRL		µg/kg wet we	1.0						
Chloromethane	BRL		µg/kg wet we	2.0						
Dibromochloromethane	BRL		µg/kg wet we	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	2.0						
1,1-Dichloroethane	BRL		µg/kg wet we	1.0						
1,2-Dichloroethane	BRL		µg/kg wet we	1.0						
1,1-Dichloroethene	BRL		µg/kg wet we	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
1,2-Dichloropropane	BRL		µg/kg wet we	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
Methylene chloride	BRL		µg/kg wet we	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	1.0						
Tetrachloroethene	BRL		µg/kg wet we	1.0						
Toluene	BRL		µg/kg wet we	1.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	1.0						
Trichloroethene	BRL		µg/kg wet we	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	1.0						
Vinyl chloride	BRL		µg/kg wet we	1.0						
Surrogate: 4-Bromofluorobenzene	*29.1*		µg/l wet		*30.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*30.5*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.8*		µg/l wet		*30.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*27.8*		µg/l wet		*30.0*		*93*	*70-130*		
LCS (9100520-BS1)										
Prepared & Analyzed: 07-Oct-09										
Bromodichloromethane	20.2		µg/l wet		20.0		101	70-130		
Bromoform	17.5		µg/l wet		20.0		88	70-130		
Bromomethane	15.8		µg/l wet		20.0		79	70-130		
Carbon tetrachloride	19.9		µg/l wet		20.0		100	70-130		
Chlorobenzene	22.7		µg/l wet		20.0		114	70-130		
Chloroethane	17.0		µg/l wet		20.0		85	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100520 - SW846 5030 Soil (high level)										
LCS (9100520-BS1)										
Prepared & Analyzed: 07-Oct-09										
Chloroform	19.8		µg/l wet		20.0		99	70-130		
Chloromethane	17.7		µg/l wet		20.0		89	70-130		
Dibromochloromethane	18.8		µg/l wet		20.0		94	70-130		
1,2-Dichlorobenzene	22.9		µg/l wet		20.0		114	70-130		
1,3-Dichlorobenzene	22.1		µg/l wet		20.0		110	70-130		
1,4-Dichlorobenzene	21.8		µg/l wet		20.0		109	70-130		
1,1-Dichloroethane	22.8		µg/l wet		20.0		114	70-130		
1,2-Dichloroethane	21.4		µg/l wet		20.0		107	70-130		
1,1-Dichloroethene	19.3		µg/l wet		20.0		97	70-130		
cis-1,2-Dichloroethene	23.9		µg/l wet		20.0		119	70-130		
trans-1,2-Dichloroethene	18.5		µg/l wet		20.0		92	70-130		
1,2-Dichloropropane	22.8		µg/l wet		20.0		114	70-130		
cis-1,3-Dichloropropene	20.4		µg/l wet		20.0		102	70-130		
trans-1,3-Dichloropropene	19.3		µg/l wet		20.0		96	70-130		
Methylene chloride	17.8		µg/l wet		20.0		89	70-130		
1,1,2,2-Tetrachloroethane	21.2		µg/l wet		20.0		106	70-130		
Tetrachloroethene	23.0		µg/l wet		20.0		115	70-130		
1,1,1-Trichloroethane	19.6		µg/l wet		20.0		98	70-130		
1,1,2-Trichloroethane	22.9		µg/l wet		20.0		115	70-130		
Trichloroethene	23.1		µg/l wet		20.0		116	70-130		
Trichlorofluoromethane (Freon 11)	20.4		µg/l wet		20.0		102	70-130		
Vinyl chloride	17.1		µg/l wet		20.0		86	70-130		
Surrogate: 4-Bromofluorobenzene	*30.4*		µg/l wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*30.3*		µg/l wet		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.7*		µg/l wet		*30.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*30.1*		µg/l wet		*30.0*		*100*	*70-130*		
LCS Dup (9100520-BSD1)										
Prepared & Analyzed: 07-Oct-09										
Bromodichloromethane	19.8		µg/l wet		20.0		99	70-130	2	30
Bromoform	17.4		µg/l wet		20.0		87	70-130	0.5	30
Bromomethane	15.9		µg/l wet		20.0		79	70-130	0.1	30
Carbon tetrachloride	19.6		µg/l wet		20.0		98	70-130	2	30
Chlorobenzene	22.6		µg/l wet		20.0		113	70-130	0.6	30
Chloroethane	16.3		µg/l wet		20.0		82	70-130	4	30
Chloroform	19.4		µg/l wet		20.0		97	70-130	2	30
Chloromethane	16.7		µg/l wet		20.0		84	70-130	6	30
Dibromochloromethane	18.5		µg/l wet		20.0		92	70-130	1	30
1,2-Dichlorobenzene	22.6		µg/l wet		20.0		113	70-130	1	30
1,3-Dichlorobenzene	22.5		µg/l wet		20.0		113	70-130	2	30
1,4-Dichlorobenzene	21.6		µg/l wet		20.0		108	70-130	1	30
1,1-Dichloroethane	21.5		µg/l wet		20.0		108	70-130	6	30
1,2-Dichloroethane	20.9		µg/l wet		20.0		104	70-130	2	30
1,1-Dichloroethene	17.8		µg/l wet		20.0		89	70-130	8	30
cis-1,2-Dichloroethene	23.4		µg/l wet		20.0		117	70-130	2	30
trans-1,2-Dichloroethene	17.8		µg/l wet		20.0		89	70-130	4	30
1,2-Dichloropropane	22.2		µg/l wet		20.0		111	70-130	3	30
cis-1,3-Dichloropropene	20.1		µg/l wet		20.0		100	70-130	1	30
trans-1,3-Dichloropropene	19.6		µg/l wet		20.0		98	70-130	1	30
Methylene chloride	17.6		µg/l wet		20.0		88	70-130	0.8	30
1,1,2,2-Tetrachloroethane	21.4		µg/l wet		20.0		107	70-130	1	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100520 - SW846 5030 Soil (high level)										
LCS Dup (9100520-BSD1)										
Prepared & Analyzed: 07-Oct-09										
Tetrachloroethene	22.8		µg/l wet		20.0		114	70-130	0.7	30
1,1,1-Trichloroethane	18.6		µg/l wet		20.0		93	70-130	5	30
1,1,2-Trichloroethane	22.7		µg/l wet		20.0		114	70-130	0.9	30
Trichloroethene	22.2		µg/l wet		20.0		111	70-130	4	30
Trichlorofluoromethane (Freon 11)	19.0		µg/l wet		20.0		95	70-130	7	30
Vinyl chloride	15.9		µg/l wet		20.0		80	70-130	7	30
Surrogate: 4-Bromofluorobenzene	*31.3*		µg/l wet		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*30.5*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.3*		µg/l wet		*30.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*30.9*		µg/l wet		*30.0*		*103*	*70-130*		
Batch 9100570 - SW846 5030 Soil (high level)										
Blank (9100570-BLK1)										
Prepared & Analyzed: 08-Oct-09										
Benzene	BRL		µg/kg wet we	1.0						
Bromodichloromethane	BRL		µg/kg wet we	1.0						
Bromoform	BRL		µg/kg wet we	1.0						
Bromomethane	BRL		µg/kg wet we	2.0						
Carbon tetrachloride	BRL		µg/kg wet we	1.0						
Chlorobenzene	BRL		µg/kg wet we	1.0						
Chloroethane	BRL		µg/kg wet we	2.0						
Chloroform	BRL		µg/kg wet we	1.0						
Chloromethane	BRL		µg/kg wet we	2.0						
Dibromochloromethane	BRL		µg/kg wet we	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	2.0						
1,1-Dichloroethane	BRL		µg/kg wet we	1.0						
1,2-Dichloroethane	BRL		µg/kg wet we	1.0						
1,1-Dichloroethene	BRL		µg/kg wet we	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
1,2-Dichloropropane	BRL		µg/kg wet we	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
Methylene chloride	BRL		µg/kg wet we	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	1.0						
Tetrachloroethene	BRL		µg/kg wet we	1.0						
Toluene	BRL		µg/kg wet we	1.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	1.0						
Trichloroethene	BRL		µg/kg wet we	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	1.0						
Vinyl chloride	BRL		µg/kg wet we	1.0						
Surrogate: 4-Bromofluorobenzene	*28.8*		µg/l wet		*30.0*		*96*	*70-130*		
Surrogate: Toluene-d8	*29.9*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.1*		µg/l wet		*30.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*27.1*		µg/l wet		*30.0*		*90*	*70-130*		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100570 - SW846 5030 Soil (high level)										
LCS (9100570-BS1)										
Prepared & Analyzed: 08-Oct-09										
Bromodichloromethane	19.9		µg/l wet		20.0		100	70-130		
Bromoform	17.4		µg/l wet		20.0		87	70-130		
Bromomethane	15.2		µg/l wet		20.0		76	70-130		
Carbon tetrachloride	20.1		µg/l wet		20.0		100	70-130		
Chlorobenzene	22.6		µg/l wet		20.0		113	70-130		
Chloroethane	15.4		µg/l wet		20.0		77	70-130		
Chloroform	20.2		µg/l wet		20.0		101	70-130		
Chloromethane	16.9		µg/l wet		20.0		84	70-130		
Dibromochloromethane	18.6		µg/l wet		20.0		93	70-130		
1,2-Dichlorobenzene	22.6		µg/l wet		20.0		113	70-130		
1,3-Dichlorobenzene	23.0		µg/l wet		20.0		115	70-130		
1,4-Dichlorobenzene	21.0		µg/l wet		20.0		105	70-130		
1,1-Dichloroethane	20.0		µg/l wet		20.0		100	70-130		
1,2-Dichloroethane	21.8		µg/l wet		20.0		109	70-130		
1,1-Dichloroethene	17.4		µg/l wet		20.0		87	70-130		
cis-1,2-Dichloroethene	23.1		µg/l wet		20.0		116	70-130		
trans-1,2-Dichloroethene	17.2		µg/l wet		20.0		86	70-130		
1,2-Dichloropropane	22.0		µg/l wet		20.0		110	70-130		
cis-1,3-Dichloropropene	19.9		µg/l wet		20.0		99	70-130		
trans-1,3-Dichloropropene	19.2		µg/l wet		20.0		96	70-130		
Methylene chloride	17.1		µg/l wet		20.0		85	70-130		
1,1,2,2-Tetrachloroethane	21.6		µg/l wet		20.0		108	70-130		
Tetrachloroethene	22.4		µg/l wet		20.0		112	70-130		
1,1,1-Trichloroethane	18.8		µg/l wet		20.0		94	70-130		
1,1,2-Trichloroethane	23.0		µg/l wet		20.0		115	70-130		
Trichloroethene	23.8		µg/l wet		20.0		119	70-130		
Trichlorofluoromethane (Freon 11)	20.3		µg/l wet		20.0		101	70-130		
Vinyl chloride	17.6		µg/l wet		20.0		88	70-130		
Surrogate: 4-Bromofluorobenzene	*30.7*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*30.6*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.9*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.6*		µg/l wet		*30.0*		*99*	*70-130*		
LCS Dup (9100570-BSD1)										
Prepared & Analyzed: 08-Oct-09										
Bromodichloromethane	19.9		µg/l wet		20.0		99	70-130	0.2	30
Bromoform	17.6		µg/l wet		20.0		88	70-130	1	30
Bromomethane	15.2		µg/l wet		20.0		76	70-130	0.07	30
Carbon tetrachloride	20.2		µg/l wet		20.0		101	70-130	0.7	30
Chlorobenzene	22.6		µg/l wet		20.0		113	70-130	0.04	30
Chloroethane	16.6		µg/l wet		20.0		83	70-130	7	30
Chloroform	20.2		µg/l wet		20.0		101	70-130	0.2	30
Chloromethane	18.5		µg/l wet		20.0		93	70-130	9	30
Dibromochloromethane	18.1		µg/l wet		20.0		91	70-130	2	30
1,2-Dichlorobenzene	23.0		µg/l wet		20.0		115	70-130	1	30
1,3-Dichlorobenzene	21.9		µg/l wet		20.0		110	70-130	5	30
1,4-Dichlorobenzene	21.3		µg/l wet		20.0		106	70-130	1	30
1,1-Dichloroethane	20.6		µg/l wet		20.0		103	70-130	3	30
1,2-Dichloroethane	22.3		µg/l wet		20.0		111	70-130	2	30
1,1-Dichloroethene	18.1		µg/l wet		20.0		90	70-130	4	30
cis-1,2-Dichloroethene	23.3		µg/l wet		20.0		116	70-130	0.6	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100570 - SW846 5030 Soil (high level)										
LCS Dup (9100570-BSD1)										
Prepared & Analyzed: 08-Oct-09										
trans-1,2-Dichloroethene	17.5		µg/l wet		20.0		87	70-130	2	30
1,2-Dichloropropane	22.8		µg/l wet		20.0		114	70-130	4	30
cis-1,3-Dichloropropene	20.0		µg/l wet		20.0		100	70-130	0.3	30
trans-1,3-Dichloropropene	19.1		µg/l wet		20.0		95	70-130	0.8	30
Methylene chloride	16.7		µg/l wet		20.0		83	70-130	2	30
1,1,2,2-Tetrachloroethane	22.5		µg/l wet		20.0		113	70-130	4	30
Tetrachloroethene	22.3		µg/l wet		20.0		111	70-130	0.6	30
1,1,1-Trichloroethane	19.2		µg/l wet		20.0		96	70-130	2	30
1,1,2-Trichloroethane	23.6		µg/l wet		20.0		118	70-130	3	30
Trichloroethene	22.9		µg/l wet		20.0		114	70-130	4	30
Trichlorofluoromethane (Freon 11)	20.5		µg/l wet		20.0		103	70-130	1	30
Vinyl chloride	18.5		µg/l wet		20.0		92	70-130	5	30
Surrogate: 4-Bromofluorobenzene	*30.6*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*30.1*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.4*		µg/l wet		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*30.7*		µg/l wet		*30.0*		*102*	*70-130*		

Close File

Notes and Definitions

R01	The Reporting Limit has been raised to account for matrix interference.
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

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

Close File

SB 02012 BM

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page ____ of ____

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: Britney Barnes
Terry Hertz

Project Mgr.: Steve Webb
Telephone #: 864-281-0030

Invoice To: Accts Payable
RMT Inc
Madison WI

P.O. No.: _____ RQN: _____

Project No.: 71360.31
Site Name: Columbia Manufacturing
Location: Westfield State: MA
Sampler(s): BCB WEH

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 7

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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs - RCE, TCE, cis 12DCE, VC	?						
02012 01	SB-209/9'	10-7-09	0815	G	Soil	2	1				X						
02	DP-209	10-7-09	0830		GW	3				X							
03	SB-210/8'	10-7-09	0920		Soil	2	1				X						
04	DP-210	10-7-09	0935		GW	3				X							
05	SB-211/7-7.5'	10-7-09	1015		Soil	2	1				X						
06	DP-211	10-7-09	1030		GW	3				X							
07	SB-212/7-8'	10-7-09	1130		Soil	2	1				X						
08	DP-212	10-7-09	1200		GW	3				X							

☐ Provide MA DEP MCP CAM Report
☐ Provide CT DPH RCP Report
QA/QC Reporting Level
☐ Standard ☐ No QC
☐ Other _____
State specific reporting standards:

Please call with screening level data on GW's as soon as available (864) 414-8021

EDD Format _____
☐ E-mail to _____

Relinquished by:	Received by:	Date:	Time:
		10/7/09	1429

Condition upon receipt: ☒ Iced ☐ Ambient ☒ °C 3.3

Close File

Report Date:
11-Jan-10 15:24

☐ Final Report
☐ Re-Issued Report
☑ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB02040-01	SB-213/7.5'	Soil	07-Oct-09 13:00	07-Oct-09 17:35
SB02040-02	DP-213	Ground Water	07-Oct-09 13:25	07-Oct-09 17:35
SB02040-03	SB-214/8'	Soil	07-Oct-09 14:45	07-Oct-09 17:35
SB02040-04	DP-214	Ground Water	07-Oct-09 15:00	07-Oct-09 17:35
SB02040-05	SB-215/7'	Soil	07-Oct-09 16:30	07-Oct-09 17:35
SB02040-06	DP-215	Ground Water	07-Oct-09 16:45	07-Oct-09 17:35
SB02040-07	TBLK-09403	Aqueous	07-Oct-09 00:00	07-Oct-09 17:35

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 15 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.

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

Close File

CASE NARRATIVE:

The samples were received 11.1 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.

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.

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

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

SW846 8260B

Laboratory Control Samples:

9100585-BSD1

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

Samples:

S909563-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

Bromomethane (33.1%)

This affected the following samples:

DP-213
DP-214
DP-215
TBLK-09403

SB02040-01 *SB-213/7.5'*

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

SB02040-02 *DP-213*

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

cis-1,2-Dichloroethene
Trichloroethene
Vinyl chloride

SB02040-03 *SB-214/8'*

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

SB02040-05 *SB-215/7'*

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

SB02040-06 *DP-215*

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

Trichloroethene

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-213/7.5' SB02040-01	71360.31	Soil	07-Oct-09 13:00	07-Oct-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	07-Oct-09	07-Oct-09	9100540	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 22.86 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	220	250	SW846 8260B	08-Oct-09	08-Oct-09	9100570	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	220	250	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	220	250	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	220	250	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*125*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*103*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*92*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	88.2		%		1	SM2540 G Mod.	07-Oct-09	07-Oct-09	9100537	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-213 SB02040-02	71360.31	Ground Water	07-Oct-09 13:25	07-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	376	E	µg/l	1.0	1	SW846 8260B	08-Oct-09	08-Oct-09	9100585	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	286	E	µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	201	E	µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*121*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*105*		*70-130 %*			"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	320		µg/l	10.0	10	SW846 8260B	08-Oct-09	08-Oct-09	9100585	
127-18-4	Tetrachloroethene	BRL		µg/l	10.0	10	"	"	"	"	
79-01-6	Trichloroethene	224		µg/l	10.0	10	"	"	"	"	
75-01-4	Vinyl chloride	167		µg/l	10.0	10	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*91*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*118*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-214/8' SB02040-03	71360.31	Soil	07-Oct-09 14:45	07-Oct-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	07-Oct-09	07-Oct-09	9100540	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 18.14 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	738	500	SW846 8260B	08-Oct-09	08-Oct-09	9100570	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	738	500	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	738	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	738	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*112*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*82*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	73.8		%		1	SM2540 G Mod.	07-Oct-09	07-Oct-09	9100537	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-214 SB02040-04	71360.31	Ground Water	07-Oct-09 15:00	07-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	243		µg/l	5.0	5	SW846 8260B	08-Oct-09	08-Oct-09	9100585	
127-18-4	Tetrachloroethene	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	247		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	74.2		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*94*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*119*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*101*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-215/7' SB02040-05	71360.31	Soil	07-Oct-09 16:30	07-Oct-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	07-Oct-09	07-Oct-09	9100540	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 30.19 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	43.9	50	SW846 8260B	08-Oct-09	08-Oct-09	9100570	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	43.9	50	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	43.9	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	43.9	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*119*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*95*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*90*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	79.7		%		1	SM2540 G Mod.	07-Oct-09	07-Oct-09	9100537	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-215 SB02040-06	71360.31	Ground Water	07-Oct-09 16:45	07-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	168		µg/l	1.0	1	SW846 8260B	08-Oct-09	08-Oct-09	9100585	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	263	E	µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	18.2		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*100*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*118*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*104*		*70-130 %*			"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	172		µg/l	5.0	5	SW846 8260B	08-Oct-09	08-Oct-09	9100585	
127-18-4	Tetrachloroethene	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	218		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	23.2		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*99*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*116*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*104*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK-09403 SB02040-07	71360.31	Aqueous	07-Oct-09 00:00	07-Oct-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	SW846 8260B	08-Oct-09	08-Oct-09	9100585	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*92*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*122*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*107*		*70-130 %*			"	"	"	"	

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100570 - SW846 5030 Soil (high level)										
Blank (9100570-BLK1)										
Prepared & Analyzed: 08-Oct-09										
Benzene	BRL		µg/kg wet we	1.0						
Bromodichloromethane	BRL		µg/kg wet we	1.0						
Bromoform	BRL		µg/kg wet we	1.0						
Bromomethane	BRL		µg/kg wet we	2.0						
Carbon tetrachloride	BRL		µg/kg wet we	1.0						
Chlorobenzene	BRL		µg/kg wet we	1.0						
Chloroethane	BRL		µg/kg wet we	2.0						
Chloroform	BRL		µg/kg wet we	1.0						
Chloromethane	BRL		µg/kg wet we	2.0						
Dibromochloromethane	BRL		µg/kg wet we	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	2.0						
1,1-Dichloroethane	BRL		µg/kg wet we	1.0						
1,2-Dichloroethane	BRL		µg/kg wet we	1.0						
1,1-Dichloroethene	BRL		µg/kg wet we	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
1,2-Dichloropropane	BRL		µg/kg wet we	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
Methylene chloride	BRL		µg/kg wet we	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	1.0						
Tetrachloroethene	BRL		µg/kg wet we	1.0						
Toluene	BRL		µg/kg wet we	1.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	1.0						
Trichloroethene	BRL		µg/kg wet we	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	1.0						
Vinyl chloride	BRL		µg/kg wet we	1.0						
Surrogate: 4-Bromofluorobenzene	*28.8*		µg/kg wet		*30.0*		*96*	*70-130*		
Surrogate: Toluene-d8	*29.9*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.1*		µg/kg wet		*30.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*27.1*		µg/kg wet		*30.0*		*90*	*70-130*		
LCS (9100570-BS1)										
Prepared & Analyzed: 08-Oct-09										
Bromodichloromethane	19.9		µg/kg wet		20.0		100	70-130		
Bromoform	17.4		µg/kg wet		20.0		87	70-130		
Bromomethane	15.2		µg/kg wet		20.0		76	70-130		
Carbon tetrachloride	20.1		µg/kg wet		20.0		100	70-130		
Chlorobenzene	22.6		µg/kg wet		20.0		113	70-130		
Chloroethane	15.4		µg/kg wet		20.0		77	70-130		
Chloroform	20.2		µg/kg wet		20.0		101	70-130		
Chloromethane	16.9		µg/kg wet		20.0		84	70-130		
Dibromochloromethane	18.6		µg/kg wet		20.0		93	70-130		
1,2-Dichlorobenzene	22.6		µg/kg wet		20.0		113	70-130		
1,3-Dichlorobenzene	23.0		µg/kg wet		20.0		115	70-130		
1,4-Dichlorobenzene	21.0		µg/kg wet		20.0		105	70-130		
1,1-Dichloroethane	20.0		µg/kg wet		20.0		100	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100570 - SW846 5030 Soil (high level)										
LCS (9100570-BS1)										
Prepared & Analyzed: 08-Oct-09										
1,2-Dichloroethane	21.8		µg/kg wet		20.0		109	70-130		
1,1-Dichloroethene	17.4		µg/kg wet		20.0		87	70-130		
cis-1,2-Dichloroethene	23.1		µg/kg wet		20.0		116	70-130		
trans-1,2-Dichloroethene	17.2		µg/kg wet		20.0		86	70-130		
1,2-Dichloropropane	22.0		µg/kg wet		20.0		110	70-130		
cis-1,3-Dichloropropene	19.9		µg/kg wet		20.0		99	70-130		
trans-1,3-Dichloropropene	19.2		µg/kg wet		20.0		96	70-130		
Methylene chloride	17.1		µg/kg wet		20.0		85	70-130		
1,1,2,2-Tetrachloroethane	21.6		µg/kg wet		20.0		108	70-130		
Tetrachloroethene	22.4		µg/kg wet		20.0		112	70-130		
1,1,1-Trichloroethane	18.8		µg/kg wet		20.0		94	70-130		
1,1,2-Trichloroethane	23.0		µg/kg wet		20.0		115	70-130		
Trichloroethene	23.8		µg/kg wet		20.0		119	70-130		
Trichlorofluoromethane (Freon 11)	20.3		µg/kg wet		20.0		101	70-130		
Vinyl chloride	17.6		µg/kg wet		20.0		88	70-130		
Surrogate: 4-Bromofluorobenzene	*30.7*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*30.6*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.9*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.6*		µg/kg wet		*30.0*		*99*	*70-130*		
LCS Dup (9100570-BSD1)										
Prepared & Analyzed: 08-Oct-09										
Bromodichloromethane	19.9		µg/kg wet		20.0		99	70-130	0.2	30
Bromoform	17.6		µg/kg wet		20.0		88	70-130	1	30
Bromomethane	15.2		µg/kg wet		20.0		76	70-130	0.07	30
Carbon tetrachloride	20.2		µg/kg wet		20.0		101	70-130	0.7	30
Chlorobenzene	22.6		µg/kg wet		20.0		113	70-130	0.04	30
Chloroethane	16.6		µg/kg wet		20.0		83	70-130	7	30
Chloroform	20.2		µg/kg wet		20.0		101	70-130	0.2	30
Chloromethane	18.5		µg/kg wet		20.0		93	70-130	9	30
Dibromochloromethane	18.1		µg/kg wet		20.0		91	70-130	2	30
1,2-Dichlorobenzene	23.0		µg/kg wet		20.0		115	70-130	1	30
1,3-Dichlorobenzene	21.9		µg/kg wet		20.0		110	70-130	5	30
1,4-Dichlorobenzene	21.3		µg/kg wet		20.0		106	70-130	1	30
1,1-Dichloroethane	20.6		µg/kg wet		20.0		103	70-130	3	30
1,2-Dichloroethane	22.3		µg/kg wet		20.0		111	70-130	2	30
1,1-Dichloroethene	18.1		µg/kg wet		20.0		90	70-130	4	30
cis-1,2-Dichloroethene	23.3		µg/kg wet		20.0		116	70-130	0.6	30
trans-1,2-Dichloroethene	17.5		µg/kg wet		20.0		87	70-130	2	30
1,2-Dichloropropane	22.8		µg/kg wet		20.0		114	70-130	4	30
cis-1,3-Dichloropropene	20.0		µg/kg wet		20.0		100	70-130	0.3	30
trans-1,3-Dichloropropene	19.1		µg/kg wet		20.0		95	70-130	0.8	30
Methylene chloride	16.7		µg/kg wet		20.0		83	70-130	2	30
1,1,2,2-Tetrachloroethane	22.5		µg/kg wet		20.0		113	70-130	4	30
Tetrachloroethene	22.3		µg/kg wet		20.0		111	70-130	0.6	30
1,1,1-Trichloroethane	19.2		µg/kg wet		20.0		96	70-130	2	30
1,1,2-Trichloroethane	23.6		µg/kg wet		20.0		118	70-130	3	30
Trichloroethene	22.9		µg/kg wet		20.0		114	70-130	4	30
Trichlorofluoromethane (Freon 11)	20.5		µg/kg wet		20.0		103	70-130	1	30
Vinyl chloride	18.5		µg/kg wet		20.0		92	70-130	5	30
Surrogate: 4-Bromofluorobenzene	*30.6*		µg/kg wet		*30.0*		*102*	*70-130*		

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100570 - SW846 5030 Soil (high level)										
LCS Dup (9100570-BSD1)										
Prepared & Analyzed: 08-Oct-09										
Surrogate: Toluene-d8	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*30.7*		µg/kg wet		*30.0*		*102*	*70-130*		
Batch 9100585 - SW846 5030 Water MS										
Blank (9100585-BLK1)										
Prepared & Analyzed: 08-Oct-09										
Benzene	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
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						
Dibromochloromethane	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						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Methylene chloride	BRL		µg/l	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	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						
Vinyl chloride	BRL		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*45.7*		µg/l		*50.0*		*91*	*70-130*		
Surrogate: Toluene-d8	*50.3*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*58.5*		µg/l		*50.0*		*117*	*70-130*		
Surrogate: Dibromofluoromethane	*52.0*		µg/l		*50.0*		*104*	*70-130*		
LCS (9100585-BS1)										
Prepared & Analyzed: 08-Oct-09										
Bromodichloromethane	22.7		µg/l		20.0		113	70-130		
Bromoform	18.5		µg/l		20.0		93	70-130		
Bromomethane	14.1		µg/l		20.0		70	70-130		
Carbon tetrachloride	19.9		µg/l		20.0		100	70-130		
Chlorobenzene	18.7		µg/l		20.0		94	70-130		
Chloroethane	16.6		µg/l		20.0		83	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100585 - SW846 5030 Water MS										
LCS (9100585-BS1)										
Prepared & Analyzed: 08-Oct-09										
Chloroform	21.8		µg/l		20.0		109	70-130		
Chloromethane	19.0		µg/l		20.0		95	70-130		
Dibromochloromethane	21.0		µg/l		20.0		105	70-130		
1,2-Dichlorobenzene	21.1		µg/l		20.0		106	70-130		
1,3-Dichlorobenzene	19.9		µg/l		20.0		99	70-130		
1,4-Dichlorobenzene	20.5		µg/l		20.0		102	70-130		
1,1-Dichloroethane	20.3		µg/l		20.0		102	70-130		
1,2-Dichloroethane	21.7		µg/l		20.0		109	70-130		
1,1-Dichloroethene	19.0		µg/l		20.0		95	70-130		
cis-1,2-Dichloroethene	19.4		µg/l		20.0		97	70-130		
trans-1,2-Dichloroethene	18.9		µg/l		20.0		94	70-130		
1,2-Dichloropropane	19.9		µg/l		20.0		100	70-130		
cis-1,3-Dichloropropene	19.7		µg/l		20.0		98	70-130		
trans-1,3-Dichloropropene	20.0		µg/l		20.0		100	70-130		
Methylene chloride	22.2		µg/l		20.0		111	70-130		
1,1,2,2-Tetrachloroethane	20.2		µg/l		20.0		101	70-130		
Tetrachloroethene	18.4		µg/l		20.0		92	70-130		
1,1,1-Trichloroethane	20.3		µg/l		20.0		101	70-130		
1,1,2-Trichloroethane	21.0		µg/l		20.0		105	70-130		
Trichloroethene	19.8		µg/l		20.0		99	70-130		
Trichlorofluoromethane (Freon 11)	22.6		µg/l		20.0		113	70-130		
Vinyl chloride	20.3		µg/l		20.0		102	70-130		
Surrogate: 4-Bromofluorobenzene	*48.2*		µg/l		*50.0*		*96*	*70-130*		
Surrogate: Toluene-d8	*49.4*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*57.1*		µg/l		*50.0*		*114*	*70-130*		
Surrogate: Dibromofluoromethane	*51.1*		µg/l		*50.0*		*102*	*70-130*		
LCS Dup (9100585-BSD1)										
Prepared & Analyzed: 08-Oct-09										
Bromodichloromethane	21.7		µg/l		20.0		108	70-130	5	30
Bromoform	18.6		µg/l		20.0		93	70-130	0.2	30
Bromomethane	13.1	QM9	µg/l		20.0		66	70-130	7	30
Carbon tetrachloride	19.2		µg/l		20.0		96	70-130	4	30
Chlorobenzene	18.5		µg/l		20.0		92	70-130	1	30
Chloroethane	18.3		µg/l		20.0		91	70-130	10	30
Chloroform	21.0		µg/l		20.0		105	70-130	4	30
Chloromethane	17.8		µg/l		20.0		89	70-130	7	30
Dibromochloromethane	20.5		µg/l		20.0		103	70-130	2	30
1,2-Dichlorobenzene	20.6		µg/l		20.0		103	70-130	2	30
1,3-Dichlorobenzene	18.4		µg/l		20.0		92	70-130	8	30
1,4-Dichlorobenzene	19.6		µg/l		20.0		98	70-130	4	30
1,1-Dichloroethane	19.2		µg/l		20.0		96	70-130	6	30
1,2-Dichloroethane	21.4		µg/l		20.0		107	70-130	2	30
1,1-Dichloroethene	17.8		µg/l		20.0		89	70-130	7	30
cis-1,2-Dichloroethene	19.2		µg/l		20.0		96	70-130	1	30
trans-1,2-Dichloroethene	17.7		µg/l		20.0		89	70-130	6	30
1,2-Dichloropropane	19.8		µg/l		20.0		99	70-130	0.9	30
cis-1,3-Dichloropropene	19.2		µg/l		20.0		96	70-130	2	30
trans-1,3-Dichloropropene	19.2		µg/l		20.0		96	70-130	4	30
Methylene chloride	21.0		µg/l		20.0		105	70-130	6	30
1,1,2,2-Tetrachloroethane	20.1		µg/l		20.0		101	70-130	0.4	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100585 - SW846 5030 Water MS										
LCS Dup (9100585-BSD1)										
Prepared & Analyzed: 08-Oct-09										
Tetrachloroethene	17.2		µg/l		20.0		86	70-130	7	30
1,1,1-Trichloroethane	19.3		µg/l		20.0		97	70-130	5	30
1,1,2-Trichloroethane	20.6		µg/l		20.0		103	70-130	2	30
Trichloroethene	19.7		µg/l		20.0		98	70-130	0.8	30
Trichlorofluoromethane (Freon 11)	21.5		µg/l		20.0		107	70-130	5	30
Vinyl chloride	19.4		µg/l		20.0		97	70-130	5	30
Surrogate: 4-Bromofluorobenzene	*49.1*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*49.6*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*57.0*		µg/l		*50.0*		*114*	*70-130*		
Surrogate: Dibromofluoromethane	*51.4*		µg/l		*50.0*		*103*	*70-130*		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100537 - General Preparation										
Duplicate (9100537-DUP1) **Source: SB02040-01**										
Prepared & Analyzed: 07-Oct-09										
% Solids	88.1		%			88.2			0.1	20

Close File

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

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

Close File

SB 02040 EM

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page _____ of _____

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: Britney Barnes, Terry Hertz

Project Mgr.: Steve Webb
Telephone #: 864 281-0030

Invoice To: Acct payable, RMT, Inc, Madison WI

P.O. No.: _____ RQN: _____

Project No.: 71360.31
Site Name: Columbia Manufacturing
Location: Westfield State: MA
Sampler(s): WE

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 7

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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		Analyses: PCE, TCE VOCs cis-1,2 DCE, VC	"						
02040 01	SB-213/7.5	10-7-09	1300	G	SOIL	2	1					X						
02	DP-213		1325		GW	3					X							
03	SB-214/8		1445		SOIL	2	1					X						
04	DP-214		1500		GW	3					X							
05	SB-215/7	10-7-09	1630		SOIL	2	1					X						
06	DP-215	10-7-09	1645	G	GW	3					X							
07	TBLK-09403					1					X	X						

☐ Provide MA DEP MCP CAM Report
☐ Provide CT DPH RCP Report
QA/QC Reporting Level
☐ Standard ☐ No QC
☐ Other _____
State specific reporting standards: _____

Please call with screening data levels as soon as available (864) 414-8021

EDD Format _____
☐ E-mail to _____

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	10/7/09	1735

Condition upon receipt: ☐ Iced ☐ Ambient ☑ °C 11.1

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

Close File

Report Date:
09-Oct-09 10:37

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB02062-01	SB-216/7.5'	Soil	07-Oct-09 17:40	08-Oct-09 09:10
SB02062-02	DP-216	Ground Water	07-Oct-09 18:10	08-Oct-09 09:10
SB02062-03	SB-217/7'	Soil	07-Oct-09 18:45	08-Oct-09 09:10
SB02062-04	DP-217	Ground Water	07-Oct-09 19:00	08-Oct-09 09:10
SB02062-05	TBLK-09404	Deionized Water	07-Oct-09 00:00	08-Oct-09 09:10

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 14 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.

Close File

CASE NARRATIVE:

The samples were received 4.2 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.

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

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

According to WSC-CAM 5/2004 Rev.4, Table 11 A-1, recovery for some VOC analytes have been deemed potentially difficult. Although they may still be within the recommended 70%-130% recovery range, a range has been set based on historical control limits.

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

SW846 8260B

Laboratory Control Samples:

9100585-BSD1

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

Samples:

S909563-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

Bromomethane

This affected the following samples:

DP-216
DP-217
TBLK-09404

SB02062-01 *SB-216/7.5'*

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

SB02062-03 *SB-217/7'*

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

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-216/7.5' SB02062-01	71360.31	Soil	07-Oct-09 17:40	08-Oct-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	08-Oct-09	08-Oct-09	9100610	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 19.61 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	611	500	SW846 8260B	08-Oct-09	08-Oct-09	9100570	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	611	500	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	611	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	611	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*106*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*101*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*91*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	79.4		%		1	SM2540 G Mod.	08-Oct-09	09-Oct-09	9100605	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-216 SB02062-02	71360.31	Ground Water	07-Oct-09 18:10	08-Oct-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	174		µg/l	5.0	5	SW846 8260B	08-Oct-09	08-Oct-09	9100585	
127-18-4	Tetrachloroethene	209		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	142		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	42.7		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*95*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*122*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*105*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-217/7' SB02062-03	71360.31	Soil	07-Oct-09 18:45	08-Oct-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	08-Oct-09	08-Oct-09	9100610	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 24.89 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	243	200	SW846 8260B	08-Oct-09	08-Oct-09	9100570	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	243	200	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	243	200	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	243	200	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*114*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*99*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*90*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	72.3		%		1	SM2540 G Mod.	08-Oct-09	09-Oct-09	9100605	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-217 SB02062-04	71360.31	Ground Water	07-Oct-09 19:00	08-Oct-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	98.8		µg/l	1.0	1	SW846 8260B	08-Oct-09	08-Oct-09	9100585	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	57.7		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	19.0		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*120*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*104*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK-09404	71360.31	Deionized Water	07-Oct-09 00:00	08-Oct-09
SB02062-05				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	SW846 8260B	08-Oct-09	08-Oct-09	9100585	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*94*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*99*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*119*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*99*		*70-130 %*			"	"	"	"	

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100570 - SW846 5030 Soil (high level)										
Blank (9100570-BLK1)										
Prepared & Analyzed: 08-Oct-09										
Benzene	BRL		µg/kg wet we	1.0						
Bromodichloromethane	BRL		µg/kg wet we	1.0						
Bromoform	BRL		µg/kg wet we	1.0						
Bromomethane	BRL		µg/kg wet we	2.0						
Carbon tetrachloride	BRL		µg/kg wet we	1.0						
Chlorobenzene	BRL		µg/kg wet we	1.0						
Chloroethane	BRL		µg/kg wet we	2.0						
Chloroform	BRL		µg/kg wet we	1.0						
Chloromethane	BRL		µg/kg wet we	2.0						
Dibromochloromethane	BRL		µg/kg wet we	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	2.0						
1,1-Dichloroethane	BRL		µg/kg wet we	1.0						
1,2-Dichloroethane	BRL		µg/kg wet we	1.0						
1,1-Dichloroethene	BRL		µg/kg wet we	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
1,2-Dichloropropane	BRL		µg/kg wet we	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
Methylene chloride	BRL		µg/kg wet we	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	1.0						
Tetrachloroethene	BRL		µg/kg wet we	1.0						
Toluene	BRL		µg/kg wet we	1.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	1.0						
Trichloroethene	BRL		µg/kg wet we	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	1.0						
Vinyl chloride	BRL		µg/kg wet we	1.0						
Surrogate: 4-Bromofluorobenzene	*28.8*		µg/l wet		*30.0*		*96*	*70-130*		
Surrogate: Toluene-d8	*29.9*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.1*		µg/l wet		*30.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*27.1*		µg/l wet		*30.0*		*90*	*70-130*		
LCS (9100570-BS1)										
Prepared & Analyzed: 08-Oct-09										
Bromodichloromethane	19.9		µg/l wet		20.0		100	70-130		
Bromoform	17.4		µg/l wet		20.0		87	70-130		
Bromomethane	15.2		µg/l wet		20.0		76	70-130		
Carbon tetrachloride	20.1		µg/l wet		20.0		100	70-130		
Chlorobenzene	22.6		µg/l wet		20.0		113	70-130		
Chloroethane	15.4		µg/l wet		20.0		77	70-130		
Chloroform	20.2		µg/l wet		20.0		101	70-130		
Chloromethane	16.9		µg/l wet		20.0		84	70-130		
Dibromochloromethane	18.6		µg/l wet		20.0		93	70-130		
1,2-Dichlorobenzene	22.6		µg/l wet		20.0		113	70-130		
1,3-Dichlorobenzene	23.0		µg/l wet		20.0		115	70-130		
1,4-Dichlorobenzene	21.0		µg/l wet		20.0		105	70-130		
1,1-Dichloroethane	20.0		µg/l wet		20.0		100	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100570 - SW846 5030 Soil (high level)										
LCS (9100570-BS1)										
Prepared & Analyzed: 08-Oct-09										
1,2-Dichloroethane	21.8		µg/l wet		20.0		109	70-130		
1,1-Dichloroethene	17.4		µg/l wet		20.0		87	70-130		
cis-1,2-Dichloroethene	23.1		µg/l wet		20.0		116	70-130		
trans-1,2-Dichloroethene	17.2		µg/l wet		20.0		86	70-130		
1,2-Dichloropropane	22.0		µg/l wet		20.0		110	70-130		
cis-1,3-Dichloropropene	19.9		µg/l wet		20.0		99	70-130		
trans-1,3-Dichloropropene	19.2		µg/l wet		20.0		96	70-130		
Methylene chloride	17.1		µg/l wet		20.0		85	70-130		
1,1,2,2-Tetrachloroethane	21.6		µg/l wet		20.0		108	70-130		
Tetrachloroethene	22.4		µg/l wet		20.0		112	70-130		
1,1,1-Trichloroethane	18.8		µg/l wet		20.0		94	70-130		
1,1,2-Trichloroethane	23.0		µg/l wet		20.0		115	70-130		
Trichloroethene	23.8		µg/l wet		20.0		119	70-130		
Trichlorofluoromethane (Freon 11)	20.3		µg/l wet		20.0		101	70-130		
Vinyl chloride	17.6		µg/l wet		20.0		88	70-130		
Surrogate: 4-Bromofluorobenzene	*30.7*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*30.6*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.9*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.6*		µg/l wet		*30.0*		*99*	*70-130*		
LCS Dup (9100570-BSD1)										
Prepared & Analyzed: 08-Oct-09										
Bromodichloromethane	19.9		µg/l wet		20.0		99	70-130	0.2	30
Bromoform	17.6		µg/l wet		20.0		88	70-130	1	30
Bromomethane	15.2		µg/l wet		20.0		76	70-130	0.07	30
Carbon tetrachloride	20.2		µg/l wet		20.0		101	70-130	0.7	30
Chlorobenzene	22.6		µg/l wet		20.0		113	70-130	0.04	30
Chloroethane	16.6		µg/l wet		20.0		83	70-130	7	30
Chloroform	20.2		µg/l wet		20.0		101	70-130	0.2	30
Chloromethane	18.5		µg/l wet		20.0		93	70-130	9	30
Dibromochloromethane	18.1		µg/l wet		20.0		91	70-130	2	30
1,2-Dichlorobenzene	23.0		µg/l wet		20.0		115	70-130	1	30
1,3-Dichlorobenzene	21.9		µg/l wet		20.0		110	70-130	5	30
1,4-Dichlorobenzene	21.3		µg/l wet		20.0		106	70-130	1	30
1,1-Dichloroethane	20.6		µg/l wet		20.0		103	70-130	3	30
1,2-Dichloroethane	22.3		µg/l wet		20.0		111	70-130	2	30
1,1-Dichloroethene	18.1		µg/l wet		20.0		90	70-130	4	30
cis-1,2-Dichloroethene	23.3		µg/l wet		20.0		116	70-130	0.6	30
trans-1,2-Dichloroethene	17.5		µg/l wet		20.0		87	70-130	2	30
1,2-Dichloropropane	22.8		µg/l wet		20.0		114	70-130	4	30
cis-1,3-Dichloropropene	20.0		µg/l wet		20.0		100	70-130	0.3	30
trans-1,3-Dichloropropene	19.1		µg/l wet		20.0		95	70-130	0.8	30
Methylene chloride	16.7		µg/l wet		20.0		83	70-130	2	30
1,1,2,2-Tetrachloroethane	22.5		µg/l wet		20.0		113	70-130	4	30
Tetrachloroethene	22.3		µg/l wet		20.0		111	70-130	0.6	30
1,1,1-Trichloroethane	19.2		µg/l wet		20.0		96	70-130	2	30
1,1,2-Trichloroethane	23.6		µg/l wet		20.0		118	70-130	3	30
Trichloroethene	22.9		µg/l wet		20.0		114	70-130	4	30
Trichlorofluoromethane (Freon 11)	20.5		µg/l wet		20.0		103	70-130	1	30
Vinyl chloride	18.5		µg/l wet		20.0		92	70-130	5	30
Surrogate: 4-Bromofluorobenzene	*30.6*		µg/l wet		*30.0*		*102*	*70-130*		

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* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100570 - SW846 5030 Soil (high level)										
LCS Dup (9100570-BSD1)										
Prepared & Analyzed: 08-Oct-09										
Surrogate: Toluene-d8	*30.1*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.4*		µg/l wet		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*30.7*		µg/l wet		*30.0*		*102*	*70-130*		
Batch 9100585 - SW846 5030 Water MS										
Blank (9100585-BLK1)										
Prepared & Analyzed: 08-Oct-09										
Benzene	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
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						
Dibromochloromethane	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						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Methylene chloride	BRL		µg/l	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	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						
Vinyl chloride	BRL		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*45.7*		µg/l		*50.0*		*91*	*70-130*		
Surrogate: Toluene-d8	*50.3*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*58.5*		µg/l		*50.0*		*117*	*70-130*		
Surrogate: Dibromofluoromethane	*52.0*		µg/l		*50.0*		*104*	*70-130*		
LCS (9100585-BS1)										
Prepared & Analyzed: 08-Oct-09										
Bromodichloromethane	22.7		µg/l		20.0		113	70-130		
Bromoform	18.5		µg/l		20.0		93	70-130		
Bromomethane	14.1		µg/l		20.0		70	70-130		
Carbon tetrachloride	19.9		µg/l		20.0		100	70-130		
Chlorobenzene	18.7		µg/l		20.0		94	70-130		
Chloroethane	16.6		µg/l		20.0		83	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100585 - SW846 5030 Water MS										
LCS (9100585-BS1)										
Prepared & Analyzed: 08-Oct-09										
Chloroform	21.8		µg/l		20.0		109	70-130		
Chloromethane	19.0		µg/l		20.0		95	70-130		
Dibromochloromethane	21.0		µg/l		20.0		105	70-130		
1,2-Dichlorobenzene	21.1		µg/l		20.0		106	70-130		
1,3-Dichlorobenzene	19.9		µg/l		20.0		99	70-130		
1,4-Dichlorobenzene	20.5		µg/l		20.0		102	70-130		
1,1-Dichloroethane	20.3		µg/l		20.0		102	70-130		
1,2-Dichloroethane	21.7		µg/l		20.0		109	70-130		
1,1-Dichloroethene	19.0		µg/l		20.0		95	70-130		
cis-1,2-Dichloroethene	19.4		µg/l		20.0		97	70-130		
trans-1,2-Dichloroethene	18.9		µg/l		20.0		94	70-130		
1,2-Dichloropropane	19.9		µg/l		20.0		100	70-130		
cis-1,3-Dichloropropene	19.7		µg/l		20.0		98	70-130		
trans-1,3-Dichloropropene	20.0		µg/l		20.0		100	70-130		
Methylene chloride	22.2		µg/l		20.0		111	70-130		
1,1,2,2-Tetrachloroethane	20.2		µg/l		20.0		101	70-130		
Tetrachloroethene	18.4		µg/l		20.0		92	70-130		
1,1,1-Trichloroethane	20.3		µg/l		20.0		101	70-130		
1,1,2-Trichloroethane	21.0		µg/l		20.0		105	70-130		
Trichloroethene	19.8		µg/l		20.0		99	70-130		
Trichlorofluoromethane (Freon 11)	22.6		µg/l		20.0		113	70-130		
Vinyl chloride	20.3		µg/l		20.0		102	70-130		
Surrogate: 4-Bromofluorobenzene	*48.2*		µg/l		*50.0*		*96*	*70-130*		
Surrogate: Toluene-d8	*49.4*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*57.1*		µg/l		*50.0*		*114*	*70-130*		
Surrogate: Dibromofluoromethane	*51.1*		µg/l		*50.0*		*102*	*70-130*		
LCS Dup (9100585-BSD1)										
Prepared & Analyzed: 08-Oct-09										
Bromodichloromethane	21.7		µg/l		20.0		108	70-130	5	30
Bromoform	18.6		µg/l		20.0		93	70-130	0.2	30
Bromomethane	13.1	QM9	µg/l		20.0		66	70-130	7	30
Carbon tetrachloride	19.2		µg/l		20.0		96	70-130	4	30
Chlorobenzene	18.5		µg/l		20.0		92	70-130	1	30
Chloroethane	18.3		µg/l		20.0		91	70-130	10	30
Chloroform	21.0		µg/l		20.0		105	70-130	4	30
Chloromethane	17.8		µg/l		20.0		89	70-130	7	30
Dibromochloromethane	20.5		µg/l		20.0		103	70-130	2	30
1,2-Dichlorobenzene	20.6		µg/l		20.0		103	70-130	2	30
1,3-Dichlorobenzene	18.4		µg/l		20.0		92	70-130	8	30
1,4-Dichlorobenzene	19.6		µg/l		20.0		98	70-130	4	30
1,1-Dichloroethane	19.2		µg/l		20.0		96	70-130	6	30
1,2-Dichloroethane	21.4		µg/l		20.0		107	70-130	2	30
1,1-Dichloroethene	17.8		µg/l		20.0		89	70-130	7	30
cis-1,2-Dichloroethene	19.2		µg/l		20.0		96	70-130	1	30
trans-1,2-Dichloroethene	17.7		µg/l		20.0		89	70-130	6	30
1,2-Dichloropropane	19.8		µg/l		20.0		99	70-130	0.9	30
cis-1,3-Dichloropropene	19.2		µg/l		20.0		96	70-130	2	30
trans-1,3-Dichloropropene	19.2		µg/l		20.0		96	70-130	4	30
Methylene chloride	21.0		µg/l		20.0		105	70-130	6	30
1,1,2,2-Tetrachloroethane	20.1		µg/l		20.0		101	70-130	0.4	30

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100585 - SW846 5030 Water MS										
LCS Dup (9100585-BSD1)										
Prepared & Analyzed: 08-Oct-09										
Tetrachloroethene	17.2		µg/l		20.0		86	70-130	7	30
1,1,1-Trichloroethane	19.3		µg/l		20.0		97	70-130	5	30
1,1,2-Trichloroethane	20.6		µg/l		20.0		103	70-130	2	30
Trichloroethene	19.7		µg/l		20.0		98	70-130	0.8	30
Trichlorofluoromethane (Freon 11)	21.5		µg/l		20.0		107	70-130	5	30
Vinyl chloride	19.4		µg/l		20.0		97	70-130	5	30
Surrogate: 4-Bromofluorobenzene	*49.1*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*49.6*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*57.0*		µg/l		*50.0*		*114*	*70-130*		
Surrogate: Dibromofluoromethane	*51.4*		µg/l		*50.0*		*103*	*70-130*		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9100605 - General Preparation										
Duplicate (9100605-DUP1) **Source: SB02062-01**										
Prepared: 08-Oct-09 Analyzed: 09-Oct-09										
% Solids	79.4		%			79.4			0.07	20

Close File

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
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.
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

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

Close File

MADEP MCP ANALYTICAL METHOD REPORT CERTIFICATION FORM

Laboratory Name: Spectrum Analytical, Inc. - Agawam, MA	Project #: 71360.31
Project Location: MTD-Columbia Manufacturing-Westfield, MA	MADEP RTN [1]:

This form provides certifications for the following data set:
SB02062-01 through SB02062-05

Sample matrices:	Deionized Water Ground Water Soil				
MCP SW-846 Methods Used	☑ 8260B	☐ 8151A	☐ 8330	☐ 6010B	☐ 7470A/1A
	☐ 8270C	☐ 8081A	☐ VPH	☐ 6020	☐ 9014M [2]
	☐ 8082	☐ 8021B	☐ EPH	☐ 7000S [3]	☐ 7196A

1 List Release Tracking Number (RTN), if known
2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method
3 S - SW-846 Methods 7000 Series List individual method and analyte

An affirmative response to questions A, B, C and D is required for "Presumptive Certainty" status

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain of Custody documentation for the data set?	☑ Yes ☐ No
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	☑ Yes ☐ No
C	Does the data included in this report meet all the analytical requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes ☐ No
D	***VPH and EPH methods only***: Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective methods)?	☐ Yes ☐ No

A response to questions E and F below is required for "Presumptive Certainty" status

E	Were all analytical QC performance standards and recommendations for the specified methods achieved?	☐ Yes ☑ No
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	☑ Yes ☐ No

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

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

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

Date: 10/9/2009

Close File

SB02082 EM

SPECTRUM ANALYTICAL, INC.
Fostering
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page ____ of ____

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: Britney Barnes, Terry Hertz

Project Mgr.: Steve Webb
Telephone #: 864 281 0030

Invoice To: Accts Payable, RMT, INC, Madison WI

P.O. No.: ____ RQN: ____

Project No.: 71360.31
Site Name: Columbia Manufacturing
Location: Westfield State: MA
Sampler(s): Bill Medlin

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 | 7

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: ____

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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		VOC's PCE, TCE, cis 1,2 DCE, VC	1,1						
0206201	SB-216/7.5	10-7-09	1740	G	Soil	2	1					X						
02	DP-216	10-7-09	1810	G	GW	3					X							
03	SB-217/7	10-7-09	1845	G	Soil	2	1					X						
04	DP-217	10-7-09	1900	G	GW	3					X							
05	TBLK-09404				DI	1												

Containers: # of VOA Vials, # of Amber Glass, # of Clear Glass, # of Plastic

Analyses: VOC's PCE, TCE, cis 1,2 DCE, VC; 1,1

Please call with screening data levels on GW as soon as available 864 444 8021

EDD Format ____
☐ E-mail to ____

Relinquished by:	Received by:	Date:	Time:
Bill Medlin		10/8/09	9:10.

Condition upon receipt: ☑ Iced ☐ Ambient ☑ °C 4.2

Close File

Report Date:
19-Oct-09 09:37

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB02472-01	TP-01	Soil	15-Oct-09 14:30	15-Oct-09 17:10
SB02472-02	TBLK-09405	Methanol	15-Oct-09 00:00	15-Oct-09 17:10

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 12 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.

Close File

CASE NARRATIVE:

The samples were received 3.0 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.

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.

+Mod 8015

Samples:

SB02472-01 *TP-01*

The VOC preserved soil sample is not within the 1:1 weight to volume ratio as recommended by SW846 methods 5030 and 5035 but may be within the 1:1 volume to volume ratio. This variance may affect the final reporting limit.

SW846 8260B

Laboratory Control Samples:

9101109-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.

Chloromethane
Vinyl chloride

9101116 LCS/LCSD

Bromoform recoveries (138%/136%) 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:

TP-01

9101116-BS1

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

Bromoform

9101116-BSD1

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

Bromoform

Close File

SW846 8260B

Samples:

S909775-CCV1

SPCC criteria was met however analyte percent drift/percent difference is greater than 30%, data is accepted due to CCC analytes passing within the 20% Drift/Difference criteria

Bromoform

This affected the following samples:

TP-01

S909779-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

Carbon tetrachloride

This affected the following samples:

TBLK-09405

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TP-01 SB02472-01	71360.31	Soil	15-Oct-09 14:30	15-Oct-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	15-Oct-09	15-Oct-09	9101068	
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Soil (high level)					Initial weight: 19.71 g						
156-59-2	cis-1,2-Dichloroethene	199		µg/kg dry	56.2	50	SW846 8260B	16-Oct-09	16-Oct-09	9101116	
127-18-4	Tetrachloroethene	265		µg/kg dry	56.2	50	"	"	"	"	
79-01-6	Trichloroethene	3,610		µg/kg dry	56.2	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	56.2	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*113*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*101*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*83*		*70-130 %*			"	"	"	"	
Gasoline Range Organics			VC10								
Prepared by method VPH - EPA 5030B					Initial weight: 19.71 g						
	Gasoline Range Organics	83.1		mg/kg dry	4.2	50	+Mod 8015	17-Oct-09	17-Oct-09	9101229	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*82*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*108*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3545A											
68476-30-2	Fuel Oil #2	BRL		mg/kg dry	31.1	1	8015BM	16-Oct-09	16-Oct-09	9101083	
68476-31-3	Fuel Oil #4	Calculated as		mg/kg dry	31.1	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/kg dry	31.1	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/kg dry	31.1	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/kg dry	31.1	1	"	"	"	"	
	Unidentified	1,450		mg/kg dry	31.1	1	"	"	"	"	
	Other Oil	BRL		mg/kg dry	31.1	1	"	"	"	"	
	Diesel Range Organics (DRO)	1,450		mg/kg dry	31.1	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*81*		*40-140 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	82.9		%		1	SM2540 G Mod.	15-Oct-09	15-Oct-09	9101063	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK-09405	71360.31	Methanol	15-Oct-09 00:00	15-Oct-09
SB02472-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	SW846 8260B	15-Oct-09	16-Oct-09	9101109	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*92*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*98*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*103*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*112*		*70-130 %*			"	"	"	"	

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9101109 - SW846 5030 Water MS										
Blank (9101109-BLK1)										
Prepared & Analyzed: 16-Oct-09										
Benzene	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
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						
Dibromochloromethane	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						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Methylene chloride	BRL		µg/l	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	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						
Vinyl chloride	BRL		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*45.8*		µg/l		*50.0*		*92*	*70-130*		
Surrogate: Toluene-d8	*49.8*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*55.1*		µg/l		*50.0*		*110*	*70-130*		
Surrogate: Dibromofluoromethane	*57.8*		µg/l		*50.0*		*116*	*70-130*		
LCS (9101109-BS1)										
Prepared & Analyzed: 16-Oct-09										
Bromodichloromethane	22.3		µg/l		20.0		111	70-130		
Bromoform	22.3		µg/l		20.0		112	70-130		
Bromomethane	24.7		µg/l		20.0		123	70-130		
Carbon tetrachloride	24.9		µg/l		20.0		124	70-130		
Chlorobenzene	20.2		µg/l		20.0		101	70-130		
Chloroethane	21.7		µg/l		20.0		109	70-130		
Chloroform	22.7		µg/l		20.0		113	70-130		
Chloromethane	27.3	QM9	µg/l		20.0		137	70-130		
Dibromochloromethane	21.3		µg/l		20.0		106	70-130		
1,2-Dichlorobenzene	21.5		µg/l		20.0		108	70-130		
1,3-Dichlorobenzene	20.6		µg/l		20.0		103	70-130		
1,4-Dichlorobenzene	19.8		µg/l		20.0		99	70-130		
1,1-Dichloroethane	22.8		µg/l		20.0		114	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9101109 - SW846 5030 Water MS										
LCS (9101109-BS1)										
Prepared & Analyzed: 16-Oct-09										
1,2-Dichloroethane	19.2		µg/l		20.0		96	70-130		
1,1-Dichloroethene	21.9		µg/l		20.0		110	70-130		
cis-1,2-Dichloroethene	20.8		µg/l		20.0		104	70-130		
trans-1,2-Dichloroethene	20.0		µg/l		20.0		100	70-130		
1,2-Dichloropropane	21.6		µg/l		20.0		108	70-130		
cis-1,3-Dichloropropene	22.3		µg/l		20.0		112	70-130		
trans-1,3-Dichloropropene	22.3		µg/l		20.0		111	70-130		
Methylene chloride	22.6		µg/l		20.0		113	70-130		
1,1,2,2-Tetrachloroethane	18.6		µg/l		20.0		93	70-130		
Tetrachloroethene	20.4		µg/l		20.0		102	70-130		
1,1,1-Trichloroethane	21.3		µg/l		20.0		106	70-130		
1,1,2-Trichloroethane	21.8		µg/l		20.0		109	70-130		
Trichloroethene	21.3		µg/l		20.0		107	70-130		
Trichlorofluoromethane (Freon 11)	21.3		µg/l		20.0		106	70-130		
Vinyl chloride	27.6	QM9	µg/l		20.0		138	70-130		
Surrogate: 4-Bromofluorobenzene	*49.9*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*49.0*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.1*		µg/l		*50.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*52.6*		µg/l		*50.0*		*105*	*70-130*		
LCS Dup (9101109-BSD1)										
Prepared & Analyzed: 16-Oct-09										
Bromodichloromethane	21.3		µg/l		20.0		107	70-130	4	25
Bromoform	22.3		µg/l		20.0		111	70-130	0.2	25
Bromomethane	21.4		µg/l		20.0		107	70-130	14	50
Carbon tetrachloride	22.4		µg/l		20.0		112	70-130	11	25
Chlorobenzene	19.2		µg/l		20.0		96	70-130	5	25
Chloroethane	19.6		µg/l		20.0		98	70-130	10	50
Chloroform	21.4		µg/l		20.0		107	70-130	6	25
Chloromethane	24.4		µg/l		20.0		122	70-130	11	25
Dibromochloromethane	20.6		µg/l		20.0		103	70-130	3	50
1,2-Dichlorobenzene	21.6		µg/l		20.0		108	70-130	0.3	25
1,3-Dichlorobenzene	19.5		µg/l		20.0		98	70-130	6	25
1,4-Dichlorobenzene	20.2		µg/l		20.0		101	70-130	2	25
1,1-Dichloroethane	21.1		µg/l		20.0		106	70-130	7	25
1,2-Dichloroethane	18.7		µg/l		20.0		94	70-130	3	25
1,1-Dichloroethene	19.3		µg/l		20.0		96	70-130	13	25
cis-1,2-Dichloroethene	19.8		µg/l		20.0		99	70-130	5	25
trans-1,2-Dichloroethene	18.8		µg/l		20.0		94	70-130	6	25
1,2-Dichloropropane	20.5		µg/l		20.0		103	70-130	5	25
cis-1,3-Dichloropropene	21.8		µg/l		20.0		109	70-130	2	25
trans-1,3-Dichloropropene	22.2		µg/l		20.0		111	70-130	0.1	25
Methylene chloride	23.1		µg/l		20.0		115	70-130	2	25
1,1,2,2-Tetrachloroethane	19.5		µg/l		20.0		97	70-130	5	25
Tetrachloroethene	19.7		µg/l		20.0		98	70-130	4	25
1,1,1-Trichloroethane	19.4		µg/l		20.0		97	70-130	9	25
1,1,2-Trichloroethane	21.7		µg/l		20.0		109	70-130	0.4	25
Trichloroethene	20.4		µg/l		20.0		102	70-130	4	25
Trichlorofluoromethane (Freon 11)	19.0		µg/l		20.0		95	70-130	11	50
Vinyl chloride	23.5		µg/l		20.0		117	70-130	16	25
Surrogate: 4-Bromofluorobenzene	*49.5*		µg/l		*50.0*		*99*	*70-130*		

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9101109 - SW846 5030 Water MS										
LCS Dup (9101109-BSD1)										
Prepared & Analyzed: 16-Oct-09										
Surrogate: Toluene-d8	*48.6*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.5*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*53.0*		µg/l		*50.0*		*106*	*70-130*		
Batch 9101116 - SW846 5030 Soil (high level)										
Blank (9101116-BLK1)										
Prepared & Analyzed: 16-Oct-09										
Benzene	BRL		µg/kg wet we	1.0						
Bromodichloromethane	BRL		µg/kg wet we	1.0						
Bromoform	BRL		µg/kg wet we	1.0						
Bromomethane	BRL		µg/kg wet we	2.0						
Carbon tetrachloride	BRL		µg/kg wet we	1.0						
Chlorobenzene	BRL		µg/kg wet we	1.0						
Chloroethane	BRL		µg/kg wet we	2.0						
Chloroform	BRL		µg/kg wet we	1.0						
Chloromethane	BRL		µg/kg wet we	2.0						
Dibromochloromethane	BRL		µg/kg wet we	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	2.0						
1,1-Dichloroethane	BRL		µg/kg wet we	1.0						
1,2-Dichloroethane	BRL		µg/kg wet we	1.0						
1,1-Dichloroethene	BRL		µg/kg wet we	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
1,2-Dichloropropane	BRL		µg/kg wet we	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
Methylene chloride	BRL		µg/kg wet we	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	1.0						
Tetrachloroethene	BRL		µg/kg wet we	1.0						
Toluene	BRL		µg/kg wet we	1.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	1.0						
Trichloroethene	BRL		µg/kg wet we	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	1.0						
Vinyl chloride	BRL		µg/kg wet we	1.0						
Surrogate: 4-Bromofluorobenzene	*28.9*		µg/l wet		*30.0*		*96*	*70-130*		
Surrogate: Toluene-d8	*31.6*		µg/l wet		*30.0*		*105*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*32.2*		µg/l wet		*30.0*		*107*	*70-130*		
Surrogate: Dibromofluoromethane	*26.1*		µg/l wet		*30.0*		*87*	*70-130*		
LCS (9101116-BS1)										
Prepared & Analyzed: 16-Oct-09										
Bromodichloromethane	23.0		µg/l wet		20.0		115	70-130		
Bromoform	27.7	QC2	µg/l wet		20.0		138	70-130		
Bromomethane	21.6		µg/l wet		20.0		108	70-130		
Carbon tetrachloride	20.4		µg/l wet		20.0		102	70-130		
Chlorobenzene	21.3		µg/l wet		20.0		106	70-130		
Chloroethane	20.5		µg/l wet		20.0		103	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9101116 - SW846 5030 Soil (high level)										
LCS (9101116-BS1)										
Prepared & Analyzed: 16-Oct-09										
Chloroform	16.4		µg/l wet		20.0		82	70-130		
Chloromethane	19.7		µg/l wet		20.0		98	70-130		
Dibromochloromethane	21.0		µg/l wet		20.0		105	70-130		
1,2-Dichlorobenzene	22.1		µg/l wet		20.0		111	70-130		
1,3-Dichlorobenzene	22.0		µg/l wet		20.0		110	70-130		
1,4-Dichlorobenzene	21.0		µg/l wet		20.0		105	70-130		
1,1-Dichloroethane	18.8		µg/l wet		20.0		94	70-130		
1,2-Dichloroethane	20.4		µg/l wet		20.0		102	70-130		
1,1-Dichloroethene	21.4		µg/l wet		20.0		107	70-130		
cis-1,2-Dichloroethene	17.3		µg/l wet		20.0		86	70-130		
trans-1,2-Dichloroethene	19.6		µg/l wet		20.0		98	70-130		
1,2-Dichloropropane	20.7		µg/l wet		20.0		104	70-130		
cis-1,3-Dichloropropene	18.9		µg/l wet		20.0		94	70-130		
trans-1,3-Dichloropropene	17.8		µg/l wet		20.0		89	70-130		
Methylene chloride	20.0		µg/l wet		20.0		100	70-130		
1,1,2,2-Tetrachloroethane	24.8		µg/l wet		20.0		124	70-130		
Tetrachloroethene	20.2		µg/l wet		20.0		101	70-130		
1,1,1-Trichloroethane	21.1		µg/l wet		20.0		106	70-130		
1,1,2-Trichloroethane	23.4		µg/l wet		20.0		117	70-130		
Trichloroethene	20.7		µg/l wet		20.0		104	70-130		
Trichlorofluoromethane (Freon 11)	24.0		µg/l wet		20.0		120	70-130		
Vinyl chloride	23.5		µg/l wet		20.0		117	70-130		
Surrogate: 4-Bromofluorobenzene	*30.5*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*29.9*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.9*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*24.9*		µg/l wet		*30.0*		*83*	*70-130*		
LCS Dup (9101116-BSD1)										
Prepared & Analyzed: 16-Oct-09										
Bromodichloromethane	23.8		µg/l wet		20.0		119	70-130	4	30
Bromoform	27.3	QC2	µg/l wet		20.0		136	70-130	2	30
Bromomethane	21.0		µg/l wet		20.0		105	70-130	3	30
Carbon tetrachloride	21.2		µg/l wet		20.0		106	70-130	4	30
Chlorobenzene	22.0		µg/l wet		20.0		110	70-130	3	30
Chloroethane	19.1		µg/l wet		20.0		96	70-130	7	30
Chloroform	16.7		µg/l wet		20.0		84	70-130	2	30
Chloromethane	19.2		µg/l wet		20.0		96	70-130	3	30
Dibromochloromethane	21.6		µg/l wet		20.0		108	70-130	3	30
1,2-Dichlorobenzene	22.2		µg/l wet		20.0		111	70-130	0.09	30
1,3-Dichlorobenzene	22.5		µg/l wet		20.0		112	70-130	2	30
1,4-Dichlorobenzene	20.6		µg/l wet		20.0		103	70-130	2	30
1,1-Dichloroethane	20.2		µg/l wet		20.0		101	70-130	7	30
1,2-Dichloroethane	21.7		µg/l wet		20.0		108	70-130	6	30
1,1-Dichloroethene	21.4		µg/l wet		20.0		107	70-130	0.3	30
cis-1,2-Dichloroethene	17.7		µg/l wet		20.0		88	70-130	3	30
trans-1,2-Dichloroethene	20.5		µg/l wet		20.0		103	70-130	4	30
1,2-Dichloropropane	21.1		µg/l wet		20.0		106	70-130	2	30
cis-1,3-Dichloropropene	19.8		µg/l wet		20.0		99	70-130	5	30
trans-1,3-Dichloropropene	18.1		µg/l wet		20.0		90	70-130	1	30
Methylene chloride	20.6		µg/l wet		20.0		103	70-130	3	30
1,1,2,2-Tetrachloroethane	25.5		µg/l wet		20.0		127	70-130	3	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9101116 - SW846 5030 Soil (high level)										
LCS Dup (9101116-BSD1)										
Prepared & Analyzed: 16-Oct-09										
Tetrachloroethene	20.4		µg/l wet		20.0		102	70-130	0.8	30
1,1,1-Trichloroethane	22.1		µg/l wet		20.0		110	70-130	4	30
1,1,2-Trichloroethane	23.3		µg/l wet		20.0		117	70-130	0.2	30
Trichloroethene	21.4		µg/l wet		20.0		107	70-130	3	30
Trichlorofluoromethane (Freon 11)	22.8		µg/l wet		20.0		114	70-130	5	30
Vinyl chloride	24.3		µg/l wet		20.0		121	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*30.4*		µg/l wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*30.5*		µg/l wet		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.8*		µg/l wet		*30.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*26.3*		µg/l wet		*30.0*		*88*	*70-130*		
Batch 9101229 - VPH - EPA 5030B										
Blank (9101229-BLK1)										
Prepared & Analyzed: 17-Oct-09										
Gasoline Range Organics	BRL		mg/kg wet we	0.08						
Surrogate: 2,5-Dibromotoluene (PID)	*49.0*		µg/l wet		*50.0*		*98*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*50.1*		µg/l wet		*50.0*		*100*	*70-130*		
LCS (9101229-BS1)										
Prepared & Analyzed: 17-Oct-09										
Gasoline Range Organics	279		µg/l wet		280		100	70-130		
Surrogate: 2,5-Dibromotoluene (PID)	*46.3*		µg/l wet		*50.0*		*93*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*48.9*		µg/l wet		*50.0*		*98*	*70-130*		
LCS Dup (9101229-BSD1)										
Prepared & Analyzed: 17-Oct-09										
Gasoline Range Organics	279		µg/l wet		280		99	70-130	0.2	25
Surrogate: 2,5-Dibromotoluene (PID)	*49.0*		µg/l wet		*50.0*		*98*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*52.0*		µg/l wet		*50.0*		*104*	*70-130*		

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9101083 - SW846 3545A										
Blank (9101083-BLK1)										
Prepared: 16-Oct-09 Analyzed: 17-Oct-09										
Fuel Oil #2	BRL		mg/kg wet we	13.3						
Fuel Oil #4	BRL		mg/kg wet we	13.3						
Fuel Oil #6	BRL		mg/kg wet we	13.3						
Motor Oil	BRL		mg/kg wet we	13.3						
Aviation Fuel	BRL		mg/kg wet we	13.3						
Unidentified	BRL		mg/kg wet we	13.3						
Other Oil	BRL		mg/kg wet we	13.3						
Diesel Range Organics (DRO)	BRL		mg/kg wet we	13.3						
Surrogate: 1-Chlorooctadecane	*2.85*		mg/kg wet we		*3.33*		*86*	*40-140*		
LCS (9101083-BS2)										
Prepared: 16-Oct-09 Analyzed: 17-Oct-09										
Fuel Oil #2	562		mg/kg wet we	13.3	667		84	40-140		
Surrogate: 1-Chlorooctadecane	*3.42*		mg/kg wet we		*3.33*		*103*	*40-140*		

Close File

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
CAL3	SPCC criteria was met however analyte percent drift/percent difference is greater than 30%, data is accepted due to 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.
VC10	The VOC preserved soil sample is not within the 1:1 weight to volume ratio as recommended by SW846 methods 5030 and 5035 but may be within the 1:1 volume to volume ratio. This variance may affect the final reporting limit.
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.

Interpretation of Total Petroleum Hydrocarbon Report

Petroleum identification is determined by comparing the GC fingerprint obtained from the sample with a library of GC fingerprints obtained from analyses of various petroleum products. Possible match categories are as follows:

Gasoline - includes regular, unleaded, premium, etc.
Fuel Oil #2 - includes home heating oil, #2 fuel oil, and diesel
Fuel Oil #4 - includes #4 fuel oil
Fuel Oil #6 - includes #6 fuel oil and bunker "C" oil
Motor Oil - includes virgin and waste automobile oil
Ligroin - includes mineral spirits, petroleum naphtha, vm&p naphtha
Aviation Fuel - includes kerosene, Jet A and JP-4
Other Oil - includes lubricating and cutting oil, and silicon oil

At times, the unidentified petroleum product is quantified using a calibration that most closely approximates the distribution of compounds in the sample. When this occurs, the result is qualified as *TPH (Calculated as).

Close File

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

Close File

SB 02472

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page _____ of _____

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

Report To: Britney Barnes, Terry Hertz

Project Mgr.: Steve Webb
Telephone #: 864 281-0030

Invoice To: Accts Payable, RMT, Inc, Madison WI

P.O. No.: _____ RQN: _____

Project No.: 71360.31
Site Name: Columbia Manufacturing
Location: Westfield State: Ma
Sampler(s): WEM

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 7

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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		VOCs PCE, TCE, 1,2DCE, VC	"
02472-01	TP-01	10-15-09	1430	G	Soil	2	1				X	X
↓ -02	TBLK-09405					1					X	X

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: _____

Please call w/ screening levels as soon as available 864 414-8021 or 864 234-9453

EDD Format _____
☐ E-mail to _____

Condition upon receipt: ☑ Iced ☐ Ambient ☐ °C 3

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	10/13/09	1710

Close File

SB 02472

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page ____ of ____

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

Report To: Britney Barnes, Terry Hertz

Project Mgr.: Steve Webb
Telephone #: 864 281-0030

Invoice To: Accts Payable, RMT, Inc, Madison WI

P.O. No.: ____ RQN: ____

Project No.: 71360.31
Site Name: Columbia Manufacturing
Location: Westfield State: Ma
Sampler(s): WEM

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 | 7

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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs PCE, TCE 1,2DCE, VC	"	Pb/Cd
02472-01	TP-01	10-15-09	1430	G	Soil	2	1			X	X	✓
02	TBLK-09405					1				X	X	

Containers: # of VOA Vials, # of Amber Glass, # of Clear Glass, # of Plastic
Analyses: VOCs PCE, TCE 1,2DCE, VC; "; Pb/Cd

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: ____

Please call w/ screening levels as soon as available 864 414-8021 or 864 234-9453

added per client req 10/16/09

EDD Format ____
☐ E-mail to ____

Condition upon receipt: ☑ Iced ☐ Ambient ☐ °C 3

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	10/13/09	1710

Close File

Report Date:
19-Oct-09 17:12

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB02567-01	TP-01A	Soil	16-Oct-09 16:30	16-Oct-09 17:40
SB02567-02	TP-01B	Soil	16-Oct-09 16:40	16-Oct-09 17:40
SB02567-03	TP-01C	Soil	16-Oct-09 16:45	16-Oct-09 17:40
SB02567-04	TBLK-09406	Aqueous	16-Oct-09 00:00	16-Oct-09 17:40

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 14 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.

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

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CASE NARRATIVE:

The samples were received 7.6 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.

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:

9101124-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.

Chloromethane
Vinyl chloride

9101164 LCS/LCSD

Bromoform recoveries (137%/139%) 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:

TP-01A
TP-01B
TP-01C

9101164-BS1

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

Bromoform

9101164-BSD1

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

Bromoform

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.

Vinyl chloride

Close File

SW846 8260B

Samples:

S909835-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

Carbon tetrachloride

This affected the following samples:

TBLK-09406

SB02567-01 *TP-01A*

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

Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

Dibromofluoromethane

SB02567-02 *TP-01B*

Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

Dibromofluoromethane

SB02567-03 *TP-01C*

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

Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

Dibromofluoromethane

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TP-01A SB02567-01	71360.31	Soil	16-Oct-09 16:30	16-Oct-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	16-Oct-09	16-Oct-09	9101187	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 14.12 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	70.1	50	SW846 8260B	16-Oct-09	17-Oct-09	9101164	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	70.1	50	"	"	"	"	
79-01-6	Trichloroethene	264		µg/kg dry	70.1	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	70.1	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*108*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*20*	SGC	*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B					Initial weight: 14.12 g						
	Gasoline Range Organics	108		mg/kg dry	10.5	100	+Mod 8015	17-Oct-09	17-Oct-09	9101229	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*71*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*98*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3545A											
68476-30-2	Fuel Oil #2	BRL		mg/kg dry	31.3	1	8015BM	16-Oct-09	17-Oct-09	9101083	
68476-31-3	Fuel Oil #4	Calculated as		mg/kg dry	31.3	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/kg dry	31.3	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/kg dry	31.3	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/kg dry	31.3	1	"	"	"	"	
	Unidentified	2,400		mg/kg dry	31.3	1	"	"	"	"	
	Other Oil	BRL		mg/kg dry	31.3	1	"	"	"	"	
	Diesel Range Organics (DRO)	2,400		mg/kg dry	31.3	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*101*		*40-140 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	85.8		%		1	SM2540 G Mod.	16-Oct-09	16-Oct-09	9101195	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TP-01B SB02567-02	71360.31	Soil	16-Oct-09 16:40	16-Oct-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	16-Oct-09	16-Oct-09	9101187	
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Soil (high level)					Initial weight: 16.4 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	58.0	50	SW846 8260B	16-Oct-09	17-Oct-09	9101164	
127-18-4	Tetrachloroethene	159		µg/kg dry	58.0	50	"	"	"	"	
79-01-6	Trichloroethene	2,020		µg/kg dry	58.0	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	58.0	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*	*95*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*13*	SGC	*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B					Initial weight: 16.4 g						
	Gasoline Range Organics	15.7		mg/kg dry	4.4	50	+Mod 8015	17-Oct-09	17-Oct-09	9101229	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*83*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*89*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3545A											
68476-30-2	Fuel Oil #2	BRL		mg/kg dry	30.8	1	8015BM	16-Oct-09	17-Oct-09	9101083	
68476-31-3	Fuel Oil #4	Calculated as		mg/kg dry	30.8	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/kg dry	30.8	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/kg dry	30.8	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/kg dry	30.8	1	"	"	"	"	
	Unidentified	673		mg/kg dry	30.8	1	"	"	"	"	
	Other Oil	BRL		mg/kg dry	30.8	1	"	"	"	"	
	Diesel Range Organics (DRO)	673		mg/kg dry	30.8	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*72*		*40-140 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	88.6		%		1	SM2540 G Mod.	16-Oct-09	16-Oct-09	9101195	

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TP-01C SB02567-03	71360.31	Soil	16-Oct-09 16:45	16-Oct-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	16-Oct-09	16-Oct-09	9101187	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)						Initial weight: 16.67 g					
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	56.0	50	SW846 8260B	16-Oct-09	17-Oct-09	9101164	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	56.0	50	"	"	"	"	
79-01-6	Trichloroethene	89.1		µg/kg dry	56.0	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	56.0	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*105*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*93*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*8*	SGC	*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B						Initial weight: 16.67 g					
	Gasoline Range Organics	75.4		mg/kg dry	8.4	100	+Mod 8015	17-Oct-09	17-Oct-09	9101229	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*76*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*92*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3545A											
68476-30-2	Fuel Oil #2	BRL		mg/kg dry	30.7	1	8015BM	16-Oct-09	17-Oct-09	9101083	
68476-31-3	Fuel Oil #4	Calculated as		mg/kg dry	30.7	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/kg dry	30.7	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/kg dry	30.7	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/kg dry	30.7	1	"	"	"	"	
	Unidentified	2,460		mg/kg dry	30.7	1	"	"	"	"	
	Other Oil	BRL		mg/kg dry	30.7	1	"	"	"	"	
	Diesel Range Organics (DRO)	2,460		mg/kg dry	30.7	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*81*		*40-140 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	89.6		%		1	SM2540 G Mod.	16-Oct-09	16-Oct-09	9101195	

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK-09406 SB02567-04	71360.31	Aqueous	16-Oct-09 00:00	16-Oct-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	SW846 8260B	16-Oct-09	18-Oct-09	9101124	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*90*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*99*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*105*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*113*		*70-130 %*			"	"	"	"	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9101124 - SW846 5030 Water MS										
Blank (9101124-BLK1)										
Prepared: 16-Oct-09 Analyzed: 17-Oct-09										
Benzene	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
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						
Dibromochloromethane	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						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Methylene chloride	BRL		µg/l	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	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						
Vinyl chloride	BRL		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*44.9*		µg/l		*50.0*		*90*	*70-130*		
Surrogate: Toluene-d8	*49.7*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*54.6*		µg/l		*50.0*		*109*	*70-130*		
Surrogate: Dibromofluoromethane	*56.7*		µg/l		*50.0*		*113*	*70-130*		
LCS (9101124-BS1)										
Prepared: 16-Oct-09 Analyzed: 18-Oct-09										
Bromodichloromethane	21.8		µg/l		20.0		109	70-130		
Bromoform	22.1		µg/l		20.0		111	70-130		
Bromomethane	23.6		µg/l		20.0		118	70-130		
Carbon tetrachloride	23.9		µg/l		20.0		120	70-130		
Chlorobenzene	19.6		µg/l		20.0		98	70-130		
Chloroethane	20.4		µg/l		20.0		102	70-130		
Chloroform	21.8		µg/l		20.0		109	70-130		
Chloromethane	26.7	QM9	µg/l		20.0		134	70-130		
Dibromochloromethane	20.9		µg/l		20.0		105	70-130		
1,2-Dichlorobenzene	21.2		µg/l		20.0		106	70-130		
1,3-Dichlorobenzene	19.5		µg/l		20.0		98	70-130		
1,4-Dichlorobenzene	19.6		µg/l		20.0		98	70-130		
1,1-Dichloroethane	22.8		µg/l		20.0		114	70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9101124 - SW846 5030 Water MS										
LCS (9101124-BS1)										
Prepared: 16-Oct-09 Analyzed: 18-Oct-09										
1,2-Dichloroethane	19.4		µg/l		20.0		97	70-130		
1,1-Dichloroethene	20.8		µg/l		20.0		104	70-130		
cis-1,2-Dichloroethene	20.9		µg/l		20.0		105	70-130		
trans-1,2-Dichloroethene	19.7		µg/l		20.0		98	70-130		
1,2-Dichloropropane	21.9		µg/l		20.0		110	70-130		
cis-1,3-Dichloropropene	20.0		µg/l		20.0		100	70-130		
trans-1,3-Dichloropropene	20.5		µg/l		20.0		102	70-130		
Methylene chloride	23.5		µg/l		20.0		118	70-130		
1,1,2,2-Tetrachloroethane	18.0		µg/l		20.0		90	70-130		
Tetrachloroethene	19.0		µg/l		20.0		95	70-130		
1,1,1-Trichloroethane	20.9		µg/l		20.0		104	70-130		
1,1,2-Trichloroethane	21.4		µg/l		20.0		107	70-130		
Trichloroethene	21.6		µg/l		20.0		108	70-130		
Trichlorofluoromethane (Freon 11)	20.2		µg/l		20.0		101	70-130		
Vinyl chloride	26.5	QM9	µg/l		20.0		133	70-130		
Surrogate: 4-Bromofluorobenzene	*49.9*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*48.6*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*47.9*		µg/l		*50.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*51.9*		µg/l		*50.0*		*104*	*70-130*		
LCS Dup (9101124-BSD1)										
Prepared: 16-Oct-09 Analyzed: 18-Oct-09										
Bromodichloromethane	20.4		µg/l		20.0		102	70-130	7	30
Bromoform	21.4		µg/l		20.0		107	70-130	3	30
Bromomethane	21.6		µg/l		20.0		108	70-130	9	30
Carbon tetrachloride	21.7		µg/l		20.0		109	70-130	10	30
Chlorobenzene	18.0		µg/l		20.0		90	70-130	9	30
Chloroethane	18.9		µg/l		20.0		94	70-130	8	30
Chloroform	20.2		µg/l		20.0		101	70-130	8	30
Chloromethane	25.4		µg/l		20.0		127	70-130	5	30
Dibromochloromethane	20.1		µg/l		20.0		101	70-130	4	30
1,2-Dichlorobenzene	19.5		µg/l		20.0		98	70-130	8	30
1,3-Dichlorobenzene	17.8		µg/l		20.0		89	70-130	9	30
1,4-Dichlorobenzene	18.1		µg/l		20.0		91	70-130	8	30
1,1-Dichloroethane	20.8		µg/l		20.0		104	70-130	9	30
1,2-Dichloroethane	19.0		µg/l		20.0		95	70-130	2	30
1,1-Dichloroethene	18.7		µg/l		20.0		93	70-130	11	30
cis-1,2-Dichloroethene	19.8		µg/l		20.0		99	70-130	5	30
trans-1,2-Dichloroethene	17.9		µg/l		20.0		89	70-130	10	30
1,2-Dichloropropane	20.4		µg/l		20.0		102	70-130	7	30
cis-1,3-Dichloropropene	18.8		µg/l		20.0		94	70-130	6	30
trans-1,3-Dichloropropene	19.4		µg/l		20.0		97	70-130	6	30
Methylene chloride	22.2		µg/l		20.0		111	70-130	5	30
1,1,2,2-Tetrachloroethane	17.8		µg/l		20.0		89	70-130	1	30
Tetrachloroethene	17.2		µg/l		20.0		86	70-130	10	30
1,1,1-Trichloroethane	19.0		µg/l		20.0		95	70-130	10	30
1,1,2-Trichloroethane	21.2		µg/l		20.0		106	70-130	0.8	30
Trichloroethene	19.1		µg/l		20.0		96	70-130	12	30
Trichlorofluoromethane (Freon 11)	17.6		µg/l		20.0		88	70-130	14	30
Vinyl chloride	22.6		µg/l		20.0		113	70-130	16	30
Surrogate: 4-Bromofluorobenzene	*50.3*		µg/l		*50.0*		*101*	*70-130*		

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9101124 - SW846 5030 Water MS										
LCS Dup (9101124-BSD1)										
Prepared: 16-Oct-09 Analyzed: 18-Oct-09										
Surrogate: Toluene-d8	*48.7*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.8*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Dibromofluoromethane	*51.8*		µg/l		*50.0*		*104*	*70-130*		
Batch 9101164 - SW846 5030 Soil (high level)										
Blank (9101164-BLK1)										
Prepared & Analyzed: 16-Oct-09										
Benzene	BRL		µg/kg wet we	1.0						
Bromodichloromethane	BRL		µg/kg wet we	1.0						
Bromoform	BRL		µg/kg wet we	1.0						
Bromomethane	BRL		µg/kg wet we	2.0						
Carbon tetrachloride	BRL		µg/kg wet we	1.0						
Chlorobenzene	BRL		µg/kg wet we	1.0						
Chloroethane	BRL		µg/kg wet we	2.0						
Chloroform	BRL		µg/kg wet we	1.0						
Chloromethane	BRL		µg/kg wet we	2.0						
Dibromochloromethane	BRL		µg/kg wet we	1.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	1.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	1.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	2.0						
1,1-Dichloroethane	BRL		µg/kg wet we	1.0						
1,2-Dichloroethane	BRL		µg/kg wet we	1.0						
1,1-Dichloroethene	BRL		µg/kg wet we	1.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	1.0						
1,2-Dichloropropane	BRL		µg/kg wet we	1.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	1.0						
Methylene chloride	BRL		µg/kg wet we	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	1.0						
Tetrachloroethene	BRL		µg/kg wet we	1.0						
Toluene	BRL		µg/kg wet we	1.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	1.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	1.0						
Trichloroethene	BRL		µg/kg wet we	1.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	1.0						
Vinyl chloride	BRL		µg/kg wet we	1.0						
Surrogate: 4-Bromofluorobenzene	*29.2*		µg/l wet		*30.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*30.0*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.2*		µg/l wet		*30.0*		*94*	*70-130*		
Surrogate: Dibromofluoromethane	*28.6*		µg/l wet		*30.0*		*95*	*70-130*		
LCS (9101164-BS1)										
Prepared & Analyzed: 16-Oct-09										
Bromodichloromethane	24.4		µg/l wet		20.0		122	70-130		
Bromoform	27.5	QC2	µg/l wet		20.0		137	70-130		
Bromomethane	20.6		µg/l wet		20.0		103	70-130		
Carbon tetrachloride	21.1		µg/l wet		20.0		105	70-130		
Chlorobenzene	22.1		µg/l wet		20.0		111	70-130		
Chloroethane	20.7		µg/l wet		20.0		103	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9101164 - SW846 5030 Soil (high level)										
LCS (9101164-BS1)										
Prepared & Analyzed: 16-Oct-09										
Chloroform	16.3		µg/l wet		20.0		82	70-130		
Chloromethane	19.2		µg/l wet		20.0		96	70-130		
Dibromochloromethane	21.3		µg/l wet		20.0		107	70-130		
1,2-Dichlorobenzene	21.1		µg/l wet		20.0		106	70-130		
1,3-Dichlorobenzene	21.7		µg/l wet		20.0		108	70-130		
1,4-Dichlorobenzene	21.4		µg/l wet		20.0		107	70-130		
1,1-Dichloroethane	19.1		µg/l wet		20.0		95	70-130		
1,2-Dichloroethane	20.5		µg/l wet		20.0		103	70-130		
1,1-Dichloroethene	22.6		µg/l wet		20.0		113	70-130		
cis-1,2-Dichloroethene	17.0		µg/l wet		20.0		85	70-130		
trans-1,2-Dichloroethene	19.3		µg/l wet		20.0		97	70-130		
1,2-Dichloropropane	21.6		µg/l wet		20.0		108	70-130		
cis-1,3-Dichloropropene	19.5		µg/l wet		20.0		98	70-130		
trans-1,3-Dichloropropene	17.9		µg/l wet		20.0		90	70-130		
Methylene chloride	19.6		µg/l wet		20.0		98	70-130		
1,1,2,2-Tetrachloroethane	26.0		µg/l wet		20.0		130	70-130		
Tetrachloroethene	20.5		µg/l wet		20.0		102	70-130		
1,1,1-Trichloroethane	22.2		µg/l wet		20.0		111	70-130		
1,1,2-Trichloroethane	23.7		µg/l wet		20.0		118	70-130		
Trichloroethene	21.6		µg/l wet		20.0		108	70-130		
Trichlorofluoromethane (Freon 11)	23.2		µg/l wet		20.0		116	70-130		
Vinyl chloride	23.7		µg/l wet		20.0		118	70-130		
Surrogate: 4-Bromofluorobenzene	*29.3*		µg/l wet		*30.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*30.8*		µg/l wet		*30.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.8*		µg/l wet		*30.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*24.0*		µg/l wet		*30.0*		*80*	*70-130*		
LCS Dup (9101164-BSD1)										
Prepared & Analyzed: 16-Oct-09										
Bromodichloromethane	24.3		µg/l wet		20.0		122	70-130	0.2	30
Bromoform	27.7	QC2	µg/l wet		20.0		139	70-130	0.9	30
Bromomethane	20.8		µg/l wet		20.0		104	70-130	0.5	30
Carbon tetrachloride	20.8		µg/l wet		20.0		104	70-130	1	30
Chlorobenzene	21.8		µg/l wet		20.0		109	70-130	2	30
Chloroethane	19.7		µg/l wet		20.0		98	70-130	5	30
Chloroform	16.6		µg/l wet		20.0		83	70-130	2	30
Chloromethane	19.0		µg/l wet		20.0		95	70-130	1	30
Dibromochloromethane	21.5		µg/l wet		20.0		108	70-130	1	30
1,2-Dichlorobenzene	22.5		µg/l wet		20.0		112	70-130	6	30
1,3-Dichlorobenzene	22.2		µg/l wet		20.0		111	70-130	3	30
1,4-Dichlorobenzene	21.6		µg/l wet		20.0		108	70-130	1	30
1,1-Dichloroethane	20.1		µg/l wet		20.0		100	70-130	5	30
1,2-Dichloroethane	21.7		µg/l wet		20.0		108	70-130	6	30
1,1-Dichloroethene	21.8		µg/l wet		20.0		109	70-130	3	30
cis-1,2-Dichloroethene	18.0		µg/l wet		20.0		90	70-130	6	30
trans-1,2-Dichloroethene	19.7		µg/l wet		20.0		99	70-130	2	30
1,2-Dichloropropane	22.6		µg/l wet		20.0		113	70-130	5	30
cis-1,3-Dichloropropene	20.3		µg/l wet		20.0		101	70-130	4	30
trans-1,3-Dichloropropene	18.1		µg/l wet		20.0		91	70-130	1	30
Methylene chloride	19.7		µg/l wet		20.0		99	70-130	0.4	30
1,1,2,2-Tetrachloroethane	26.0		µg/l wet		20.0		130	70-130	0.2	30

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9101164 - SW846 5030 Soil (high level)										
LCS Dup (9101164-BSD1)										
Prepared & Analyzed: 16-Oct-09										
Tetrachloroethene	20.7		µg/l wet		20.0		104	70-130	1	30
1,1,1-Trichloroethane	21.9		µg/l wet		20.0		110	70-130	1	30
1,1,2-Trichloroethane	23.6		µg/l wet		20.0		118	70-130	0.2	30
Trichloroethene	20.8		µg/l wet		20.0		104	70-130	4	30
Trichlorofluoromethane (Freon 11)	23.9		µg/l wet		20.0		119	70-130	3	30
Vinyl chloride	26.4	QM9	µg/l wet		20.0		132	70-130	11	30
Surrogate: 4-Bromofluorobenzene	*28.6*		µg/l wet		*30.0*		*95*	*70-130*		
Surrogate: Toluene-d8	*30.1*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.9*		µg/l wet		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*30.4*		µg/l wet		*30.0*		*101*	*70-130*		
Batch 9101229 - VPH - EPA 5030B										
Blank (9101229-BLK1)										
Prepared & Analyzed: 17-Oct-09										
Gasoline Range Organics	BRL		mg/kg wet we	3.8						
Surrogate: 2,5-Dibromotoluene (PID)	*49.0*		µg/l wet		*50.0*		*98*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*50.1*		µg/l wet		*50.0*		*100*	*70-130*		
LCS (9101229-BS1)										
Prepared & Analyzed: 17-Oct-09										
Gasoline Range Organics	279		µg/l wet		280		100	70-130		
Surrogate: 2,5-Dibromotoluene (PID)	*46.3*		µg/l wet		*50.0*		*93*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*48.9*		µg/l wet		*50.0*		*98*	*70-130*		
LCS Dup (9101229-BSD1)										
Prepared & Analyzed: 17-Oct-09										
Gasoline Range Organics	279		µg/l wet		280		99	70-130	0.2	25
Surrogate: 2,5-Dibromotoluene (PID)	*49.0*		µg/l wet		*50.0*		*98*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*52.0*		µg/l wet		*50.0*		*104*	*70-130*		

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9101083 - SW846 3545A										
Blank (9101083-BLK1)										
Prepared: 16-Oct-09 Analyzed: 17-Oct-09										
Fuel Oil #2	BRL		mg/kg wet we	13.3						
Fuel Oil #4	BRL		mg/kg wet we	13.3						
Fuel Oil #6	BRL		mg/kg wet we	13.3						
Motor Oil	BRL		mg/kg wet we	13.3						
Aviation Fuel	BRL		mg/kg wet we	13.3						
Unidentified	BRL		mg/kg wet we	13.3						
Other Oil	BRL		mg/kg wet we	13.3						
Diesel Range Organics (DRO)	BRL		mg/kg wet we	13.3						
Surrogate: 1-Chlorooctadecane	*2.85*		mg/kg wet we		*3.33*		*86*	*40-140*		
LCS (9101083-BS2)										
Prepared: 16-Oct-09 Analyzed: 17-Oct-09										
Fuel Oil #2	562		mg/kg wet we	13.3	667		84	40-140		
Surrogate: 1-Chlorooctadecane	*3.42*		mg/kg wet we		*3.33*		*103*	*40-140*		

Close File

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.
R05	Elevated Reporting Limits due to the presence of high levels of non-target analytes.
SGC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
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.

Interpretation of Total Petroleum Hydrocarbon Report

Petroleum identification is determined by comparing the GC fingerprint obtained from the sample with a library of GC fingerprints obtained from analyses of various petroleum products. Possible match categories are as follows:

Gasoline - includes regular, unleaded, premium, etc.
Fuel Oil #2 - includes home heating oil, #2 fuel oil, and diesel
Fuel Oil #4 - includes #4 fuel oil
Fuel Oil #6 - includes #6 fuel oil and bunker "C" oil
Motor Oil - includes virgin and waste automobile oil
Ligroin - includes mineral spirits, petroleum naphtha, vm&p naphtha
Aviation Fuel - includes kerosene, Jet A and JP-4
Other Oil - includes lubricating and cutting oil, and silicon oil

At times, the unidentified petroleum product is quantified using a calibration that most closely approximates the distribution of compounds in the sample. When this occurs, the result is qualified as *TPH (Calculated as).

Close File

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

Close File

SB 02567

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page _____ of _____

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

Report To: Brittney Barnes, Terry Hertz

Invoice To: Acct. Payable, RMT, INC, Madi. WI

Project No.: 71360.31

Site Name: Columbia Manufacturing

Location: Westfield State: Ma

Project Mgr.: Steve Webb

Telephone #: 864 281 0030

P.O. No.: _____ RQN: _____

Sampler(s): WEB

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 7

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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOC's PESTICIDES 1,2DCE UC	TPH DRO	TPH GRO	moisture				
02567-01	TP-01A	10-16-09	1630	G	Soil	2	1			X	X	X	X	X			
02	TP-01B	10-16-09	1640	G	Soil	2	1			X	X	X	X	X			
03	TP-01C	10-16-09	1645	G	Soil	2	1			X	X	X	X	X			
04	TBLK-091406					1				X	X						

Containers: # of VOA Vials, # of Amber Glass, # of Clear Glass, # of Plastic

Analyses: VOC's PESTICIDES 1,2DCE UC, TPH DRO, TPH GRO, moisture

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

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

State specific reporting standards: _____

Please call w/ screening levels as soon as available 864 414-8021 Thanks

EDD Format _____
☐ E-mail to _____

Condition upon receipt: ☑ Iced ☐ Ambient ☐ °C 7.6

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	10/16/09	1740

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

Close File

Report Date:
18-Dec-09 17:00

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB05670-01	SB-200A/7	Soil	15-Dec-09 11:30	15-Dec-09 17:00
SB05670-02	SB-200A/9.5	Soil	15-Dec-09 11:40	15-Dec-09 17:00
SB05670-03	DP-200A	Ground Water	15-Dec-09 12:15	15-Dec-09 17:00
SB05670-04	SB-201A/9	Soil	15-Dec-09 13:00	15-Dec-09 17:00
SB05670-05	DP-201A	Ground Water	15-Dec-09 13:20	15-Dec-09 17:00
SB05670-06	SB-202A/9	Soil	15-Dec-09 13:50	15-Dec-09 17:00
SB05670-07	SB-202A/18	Soil	15-Dec-09 14:00	15-Dec-09 17:00
SB05670-08	DP-202A	Ground Water	15-Dec-09 14:15	15-Dec-09 17:00
SB05670-09	SB-203A/4-5	Soil	15-Dec-09 14:45	15-Dec-09 17:00
SB05670-10	SB-203A/8	Soil	15-Dec-09 14:55	15-Dec-09 17:00
SB05670-11	SB-203A/12-13	Soil	15-Dec-09 15:05	15-Dec-09 17:00
SB05670-12	SB-203A/17-18	Soil	15-Dec-09 15:15	15-Dec-09 17:00
SB05670-13	DP-203A	Ground Water	15-Dec-09 15:35	15-Dec-09 17:00

Close File

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 34 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.

Close File

CASE NARRATIVE:

The samples were received 5.0 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.

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.

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

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

SW846 8260B

Laboratory Control Samples:

9121377-BS1

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

Trichlorofluoromethane (Freon 11)

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.

Carbon tetrachloride

9121377-BSD1

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

Trichlorofluoromethane (Freon 11)

9121465-BS1

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

Carbon tetrachloride
Trichlorofluoromethane (Freon 11)

9121465-BSD1

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

Carbon tetrachloride
Trichlorofluoromethane (Freon 11)

Close File

SW846 8260B

Samples:

S912410-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

Carbon tetrachloride (31.9%)

This affected the following samples:

SB-203A/12-13
SB-203A/17-18

S912419-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

1,1,1-Trichloroethane (32.6%)
Carbon tetrachloride (41.6%)
Trichlorofluoromethane (Freon 11) (41.2%)

This affected the following samples:

SB-203A/4-5

SB05670-01 *SB-200A/7*

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

SB05670-02 *SB-200A/9.5*

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

SB05670-04 *SB-201A/9*

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

SB05670-05 *DP-201A*

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

SB05670-06 *SB-202A/9*

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

Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

Dibromofluoromethane

SB05670-07 *SB-202A/18*

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

SB05670-10 *SB-203A/8*

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

SB05670-12RE1 *SB-203A/17-18*

The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

1,2-Dichloroethane-d4
Dibromofluoromethane

Close File

SW846 8260B

Samples:

SB05670-13	*DP-203A*

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

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-200A/7 SB05670-01	71360.31	Soil	15-Dec-09 11:30	15-Dec-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	15-Dec-09	15-Dec-09	9121250	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 14.47 g						
156-59-2	cis-1,2-Dichloroethene	1,880		µg/kg dry	806	500	SW846 8260B	17-Dec-09	17-Dec-09	9121376	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	806	500	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	806	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	806	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*116*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*94*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*95*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	78.0		%		1	SM2540 G Mod.	16-Dec-09	16-Dec-09	9121303	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-200A/9.5 SB05670-02	71360.31	Soil	15-Dec-09 11:40	15-Dec-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	15-Dec-09	15-Dec-09	9121250	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 17.19 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	53.9	50	SW846 8260B	17-Dec-09	17-Dec-09	9121376	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	53.9	50	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	53.9	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	53.9	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*100*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*94*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	90.1		%		1	SM2540 G Mod.	16-Dec-09	16-Dec-09	9121303	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-200A SB05670-03	71360.31	Ground Water	15-Dec-09 12:15	15-Dec-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	432		µg/l	5.0	5	SW846 8260B	17-Dec-09	17-Dec-09	9121378	
127-18-4	Tetrachloroethene	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	14.8		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	257	E	µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*124*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*105*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*			"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
75-01-4	Vinyl chloride	346		µg/l	10.0	10	SW846 8260B	18-Dec-09	18-Dec-09	9121480	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*105*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*106*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*104*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-201A/9 SB05670-04	71360.31	Soil	15-Dec-09 13:00	15-Dec-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	15-Dec-09	15-Dec-09	9121250	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 12.23 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	389	200	SW846 8260B	17-Dec-09	17-Dec-09	9121376	
127-18-4	Tetrachloroethene	1,560		µg/kg dry	389	200	"	"	"	"	
79-01-6	Trichloroethene	3,470		µg/kg dry	389	200	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	389	200	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*107*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*94*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*94*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	75.6		%		1	SM2540 G Mod.	16-Dec-09	16-Dec-09	9121303	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-201A SB05670-05	71360.31	Ground Water	15-Dec-09 13:20	15-Dec-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	25.0	25	SW846 8260B	17-Dec-09	17-Dec-09	9121378	
127-18-4	Tetrachloroethene	BRL		µg/l	25.0	25	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	25.0	25	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	25.0	25	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*83*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*78*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*103*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*99*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-202A/9 SB05670-06	71360.31	Soil	15-Dec-09 13:50	15-Dec-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	15-Dec-09	15-Dec-09	9121250	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 11.77 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	201	100	SW846 8260B	16-Dec-09	16-Dec-09	9121292	
127-18-4	Tetrachloroethene	323		µg/kg dry	201	100	"	"	"	"	
79-01-6	Trichloroethene	2,190		µg/kg dry	201	100	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	201	100	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*105*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*101*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*22*	SGC	*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	75.6		%		1	SM2540 G Mod.	16-Dec-09	16-Dec-09	9121303	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-202A/18 SB05670-07	71360.31	Soil	15-Dec-09 14:00	15-Dec-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	15-Dec-09	15-Dec-09	9121250	
Volatile Organic Halocarbons by SW846 8260B			GS1								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 16.32 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	57.8	50	SW846 8260B	17-Dec-09	17-Dec-09	9121376	
127-18-4	Tetrachloroethene	1,470		µg/kg dry	57.8	50	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	57.8	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	57.8	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*101*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*95*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*96*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	89.0		%		1	SM2540 G Mod.	16-Dec-09	16-Dec-09	9121303	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-202A SB05670-08	71360.31	Ground Water	15-Dec-09 14:15	15-Dec-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1000	1000	SW846 8260B	18-Dec-09	18-Dec-09	9121480	
127-18-4	Tetrachloroethene	49,500		µg/l	1000	1000	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1000	1000	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1000	1000	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*81*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*110*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*105*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-203A/4-5 SB05670-09	71360.31	Soil	15-Dec-09 14:45	15-Dec-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	15-Dec-09	15-Dec-09	9121250	
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5035A Soil (low level)						Initial weight: 6.88 g					
Re-analysis of Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5035A Soil (low level)											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	5.5	1	SW846 8260B	18-Dec-09	18-Dec-09	9121465	
127-18-4	Tetrachloroethene	8.4		µg/kg dry	5.5	1	"	"	"	"	
79-01-6	Trichloroethene	132		µg/kg dry	5.5	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	5.5	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*92*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*126*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*109*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	82.2		%		1	SM2540 G Mod.	16-Dec-09	16-Dec-09	9121303	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-203A/8 SB05670-10	71360.31	Soil	15-Dec-09 14:55	15-Dec-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	15-Dec-09	15-Dec-09	9121250	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.65 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	340	200	SW846 8260B	17-Dec-09	17-Dec-09	9121376	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	340	200	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	340	200	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	340	200	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*105*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*93*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*92*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	72.5		%		1	SM2540 G Mod.	16-Dec-09	16-Dec-09	9121303	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-203A/12-13 SB05670-11	71360.31	Soil	15-Dec-09 15:05	15-Dec-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	15-Dec-09	15-Dec-09	9121250	
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5035A Soil (low level)						Initial weight: 7.2 g					
Re-analysis of Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5035A Soil (low level)											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	4.6	1	SW846 8260B	17-Dec-09	17-Dec-09	9121377	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	4.6	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	4.6	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	4.6	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*90*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*126*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*118*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	88.5		%		1	SM2540 G Mod.	16-Dec-09	16-Dec-09	9121303	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-203A/17-18 SB05670-12	71360.31	Soil	15-Dec-09 15:15	15-Dec-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	15-Dec-09	15-Dec-09	9121250	
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5035A Soil (low level)						Initial weight: 8.24 g					
Re-analysis of Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5035A Soil (low level)											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	3.8	1	SW846 8260B	17-Dec-09	17-Dec-09	9121377	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	3.8	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	3.8	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	3.8	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*90*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*77*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*173*	S04	*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*156*	S04	*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	90.8		%		1	SM2540 G Mod.	16-Dec-09	16-Dec-09	9121303	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-203A SB05670-13	71360.31	Ground Water	15-Dec-09 15:35	15-Dec-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	50.0	50	SW846 8260B	17-Dec-09	17-Dec-09	9121378	
127-18-4	Tetrachloroethene	156		µg/l	50.0	50	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	50.0	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	50.0	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*88*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*103*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*		*70-130 %*			"	"	"	"	

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121292 - SW846 5030 Soil (high level)										
Blank (9121292-BLK1)										
Prepared & Analyzed: 16-Dec-09										
Benzene	BRL		µg/kg wet we	50.0						
Bromodichloromethane	BRL		µg/kg wet we	50.0						
Bromoform	BRL		µg/kg wet we	50.0						
Bromomethane	BRL		µg/kg wet we	100						
Carbon tetrachloride	BRL		µg/kg wet we	50.0						
Chlorobenzene	BRL		µg/kg wet we	50.0						
Chloroethane	BRL		µg/kg wet we	100						
Chloroform	BRL		µg/kg wet we	50.0						
Chloromethane	BRL		µg/kg wet we	100						
Dibromochloromethane	BRL		µg/kg wet we	50.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	50.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	50.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	50.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	100						
1,1-Dichloroethane	BRL		µg/kg wet we	50.0						
1,2-Dichloroethane	BRL		µg/kg wet we	50.0						
1,1-Dichloroethene	BRL		µg/kg wet we	50.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	50.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	50.0						
1,2-Dichloropropane	BRL		µg/kg wet we	50.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	50.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	50.0						
Methylene chloride	BRL		µg/kg wet we	250						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	50.0						
Tetrachloroethene	BRL		µg/kg wet we	50.0						
Toluene	BRL		µg/kg wet we	50.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	50.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	50.0						
Trichloroethene	BRL		µg/kg wet we	50.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	50.0						
Vinyl chloride	BRL		µg/kg wet we	50.0						
Surrogate: 4-Bromofluorobenzene	*29.0*		µg/kg wet		*30.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*30.6*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.9*		µg/kg wet		*30.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*28.9*		µg/kg wet		*30.0*		*96*	*70-130*		
LCS (9121292-BS1)										
Prepared & Analyzed: 16-Dec-09										
Bromodichloromethane	22.2		µg/kg wet		20.0		111	70-130		
Bromoform	18.0		µg/kg wet		20.0		90	70-130		
Bromomethane	18.8		µg/kg wet		20.0		94	70-130		
Carbon tetrachloride	18.7		µg/kg wet		20.0		94	70-130		
Chlorobenzene	20.3		µg/kg wet		20.0		101	70-130		
Chloroethane	17.9		µg/kg wet		20.0		90	70-130		
Chloroform	20.5		µg/kg wet		20.0		102	70-130		
Chloromethane	18.8		µg/kg wet		20.0		94	70-130		
Dibromochloromethane	16.6		µg/kg wet		20.0		83	70-130		
1,2-Dichlorobenzene	19.9		µg/kg wet		20.0		99	70-130		
1,3-Dichlorobenzene	21.8		µg/kg wet		20.0		109	70-130		
1,4-Dichlorobenzene	19.9		µg/kg wet		20.0		100	70-130		
1,1-Dichloroethane	19.2		µg/kg wet		20.0		96	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121292 - SW846 5030 Soil (high level)										
LCS (9121292-BS1)										
Prepared & Analyzed: 16-Dec-09										
1,2-Dichloroethane	20.2		µg/kg wet		20.0		101	70-130		
1,1-Dichloroethene	20.2		µg/kg wet		20.0		101	70-130		
cis-1,2-Dichloroethene	21.4		µg/kg wet		20.0		107	70-130		
trans-1,2-Dichloroethene	18.9		µg/kg wet		20.0		94	70-130		
1,2-Dichloropropane	18.9		µg/kg wet		20.0		94	70-130		
cis-1,3-Dichloropropene	20.0		µg/kg wet		20.0		100	70-130		
trans-1,3-Dichloropropene	18.5		µg/kg wet		20.0		93	70-130		
Methylene chloride	18.1		µg/kg wet		20.0		90	70-130		
1,1,2,2-Tetrachloroethane	20.2		µg/kg wet		20.0		101	70-130		
Tetrachloroethene	22.3		µg/kg wet		20.0		111	70-130		
1,1,1-Trichloroethane	21.6		µg/kg wet		20.0		108	70-130		
1,1,2-Trichloroethane	21.6		µg/kg wet		20.0		108	70-130		
Trichloroethene	21.2		µg/kg wet		20.0		106	70-130		
Trichlorofluoromethane (Freon 11)	22.0		µg/kg wet		20.0		110	70-130		
Vinyl chloride	17.8		µg/kg wet		20.0		89	70-130		
Surrogate: 4-Bromofluorobenzene	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.0*		µg/kg wet		*30.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*29.7*		µg/kg wet		*30.0*		*99*	*70-130*		
LCS Dup (9121292-BSD1)										
Prepared & Analyzed: 16-Dec-09										
Bromodichloromethane	22.4		µg/kg wet		20.0		112	70-130	0.9	25
Bromoform	18.2		µg/kg wet		20.0		91	70-130	1	25
Bromomethane	16.7		µg/kg wet		20.0		83	70-130	12	50
Carbon tetrachloride	18.6		µg/kg wet		20.0		93	70-130	0.6	25
Chlorobenzene	20.1		µg/kg wet		20.0		100	70-130	0.9	25
Chloroethane	16.8		µg/kg wet		20.0		84	70-130	7	50
Chloroform	20.5		µg/kg wet		20.0		102	70-130	0.05	25
Chloromethane	18.1		µg/kg wet		20.0		91	70-130	4	25
Dibromochloromethane	16.8		µg/kg wet		20.0		84	70-130	2	50
1,2-Dichlorobenzene	20.0		µg/kg wet		20.0		100	70-130	0.6	25
1,3-Dichlorobenzene	21.6		µg/kg wet		20.0		108	70-130	0.7	25
1,4-Dichlorobenzene	20.0		µg/kg wet		20.0		100	70-130	0.4	25
1,1-Dichloroethane	18.0		µg/kg wet		20.0		90	70-130	6	25
1,2-Dichloroethane	20.4		µg/kg wet		20.0		102	70-130	0.6	25
1,1-Dichloroethene	19.9		µg/kg wet		20.0		100	70-130	1	25
cis-1,2-Dichloroethene	21.1		µg/kg wet		20.0		105	70-130	2	25
trans-1,2-Dichloroethene	18.8		µg/kg wet		20.0		94	70-130	0.2	25
1,2-Dichloropropane	19.0		µg/kg wet		20.0		95	70-130	0.3	25
cis-1,3-Dichloropropene	19.6		µg/kg wet		20.0		98	70-130	2	25
trans-1,3-Dichloropropene	18.4		µg/kg wet		20.0		92	70-130	0.8	25
Methylene chloride	18.0		µg/kg wet		20.0		90	70-130	0.7	25
1,1,2,2-Tetrachloroethane	20.3		µg/kg wet		20.0		102	70-130	0.2	25
Tetrachloroethene	21.4		µg/kg wet		20.0		107	70-130	4	25
1,1,1-Trichloroethane	21.1		µg/kg wet		20.0		105	70-130	3	25
1,1,2-Trichloroethane	22.0		µg/kg wet		20.0		110	70-130	2	25
Trichloroethene	21.1		µg/kg wet		20.0		106	70-130	0.5	25
Trichlorofluoromethane (Freon 11)	21.0		µg/kg wet		20.0		105	70-130	5	25
Vinyl chloride	16.5		µg/kg wet		20.0		82	70-130	8	50
Surrogate: 4-Bromofluorobenzene	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		

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* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121292 - SW846 5030 Soil (high level)										
LCS Dup (9121292-BSD1)										
Prepared & Analyzed: 16-Dec-09										
Surrogate: Toluene-d8	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.6*		µg/kg wet		*30.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*29.6*		µg/kg wet		*30.0*		*99*	*70-130*		
Batch 9121319 - SW846 5030 Soil (high level)										
Blank (9121319-BLK1)										
Prepared & Analyzed: 16-Dec-09										
Benzene	BRL		µg/kg wet we	50.0						
Bromodichloromethane	BRL		µg/kg wet we	50.0						
Bromoform	BRL		µg/kg wet we	50.0						
Bromomethane	BRL		µg/kg wet we	100						
Carbon tetrachloride	BRL		µg/kg wet we	50.0						
Chlorobenzene	BRL		µg/kg wet we	50.0						
Chloroethane	BRL		µg/kg wet we	100						
Chloroform	BRL		µg/kg wet we	50.0						
Chloromethane	BRL		µg/kg wet we	100						
Dibromochloromethane	BRL		µg/kg wet we	50.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	50.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	50.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	50.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	100						
1,1-Dichloroethane	BRL		µg/kg wet we	50.0						
1,2-Dichloroethane	BRL		µg/kg wet we	50.0						
1,1-Dichloroethene	BRL		µg/kg wet we	50.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	50.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	50.0						
1,2-Dichloropropane	BRL		µg/kg wet we	50.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	50.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	50.0						
Methylene chloride	BRL		µg/kg wet we	500						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	50.0						
Tetrachloroethene	BRL		µg/kg wet we	50.0						
Toluene	BRL		µg/kg wet we	50.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	50.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	50.0						
Trichloroethene	BRL		µg/kg wet we	50.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	50.0						
Vinyl chloride	BRL		µg/kg wet we	50.0						
Surrogate: 4-Bromofluorobenzene	*29.3*		µg/kg wet		*30.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*30.1*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.5*		µg/kg wet		*30.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*28.7*		µg/kg wet		*30.0*		*96*	*70-130*		
LCS (9121319-BS1)										
Prepared & Analyzed: 16-Dec-09										
Bromodichloromethane	22.5		µg/kg wet		20.0		112	70-130		
Bromoform	18.6		µg/kg wet		20.0		93	70-130		
Bromomethane	16.2		µg/kg wet		20.0		81	70-130		
Carbon tetrachloride	19.4		µg/kg wet		20.0		97	70-130		
Chlorobenzene	21.6		µg/kg wet		20.0		108	70-130		
Chloroethane	16.5		µg/kg wet		20.0		83	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121319 - SW846 5030 Soil (high level)										
LCS (9121319-BS1)										
Prepared & Analyzed: 16-Dec-09										
Chloroform	21.5		µg/kg wet		20.0		107	70-130		
Chloromethane	18.4		µg/kg wet		20.0		92	70-130		
Dibromochloromethane	16.9		µg/kg wet		20.0		84	70-130		
1,2-Dichlorobenzene	20.7		µg/kg wet		20.0		103	70-130		
1,3-Dichlorobenzene	22.0		µg/kg wet		20.0		110	70-130		
1,4-Dichlorobenzene	20.4		µg/kg wet		20.0		102	70-130		
1,1-Dichloroethane	17.5		µg/kg wet		20.0		88	70-130		
1,2-Dichloroethane	20.0		µg/kg wet		20.0		100	70-130		
1,1-Dichloroethene	20.0		µg/kg wet		20.0		100	70-130		
cis-1,2-Dichloroethene	22.1		µg/kg wet		20.0		110	70-130		
trans-1,2-Dichloroethene	17.8		µg/kg wet		20.0		89	70-130		
1,2-Dichloropropane	19.0		µg/kg wet		20.0		95	70-130		
cis-1,3-Dichloropropene	19.6		µg/kg wet		20.0		98	70-130		
trans-1,3-Dichloropropene	18.1		µg/kg wet		20.0		91	70-130		
Methylene chloride	18.0		µg/kg wet		20.0		90	70-130		
1,1,2,2-Tetrachloroethane	19.0		µg/kg wet		20.0		95	70-130		
Tetrachloroethene	23.9		µg/kg wet		20.0		120	70-130		
1,1,1-Trichloroethane	22.6		µg/kg wet		20.0		113	70-130		
1,1,2-Trichloroethane	21.5		µg/kg wet		20.0		108	70-130		
Trichloroethene	21.6		µg/kg wet		20.0		108	70-130		
Trichlorofluoromethane (Freon 11)	21.2		µg/kg wet		20.0		106	70-130		
Vinyl chloride	17.5		µg/kg wet		20.0		88	70-130		
Surrogate: 4-Bromofluorobenzene	*29.6*		µg/kg wet		*30.0*		*99*	*70-130*		
Surrogate: Toluene-d8	*29.9*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.9*		µg/kg wet		*30.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
LCS Dup (9121319-BSD1)										
Prepared & Analyzed: 16-Dec-09										
Bromodichloromethane	22.2		µg/kg wet		20.0		111	70-130	1	30
Bromoform	19.3		µg/kg wet		20.0		96	70-130	4	30
Bromomethane	16.2		µg/kg wet		20.0		81	70-130	0.4	30
Carbon tetrachloride	19.6		µg/kg wet		20.0		98	70-130	0.8	30
Chlorobenzene	20.4		µg/kg wet		20.0		102	70-130	5	30
Chloroethane	16.7		µg/kg wet		20.0		84	70-130	1	30
Chloroform	21.0		µg/kg wet		20.0		105	70-130	2	30
Chloromethane	18.2		µg/kg wet		20.0		91	70-130	0.7	30
Dibromochloromethane	17.0		µg/kg wet		20.0		85	70-130	0.6	30
1,2-Dichlorobenzene	20.1		µg/kg wet		20.0		100	70-130	3	30
1,3-Dichlorobenzene	21.4		µg/kg wet		20.0		107	70-130	3	30
1,4-Dichlorobenzene	19.9		µg/kg wet		20.0		99	70-130	2	30
1,1-Dichloroethane	17.5		µg/kg wet		20.0		87	70-130	0.2	30
1,2-Dichloroethane	20.1		µg/kg wet		20.0		101	70-130	0.7	30
1,1-Dichloroethene	19.8		µg/kg wet		20.0		99	70-130	0.8	30
cis-1,2-Dichloroethene	21.8		µg/kg wet		20.0		109	70-130	1	30
trans-1,2-Dichloroethene	14.9		µg/kg wet		20.0		75	70-130	18	30
1,2-Dichloropropane	18.5		µg/kg wet		20.0		92	70-130	3	30
cis-1,3-Dichloropropene	19.6		µg/kg wet		20.0		98	70-130	0.5	30
trans-1,3-Dichloropropene	18.2		µg/kg wet		20.0		91	70-130	0.2	30
Methylene chloride	16.9		µg/kg wet		20.0		85	70-130	6	30
1,1,2,2-Tetrachloroethane	19.6		µg/kg wet		20.0		98	70-130	3	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121319 - SW846 5030 Soil (high level)										
LCS Dup (9121319-BSD1)										
Prepared & Analyzed: 16-Dec-09										
Tetrachloroethene	22.9		µg/kg wet		20.0		114	70-130	5	30
1,1,1-Trichloroethane	22.1		µg/kg wet		20.0		110	70-130	2	30
1,1,2-Trichloroethane	21.5		µg/kg wet		20.0		107	70-130	0.3	30
Trichloroethene	21.1		µg/kg wet		20.0		106	70-130	2	30
Trichlorofluoromethane (Freon 11)	20.8		µg/kg wet		20.0		104	70-130	2	30
Vinyl chloride	16.0		µg/kg wet		20.0		80	70-130	9	30
Surrogate: 4-Bromofluorobenzene	*29.8*		µg/kg wet		*30.0*		*99*	*70-130*		
Surrogate: Toluene-d8	*29.8*		µg/kg wet		*30.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.8*		µg/kg wet		*30.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*30.5*		µg/kg wet		*30.0*		*102*	*70-130*		
Batch 9121376 - SW846 5030 Soil (high level)										
Blank (9121376-BLK1)										
Prepared & Analyzed: 17-Dec-09										
Benzene	BRL		µg/kg wet we	50.0						
Bromodichloromethane	BRL		µg/kg wet we	50.0						
Bromoform	BRL		µg/kg wet we	50.0						
Bromomethane	BRL		µg/kg wet we	100						
Carbon tetrachloride	BRL		µg/kg wet we	50.0						
Chlorobenzene	BRL		µg/kg wet we	50.0						
Chloroethane	BRL		µg/kg wet we	100						
Chloroform	BRL		µg/kg wet we	50.0						
Chloromethane	BRL		µg/kg wet we	100						
Dibromochloromethane	BRL		µg/kg wet we	50.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	50.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	50.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	50.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	100						
1,1-Dichloroethane	BRL		µg/kg wet we	50.0						
1,2-Dichloroethane	BRL		µg/kg wet we	50.0						
1,1-Dichloroethene	BRL		µg/kg wet we	50.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	50.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	50.0						
1,2-Dichloropropane	BRL		µg/kg wet we	50.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	50.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	50.0						
Methylene chloride	BRL		µg/kg wet we	250						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	50.0						
Tetrachloroethene	BRL		µg/kg wet we	50.0						
Toluene	BRL		µg/kg wet we	50.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	50.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	50.0						
Trichloroethene	BRL		µg/kg wet we	50.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	50.0						
Vinyl chloride	BRL		µg/kg wet we	50.0						
Surrogate: 4-Bromofluorobenzene	*29.5*		µg/kg wet		*30.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.8*		µg/kg wet		*30.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*28.6*		µg/kg wet		*30.0*		*95*	*70-130*		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121376 - SW846 5030 Soil (high level)										
LCS (9121376-BS1)										
Prepared & Analyzed: 17-Dec-09										
Bromodichloromethane	21.3		µg/kg wet		20.0		106	70-130		
Bromoform	18.1		µg/kg wet		20.0		91	70-130		
Bromomethane	16.3		µg/kg wet		20.0		82	70-130		
Carbon tetrachloride	18.5		µg/kg wet		20.0		92	70-130		
Chlorobenzene	20.9		µg/kg wet		20.0		104	70-130		
Chloroethane	16.1		µg/kg wet		20.0		80	70-130		
Chloroform	20.3		µg/kg wet		20.0		101	70-130		
Chloromethane	16.7		µg/kg wet		20.0		84	70-130		
Dibromochloromethane	16.6		µg/kg wet		20.0		83	70-130		
1,2-Dichlorobenzene	19.7		µg/kg wet		20.0		99	70-130		
1,3-Dichlorobenzene	22.3		µg/kg wet		20.0		111	70-130		
1,4-Dichlorobenzene	19.9		µg/kg wet		20.0		99	70-130		
1,1-Dichloroethane	21.6		µg/kg wet		20.0		108	70-130		
1,2-Dichloroethane	19.4		µg/kg wet		20.0		97	70-130		
1,1-Dichloroethene	19.1		µg/kg wet		20.0		96	70-130		
cis-1,2-Dichloroethene	21.6		µg/kg wet		20.0		108	70-130		
trans-1,2-Dichloroethene	18.4		µg/kg wet		20.0		92	70-130		
1,2-Dichloropropane	18.5		µg/kg wet		20.0		93	70-130		
cis-1,3-Dichloropropene	19.2		µg/kg wet		20.0		96	70-130		
trans-1,3-Dichloropropene	17.9		µg/kg wet		20.0		90	70-130		
Methylene chloride	17.0		µg/kg wet		20.0		85	70-130		
1,1,2,2-Tetrachloroethane	19.6		µg/kg wet		20.0		98	70-130		
Tetrachloroethene	22.8		µg/kg wet		20.0		114	70-130		
1,1,1-Trichloroethane	21.2		µg/kg wet		20.0		106	70-130		
1,1,2-Trichloroethane	20.6		µg/kg wet		20.0		103	70-130		
Trichloroethene	21.4		µg/kg wet		20.0		107	70-130		
Trichlorofluoromethane (Freon 11)	20.4		µg/kg wet		20.0		102	70-130		
Vinyl chloride	15.1		µg/kg wet		20.0		76	70-130		
Surrogate: 4-Bromofluorobenzene	*30.5*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*29.9*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*27.8*		µg/kg wet		*30.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*29.8*		µg/kg wet		*30.0*		*99*	*70-130*		
LCS Dup (9121376-BSD1)										
Prepared & Analyzed: 17-Dec-09										
Bromodichloromethane	21.0		µg/kg wet		20.0		105	70-130	1	25
Bromoform	17.3		µg/kg wet		20.0		86	70-130	5	25
Bromomethane	16.7		µg/kg wet		20.0		83	70-130	2	50
Carbon tetrachloride	20.0		µg/kg wet		20.0		100	70-130	8	25
Chlorobenzene	21.1		µg/kg wet		20.0		106	70-130	1	25
Chloroethane	17.2		µg/kg wet		20.0		86	70-130	7	50
Chloroform	20.1		µg/kg wet		20.0		101	70-130	0.7	25
Chloromethane	17.3		µg/kg wet		20.0		87	70-130	3	25
Dibromochloromethane	16.0		µg/kg wet		20.0		80	70-130	3	50
1,2-Dichlorobenzene	19.4		µg/kg wet		20.0		97	70-130	2	25
1,3-Dichlorobenzene	22.6		µg/kg wet		20.0		113	70-130	1	25
1,4-Dichlorobenzene	19.8		µg/kg wet		20.0		99	70-130	0.1	25
1,1-Dichloroethane	21.4		µg/kg wet		20.0		107	70-130	1	25
1,2-Dichloroethane	18.2		µg/kg wet		20.0		91	70-130	6	25
1,1-Dichloroethene	19.5		µg/kg wet		20.0		98	70-130	2	25
cis-1,2-Dichloroethene	21.8		µg/kg wet		20.0		109	70-130	1	25

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121376 - SW846 5030 Soil (high level)										
LCS Dup (9121376-BSD1)										
Prepared & Analyzed: 17-Dec-09										
trans-1,2-Dichloroethene	18.3		µg/kg wet		20.0		92	70-130	0.3	25
1,2-Dichloropropane	17.8		µg/kg wet		20.0		89	70-130	4	25
cis-1,3-Dichloropropene	19.3		µg/kg wet		20.0		97	70-130	0.8	25
trans-1,3-Dichloropropene	17.3		µg/kg wet		20.0		87	70-130	4	25
Methylene chloride	17.0		µg/kg wet		20.0		85	70-130	0.1	25
1,1,2,2-Tetrachloroethane	16.2		µg/kg wet		20.0		81	70-130	19	25
Tetrachloroethene	23.3		µg/kg wet		20.0		116	70-130	2	25
1,1,1-Trichloroethane	22.0		µg/kg wet		20.0		110	70-130	4	25
1,1,2-Trichloroethane	18.8		µg/kg wet		20.0		94	70-130	9	25
Trichloroethene	21.3		µg/kg wet		20.0		107	70-130	0.2	25
Trichlorofluoromethane (Freon 11)	21.3		µg/kg wet		20.0		107	70-130	4	25
Vinyl chloride	22.7		µg/kg wet		20.0		113	70-130	40	50
Surrogate: 4-Bromofluorobenzene	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*29.4*		µg/kg wet		*30.0*		*98*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*26.4*		µg/kg wet		*30.0*		*88*	*70-130*		
Surrogate: Dibromofluoromethane	*29.5*		µg/kg wet		*30.0*		*98*	*70-130*		
Batch 9121377 - SW846 5035A Soil (low level)										
Blank (9121377-BLK1)										
Prepared & Analyzed: 17-Dec-09										
Benzene	BRL		µg/kg wet we	5.0						
Bromodichloromethane	BRL		µg/kg wet we	5.0						
Bromoform	BRL		µg/kg wet we	5.0						
Bromomethane	BRL		µg/kg wet we	10.0						
Carbon tetrachloride	BRL		µg/kg wet we	5.0						
Chlorobenzene	BRL		µg/kg wet we	5.0						
Chloroethane	BRL		µg/kg wet we	10.0						
Chloroform	BRL		µg/kg wet we	5.0						
Chloromethane	BRL		µg/kg wet we	10.0						
Dibromochloromethane	BRL		µg/kg wet we	5.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	5.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	5.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	5.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	10.0						
1,1-Dichloroethane	BRL		µg/kg wet we	5.0						
1,2-Dichloroethane	BRL		µg/kg wet we	5.0						
1,1-Dichloroethene	BRL		µg/kg wet we	5.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	5.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	5.0						
1,2-Dichloropropane	BRL		µg/kg wet we	5.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	5.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	5.0						
Methylene chloride	BRL		µg/kg wet we	50.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	5.0						
Tetrachloroethene	BRL		µg/kg wet we	5.0						
Toluene	BRL		µg/kg wet we	5.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	5.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	5.0						
Trichloroethene	BRL		µg/kg wet we	5.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	5.0						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121377 - SW846 5035A Soil (low level)										
Blank (9121377-BLK1)										
Prepared & Analyzed: 17-Dec-09										
Vinyl chloride	BRL		µg/kg wet we	5.0						
Surrogate: 4-Bromofluorobenzene	*48.8*		µg/kg wet		*50.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*50.8*		µg/kg wet		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*62.6*		µg/kg wet		*50.0*		*125*	*70-130*		
Surrogate: Dibromofluoromethane	*51.5*		µg/kg wet		*50.0*		*103*	*70-130*		
LCS (9121377-BS1)										
Prepared & Analyzed: 17-Dec-09										
Bromodichloromethane	22.9		µg/kg wet		20.0		114	70-130		
Bromoform	22.4		µg/kg wet		20.0		112	70-130		
Bromomethane	20.2		µg/kg wet		20.0		101	70-130		
Carbon tetrachloride	26.2	QM9	µg/kg wet		20.0		131	70-130		
Chlorobenzene	20.7		µg/kg wet		20.0		104	70-130		
Chloroethane	20.9		µg/kg wet		20.0		104	70-130		
Chloroform	20.6		µg/kg wet		20.0		103	70-130		
Chloromethane	20.7		µg/kg wet		20.0		103	70-130		
Dibromochloromethane	22.0		µg/kg wet		20.0		110	70-130		
1,2-Dichlorobenzene	21.9		µg/kg wet		20.0		110	70-130		
1,3-Dichlorobenzene	24.0		µg/kg wet		20.0		120	70-130		
1,4-Dichlorobenzene	21.5		µg/kg wet		20.0		107	70-130		
1,1-Dichloroethane	21.5		µg/kg wet		20.0		107	70-130		
1,2-Dichloroethane	21.8		µg/kg wet		20.0		109	70-130		
1,1-Dichloroethene	23.0		µg/kg wet		20.0		115	70-130		
cis-1,2-Dichloroethene	21.7		µg/kg wet		20.0		108	70-130		
trans-1,2-Dichloroethene	20.4		µg/kg wet		20.0		102	70-130		
1,2-Dichloropropane	21.2		µg/kg wet		20.0		106	70-130		
cis-1,3-Dichloropropene	22.2		µg/kg wet		20.0		111	70-130		
trans-1,3-Dichloropropene	21.2		µg/kg wet		20.0		106	70-130		
Methylene chloride	19.2		µg/kg wet		20.0		96	70-130		
1,1,2,2-Tetrachloroethane	22.3		µg/kg wet		20.0		112	70-130		
Tetrachloroethene	24.1		µg/kg wet		20.0		121	70-130		
1,1,1-Trichloroethane	24.2		µg/kg wet		20.0		121	70-130		
1,1,2-Trichloroethane	22.6		µg/kg wet		20.0		113	70-130		
Trichloroethene	21.8		µg/kg wet		20.0		109	70-130		
Trichlorofluoromethane (Freon 11)	28.7	QC2	µg/kg wet		20.0		143	70-130		
Vinyl chloride	22.4		µg/kg wet		20.0		112	70-130		
Surrogate: 4-Bromofluorobenzene	*53.6*		µg/kg wet		*50.0*		*107*	*70-130*		
Surrogate: Toluene-d8	*50.0*		µg/kg wet		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*53.6*		µg/kg wet		*50.0*		*107*	*70-130*		
Surrogate: Dibromofluoromethane	*50.2*		µg/kg wet		*50.0*		*100*	*70-130*		
LCS Dup (9121377-BSD1)										
Prepared & Analyzed: 17-Dec-09										
Bromodichloromethane	23.0		µg/kg wet		20.0		115	70-130	0.7	30
Bromoform	22.3		µg/kg wet		20.0		111	70-130	0.5	30
Bromomethane	19.0		µg/kg wet		20.0		95	70-130	6	30
Carbon tetrachloride	25.8		µg/kg wet		20.0		129	70-130	1	30
Chlorobenzene	20.1		µg/kg wet		20.0		101	70-130	3	30
Chloroethane	20.1		µg/kg wet		20.0		101	70-130	4	30
Chloroform	20.9		µg/kg wet		20.0		104	70-130	1	30
Chloromethane	19.6		µg/kg wet		20.0		98	70-130	5	30
Dibromochloromethane	22.2		µg/kg wet		20.0		111	70-130	1	30

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121377 - SW846 5035A Soil (low level)										
LCS Dup (9121377-BSD1)										
Prepared & Analyzed: 17-Dec-09										
1,2-Dichlorobenzene	21.8		µg/kg wet		20.0		109	70-130	0.4	30
1,3-Dichlorobenzene	22.7		µg/kg wet		20.0		114	70-130	5	30
1,4-Dichlorobenzene	21.2		µg/kg wet		20.0		106	70-130	1	30
1,1-Dichloroethane	20.9		µg/kg wet		20.0		104	70-130	3	30
1,2-Dichloroethane	21.4		µg/kg wet		20.0		107	70-130	2	30
1,1-Dichloroethene	22.4		µg/kg wet		20.0		112	70-130	3	30
cis-1,2-Dichloroethene	20.9		µg/kg wet		20.0		105	70-130	3	30
trans-1,2-Dichloroethene	19.0		µg/kg wet		20.0		95	70-130	7	30
1,2-Dichloropropane	20.7		µg/kg wet		20.0		103	70-130	2	30
cis-1,3-Dichloropropene	21.0		µg/kg wet		20.0		105	70-130	5	30
trans-1,3-Dichloropropene	20.6		µg/kg wet		20.0		103	70-130	3	30
Methylene chloride	19.4		µg/kg wet		20.0		97	70-130	1	30
1,1,2,2-Tetrachloroethane	21.0		µg/kg wet		20.0		105	70-130	6	30
Tetrachloroethene	22.9		µg/kg wet		20.0		114	70-130	5	30
1,1,1-Trichloroethane	23.6		µg/kg wet		20.0		118	70-130	3	30
1,1,2-Trichloroethane	21.4		µg/kg wet		20.0		107	70-130	5	30
Trichloroethene	21.1		µg/kg wet		20.0		106	70-130	3	30
Trichlorofluoromethane (Freon 11)	27.2	QC2	µg/kg wet		20.0		136	70-130	5	30
Vinyl chloride	21.2		µg/kg wet		20.0		106	70-130	6	30
Surrogate: 4-Bromofluorobenzene	*53.2*		µg/kg wet		*50.0*		*106*	*70-130*		
Surrogate: Toluene-d8	*50.8*		µg/kg wet		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*53.4*		µg/kg wet		*50.0*		*107*	*70-130*		
Surrogate: Dibromofluoromethane	*51.3*		µg/kg wet		*50.0*		*103*	*70-130*		
Batch 9121378 - SW846 5030 Water MS										
Blank (9121378-BLK1)										
Prepared & Analyzed: 17-Dec-09										
Benzene	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
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						
Dibromochloromethane	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						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Methylene chloride	BRL		µg/l	10.0						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121378 - SW846 5030 Water MS										
Blank (9121378-BLK1)										
Prepared & Analyzed: 17-Dec-09										
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	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						
Vinyl chloride	BRL		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*25.1*		µg/l		*30.0*		*84*	*70-130*		
Surrogate: Toluene-d8	*26.7*		µg/l		*30.0*		*89*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.6*		µg/l		*30.0*		*99*	*70-130*		
Surrogate: Dibromofluoromethane	*28.9*		µg/l		*30.0*		*96*	*70-130*		
LCS (9121378-BS1)										
Prepared & Analyzed: 17-Dec-09										
Bromodichloromethane	17.5		µg/l		20.0		87	70-130		
Bromoform	17.2		µg/l		20.0		86	70-130		
Bromomethane	14.5		µg/l		20.0		72	70-130		
Carbon tetrachloride	18.9		µg/l		20.0		94	70-130		
Chlorobenzene	18.8		µg/l		20.0		94	70-130		
Chloroethane	16.9		µg/l		20.0		85	70-130		
Chloroform	18.6		µg/l		20.0		93	70-130		
Chloromethane	16.9		µg/l		20.0		84	70-130		
Dibromochloromethane	15.7		µg/l		20.0		79	70-130		
1,2-Dichlorobenzene	21.7		µg/l		20.0		109	70-130		
1,3-Dichlorobenzene	20.8		µg/l		20.0		104	70-130		
1,4-Dichlorobenzene	18.5		µg/l		20.0		93	70-130		
1,1-Dichloroethane	17.5		µg/l		20.0		88	70-130		
1,2-Dichloroethane	17.5		µg/l		20.0		88	70-130		
1,1-Dichloroethene	18.5		µg/l		20.0		92	70-130		
cis-1,2-Dichloroethene	18.3		µg/l		20.0		91	70-130		
trans-1,2-Dichloroethene	17.0		µg/l		20.0		85	70-130		
1,2-Dichloropropane	17.8		µg/l		20.0		89	70-130		
cis-1,3-Dichloropropene	15.7		µg/l		20.0		78	70-130		
trans-1,3-Dichloropropene	15.2		µg/l		20.0		76	70-130		
Methylene chloride	17.5		µg/l		20.0		88	70-130		
1,1,2,2-Tetrachloroethane	18.7		µg/l		20.0		93	70-130		
Tetrachloroethene	17.9		µg/l		20.0		90	70-130		
1,1,1-Trichloroethane	18.1		µg/l		20.0		90	70-130		
1,1,2-Trichloroethane	19.0		µg/l		20.0		95	70-130		
Trichloroethene	18.7		µg/l		20.0		93	70-130		
Trichlorofluoromethane (Freon 11)	19.3		µg/l		20.0		96	70-130		
Vinyl chloride	16.7		µg/l		20.0		83	70-130		
Surrogate: 4-Bromofluorobenzene	*30.0*		µg/l		*30.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*29.2*		µg/l		*30.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.0*		µg/l		*30.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*28.4*		µg/l		*30.0*		*95*	*70-130*		
LCS Dup (9121378-BSD1)										
Prepared & Analyzed: 17-Dec-09										
Bromodichloromethane	19.7		µg/l		20.0		98	70-130	12	30
Bromoform	17.6		µg/l		20.0		88	70-130	2	30

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* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121378 - SW846 5030 Water MS										
LCS Dup (9121378-BSD1)										
Prepared & Analyzed: 17-Dec-09										
Bromomethane	18.9		µg/l		20.0		94	70-130	26	30
Carbon tetrachloride	22.6		µg/l		20.0		113	70-130	18	30
Chlorobenzene	19.3		µg/l		20.0		96	70-130	2	30
Chloroethane	20.4		µg/l		20.0		102	70-130	18	30
Chloroform	22.9		µg/l		20.0		115	70-130	21	30
Chloromethane	20.1		µg/l		20.0		101	70-130	18	30
Dibromochloromethane	18.3		µg/l		20.0		91	70-130	15	30
1,2-Dichlorobenzene	21.5		µg/l		20.0		108	70-130	0.9	30
1,3-Dichlorobenzene	21.6		µg/l		20.0		108	70-130	4	30
1,4-Dichlorobenzene	18.5		µg/l		20.0		92	70-130	0.4	30
1,1-Dichloroethane	21.3		µg/l		20.0		106	70-130	20	30
1,2-Dichloroethane	21.4		µg/l		20.0		107	70-130	20	30
1,1-Dichloroethene	22.7		µg/l		20.0		113	70-130	20	30
cis-1,2-Dichloroethene	22.6		µg/l		20.0		113	70-130	21	30
trans-1,2-Dichloroethene	20.4		µg/l		20.0		102	70-130	19	30
1,2-Dichloropropane	21.1		µg/l		20.0		106	70-130	17	30
cis-1,3-Dichloropropene	17.4		µg/l		20.0		87	70-130	11	30
trans-1,3-Dichloropropene	16.6		µg/l		20.0		83	70-130	9	30
Methylene chloride	21.3		µg/l		20.0		106	70-130	19	30
1,1,2,2-Tetrachloroethane	20.4		µg/l		20.0		102	70-130	9	30
Tetrachloroethene	22.1		µg/l		20.0		110	70-130	21	30
1,1,1-Trichloroethane	21.6		µg/l		20.0		108	70-130	18	30
1,1,2-Trichloroethane	23.0		µg/l		20.0		115	70-130	19	30
Trichloroethene	22.0		µg/l		20.0		110	70-130	16	30
Trichlorofluoromethane (Freon 11)	23.5		µg/l		20.0		117	70-130	20	30
Vinyl chloride	21.9		µg/l		20.0		110	70-130	27	30
Surrogate: 4-Bromofluorobenzene	*29.8*		µg/l		*30.0*		*99*	*70-130*		
Surrogate: Toluene-d8	*34.0*		µg/l		*30.0*		*113*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*34.1*		µg/l		*30.0*		*114*	*70-130*		
Surrogate: Dibromofluoromethane	*34.1*		µg/l		*30.0*		*114*	*70-130*		
Batch 9121465 - SW846 5035A Soil (low level)										
Blank (9121465-BLK1)										
Prepared & Analyzed: 18-Dec-09										
Benzene	BRL		µg/kg wet we	5.0						
Bromodichloromethane	BRL		µg/kg wet we	5.0						
Bromoform	BRL		µg/kg wet we	5.0						
Bromomethane	BRL		µg/kg wet we	10.0						
Carbon tetrachloride	BRL		µg/kg wet we	5.0						
Chlorobenzene	BRL		µg/kg wet we	5.0						
Chloroethane	BRL		µg/kg wet we	10.0						
Chloroform	BRL		µg/kg wet we	5.0						
Chloromethane	BRL		µg/kg wet we	10.0						
Dibromochloromethane	BRL		µg/kg wet we	5.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	5.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	5.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	5.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	10.0						
1,1-Dichloroethane	BRL		µg/kg wet we	5.0						
1,2-Dichloroethane	BRL		µg/kg wet we	5.0						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121465 - SW846 5035A Soil (low level)										
Blank (9121465-BLK1)										
Prepared & Analyzed: 18-Dec-09										
1,1-Dichloroethene	BRL		µg/kg wet we	5.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	5.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	5.0						
1,2-Dichloropropane	BRL		µg/kg wet we	5.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	5.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	5.0						
Methylene chloride	BRL		µg/kg wet we	50.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	5.0						
Tetrachloroethene	BRL		µg/kg wet we	5.0						
Toluene	BRL		µg/kg wet we	5.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	5.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	5.0						
Trichloroethene	BRL		µg/kg wet we	5.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	5.0						
Vinyl chloride	BRL		µg/kg wet we	5.0						
Surrogate: 4-Bromofluorobenzene	*49.0*		µg/kg wet		*50.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*51.4*		µg/kg wet		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*65.0*		µg/kg wet		*50.0*		*130*	*70-130*		
Surrogate: Dibromofluoromethane	*53.8*		µg/kg wet		*50.0*		*108*	*70-130*		
LCS (9121465-BS1)										
Prepared & Analyzed: 18-Dec-09										
Bromodichloromethane	23.2		µg/kg wet		20.0		116	70-130		
Bromoform	22.2		µg/kg wet		20.0		111	70-130		
Bromomethane	20.8		µg/kg wet		20.0		104	70-130		
Carbon tetrachloride	27.0	QC2	µg/kg wet		20.0		135	70-130		
Chlorobenzene	20.7		µg/kg wet		20.0		104	70-130		
Chloroethane	21.7		µg/kg wet		20.0		108	70-130		
Chloroform	22.4		µg/kg wet		20.0		112	70-130		
Chloromethane	22.2		µg/kg wet		20.0		111	70-130		
Dibromochloromethane	22.7		µg/kg wet		20.0		114	70-130		
1,2-Dichlorobenzene	22.3		µg/kg wet		20.0		112	70-130		
1,3-Dichlorobenzene	23.5		µg/kg wet		20.0		117	70-130		
1,4-Dichlorobenzene	21.3		µg/kg wet		20.0		106	70-130		
1,1-Dichloroethane	22.5		µg/kg wet		20.0		113	70-130		
1,2-Dichloroethane	22.1		µg/kg wet		20.0		111	70-130		
1,1-Dichloroethene	24.4		µg/kg wet		20.0		122	70-130		
cis-1,2-Dichloroethene	21.5		µg/kg wet		20.0		108	70-130		
trans-1,2-Dichloroethene	20.6		µg/kg wet		20.0		103	70-130		
1,2-Dichloropropane	21.8		µg/kg wet		20.0		109	70-130		
cis-1,3-Dichloropropene	22.6		µg/kg wet		20.0		113	70-130		
trans-1,3-Dichloropropene	22.4		µg/kg wet		20.0		112	70-130		
Methylene chloride	21.7		µg/kg wet		20.0		109	70-130		
1,1,2,2-Tetrachloroethane	21.0		µg/kg wet		20.0		105	70-130		
Tetrachloroethene	25.1		µg/kg wet		20.0		126	70-130		
1,1,1-Trichloroethane	25.7		µg/kg wet		20.0		128	70-130		
1,1,2-Trichloroethane	22.7		µg/kg wet		20.0		114	70-130		
Trichloroethene	23.1		µg/kg wet		20.0		115	70-130		
Trichlorofluoromethane (Freon 11)	29.8	QC2	µg/kg wet		20.0		149	70-130		
Vinyl chloride	23.7		µg/kg wet		20.0		118	70-130		
Surrogate: 4-Bromofluorobenzene	*52.2*		µg/kg wet		*50.0*		*104*	*70-130*		

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* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121465 - SW846 5035A Soil (low level)										
LCS (9121465-BS1)										
Prepared & Analyzed: 18-Dec-09										
Surrogate: Toluene-d8	*51.0*		µg/kg wet		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*55.5*		µg/kg wet		*50.0*		*111*	*70-130*		
Surrogate: Dibromofluoromethane	*50.0*		µg/kg wet		*50.0*		*100*	*70-130*		
LCS Dup (9121465-BSD1)										
Prepared & Analyzed: 18-Dec-09										
Bromodichloromethane	24.1		µg/kg wet		20.0		121	70-130	4	30
Bromoform	21.6		µg/kg wet		20.0		108	70-130	3	30
Bromomethane	20.6		µg/kg wet		20.0		103	70-130	1	30
Carbon tetrachloride	27.7	QC2	µg/kg wet		20.0		138	70-130	2	30
Chlorobenzene	21.2		µg/kg wet		20.0		106	70-130	2	30
Chloroethane	21.9		µg/kg wet		20.0		110	70-130	1	30
Chloroform	22.4		µg/kg wet		20.0		112	70-130	0.09	30
Chloromethane	21.6		µg/kg wet		20.0		108	70-130	3	30
Dibromochloromethane	22.5		µg/kg wet		20.0		112	70-130	1	30
1,2-Dichlorobenzene	22.8		µg/kg wet		20.0		114	70-130	2	30
1,3-Dichlorobenzene	23.3		µg/kg wet		20.0		116	70-130	0.9	30
1,4-Dichlorobenzene	22.7		µg/kg wet		20.0		114	70-130	7	30
1,1-Dichloroethane	22.4		µg/kg wet		20.0		112	70-130	0.7	30
1,2-Dichloroethane	23.0		µg/kg wet		20.0		115	70-130	4	30
1,1-Dichloroethene	24.7		µg/kg wet		20.0		124	70-130	1	30
cis-1,2-Dichloroethene	22.5		µg/kg wet		20.0		112	70-130	4	30
trans-1,2-Dichloroethene	20.9		µg/kg wet		20.0		104	70-130	1	30
1,2-Dichloropropane	22.1		µg/kg wet		20.0		111	70-130	1	30
cis-1,3-Dichloropropene	23.3		µg/kg wet		20.0		117	70-130	3	30
trans-1,3-Dichloropropene	21.7		µg/kg wet		20.0		108	70-130	3	30
Methylene chloride	20.3		µg/kg wet		20.0		102	70-130	7	30
1,1,2,2-Tetrachloroethane	21.0		µg/kg wet		20.0		105	70-130	0.1	30
Tetrachloroethene	25.1		µg/kg wet		20.0		126	70-130	0.08	30
1,1,1-Trichloroethane	25.9		µg/kg wet		20.0		130	70-130	1	30
1,1,2-Trichloroethane	21.5		µg/kg wet		20.0		108	70-130	5	30
Trichloroethene	22.9		µg/kg wet		20.0		114	70-130	1	30
Trichlorofluoromethane (Freon 11)	29.7	QC2	µg/kg wet		20.0		148	70-130	0.6	30
Vinyl chloride	23.1		µg/kg wet		20.0		115	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*51.5*		µg/kg wet		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*50.8*		µg/kg wet		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*52.8*		µg/kg wet		*50.0*		*106*	*70-130*		
Surrogate: Dibromofluoromethane	*50.1*		µg/kg wet		*50.0*		*100*	*70-130*		
Batch 9121480 - SW846 5030 Water MS										
Blank (9121480-BLK1)										
Prepared & Analyzed: 18-Dec-09										
Benzene	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
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						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121480 - SW846 5030 Water MS										
Blank (9121480-BLK1)										
Prepared & Analyzed: 18-Dec-09										
Dibromochloromethane	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						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Methylene chloride	BRL		µg/l	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	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						
Vinyl chloride	BRL		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*24.8*		µg/l		*30.0*		*83*	*70-130*		
Surrogate: Toluene-d8	*24.7*		µg/l		*30.0*		*82*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.0*		µg/l		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.0*		µg/l		*30.0*		*97*	*70-130*		
LCS (9121480-BS1)										
Prepared & Analyzed: 18-Dec-09										
Bromodichloromethane	17.4		µg/l		20.0		87	70-130		
Bromoform	17.6		µg/l		20.0		88	70-130		
Bromomethane	15.8		µg/l		20.0		79	70-130		
Carbon tetrachloride	18.7		µg/l		20.0		94	70-130		
Chlorobenzene	19.2		µg/l		20.0		96	70-130		
Chloroethane	17.1		µg/l		20.0		86	70-130		
Chloroform	19.4		µg/l		20.0		97	70-130		
Chloromethane	17.1		µg/l		20.0		85	70-130		
Dibromochloromethane	16.0		µg/l		20.0		80	70-130		
1,2-Dichlorobenzene	21.5		µg/l		20.0		107	70-130		
1,3-Dichlorobenzene	22.0		µg/l		20.0		110	70-130		
1,4-Dichlorobenzene	18.6		µg/l		20.0		93	70-130		
1,1-Dichloroethane	18.0		µg/l		20.0		90	70-130		
1,2-Dichloroethane	17.7		µg/l		20.0		88	70-130		
1,1-Dichloroethene	18.0		µg/l		20.0		90	70-130		
cis-1,2-Dichloroethene	18.4		µg/l		20.0		92	70-130		
trans-1,2-Dichloroethene	16.9		µg/l		20.0		85	70-130		
1,2-Dichloropropane	16.7		µg/l		20.0		84	70-130		
cis-1,3-Dichloropropene	15.1		µg/l		20.0		75	70-130		
trans-1,3-Dichloropropene	15.2		µg/l		20.0		76	70-130		
Methylene chloride	17.5		µg/l		20.0		88	70-130		
1,1,2,2-Tetrachloroethane	19.6		µg/l		20.0		98	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121480 - SW846 5030 Water MS										
LCS (9121480-BS1)										
Prepared & Analyzed: 18-Dec-09										
Tetrachloroethene	17.3		µg/l		20.0		87	70-130		
1,1,1-Trichloroethane	18.4		µg/l		20.0		92	70-130		
1,1,2-Trichloroethane	18.0		µg/l		20.0		90	70-130		
Trichloroethene	17.7		µg/l		20.0		89	70-130		
Trichlorofluoromethane (Freon 11)	19.0		µg/l		20.0		95	70-130		
Vinyl chloride	17.5		µg/l		20.0		88	70-130		
Surrogate: 4-Bromofluorobenzene	*31.3*		µg/l		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*28.6*		µg/l		*30.0*		*95*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.9*		µg/l		*30.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*29.3*		µg/l		*30.0*		*98*	*70-130*		
LCS Dup (9121480-BSD1)										
Prepared & Analyzed: 18-Dec-09										
Bromodichloromethane	19.2		µg/l		20.0		96	70-130	9	30
Bromoform	18.4		µg/l		20.0		92	70-130	5	30
Bromomethane	18.6		µg/l		20.0		93	70-130	16	30
Carbon tetrachloride	20.3		µg/l		20.0		101	70-130	8	30
Chlorobenzene	18.1		µg/l		20.0		90	70-130	6	30
Chloroethane	18.3		µg/l		20.0		92	70-130	7	30
Chloroform	22.8		µg/l		20.0		114	70-130	16	30
Chloromethane	18.5		µg/l		20.0		93	70-130	8	30
Dibromochloromethane	17.6		µg/l		20.0		88	70-130	10	30
1,2-Dichlorobenzene	20.2		µg/l		20.0		101	70-130	6	30
1,3-Dichlorobenzene	20.7		µg/l		20.0		103	70-130	6	30
1,4-Dichlorobenzene	17.2		µg/l		20.0		86	70-130	7	30
1,1-Dichloroethane	20.1		µg/l		20.0		100	70-130	11	30
1,2-Dichloroethane	21.9		µg/l		20.0		110	70-130	21	30
1,1-Dichloroethene	20.0		µg/l		20.0		100	70-130	10	30
cis-1,2-Dichloroethene	21.2		µg/l		20.0		106	70-130	14	30
trans-1,2-Dichloroethene	18.6		µg/l		20.0		93	70-130	9	30
1,2-Dichloropropane	18.8		µg/l		20.0		94	70-130	12	30
cis-1,3-Dichloropropene	16.3		µg/l		20.0		82	70-130	8	30
trans-1,3-Dichloropropene	16.2		µg/l		20.0		81	70-130	6	30
Methylene chloride	21.1		µg/l		20.0		105	70-130	18	30
1,1,2,2-Tetrachloroethane	20.8		µg/l		20.0		104	70-130	6	30
Tetrachloroethene	18.8		µg/l		20.0		94	70-130	8	30
1,1,1-Trichloroethane	20.3		µg/l		20.0		101	70-130	10	30
1,1,2-Trichloroethane	21.8		µg/l		20.0		109	70-130	19	30
Trichloroethene	19.5		µg/l		20.0		97	70-130	9	30
Trichlorofluoromethane (Freon 11)	21.0		µg/l		20.0		105	70-130	10	30
Vinyl chloride	21.4		µg/l		20.0		107	70-130	20	30
Surrogate: 4-Bromofluorobenzene	*31.0*		µg/l		*30.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*33.2*		µg/l		*30.0*		*111*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*37.3*		µg/l		*30.0*		*124*	*70-130*		
Surrogate: Dibromofluoromethane	*36.1*		µg/l		*30.0*		*120*	*70-130*		

Close File

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
E	The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
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.
R05	Elevated Reporting Limits due to the presence of high levels of non-target analytes.
S04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
SGC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
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.
Kim Wisk

Close File

SB0S607C Ck

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 2

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: Britney Barnes

Telephone #: (864) 234-9453

Project Mgr. Steve Webb

Invoice To: RMT, INC
Madison WI

P.O. No.: 71360.31 RQN: _____

Project No.: 71360.31

Site Name: Columbia

Location: Westfield State: MA.

Sampler(s): Bill Medlin

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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		Acetone, cis 1,2 DCE, vinyl Chloride	moisture						
S0S607C-01	SB-200A/7	12/15/09	1130	G	Soil	2	1				X	X						
02	SB-200A/9.5	12/15/09	1140	G	Soil	2	1				X	X						
03	DP-200A	12/15/09	1215	G	GW	3					X							
04	SB-201A/9	12/15/09	1300	G	Soil	2	1				X	X						
05	DP-201A	12/15/09	1320	G	GW	3					X							
06	SB-202A/9	12/15/09	1350	G	Soil	2	1				X	X						
07	SB-202A/18	12/15/09	1400	G	Soil	2	1				X	X						
08	DP-202A	12/15/09	1415	G	GW	3					X							
09	SB-203A/4.5	12/15/09	1445	G	Soil	2	1				X	X						
10	SB-203A/8	12/15/09	1455	G	Soil	2	1				X	X						

Relinquished by:	Received by:	Date:	Time:	Temp°C
[signature]	[signature]	12/15/09	17:00	5°C

Analyses:
- ☐ 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 _____
☐ E-mail to _____

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

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SB05670 CK

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 2 of 2

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: Bristney Barnes

Telephone #: 864 234-9453

Project Mgr. Steve Webb

Invoice To: RMT, Inc
Mad. WI

P.O. No.: 71360.31 RQN:

Project No.: 71360.31

Site Name: Columbia

Location: Westfield State: Ma

Sampler(s): Bill Medlin

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:

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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		PCE, TCE, cis-1,2-DCE, vinyl chloride	moisture						
SB05670-11	SB-203A/12_13	12/15/09	1505	G	SO	2	1				X	X						
12	SB-203A/17_18	12/15/09	1515	G	SO	2	1				X	X						
13	DP-203A	12/15/09	1535	G	GW	3					X							

Containers: # of VOA Vials, # of Amber Glass, # of Clear Glass, # of Plastic

Analyses: PCE, TCE, cis-1,2-DCE, vinyl chloride; moisture

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

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

State specific reporting standards: _____

Relinquished by:	Received by:	Date:	Time:	Temp°C
[signature]	[signature]	12/15/09	17:00	5°C

☐ EDD Format _____
☐ E-mail to _____

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

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Close File

Report Date:
18-Dec-09 11:04

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Container	Matrix	Date Sampled	Date Received
SB05672-01	AS-52	Summa canister 6 liter	Air	15-Dec-09 15:07	15-Dec-09 16:45
SB05672-02	AS-103	Summa canister 6 liter	Air	15-Dec-09 15:10	15-Dec-09 16:45
SB05672-03	AS-WT	Summa canister 6 liter	Air	15-Dec-09 15:12	15-Dec-09 16:45
SB05672-04	AS-PO6	Summa canister 6 liter	Air	15-Dec-09 15:15	15-Dec-09 16:45
SB05672-05	AS-BG	Summa canister 6 liter	Air	15-Dec-09 15:20	15-Dec-09 16:45

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 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 9 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.

Close File

CASE NARRATIVE:

Samples are received and the pressure is recorded from the gauge on the canister. If a canister does not have a gauge, a vacuum gauge is attached to the valve and pressure is recorded. If the canister is below -10 psig, the can must be pressurized to 0 psig. Tedlar bags do not have the pressure recorded. The can pressure can be located within this report in the sample header information.

If a 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.

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
AS-52 SB05672-01	71360.31	Air	15-Dec-09 15:07	15-Dec-09

CAS No.	*Analyte(s)*	*Result/Units*	**RDL*	*Result ug/m³*	**RDL*	*Flag*	*Method Ref.*	*Analyzed*	*Batch*	*Cert.*
Air Quality Analyses										
Chlorinated VOCs by EPA TO-15		ppbv	Prepared 16-Dec-09		Dilution: 1		Can pressure: -16			
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.28		EPA TO-15	16-Dec-09	9121299	
79-01-6	Trichloroethene	BRL	0.500	BRL	2.69		"	"	"	
127-18-4	Tetrachloroethene	BRL	0.500	BRL	3.39		"	"	"	
Surrogate recoveries:										
460-00-4	*4-Bromofluorobenzene*	*82*	*70-130 %*				"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
AS-103 SB05672-02	71360.31	Air	15-Dec-09 15:10	15-Dec-09

CAS No.	*Analyte(s)*	*Result/Units*	**RDL*	*Result ug/m³*	**RDL*	*Flag*	*Method Ref.*	*Analyzed*	*Batch*	*Cert.*
Air Quality Analyses										
Chlorinated VOCs by EPA TO-15		ppbv	Prepared 16-Dec-09		Dilution: 1		Can pressure: -1			
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.28		EPA TO-15	16-Dec-09	9121299	
79-01-6	Trichloroethene	BRL	0.500	BRL	2.69		"	"	"	
127-18-4	Tetrachloroethene	1.71	0.500	11.60	3.39		"	"	"	
Surrogate recoveries:										
460-00-4	*4-Bromofluorobenzene*	*86*	*70-130 %*				"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
AS-WT	71360.31	Air	15-Dec-09 15:12	15-Dec-09
SB05672-03				

CAS No.	*Analyte(s)*	*Result/Units*	**RDL*	*Result ug/m³*	**RDL*	*Flag*	*Method Ref.*	*Analyzed*	*Batch*	*Cert.*
Air Quality Analyses										
Chlorinated VOCs by EPA TO-15		ppbv	Prepared 16-Dec-09		Dilution: 1		Can pressure: -13			
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.28		EPA TO-15	16-Dec-09	9121299	
79-01-6	Trichloroethene	0.740	0.500	3.98	2.69		"	"	"	
127-18-4	Tetrachloroethene	BRL	0.500	BRL	3.39		"	"	"	
Surrogate recoveries:										
460-00-4	*4-Bromofluorobenzene*	*85*	*70-130 %*				"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
AS-PO6 SB05672-04	71360.31	Air	15-Dec-09 15:15	15-Dec-09

CAS No.	*Analyte(s)*	*Result/Units*	**RDL*	*Result ug/m³*	**RDL*	*Flag*	*Method Ref.*	*Analyzed*	*Batch*	*Cert.*
Air Quality Analyses										
Chlorinated VOCs by EPA TO-15		ppbv	Prepared 16-Dec-09		Dilution: 1		Can pressure: -2			
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.28		EPA TO-15	16-Dec-09	9121299	
79-01-6	Trichloroethene	0.940	0.500	5.05	2.69		"	"	"	
127-18-4	Tetrachloroethene	BRL	0.500	BRL	3.39		"	"	"	
Surrogate recoveries:										
460-00-4	*4-Bromofluorobenzene*	*83*	*70-130 %*				"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
AS-BG SB05672-05	71360.31	Air	15-Dec-09 15:20	15-Dec-09

CAS No.	*Analyte(s)*	*Result/Units*	**RDL*	*Result ug/m³*	**RDL*	*Flag*	*Method Ref.*	*Analyzed*	*Batch*	*Cert.*
Air Quality Analyses										
Chlorinated VOCs by EPA TO-15		ppbv	Prepared 16-Dec-09		Dilution: 1		Can pressure: -5			
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.28		EPA TO-15	16-Dec-09	9121299	
79-01-6	Trichloroethene	BRL	0.500	BRL	2.69		"	"	"	
127-18-4	Tetrachloroethene	BRL	0.500	BRL	3.39		"	"	"	
87-68-3	Hexachlorobutadiene	BRL	0.500	BRL	5.33		"	"	"	
Surrogate recoveries:										
460-00-4	*4-Bromofluorobenzene*	*83*	*70-130 %*				"	"	"	

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Air Quality Analyses - Quality Control

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 9121299 - General Air Prep										
Blank (9121299-BLK1)				Prepared & Analyzed: 16-Dec-09						
Chloromethane	BRL	0.500	ppbv							
Vinyl chloride	BRL	0.500	ppbv							
Chloroethane	BRL	0.500	ppbv							
1,1-Dichloroethene	BRL	0.500	ppbv							
Methylene chloride	BRL	0.500	ppbv							
trans-1,2-Dichloroethene	BRL	0.500	ppbv							
1,1-Dichloroethane	BRL	0.500	ppbv							
cis-1,2-Dichloroethene	BRL	0.500	ppbv							
Chloroform	BRL	0.500	ppbv							
1,2-Dichloroethane	BRL	0.500	ppbv							
1,1,1-Trichloroethane	BRL	0.500	ppbv							
Carbon tetrachloride	BRL	0.500	ppbv							
1,2-Dichloropropane	BRL	0.500	ppbv							
Trichloroethene	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							
Tetrachloroethene	BRL	0.500	ppbv							
Chlorobenzene	BRL	0.500	ppbv							
1,1,2,2-Tetrachloroethane	BRL	0.500	ppbv							
1,3-Dichlorobenzene	BRL	0.500	ppbv							
1,4-Dichlorobenzene	BRL	0.500	ppbv							
1,2-Dichlorobenzene	BRL	0.500	ppbv							
Hexachlorobutadiene	BRL	0.500	ppbv							
Surrogate: 4-Bromofluorobenzene	*7.92*		ppbv	*10.0*		*79*	*70-130*			
LCS (9121299-BS1)				Prepared & Analyzed: 16-Dec-09						
Chloromethane	10.1		ppbv	10.0		101	70-130			
Vinyl chloride	10.4		ppbv	10.0		104	70-130			
Chloroethane	9.31		ppbv	10.0		93	70-130			
1,1-Dichloroethene	7.01		ppbv	10.0		70	70-130			
Methylene chloride	7.34		ppbv	10.0		73	70-130			
trans-1,2-Dichloroethene	9.52		ppbv	10.0		95	70-130			
1,1-Dichloroethane	9.27		ppbv	10.0		93	70-130			
cis-1,2-Dichloroethene	9.62		ppbv	10.0		96	70-130			
Chloroform	8.91		ppbv	10.0		89	70-130			
1,2-Dichloroethane	8.54		ppbv	10.0		85	70-130			
1,1,1-Trichloroethane	8.66		ppbv	10.0		87	70-130			
Carbon tetrachloride	8.80		ppbv	10.0		88	70-130			
1,2-Dichloropropane	9.63		ppbv	10.0		96	70-130			
Trichloroethene	9.21		ppbv	10.0		92	70-130			
cis-1,3-Dichloropropene	9.72		ppbv	10.0		97	70-130			
trans-1,3-Dichloropropene	9.45		ppbv	10.0		94	70-130			
1,1,2-Trichloroethane	9.28		ppbv	10.0		93	70-130			
Tetrachloroethene	8.98		ppbv	10.0		90	70-130			
Chlorobenzene	8.13		ppbv	10.0		81	70-130			
1,1,2,2-Tetrachloroethane	8.21		ppbv	10.0		82	70-130			
1,3-Dichlorobenzene	8.07		ppbv	10.0		81	70-130			
1,4-Dichlorobenzene	8.52		ppbv	10.0		85	70-130			
1,2-Dichlorobenzene	8.34		ppbv	10.0		83	70-130			
Hexachlorobutadiene	8.01		ppbv	10.0		80	70-130			
Surrogate: 4-Bromofluorobenzene	*8.71*		ppbv	*10.0*		*87*	*70-130*			

Close File

Notes and Definitions

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dry	Sample results reported on a dry weight basis
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RPD	Relative Percent Difference

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Validated by:
Hanibal C. Tayeh, Ph.D.
June O'Connor

Close File

SB05672 Ck

SPECTRUM ANALYTICAL, INC.
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Chain of Custody Record/Field Test Data Sheets for Air Analyses

Page ____ of ____

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: RMT, INC
Invoice To: RMT INC
Tel #:
Attn:
Project Manager: BRIT BARNES
P.O. No.: 71360.31 RQN:
Project No.: MTD Westfield
Site Name: 71360.31
Location: Westfield, MA
Sampler (s): Chris Kline

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: TO15 Chlorinated	Matrix: Indoor/Ambient Air	Matrix: Soil Gas	Check box if canister is returned unused
LABORATORY USE ONLY																		
3 1376	6L	-30		2841	10.3	-01	AS-52	12-15-09	0650	1507	29	1						
2 0264		-30		2854	10.5	-02	AS-103	12-15-09	0655	1510	30	0			X			
1 7635		-30		1318	10.3	-03	AS-WT	12-15-09	0700	1512	30	15			X			
1398		-30		860	10.5	-04	AS-PO6	12-15-09	0703	1515	30	5			X			
7634		-30		2936	10.2	-5	AS-BG	12-15-09	0707	1520	30	3			X			

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: ONLY report TCE, PCE + vinly chloride

Date of Request: #13462
Requested by:
Company: RMT
Location: Westfield, MA
Summa Canisters:
Flow Controllers:
Flow Rate/Setting:
Date Needed: 12-14-09

*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:
Printed: Chris Kline
Date:

* 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:
		12/15/09	16:45

A 0765

17.1°C

Revised 12/08

Close File

Report Date:
18-Dec-09 14:06

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
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HANIBAL TECHNOLOGY

Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB05674-01	MW-59S	Ground Water	15-Dec-09 09:00	15-Dec-09 17:00
SB05674-02	PMP-03	Ground Water	15-Dec-09 09:15	15-Dec-09 17:00
SB05674-03	MW-60S	Ground Water	15-Dec-09 10:35	15-Dec-09 17:00
SB05674-04	MW-55S	Ground Water	15-Dec-09 11:35	15-Dec-09 17:00
SB05674-05	MW-56S	Ground Water	15-Dec-09 12:45	15-Dec-09 17:00
SB05674-06	MW-65S	Ground Water	15-Dec-09 14:00	15-Dec-09 17:00
SB05674-07	MW-24S	Ground Water	15-Dec-09 14:40	15-Dec-09 17:00
SB05674-08	PMP-02	Ground Water	15-Dec-09 15:25	15-Dec-09 17:00
SB05674-09	MW-63S	Ground Water	15-Dec-09 15:55	15-Dec-09 17:00
SB05674-10	TBLK-09406	Deionized Water	15-Dec-09 00:00	15-Dec-09 17:00

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 35 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.

Close File

CASE NARRATIVE:

The samples were received 4.3 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.

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

Samples:

SB05674-06 *MW-65S*

This compound is a common laboratory contaminant.

Chloromethane

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-59S	71360.31	Ground Water	15-Dec-09 09:00	15-Dec-09
SB05674-01				

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											
67-64-1	Acetone	BRL		µg/l	50.0	5	SW846 8260B	16-Dec-09	17-Dec-09	9121316	
107-13-1	Acrylonitrile	BRL		µg/l	5.0	5	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	5.0	5	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	5.0	5	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	5.0	5	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	5.0	5	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	5.0	5	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	10.0	5	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	50.0	5	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	25.0	5	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	5.0	5	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	10.0	5	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	5.0	5	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	10.0	5	"	"	"	"	
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	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	5.0	5	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	5.0	5	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	5.0	5	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	10.0	5	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	5.6		µg/l	5.0	5	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	5.0	5	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	50.0	5	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	5.0	5	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	5.0	5	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	50.0	5	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	50.0	5	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	5.0	5	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	5.0	5	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-59S	71360.31	Ground Water	15-Dec-09 09:00	15-Dec-09
SB05674-01				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	5.0	5	SW846 8260B	16-Dec-09	17-Dec-09	9121316	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	5.0	5	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	5.0	5	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	5.0	5	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	700		µg/l	5.0	5	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	5.0	5	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	5.0	5	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	10.0	5	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*84*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*106*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*93*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	17-Dec-09	17-Dec-09	9121346	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*86*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*103*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	17-Dec-09	18-Dec-09	9121354	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	1.5		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	1.5		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*99*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
PMP-03 SB05674-02	71360.31	Ground Water	15-Dec-09 09:15	15-Dec-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											
67-64-1	Acetone	BRL		µg/l	50.0	5	SW846 8260B	16-Dec-09	17-Dec-09	9121296	
107-13-1	Acrylonitrile	BRL		µg/l	5.0	5	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	5.0	5	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	5.0	5	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	5.0	5	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	5.0	5	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	5.0	5	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	10.0	5	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	50.0	5	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	25.0	5	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	5.0	5	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	10.0	5	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	5.0	5	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	10.0	5	"	"	"	"	
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	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	5.0	5	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	5.0	5	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	5.0	5	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	10.0	5	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	387		µg/l	5.0	5	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	9.8		µg/l	5.0	5	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	5.0	5	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	50.0	5	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	5.0	5	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	5.0	5	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	50.0	5	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	50.0	5	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	5.0	5	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	5.0	5	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
PMP-03 SB05674-02	71360.31	Ground Water	15-Dec-09 09:15	15-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	5.0	5	SW846 8260B	16-Dec-09	17-Dec-09	9121296	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	5.0	5	"	"	"	"	
127-18-4	Tetrachloroethene	15.1		µg/l	5.0	5	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	5.0	5	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	133		µg/l	5.0	5	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	5.0	5	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	135		µg/l	5.0	5	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	10.0	5	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*95*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*110*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*105*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	17-Dec-09	17-Dec-09	9121346	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*84*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*99*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	17-Dec-09	18-Dec-09	9121354	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	5.4		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	5.4		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*99*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-60S	71360.31	Ground Water	15-Dec-09 10:35	15-Dec-09
SB05674-03				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121316	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	15.5		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	57.2		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	2.6		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	1.0		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-60S	71360.31	Ground Water	15-Dec-09 10:35	15-Dec-09
SB05674-03				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121316	
79-34-5	1,1,2,2-Tetrachloroethane	1.9		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	44.9		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	175		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	15.5		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*92*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*108*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*97*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*96*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	17-Dec-09	17-Dec-09	9121346	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*85*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*99*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	17-Dec-09	18-Dec-09	9121354	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	3.6		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	3.6		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*102*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-55S	71360.31	Ground Water	15-Dec-09 11:35	15-Dec-09
SB05674-04				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121296	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	1.1		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-55S SB05674-04	71360.31	Ground Water	15-Dec-09 11:35	15-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121296	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	2.4		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*95*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*110*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*104*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	17-Dec-09	17-Dec-09	9121346	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*86*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*104*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	17-Dec-09	18-Dec-09	9121354	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	1.9		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	1.9		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*101*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-56S	71360.31	Ground Water	15-Dec-09 12:45	15-Dec-09
SB05674-05				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121296	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	6.2		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-56S SB05674-05	71360.31	Ground Water	15-Dec-09 12:45	15-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121296	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	1.8		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	7.6		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*95*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*107*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*104*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	17-Dec-09	17-Dec-09	9121346	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*93*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*111*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	17-Dec-09	18-Dec-09	9121354	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	1.7		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	1.7		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*103*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-65S SB05674-06	71360.31	Ground Water	15-Dec-09 14:00	15-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121296	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	5.6	O01	µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	2.0		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	48.5		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-65S	71360.31	Ground Water	15-Dec-09 14:00	15-Dec-09
SB05674-06				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121296	
79-34-5	1,1,2,2-Tetrachloroethane	7.6		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	15.3		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	4.2		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	167		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	6.2		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*96*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*110*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*106*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	17-Dec-09	17-Dec-09	9121346	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*84*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*100*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	17-Dec-09	18-Dec-09	9121354	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	2.9		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	2.9		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*105*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-24S SB05674-07	71360.31	Ground Water	15-Dec-09 14:40	15-Dec-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											
67-64-1	Acetone	BRL		µg/l	50.0	5	SW846 8260B	16-Dec-09	17-Dec-09	9121316	
107-13-1	Acrylonitrile	BRL		µg/l	5.0	5	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	5.0	5	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	5.0	5	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	5.0	5	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	5.0	5	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	5.0	5	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	10.0	5	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	50.0	5	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	25.0	5	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	5.0	5	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	10.0	5	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	5.0	5	"	"	"	"	
74-87-3	Chloromethane	16.0		µg/l	10.0	5	"	"	"	"	
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	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	5.0	5	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	5.0	5	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	5.0	5	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	10.0	5	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	36.4		µg/l	5.0	5	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	5.0	5	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	50.0	5	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	5.0	5	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	5.0	5	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	50.0	5	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	50.0	5	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	5.0	5	"	"	"	"	
103-65-1	n-Propylbenzene	5.2		µg/l	5.0	5	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	5.0	5	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-24S SB05674-07	71360.31	Ground Water	15-Dec-09 14:40	15-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	5.0	5	SW846 8260B	16-Dec-09	17-Dec-09	9121316	
79-34-5	1,1,2,2-Tetrachloroethane	9.6		µg/l	5.0	5	"	"	"	"	
127-18-4	Tetrachloroethene	55.2		µg/l	5.0	5	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	5.0	5	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	5.5		µg/l	5.0	5	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	272		µg/l	5.0	5	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	5.0	5	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	19.6		µg/l	5.0	5	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	10.0	5	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*91*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*99*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*86*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*87*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	0.4		mg/l	0.4	5	+Mod 8015	18-Dec-09	18-Dec-09	9121451	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*125*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*124*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	17-Dec-09	18-Dec-09	9121354	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	7.7		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	7.7		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*110*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
PMP-02 SB05674-08	71360.31	Ground Water	15-Dec-09 15:25	15-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121316	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	1.0		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	5.6		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	1.2		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	1.3		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	82.0		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	1.5		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	1.2		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	1.3		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
PMP-02 SB05674-08	71360.31	Ground Water	15-Dec-09 15:25	15-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121316	
79-34-5	1,1,2,2-Tetrachloroethane	2.6		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	19.7		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	1.6		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	111		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	14.5		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*92*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*109*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	17-Dec-09	17-Dec-09	9121346	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*87*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*100*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	17-Dec-09	18-Dec-09	9121354	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	8.7		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	8.7		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*106*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-63S SB05674-09	71360.31	Ground Water	15-Dec-09 15:55	15-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121316	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	12.9		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	1.1		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	61.7		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	1.4		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-63S SB05674-09	71360.31	Ground Water	15-Dec-09 15:55	15-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121316	
79-34-5	1,1,2,2-Tetrachloroethane	1.9		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	16.1		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	1.2		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	71.6		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	9.0		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*94*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*99*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*90*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*88*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	17-Dec-09	17-Dec-09	9121346	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*79*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*90*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	17-Dec-09	18-Dec-09	9121354	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	6.4		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	6.4		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*100*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK-09406	71360.31	Deionized Water	15-Dec-09 00:00	15-Dec-09
SB05674-10				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121316	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK-09406	71360.31	Deionized Water	15-Dec-09 00:00	15-Dec-09
SB05674-10				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	16-Dec-09	17-Dec-09	9121316	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*86*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*94*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*93*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*89*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	1	+Mod 8015	17-Dec-09	17-Dec-09	9121346	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*80*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*96*		*70-130 %*			"	"	"	"	

Close File

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121296 - SW846 5030 Water MS										
Blank (9121296-BLK1)										
Prepared: 16-Dec-09 Analyzed: 17-Dec-09										
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	1.0						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
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	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/l	1.0						
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	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	1.0						
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	10.0						
Naphthalene	BRL		µg/l	1.0						
n-Propylbenzene	BRL		µg/l	1.0						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121296 - SW846 5030 Water MS										
Blank (9121296-BLK1)										
Prepared: 16-Dec-09 Analyzed: 17-Dec-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	1.0						
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						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	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						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	500						
1,4-Dioxane	BRL		µg/l	20.0						
Surrogate: 4-Bromofluorobenzene	*47.0*		µg/l		*50.0*		*94*	*70-130*		
Surrogate: Toluene-d8	*51.1*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*53.4*		µg/l		*50.0*		*107*	*70-130*		
Surrogate: Dibromofluoromethane	*52.7*		µg/l		*50.0*		*105*	*70-130*		
LCS (9121296-BS1)										
Prepared: 16-Dec-09 Analyzed: 17-Dec-09										
Acetone	18.6		µg/l		20.0		93	31.7-144		
Acrylonitrile	20.1		µg/l		20.0		101	70-130		
Benzene	19.2		µg/l		20.0		96	70-130		
Bromobenzene	20.2		µg/l		20.0		101	70-130		
Bromochloromethane	22.5		µg/l		20.0		113	70-130		
Bromodichloromethane	20.2		µg/l		20.0		101	70-130		
Bromoform	21.6		µg/l		20.0		108	70-130		
Bromomethane	20.2		µg/l		20.0		101	43-158		
2-Butanone (MEK)	23.3		µg/l		20.0		117	54.5-137		
n-Butylbenzene	22.7		µg/l		20.0		113	70-130		
sec-Butylbenzene	23.2		µg/l		20.0		116	70-130		
tert-Butylbenzene	23.2		µg/l		20.0		116	70-130		
Carbon disulfide	21.1		µg/l		20.0		106	70-130		
Carbon tetrachloride	21.1		µg/l		20.0		106	70-130		
Chlorobenzene	23.7		µg/l		20.0		118	70-130		
Chloroethane	20.6		µg/l		20.0		103	60.1-131		
Chloroform	23.5		µg/l		20.0		117	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121296 - SW846 5030 Water MS										
LCS (9121296-BS1)										
Prepared: 16-Dec-09 Analyzed: 17-Dec-09										
Chloromethane	20.0		µg/l		20.0		100	70-130		
2-Chlorotoluene	22.6		µg/l		20.0		113	70-130		
4-Chlorotoluene	22.5		µg/l		20.0		112	70-130		
1,2-Dibromo-3-chloropropane	20.5		µg/l		20.0		103	70-130		
Dibromochloromethane	20.1		µg/l		20.0		101	66.2-145		
1,2-Dibromoethane (EDB)	19.9		µg/l		20.0		100	70-130		
Dibromomethane	18.2		µg/l		20.0		91	70-130		
1,2-Dichlorobenzene	21.0		µg/l		20.0		105	70-130		
1,3-Dichlorobenzene	20.7		µg/l		20.0		104	70-130		
1,4-Dichlorobenzene	23.8		µg/l		20.0		119	70-130		
Dichlorodifluoromethane (Freon12)	20.6		µg/l		20.0		103	46.9-168		
1,1-Dichloroethane	23.0		µg/l		20.0		115	70-130		
1,2-Dichloroethane	23.3		µg/l		20.0		117	70-130		
1,1-Dichloroethene	23.0		µg/l		20.0		115	70-130		
cis-1,2-Dichloroethene	23.0		µg/l		20.0		115	70-130		
trans-1,2-Dichloroethene	21.3		µg/l		20.0		107	70-130		
1,2-Dichloropropane	21.6		µg/l		20.0		108	70-130		
1,3-Dichloropropane	22.3		µg/l		20.0		112	70-130		
2,2-Dichloropropane	18.7		µg/l		20.0		93	70-130		
1,1-Dichloropropene	19.0		µg/l		20.0		95	70-130		
cis-1,3-Dichloropropene	19.6		µg/l		20.0		98	70-130		
trans-1,3-Dichloropropene	21.3		µg/l		20.0		106	70-130		
Ethylbenzene	20.9		µg/l		20.0		104	70-130		
Hexachlorobutadiene	21.8		µg/l		20.0		109	70-135		
2-Hexanone (MBK)	18.8		µg/l		20.0		94	70-130		
Isopropylbenzene	18.5		µg/l		20.0		92	70-130		
4-Isopropyltoluene	21.9		µg/l		20.0		110	70-130		
Methyl tert-butyl ether	22.8		µg/l		20.0		114	70-130		
4-Methyl-2-pentanone (MIBK)	20.0		µg/l		20.0		100	57.6-130		
Methylene chloride	22.2		µg/l		20.0		111	70-130		
Naphthalene	23.6		µg/l		20.0		118	70-130		
n-Propylbenzene	21.7		µg/l		20.0		109	70-130		
Styrene	21.9		µg/l		20.0		109	70-130		
1,1,1,2-Tetrachloroethane	20.7		µg/l		20.0		103	70-130		
1,1,2,2-Tetrachloroethane	19.3		µg/l		20.0		96	70-130		
Tetrachloroethene	18.5		µg/l		20.0		93	70-130		
Toluene	18.5		µg/l		20.0		93	70-130		
1,2,3-Trichlorobenzene	22.6		µg/l		20.0		113	70-130		
1,2,4-Trichlorobenzene	19.8		µg/l		20.0		99	70-130		
1,3,5-Trichlorobenzene	20.0		µg/l		20.0		100	70-130		
1,1,1-Trichloroethane	20.1		µg/l		20.0		101	70-130		
1,1,2-Trichloroethane	19.3		µg/l		20.0		97	70-130		
Trichloroethene	22.6		µg/l		20.0		113	70-130		
Trichlorofluoromethane (Freon 11)	26.0		µg/l		20.0		130	64.9-147		
1,2,3-Trichloropropane	21.1		µg/l		20.0		105	70-130		
1,2,4-Trimethylbenzene	23.0		µg/l		20.0		115	70-130		
1,3,5-Trimethylbenzene	22.3		µg/l		20.0		112	70-130		
Vinyl chloride	21.8		µg/l		20.0		109	70-130		
m,p-Xylene	43.7		µg/l		40.0		109	70-130		

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121296 - SW846 5030 Water MS										
LCS (9121296-BS1)										
Prepared: 16-Dec-09 Analyzed: 17-Dec-09										
o-Xylene	22.4		µg/l		20.0		112	70-130		
Tetrahydrofuran	16.4		µg/l		20.0		82	70-130		
Ethyl ether	21.2		µg/l		20.0		106	70-130		
Tert-amyl methyl ether	22.6		µg/l		20.0		113	70-130		
Ethyl tert-butyl ether	19.1		µg/l		20.0		95	70-130		
Di-isopropyl ether	17.9		µg/l		20.0		89	70-130		
Tert-Butanol / butyl alcohol	224		µg/l		200		112	70-130		
trans-1,4-Dichloro-2-butene	20.6		µg/l		20.0		103	70-130		
Ethanol	406		µg/l		400		102	70-130		
1,4-Dioxane	180		µg/l		200		90	53.8-137		
Surrogate: 4-Bromofluorobenzene	*51.3*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*49.4*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.2*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*49.8*		µg/l		*50.0*		*100*	*70-130*		
LCS Dup (9121296-BSD1)										
Prepared: 16-Dec-09 Analyzed: 17-Dec-09										
Acetone	18.2		µg/l		20.0		91	31.7-144	2	50
Acrylonitrile	20.3		µg/l		20.0		102	70-130	0.9	25
Benzene	18.0		µg/l		20.0		90	70-130	7	25
Bromobenzene	18.6		µg/l		20.0		93	70-130	8	25
Bromochloromethane	21.7		µg/l		20.0		108	70-130	4	25
Bromodichloromethane	19.6		µg/l		20.0		98	70-130	3	25
Bromoform	21.4		µg/l		20.0		107	70-130	1	25
Bromomethane	18.1		µg/l		20.0		91	43-158	11	50
2-Butanone (MEK)	24.2		µg/l		20.0		121	54.5-137	3	50
n-Butylbenzene	20.7		µg/l		20.0		104	70-130	9	25
sec-Butylbenzene	21.3		µg/l		20.0		107	70-130	8	25
tert-Butylbenzene	21.2		µg/l		20.0		106	70-130	9	25
Carbon disulfide	18.4		µg/l		20.0		92	70-130	14	25
Carbon tetrachloride	19.5		µg/l		20.0		98	70-130	8	25
Chlorobenzene	22.1		µg/l		20.0		110	70-130	7	25
Chloroethane	18.9		µg/l		20.0		95	60.1-131	8	50
Chloroform	22.3		µg/l		20.0		112	70-130	5	25
Chloromethane	18.2		µg/l		20.0		91	70-130	10	25
2-Chlorotoluene	20.9		µg/l		20.0		105	70-130	8	25
4-Chlorotoluene	21.1		µg/l		20.0		106	70-130	6	25
1,2-Dibromo-3-chloropropane	20.1		µg/l		20.0		100	70-130	2	25
Dibromochloromethane	19.6		µg/l		20.0		98	66.2-145	3	50
1,2-Dibromoethane (EDB)	19.1		µg/l		20.0		95	70-130	4	25
Dibromomethane	17.6		µg/l		20.0		88	70-130	3	25
1,2-Dichlorobenzene	19.4		µg/l		20.0		97	70-130	8	25
1,3-Dichlorobenzene	19.4		µg/l		20.0		97	70-130	6	25
1,4-Dichlorobenzene	22.0		µg/l		20.0		110	70-130	8	25
Dichlorodifluoromethane (Freon12)	19.2		µg/l		20.0		96	46.9-168	7	50
1,1-Dichloroethane	21.9		µg/l		20.0		109	70-130	5	25
1,2-Dichloroethane	22.8		µg/l		20.0		114	70-130	2	25
1,1-Dichloroethene	20.5		µg/l		20.0		102	70-130	12	25
cis-1,2-Dichloroethene	21.8		µg/l		20.0		109	70-130	6	25
trans-1,2-Dichloroethene	19.3		µg/l		20.0		97	70-130	10	25
1,2-Dichloropropane	19.9		µg/l		20.0		100	70-130	8	25

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121296 - SW846 5030 Water MS										
LCS Dup (9121296-BSD1)										
Prepared: 16-Dec-09 Analyzed: 17-Dec-09										
1,3-Dichloropropane	22.0		µg/l		20.0		110	70-130	2	25
2,2-Dichloropropane	17.1		µg/l		20.0		86	70-130	9	25
1,1-Dichloropropene	18.0		µg/l		20.0		90	70-130	6	25
cis-1,3-Dichloropropene	18.9		µg/l		20.0		95	70-130	4	25
trans-1,3-Dichloropropene	20.5		µg/l		20.0		103	70-130	4	25
Ethylbenzene	19.5		µg/l		20.0		98	70-130	7	25
Hexachlorobutadiene	19.6		µg/l		20.0		98	70-135	10	50
2-Hexanone (MBK)	19.4		µg/l		20.0		97	70-130	3	25
Isopropylbenzene	17.0		µg/l		20.0		85	70-130	9	25
4-Isopropyltoluene	20.0		µg/l		20.0		100	70-130	9	25
Methyl tert-butyl ether	22.4		µg/l		20.0		112	70-130	2	25
4-Methyl-2-pentanone (MIBK)	19.7		µg/l		20.0		99	57.6-130	2	50
Methylene chloride	21.2		µg/l		20.0		106	70-130	5	25
Naphthalene	22.4		µg/l		20.0		112	70-130	5	25
n-Propylbenzene	20.0		µg/l		20.0		100	70-130	8	25
Styrene	20.9		µg/l		20.0		105	70-130	4	25
1,1,1,2-Tetrachloroethane	19.3		µg/l		20.0		97	70-130	7	25
1,1,2,2-Tetrachloroethane	19.0		µg/l		20.0		95	70-130	2	25
Tetrachloroethene	17.4		µg/l		20.0		87	70-130	7	25
Toluene	16.9		µg/l		20.0		84	70-130	9	25
1,2,3-Trichlorobenzene	21.5		µg/l		20.0		107	70-130	5	25
1,2,4-Trichlorobenzene	18.6		µg/l		20.0		93	70-130	6	25
1,1,1-Trichloroethane	18.6		µg/l		20.0		93	70-130	8	25
1,3,5-Trichlorobenzene	18.0		µg/l		20.0		90	70-130	10	25
1,1,2-Trichloroethane	18.5		µg/l		20.0		93	70-130	4	25
Trichloroethene	20.6		µg/l		20.0		103	70-130	9	25
Trichlorofluoromethane (Freon 11)	23.4		µg/l		20.0		117	64.9-147	11	50
1,2,3-Trichloropropane	20.9		µg/l		20.0		104	70-130	1	25
1,2,4-Trimethylbenzene	21.3		µg/l		20.0		107	70-130	8	25
1,3,5-Trimethylbenzene	21.1		µg/l		20.0		106	70-130	6	25
Vinyl chloride	19.4		µg/l		20.0		97	70-130	12	25
m,p-Xylene	40.6		µg/l		40.0		102	70-130	7	25
o-Xylene	21.0		µg/l		20.0		105	70-130	6	25
Tetrahydrofuran	16.9		µg/l		20.0		85	70-130	3	25
Ethyl ether	20.7		µg/l		20.0		104	70-130	3	50
Tert-amyl methyl ether	21.4		µg/l		20.0		107	70-130	6	25
Ethyl tert-butyl ether	18.7		µg/l		20.0		94	70-130	2	25
Di-isopropyl ether	17.6		µg/l		20.0		88	70-130	2	25
Tert-Butanol / butyl alcohol	226		µg/l		200		113	70-130	1	25
trans-1,4-Dichloro-2-butene	20.9		µg/l		20.0		104	70-130	1	25
Ethanol	395		µg/l		400		99	70-130	3	30
1,4-Dioxane	178		µg/l		200		89	53.8-137	1	25
Surrogate: 4-Bromofluorobenzene	*51.4*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*50.3*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.7*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*49.8*		µg/l		*50.0*		*100*	*70-130*		
Batch 9121316 - SW846 5030 Water MS										
Blank (9121316-BLK1)										
Prepared & Analyzed: 16-Dec-09										

Close File

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121316 - SW846 5030 Water MS										
Blank (9121316-BLK1)										
Prepared & Analyzed: 16-Dec-09										
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	1.0						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
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	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/l	1.0						
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	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	1.0						
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	10.0						
Naphthalene	BRL		µg/l	1.0						
n-Propylbenzene	BRL		µg/l	1.0						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121316 - SW846 5030 Water MS										
Blank (9121316-BLK1)										
Prepared & Analyzed: 16-Dec-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	1.0						
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						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	500						
1,4-Dioxane	BRL		µg/l	20.0						
Surrogate: 4-Bromofluorobenzene	*24.9*		µg/l		*30.0*		*83*	*70-130*		
Surrogate: Toluene-d8	*27.2*		µg/l		*30.0*		*91*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*27.5*		µg/l		*30.0*		*92*	*70-130*		
Surrogate: Dibromofluoromethane	*26.4*		µg/l		*30.0*		*88*	*70-130*		
LCS (9121316-BS1)										
Prepared & Analyzed: 16-Dec-09										
Acetone	20.9		µg/l		20.0		105	31.7-144		
Acrylonitrile	19.6		µg/l		20.0		98	70-130		
Benzene	19.8		µg/l		20.0		99	70-130		
Bromobenzene	21.8		µg/l		20.0		109	70-130		
Bromochloromethane	20.6		µg/l		20.0		103	70-130		
Bromodichloromethane	18.6		µg/l		20.0		93	70-130		
Bromoform	18.2		µg/l		20.0		91	70-130		
Bromomethane	17.5		µg/l		20.0		88	43-158		
2-Butanone (MEK)	20.2		µg/l		20.0		101	54.5-137		
n-Butylbenzene	19.8		µg/l		20.0		99	70-130		
sec-Butylbenzene	20.6		µg/l		20.0		103	70-130		
tert-Butylbenzene	20.3		µg/l		20.0		101	70-130		
Carbon disulfide	18.4		µg/l		20.0		92	70-130		
Carbon tetrachloride	20.0		µg/l		20.0		100	70-130		
Chlorobenzene	21.1		µg/l		20.0		106	70-130		
Chloroethane	18.3		µg/l		20.0		91	60.1-131		
Chloroform	20.6		µg/l		20.0		103	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121316 - SW846 5030 Water MS										
LCS (9121316-BS1)										
Prepared & Analyzed: 16-Dec-09										
Chloromethane	18.6		µg/l		20.0		93	70-130		
2-Chlorotoluene	23.6		µg/l		20.0		118	70-130		
4-Chlorotoluene	20.9		µg/l		20.0		104	70-130		
1,2-Dibromo-3-chloropropane	18.1		µg/l		20.0		90	70-130		
Dibromochloromethane	16.8		µg/l		20.0		84	66.2-145		
1,2-Dibromoethane (EDB)	20.9		µg/l		20.0		104	70-130		
Dibromomethane	20.6		µg/l		20.0		103	70-130		
1,2-Dichlorobenzene	23.6		µg/l		20.0		118	70-130		
1,3-Dichlorobenzene	23.1		µg/l		20.0		115	70-130		
1,4-Dichlorobenzene	20.3		µg/l		20.0		101	70-130		
Dichlorodifluoromethane (Freon12)	18.2		µg/l		20.0		91	46.9-168		
1,1-Dichloroethane	19.2		µg/l		20.0		96	70-130		
1,2-Dichloroethane	18.8		µg/l		20.0		94	70-130		
1,1-Dichloroethene	20.2		µg/l		20.0		101	70-130		
cis-1,2-Dichloroethene	20.2		µg/l		20.0		101	70-130		
trans-1,2-Dichloroethene	18.5		µg/l		20.0		92	70-130		
1,2-Dichloropropane	22.1		µg/l		20.0		110	70-130		
1,3-Dichloropropane	20.3		µg/l		20.0		102	70-130		
2,2-Dichloropropane	15.9		µg/l		20.0		80	70-130		
1,1-Dichloropropene	20.0		µg/l		20.0		100	70-130		
cis-1,3-Dichloropropene	16.4		µg/l		20.0		82	70-130		
trans-1,3-Dichloropropene	16.0		µg/l		20.0		80	70-130		
Ethylbenzene	19.9		µg/l		20.0		99	70-130		
Hexachlorobutadiene	20.6		µg/l		20.0		103	70-135		
2-Hexanone (MBK)	17.5		µg/l		20.0		88	70-130		
Isopropylbenzene	18.9		µg/l		20.0		95	70-130		
4-Isopropyltoluene	20.2		µg/l		20.0		101	70-130		
Methyl tert-butyl ether	19.6		µg/l		20.0		98	70-130		
4-Methyl-2-pentanone (MIBK)	19.4		µg/l		20.0		97	57.6-130		
Methylene chloride	19.2		µg/l		20.0		96	70-130		
Naphthalene	17.4		µg/l		20.0		87	70-130		
n-Propylbenzene	18.5		µg/l		20.0		92	70-130		
Styrene	18.6		µg/l		20.0		93	70-130		
1,1,1,2-Tetrachloroethane	19.8		µg/l		20.0		99	70-130		
1,1,2,2-Tetrachloroethane	21.6		µg/l		20.0		108	70-130		
Tetrachloroethene	20.3		µg/l		20.0		102	70-130		
Toluene	19.4		µg/l		20.0		97	70-130		
1,2,3-Trichlorobenzene	20.6		µg/l		20.0		103	70-130		
1,2,4-Trichlorobenzene	17.6		µg/l		20.0		88	70-130		
1,1,1-Trichloroethane	19.7		µg/l		20.0		99	70-130		
1,3,5-Trichlorobenzene	20.7		µg/l		20.0		104	70-130		
1,1,2-Trichloroethane	21.4		µg/l		20.0		107	70-130		
Trichloroethene	23.2		µg/l		20.0		116	70-130		
Trichlorofluoromethane (Freon 11)	20.1		µg/l		20.0		101	64.9-147		
1,2,3-Trichloropropane	24.2		µg/l		20.0		121	70-130		
1,2,4-Trimethylbenzene	19.4		µg/l		20.0		97	70-130		
1,3,5-Trimethylbenzene	19.2		µg/l		20.0		96	70-130		
Vinyl chloride	17.5		µg/l		20.0		87	70-130		
m,p-Xylene	41.4		µg/l		40.0		103	70-130		

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121316 - SW846 5030 Water MS										
LCS (9121316-BS1)										
Prepared & Analyzed: 16-Dec-09										
o-Xylene	21.9		µg/l		20.0		110	70-130		
Tetrahydrofuran	21.9		µg/l		20.0		109	70-130		
Ethyl ether	20.6		µg/l		20.0		103	70-130		
Tert-amyl methyl ether	17.2		µg/l		20.0		86	70-130		
Ethyl tert-butyl ether	18.4		µg/l		20.0		92	70-130		
Di-isopropyl ether	20.5		µg/l		20.0		103	70-130		
Tert-Butanol / butyl alcohol	196		µg/l		200		98	70-130		
trans-1,4-Dichloro-2-butene	19.5		µg/l		20.0		98	70-130		
Ethanol	401		µg/l		400		100	70-130		
1,4-Dioxane	203		µg/l		200		102	53.8-137		
Surrogate: 4-Bromofluorobenzene	*30.3*		µg/l		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*29.5*		µg/l		*30.0*		*98*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*27.3*		µg/l		*30.0*		*91*	*70-130*		
Surrogate: Dibromofluoromethane	*27.9*		µg/l		*30.0*		*93*	*70-130*		
LCS Dup (9121316-BSD1)										
Prepared & Analyzed: 16-Dec-09										
Acetone	23.5		µg/l		20.0		117	31.7-144	11	50
Acrylonitrile	23.0		µg/l		20.0		115	70-130	16	25
Benzene	21.7		µg/l		20.0		108	70-130	9	25
Bromobenzene	23.0		µg/l		20.0		115	70-130	6	25
Bromochloromethane	22.5		µg/l		20.0		113	70-130	9	25
Bromodichloromethane	20.1		µg/l		20.0		101	70-130	8	25
Bromoform	19.6		µg/l		20.0		98	70-130	7	25
Bromomethane	19.9		µg/l		20.0		99	43-158	13	50
2-Butanone (MEK)	24.0		µg/l		20.0		120	54.5-137	17	50
n-Butylbenzene	19.7		µg/l		20.0		99	70-130	0.4	25
sec-Butylbenzene	22.1		µg/l		20.0		111	70-130	7	25
tert-Butylbenzene	21.4		µg/l		20.0		107	70-130	5	25
Carbon disulfide	19.4		µg/l		20.0		97	70-130	5	25
Carbon tetrachloride	22.1		µg/l		20.0		111	70-130	10	25
Chlorobenzene	22.3		µg/l		20.0		112	70-130	5	25
Chloroethane	19.8		µg/l		20.0		99	60.1-131	8	50
Chloroform	22.6		µg/l		20.0		113	70-130	10	25
Chloromethane	20.5		µg/l		20.0		103	70-130	10	25
2-Chlorotoluene	25.4		µg/l		20.0		127	70-130	7	25
4-Chlorotoluene	21.9		µg/l		20.0		110	70-130	5	25
1,2-Dibromo-3-chloropropane	19.3		µg/l		20.0		97	70-130	7	25
Dibromochloromethane	18.7		µg/l		20.0		93	66.2-145	10	50
1,2-Dibromoethane (EDB)	23.9		µg/l		20.0		120	70-130	14	25
Dibromomethane	21.2		µg/l		20.0		106	70-130	3	25
1,2-Dichlorobenzene	24.7		µg/l		20.0		123	70-130	4	25
1,3-Dichlorobenzene	24.7		µg/l		20.0		123	70-130	7	25
1,4-Dichlorobenzene	20.6		µg/l		20.0		103	70-130	2	25
Dichlorodifluoromethane (Freon12)	20.5		µg/l		20.0		102	46.9-168	12	50
1,1-Dichloroethane	21.3		µg/l		20.0		106	70-130	10	25
1,2-Dichloroethane	20.7		µg/l		20.0		103	70-130	9	25
1,1-Dichloroethene	22.0		µg/l		20.0		110	70-130	9	25
cis-1,2-Dichloroethene	22.2		µg/l		20.0		111	70-130	10	25
trans-1,2-Dichloroethene	20.4		µg/l		20.0		102	70-130	10	25
1,2-Dichloropropane	21.5		µg/l		20.0		108	70-130	3	25

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121316 - SW846 5030 Water MS										
LCS Dup (9121316-BSD1)										
Prepared & Analyzed: 16-Dec-09										
1,3-Dichloropropane	23.1		µg/l		20.0		115	70-130	13	25
2,2-Dichloropropane	17.4		µg/l		20.0		87	70-130	9	25
1,1-Dichloropropene	22.3		µg/l		20.0		111	70-130	11	25
cis-1,3-Dichloropropene	17.5		µg/l		20.0		87	70-130	6	25
trans-1,3-Dichloropropene	16.7		µg/l		20.0		84	70-130	4	25
Ethylbenzene	20.9		µg/l		20.0		105	70-130	5	25
Hexachlorobutadiene	19.8		µg/l		20.0		99	70-135	4	50
2-Hexanone (MBK)	19.4		µg/l		20.0		97	70-130	10	25
Isopropylbenzene	19.9		µg/l		20.0		99	70-130	5	25
4-Isopropyltoluene	20.8		µg/l		20.0		104	70-130	3	25
Methyl tert-butyl ether	22.2		µg/l		20.0		111	70-130	13	25
4-Methyl-2-pentanone (MIBK)	21.6		µg/l		20.0		108	57.6-130	11	50
Methylene chloride	21.6		µg/l		20.0		108	70-130	12	25
Naphthalene	17.1		µg/l		20.0		86	70-130	2	25
n-Propylbenzene	19.5		µg/l		20.0		98	70-130	5	25
Styrene	19.1		µg/l		20.0		95	70-130	3	25
1,1,1,2-Tetrachloroethane	20.7		µg/l		20.0		103	70-130	4	25
1,1,2,2-Tetrachloroethane	23.6		µg/l		20.0		118	70-130	9	25
Tetrachloroethene	22.2		µg/l		20.0		111	70-130	9	25
Toluene	21.3		µg/l		20.0		107	70-130	10	25
1,2,3-Trichlorobenzene	21.0		µg/l		20.0		105	70-130	2	25
1,2,4-Trichlorobenzene	17.2		µg/l		20.0		86	70-130	2	25
1,1,1-Trichloroethane	21.5		µg/l		20.0		108	70-130	9	25
1,3,5-Trichlorobenzene	20.6		µg/l		20.0		103	70-130	0.4	25
1,1,2-Trichloroethane	24.3		µg/l		20.0		121	70-130	12	25
Trichloroethene	22.6		µg/l		20.0		113	70-130	3	25
Trichlorofluoromethane (Freon 11)	22.6		µg/l		20.0		113	64.9-147	12	50
1,2,3-Trichloropropane	26.1		µg/l		20.0		130	70-130	7	25
1,2,4-Trimethylbenzene	20.7		µg/l		20.0		103	70-130	6	25
1,3,5-Trimethylbenzene	19.8		µg/l		20.0		99	70-130	3	25
Vinyl chloride	21.3		µg/l		20.0		106	70-130	20	25
m,p-Xylene	43.5		µg/l		40.0		109	70-130	5	25
o-Xylene	22.9		µg/l		20.0		114	70-130	4	25
Tetrahydrofuran	23.1		µg/l		20.0		116	70-130	6	25
Ethyl ether	23.3		µg/l		20.0		117	70-130	13	50
Tert-amyl methyl ether	19.1		µg/l		20.0		96	70-130	10	25
Ethyl tert-butyl ether	20.2		µg/l		20.0		101	70-130	9	25
Di-isopropyl ether	22.4		µg/l		20.0		112	70-130	9	25
Tert-Butanol / butyl alcohol	221		µg/l		200		111	70-130	12	25
trans-1,4-Dichloro-2-butene	21.6		µg/l		20.0		108	70-130	10	25
Ethanol	498		µg/l		400		125	70-130	22	30
1,4-Dioxane	236		µg/l		200		118	53.8-137	15	25
Surrogate: 4-Bromofluorobenzene	*31.0*		µg/l		*30.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*30.7*		µg/l		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.9*		µg/l		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.7*		µg/l		*30.0*		*99*	*70-130*		
Batch 9121346 - VPH - EPA 5030B										
Blank (9121346-BLK1)										
Prepared & Analyzed: 17-Dec-09										

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121346 - VPH - EPA 5030B										
Blank (9121346-BLK1)										
Prepared & Analyzed: 17-Dec-09										
Gasoline Range Organics	BRL		mg/l	0.4						
Surrogate: 2,5-Dibromotoluene (PID)	*40.3*		µg/l		*50.0*		*81*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*47.7*		µg/l		*50.0*		*95*	*70-130*		
LCS (9121346-BS1)										
Prepared & Analyzed: 17-Dec-09										
Gasoline Range Organics	256		µg/l		280		91	70-130		
Surrogate: 2,5-Dibromotoluene (PID)	*41.9*		µg/l		*50.0*		*84*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*54.7*		µg/l		*50.0*		*109*	*70-130*		
LCS Dup (9121346-BSD1)										
Prepared & Analyzed: 17-Dec-09										
Gasoline Range Organics	255		µg/l		280		91	70-130	0.1	25
Surrogate: 2,5-Dibromotoluene (PID)	*38.3*		µg/l		*50.0*		*77*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*48.8*		µg/l		*50.0*		*98*	*70-130*		
Batch 9121451 - VPH - EPA 5030B										
Blank (9121451-BLK1)										
Prepared & Analyzed: 18-Dec-09										
Gasoline Range Organics	BRL		mg/l	0.4						
Surrogate: 2,5-Dibromotoluene (PID)	*52.2*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*52.0*		µg/l		*50.0*		*104*	*70-130*		
LCS (9121451-BS1)										
Prepared & Analyzed: 18-Dec-09										
Gasoline Range Organics	261		µg/l		280		93	70-130		
Surrogate: 2,5-Dibromotoluene (PID)	*52.3*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*52.1*		µg/l		*50.0*		*104*	*70-130*		
LCS Dup (9121451-BSD1)										
Prepared & Analyzed: 18-Dec-09										
Gasoline Range Organics	264		µg/l		280		94	70-130	1	25
Surrogate: 2,5-Dibromotoluene (PID)	*52.1*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*52.0*		µg/l		*50.0*		*104*	*70-130*		

Close File

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121354 - SW846 3510C										
Blank (9121354-BLK1)										
Prepared: 17-Dec-09 Analyzed: 18-Dec-09										
Fuel Oil #2	BRL		mg/l	0.1						
Fuel Oil #4	BRL		mg/l	0.1						
Fuel Oil #6	BRL		mg/l	0.1						
Motor Oil	BRL		mg/l	0.1						
Aviation Fuel	BRL		mg/l	0.1						
Unidentified	BRL		mg/l	0.1						
Other Oil	BRL		mg/l	0.1						
Diesel Range Organics (DRO)	BRL		mg/l	0.1						
Surrogate: 1-Chlorooctadecane	*0.0456*		mg/l		*0.0500*		*91*	*40-140*		
LCS (9121354-BS2)										
Prepared: 17-Dec-09 Analyzed: 18-Dec-09										
Fuel Oil #2	7.0		mg/l	0.1	10.0		70	40-140		
Surrogate: 1-Chlorooctadecane	*0.0391*		mg/l		*0.0500*		*78*	*40-140*		

Close File

Notes and Definitions

O01	This compound is a common laboratory contaminant.
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.

Interpretation of Total Petroleum Hydrocarbon Report

Petroleum identification is determined by comparing the GC fingerprint obtained from the sample with a library of GC fingerprints obtained from analyses of various petroleum products. Possible match categories are as follows:

Gasoline - includes regular, unleaded, premium, etc.
Fuel Oil #2 - includes home heating oil, #2 fuel oil, and diesel
Fuel Oil #4 - includes #4 fuel oil
Fuel Oil #6 - includes #6 fuel oil and bunker "C" oil
Motor Oil - includes virgin and waste automobile oil
Ligroin - includes mineral spirits, petroleum naphtha, vm&p naphtha
Aviation Fuel - includes kerosene, Jet A and JP-4
Other Oil - includes lubricating and cutting oil, and silicon oil

At times, the unidentified petroleum product is quantified using a calibration that most closely approximates the distribution of compounds in the sample. When this occurs, the result is qualified as *TPH (Calculated as).

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

Close File

RMT

CHAIN OF CUSTODY RECORD

77099

SB 05674 e

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
Phone 864/281-0030 • Fax 864/281-0288

Project No. 71360.31

Project/Client: MTD Westfield

Project Manager/Contact Person: S. Webb / B. Barnes

Lab No.	Yr. 09 Date	Time	Sample Station ID	Total Number of Containers	MATRIX	VOC's	TPH GRO	TPH DRO						Comments:
Filtered (Yes/No)						N	N							
Preserved (Code)						E	E							
05674-01	12/15	0900	MW-59S	5	GW	X	X							
-02		0915	PMP-03	5		X	X							
-03		1035	MW-60S	5		X	X							
-04		1135	MW-55S	5		X	X							
-05		1245	MW-56S	5		X	X							
-06		1400	MW-61	5		X	X							
-07		1440	MW-24S	5		X	X							
-08		1525	PMP-02	5		X	X							
-09		1555	MW-63S	5		X	X							
-10			TBLK-09406	1	DI	X								

Analyses Requested

PRESERVED CODES
A — NONE
B — HNO_3
C — H_2SO_4
D — NaOH
E — HCl
F — METHANOL
G — _____

SPECIAL INSTRUCTIONS

SAMPLER Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
[signature]	12/15/09 1615		
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
[signature]	12/15 1710	[signature]	12/15 17:00
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time

Custody Seal: Present/Absent Intact/Not Intact Seal #s

HAZARDS ASSOCIATED WITH SAMPLES
- ☐ Flammable
- ☐ Corrosive
- ☐ Highly Toxic
- ☐ Other (list) _____

Turn Around (circle one) Normal Rush

Report Due _____

(For Lab Use Only)

Receipt Temp: _____

Temp Blank Y N

Receipt pH (Wet/Metals) _____

F-268 (10/08)

WHITE—LABORATORY COPY YELLOW—REPORT APPENDIX PINK—SAMPLER/SUBMITTER

4.3°C ice

Close File

RMT

CHAIN OF CUSTODY RECORD

77099

SB 05674 P

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
Phone 864/281-0030 • Fax 864/281-0288

Project No. 71360.31

Project/Client: MTD Westfield

Project Manager/Contact Person: S. Webb / B. Barnes

Lab No.	Yr. 09 Date	Time	Sample Station ID	Total Number of Containers	MATRIX	Filtered (Yes/No) N	Filtered (Yes/No) N	Preserved (Code) E	Preserved (Code) E	Analyses Requested: VOC's	Analyses Requested: TPH GRO	Analyses Requested: TPH DRO						Comments:
05674-01	12/15	0900	MW-59S	5	GW	X	X											
-02		0915	PMP-03	5		X	X											
-03		1035	MW-60S	5		X	X											
-04		1135	MW-55S	5		X	X											
-05		1245	MW-56S	5		X	X											
-06		1400	MW-61~~65~~S	5		X	X											per client req.
-07		1440	MW-24S	5		X	X											
-08		1525	PMP-02	5		X	X											
-09		1555	MW-63S	5		X	X											
-10			TBLK-09406	1	DI	X												

PRESERVED CODES
A — NONE
B — HNO_3
C — H_2SO_4
D — NaOH
E — HCl
F — METHANOL
G — _____

SPECIAL INSTRUCTIONS

SAMPLER Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
[signature]	12/15/09 1615		
Relinquished by (Signature) [signature]	Date/Time 12/15 1710	Received by (Signature) [signature]	Date/Time 12/15 17:00
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time

HAZARDS ASSOCIATED WITH SAMPLES
- ☐ Flammable
- ☐ Corrosive
- ☐ Highly Toxic
- ☐ Other (list) _____

Turn Around (circle one) Normal Rush

Report Due _____

(For Lab Use Only)

Receipt Temp: _____

Temp Blank Y N

Receipt pH (Wet/Metals) _____

Custody Seal: Present/Absent Intact/Not Intact Seal #s

F-268 (10/08)

WHITE—LABORATORY COPY YELLOW—REPORT APPENDIX PINK—SAMPLER/SUBMITTER

4.3°C ice

Close File

Report Date:
21-Dec-09 16:53

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB05753-01	MW-64S	Ground Water	15-Dec-09 17:00	16-Dec-09 17:30
SB05753-02	PMP-01	Ground Water	16-Dec-09 09:00	16-Dec-09 17:30
SB05753-03	MW-61S	Ground Water	16-Dec-09 11:15	16-Dec-09 17:30
SB05753-04	MW-20CR	Ground Water	16-Dec-09 12:20	16-Dec-09 17:30
SB05753-05	MW-62S	Ground Water	16-Dec-09 12:50	16-Dec-09 17:30
SB05753-06	MW-20B	Ground Water	16-Dec-09 13:45	16-Dec-09 17:30
SB05753-07	RW-09	Ground Water	16-Dec-09 14:45	16-Dec-09 17:30
SB05753-08	RW-08	Ground Water	16-Dec-09 14:55	16-Dec-09 17:30
SB05753-09	RW-01	Ground Water	16-Dec-09 15:10	16-Dec-09 17:30
SB05753-10	RW-02	Ground Water	16-Dec-09 15:20	16-Dec-09 17:30
SB05753-11	RW-03	Ground Water	16-Dec-09 15:30	16-Dec-09 17:30
SB05753-12	RW-04	Ground Water	16-Dec-09 15:35	16-Dec-09 17:30
SB05753-13	RW-05	Ground Water	16-Dec-09 15:45	16-Dec-09 17:30
SB05753-14	RW-06	Ground Water	16-Dec-09 16:00	16-Dec-09 17:30
SB05753-15	DUO9402	Ground Water	16-Dec-09 00:00	16-Dec-09 17:30
SB05753-16	TBLK-09407	Deionized Water	16-Dec-09 00:00	16-Dec-09 17:30

Close File

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 54 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.

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

Close File

CASE NARRATIVE:

The samples were received 5.7 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.

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

Blanks:

9121571-BLK1

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

Laboratory Control Samples:

9121485-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.

Acetone

9121485-BSD1

RPD out of acceptance range.

Acetone

9121571-BS1

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

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.

Vinyl chloride

9121571-BSD1

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

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.

cis-1,2-Dichloroethene

Close File

SW846 8260B

Spikes:

9121485-MS1 *Source: SB05753-07*

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

Styrene
Trichloroethene

9121485-MSD1 *Source: SB05753-07*

RPD out of acceptance range.

1,4-Dioxane
Styrene
Trichloroethene

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.

4-Methyl-2-pentanone (MIBK)

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

1,4-Dioxane
Trichloroethene

Close File

SW846 8260B

Samples:

S912489-CCV1

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05753-03 *MW-61S*

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

SB05753-04 *MW-20CR*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

The Reporting Limits for this analysis are elevated due to sample foaming.

SB05753-06RE1 *MW-20B*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05753-11 *RW-03*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05753-15 *DUO9402*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05753-15RE1 *DUO9402*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05753-16 *TBLK-09407*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-64S	71360.31	Ground Water	15-Dec-09 17:00	16-Dec-09
SB05753-01				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	1.0		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	2.0		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	2.1		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	2.4		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	77.7		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	1.7		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-64S SB05753-01	71360.31	Ground Water	15-Dec-09 17:00	16-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
79-34-5	1,1,2,2-Tetrachloroethane	2.1		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	6.0		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	1.2		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	55.2		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	48.1		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*94*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*112*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*117*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*115*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	18-Dec-09	18-Dec-09	9121451	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*130*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*130*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	18-Dec-09	18-Dec-09	9121445	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	4.1		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	4.1		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*109*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
PMP-01 SB05753-02	71360.31	Ground Water	16-Dec-09 09:00	16-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	1.1		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	49.6		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	1.2		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	1.1		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
PMP-01 SB05753-02	71360.31	Ground Water	16-Dec-09 09:00	16-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	1.3		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	27.9		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	4.7		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*91*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*110*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*111*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	18-Dec-09	18-Dec-09	9121451	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*125*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*121*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	18-Dec-09	18-Dec-09	9121445	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	10.6		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	10.6		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*120*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-61S	71360.31	Ground Water	16-Dec-09 11:15	16-Dec-09
SB05753-03				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds			GS1								
Prepared by method SW846 5030 Water MS											
67-64-1	Acetone	BRL		µg/l	50.0	5	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
107-13-1	Acrylonitrile	BRL		µg/l	5.0	5	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	5.0	5	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	5.0	5	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	5.0	5	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	5.0	5	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	5.0	5	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	10.0	5	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	50.0	5	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	25.0	5	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	5.0	5	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	10.0	5	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	5.0	5	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	10.0	5	"	"	"	"	
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	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	5.0	5	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	5.0	5	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	5.0	5	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	10.0	5	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	258		µg/l	5.0	5	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	5.0	5	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	50.0	5	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	5.0	5	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	5.0	5	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	50.0	5	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	50.0	5	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	5.0	5	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	5.0	5	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-61S SB05753-03	71360.31	Ground Water	16-Dec-09 11:15	16-Dec-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds			GS1								
Prepared by method SW846 5030 Water MS											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	5.0	5	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
79-34-5	1,1,2,2-Tetrachloroethane	7.3		µg/l	5.0	5	"	"	"	"	
127-18-4	Tetrachloroethene	11.2		µg/l	5.0	5	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	5.0	5	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	267		µg/l	5.0	5	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	5.0	5	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	35.2		µg/l	5.0	5	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	10.0	5	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*89*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*109*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*110*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	18-Dec-09	18-Dec-09	9121451	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*123*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*120*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	18-Dec-09	18-Dec-09	9121445	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	5.6		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	5.6		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*104*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-20CR	71360.31	Ground Water	16-Dec-09 12:20	16-Dec-09
SB05753-04				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds			R04								
Prepared by method SW846 5030 Water MS											
67-64-1	Acetone	BRL		µg/l	100	10	SW846 8260B	21-Dec-09	21-Dec-09	9121571	
107-13-1	Acrylonitrile	BRL		µg/l	10.0	10	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	10.0	10	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	10.0	10	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	10.0	10	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	10.0	10	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	10.0	10	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	20.0	10	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	100	10	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	50.0	10	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	10.0	10	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	20.0	10	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	10.0	10	"	"	"	"	
74-87-3	Chloromethane	72.9		µg/l	20.0	10	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	10.0	10	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	10.0	10	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	20.0	10	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	10.0	10	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	10.0	10	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	10.0	10	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	20.0	10	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	10.0	10	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	10.0	10	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	10.0	10	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	120		µg/l	10.0	10	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	10.0	10	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	10.0	10	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	10.0	10	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	10.0	10	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	10.0	10	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	10.0	10	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	10.0	10	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	10.0	10	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	100	10	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	10.0	10	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	10.0	10	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	100	10	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	100	10	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	10.0	10	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	10.0	10	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-20CR	71360.31	Ground Water	16-Dec-09 12:20	16-Dec-09
SB05753-04				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Compounds			R04								
Prepared by method SW846 5030 Water MS											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	10.0	10	SW846 8260B	21-Dec-09	21-Dec-09	9121571	
79-34-5	1,1,2,2-Tetrachloroethane	13.7		µg/l	10.0	10	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	10.0	10	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	10.0	10	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	10.0	10	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	10.0	10	"	"	"	"	
79-01-6	Trichloroethene	149		µg/l	10.0	10	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	10.0	10	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	10.0	10	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
75-01-4	Vinyl chloride	13.0	CAL1	µg/l	10.0	10	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	20.0	10	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	10.0	10	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*105*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*111*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*109*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	18-Dec-09	18-Dec-09	9121451	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*124*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*123*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	18-Dec-09	18-Dec-09	9121445	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	4.9		mg/l	0.2	1	"	"	"	"	
	Unidentified	Calculated as		mg/l	0.2	1	"	"	"	"	
	Other Oil	4.9		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	4.9		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*117*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-62S	71360.31	Ground Water	16-Dec-09 12:50	16-Dec-09
SB05753-05				

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											
67-64-1	Acetone	29.0		µg/l	10.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	1.5		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	2.6		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	29.0		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	1.0		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	2.7		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	94.9		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	1.4		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	1.6		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-62S SB05753-05	71360.31	Ground Water	16-Dec-09 12:50	16-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	58.0		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	22.6		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	47.8		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*94*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*115*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*115*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*116*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	18-Dec-09	18-Dec-09	9121451	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*120*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*119*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	18-Dec-09	18-Dec-09	9121445	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	5.7		mg/l	0.2	1	"	"	"	"	
	Unidentified	Calculated as		mg/l	0.2	1	"	"	"	"	
	Other Oil	5.7		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	5.7		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*110*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-20B	71360.31	Ground Water	16-Dec-09 13:45	16-Dec-09
SB05753-06				

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											
67-64-1	Acetone	11.1		µg/l	10.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	2.6		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	1.2		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	1.0		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	271	E	µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	2.1		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	3.7		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-20B	71360.31	Ground Water	16-Dec-09 13:45	16-Dec-09
SB05753-06				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	8.1		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	5.7		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	67.8	E	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*92*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*118*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*117*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*117*		*70-130 %*			"	"	"	"	
Re-analysis of Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	224		µg/l	5.0	5	SW846 8260B	21-Dec-09	21-Dec-09	9121571	
75-01-4	Vinyl chloride	72.2	CAL1	µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*97*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*104*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*115*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*109*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	18-Dec-09	18-Dec-09	9121451	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*124*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*124*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	18-Dec-09	18-Dec-09	9121445	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	7.7		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	7.7		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*110*		*40-140 %*			"	"	"	"	

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-09 SB05753-07	71360.31	Ground Water	16-Dec-09 14:45	16-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	1.2		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	1.4		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	41.3		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-09 SB05753-07	71360.31	Ground Water	16-Dec-09 14:45	16-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
79-34-5	1,1,2,2-Tetrachloroethane	4.7		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	14.4		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	3.2		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	157		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	4.5		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*90*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*114*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*118*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*116*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-08 SB05753-08	71360.31	Ground Water	16-Dec-09 14:55	16-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	1.2		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	1.0		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	17.6		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	1.7		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	2.2		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	49.6		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	1.5		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	1.6		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	1.6		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-08 SB05753-08	71360.31	Ground Water	16-Dec-09 14:55	16-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
79-34-5	1,1,2,2-Tetrachloroethane	7.9		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	44.6		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	5.5		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	295	E	µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	14.2		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*91*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*109*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*114*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*112*		*70-130 %*			"	"	"	"	
Re-analysis of Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
79-01-6	Trichloroethene	206		µg/l	5.0	5	SW846 8260B	21-Dec-09	21-Dec-09	9121571	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*97*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*114*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-01 SB05753-09	71360.31	Ground Water	16-Dec-09 15:10	16-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	13.7		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	62.8		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	3.2		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-01 SB05753-09	71360.31	Ground Water	16-Dec-09 15:10	16-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	10.6		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	199		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	6.9		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*87*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*107*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*111*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*109*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-02 SB05753-10	71360.31	Ground Water	16-Dec-09 15:20	16-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	2.2		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	26.7		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	2.4		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	1.9		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	1.8		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	128		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	3.2		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	62.8		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-02 SB05753-10	71360.31	Ground Water	16-Dec-09 15:20	16-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
79-34-5	1,1,2,2-Tetrachloroethane	6.6		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	66.6		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	4.3		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	871	E	µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	20.1		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*88*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*112*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*118*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*117*		*70-130 %*			"	"	"	"	
Re-analysis of Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
79-01-6	Trichloroethene	536		µg/l	10.0	10	SW846 8260B	21-Dec-09	21-Dec-09	9121571	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*99*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*109*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*107*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-03 SB05753-11	71360.31	Ground Water	16-Dec-09 15:30	16-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	21-Dec-09	9121571	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	9.7		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-03 SB05753-11	71360.31	Ground Water	16-Dec-09 15:30	16-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	21-Dec-09	9121571	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	3.0		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	20.0		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*109*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-04 SB05753-12	71360.31	Ground Water	16-Dec-09 15:35	16-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	6.8		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-04 SB05753-12	71360.31	Ground Water	16-Dec-09 15:35	16-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	3.6		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	23.5		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*85*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*86*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*95*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-05 SB05753-13	71360.31	Ground Water	16-Dec-09 15:45	16-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-05 SB05753-13	71360.31	Ground Water	16-Dec-09 15:45	16-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	3.8		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*89*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*86*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*94*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-06 SB05753-14	71360.31	Ground Water	16-Dec-09 16:00	16-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	2.9		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-06 SB05753-14	71360.31	Ground Water	16-Dec-09 16:00	16-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121485	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	2.4		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	37.9		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*88*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*88*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*94*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DUO9402	71360.31	Ground Water	16-Dec-09 00:00	16-Dec-09
SB05753-15				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	21-Dec-09	9121571	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	7.9		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	31.1		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	3.2		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	2.6		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	163	E	µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	3.7		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DUO9402	71360.31	Ground Water	16-Dec-09 00:00	16-Dec-09
SB05753-15				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	21-Dec-09	9121571	
79-34-5	1,1,2,2-Tetrachloroethane	9.9		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	1.0		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	1.8		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	125		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	24.2	CAL1, E	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*109*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*107*		*70-130 %*			"	"	"	"	
Re-analysis of Volatile Organic Compounds											
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	143		µg/l	5.0	5	SW846 8260B	21-Dec-09	21-Dec-09	9121571	
75-01-4	Vinyl chloride	18.6	CAL1	µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*97*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*109*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*107*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	18-Dec-09	18-Dec-09	9121451	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*120*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*119*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	18-Dec-09	18-Dec-09	9121445	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	4.5		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	4.5		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*111*		*40-140 %*			"	"	"	"	

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* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK-09407 SB05753-16	71360.31	Deionized Water	16-Dec-09 00:00	16-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	21-Dec-09	9121571	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK-09407	71360.31	Deionized Water	16-Dec-09 00:00	16-Dec-09
SB05753-16				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	21-Dec-09	9121571	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*96*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*110*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*109*		*70-130 %*			"	"	"	"	

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121451 - VPH - EPA 5030B										
Blank (9121451-BLK1)										
Prepared & Analyzed: 18-Dec-09										
Gasoline Range Organics	BRL		mg/l	0.4						
Surrogate: 2,5-Dibromotoluene (PID)	*52.2*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*52.0*		µg/l		*50.0*		*104*	*70-130*		
LCS (9121451-BS1)										
Prepared & Analyzed: 18-Dec-09										
Gasoline Range Organics	261		µg/l		280		93	70-130		
Surrogate: 2,5-Dibromotoluene (PID)	*52.3*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*52.1*		µg/l		*50.0*		*104*	*70-130*		
LCS Dup (9121451-BSD1)										
Prepared & Analyzed: 18-Dec-09										
Gasoline Range Organics	264		µg/l		280		94	70-130	1	25
Surrogate: 2,5-Dibromotoluene (PID)	*52.1*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*52.0*		µg/l		*50.0*		*104*	*70-130*		
Batch 9121485 - SW846 5030 Water MS										
Blank (9121485-BLK1)										
Prepared & Analyzed: 18-Dec-09										
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	1.0						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
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	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/l	1.0						
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						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121485 - SW846 5030 Water MS										
Blank (9121485-BLK1)										
Prepared & Analyzed: 18-Dec-09										
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	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	1.0						
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	10.0						
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	1.0						
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						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	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						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	500						
1,4-Dioxane	BRL		µg/l	20.0						
Surrogate: 4-Bromofluorobenzene	*24.2*		µg/l		*30.0*		*81*	*70-130*		
Surrogate: Toluene-d8	*26.0*		µg/l		*30.0*		*87*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.6*		µg/l		*30.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*27.8*		µg/l		*30.0*		*93*	*70-130*		
LCS (9121485-BS1)										
Prepared & Analyzed: 18-Dec-09										
Acetone	43.3	QM9	µg/l		20.0		217	31.7-144		

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* Reportable Detection Limit BRL = Below Reporting Limit

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121485 - SW846 5030 Water MS										
LCS (9121485-BS1)										
Prepared & Analyzed: 18-Dec-09										
Acrylonitrile	19.7		µg/l		20.0		98	70-130		
Benzene	20.0		µg/l		20.0		100	70-130		
Bromobenzene	19.0		µg/l		20.0		95	70-130		
Bromochloromethane	20.8		µg/l		20.0		104	70-130		
Bromodichloromethane	19.0		µg/l		20.0		95	70-130		
Bromoform	17.4		µg/l		20.0		87	70-130		
Bromomethane	16.9		µg/l		20.0		84	43-158		
2-Butanone (MEK)	24.6		µg/l		20.0		123	54.5-137		
n-Butylbenzene	17.1		µg/l		20.0		86	70-130		
sec-Butylbenzene	18.3		µg/l		20.0		91	70-130		
tert-Butylbenzene	17.8		µg/l		20.0		89	70-130		
Carbon disulfide	18.5		µg/l		20.0		93	70-130		
Carbon tetrachloride	20.6		µg/l		20.0		103	70-130		
Chlorobenzene	18.5		µg/l		20.0		92	70-130		
Chloroethane	19.0		µg/l		20.0		95	60.1-131		
Chloroform	21.5		µg/l		20.0		107	70-130		
Chloromethane	19.4		µg/l		20.0		97	70-130		
2-Chlorotoluene	20.5		µg/l		20.0		102	70-130		
4-Chlorotoluene	18.1		µg/l		20.0		91	70-130		
1,2-Dibromo-3-chloropropane	17.2		µg/l		20.0		86	70-130		
Dibromochloromethane	17.8		µg/l		20.0		89	66.2-145		
1,2-Dibromoethane (EDB)	21.0		µg/l		20.0		105	70-130		
Dibromomethane	18.7		µg/l		20.0		94	70-130		
1,2-Dichlorobenzene	19.9		µg/l		20.0		100	70-130		
1,3-Dichlorobenzene	20.0		µg/l		20.0		100	70-130		
1,4-Dichlorobenzene	17.2		µg/l		20.0		86	70-130		
Dichlorodifluoromethane (Freon12)	19.1		µg/l		20.0		96	46.9-168		
1,1-Dichloroethane	19.7		µg/l		20.0		98	70-130		
1,2-Dichloroethane	19.0		µg/l		20.0		95	70-130		
1,1-Dichloroethene	20.3		µg/l		20.0		101	70-130		
cis-1,2-Dichloroethene	20.8		µg/l		20.0		104	70-130		
trans-1,2-Dichloroethene	18.2		µg/l		20.0		91	70-130		
1,2-Dichloropropane	19.0		µg/l		20.0		95	70-130		
1,3-Dichloropropane	20.4		µg/l		20.0		102	70-130		
2,2-Dichloropropane	17.6		µg/l		20.0		88	70-130		
1,1-Dichloropropene	19.8		µg/l		20.0		99	70-130		
cis-1,3-Dichloropropene	16.8		µg/l		20.0		84	70-130		
trans-1,3-Dichloropropene	16.6		µg/l		20.0		83	70-130		
Ethylbenzene	17.0		µg/l		20.0		85	70-130		
Hexachlorobutadiene	18.1		µg/l		20.0		91	70-135		
2-Hexanone (MBK)	18.1		µg/l		20.0		91	70-130		
Isopropylbenzene	16.5		µg/l		20.0		83	70-130		
4-Isopropyltoluene	17.6		µg/l		20.0		88	70-130		
Methyl tert-butyl ether	20.5		µg/l		20.0		102	70-130		
4-Methyl-2-pentanone (MIBK)	20.1		µg/l		20.0		100	57.6-130		
Methylene chloride	20.2		µg/l		20.0		101	70-130		
Naphthalene	14.9		µg/l		20.0		74	70-130		
n-Propylbenzene	16.5		µg/l		20.0		82	70-130		
Styrene	15.7		µg/l		20.0		79	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121485 - SW846 5030 Water MS										
LCS (9121485-BS1)										
Prepared & Analyzed: 18-Dec-09										
1,1,1,2-Tetrachloroethane	18.2		µg/l		20.0		91	70-130		
1,1,2,2-Tetrachloroethane	19.0		µg/l		20.0		95	70-130		
Tetrachloroethene	21.0		µg/l		20.0		105	70-130		
Toluene	19.4		µg/l		20.0		97	70-130		
1,2,3-Trichlorobenzene	17.2		µg/l		20.0		86	70-130		
1,2,4-Trichlorobenzene	15.1		µg/l		20.0		75	70-130		
1,1,1-Trichloroethane	20.4		µg/l		20.0		102	70-130		
1,3,5-Trichlorobenzene	17.7		µg/l		20.0		88	70-130		
1,1,2-Trichloroethane	21.4		µg/l		20.0		107	70-130		
Trichloroethene	20.2		µg/l		20.0		101	70-130		
Trichlorofluoromethane (Freon 11)	21.0		µg/l		20.0		105	64.9-147		
1,2,3-Trichloropropane	21.4		µg/l		20.0		107	70-130		
1,2,4-Trimethylbenzene	17.0		µg/l		20.0		85	70-130		
1,3,5-Trimethylbenzene	16.8		µg/l		20.0		84	70-130		
Vinyl chloride	17.8		µg/l		20.0		89	70-130		
m,p-Xylene	36.1		µg/l		40.0		90	70-130		
o-Xylene	18.7		µg/l		20.0		94	70-130		
Tetrahydrofuran	21.6		µg/l		20.0		108	70-130		
Ethyl ether	20.2		µg/l		20.0		101	70-130		
Tert-amyl methyl ether	18.0		µg/l		20.0		90	70-130		
Ethyl tert-butyl ether	19.1		µg/l		20.0		96	70-130		
Di-isopropyl ether	20.9		µg/l		20.0		105	70-130		
Tert-Butanol / butyl alcohol	197		µg/l		200		99	70-130		
trans-1,4-Dichloro-2-butene	17.3		µg/l		20.0		87	70-130		
Ethanol	408		µg/l		400		102	70-130		
1,4-Dioxane	222		µg/l		200		111	53.8-137		
Surrogate: 4-Bromofluorobenzene	*30.9*		µg/l		*30.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*34.4*		µg/l		*30.0*		*114*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*32.0*		µg/l		*30.0*		*107*	*70-130*		
Surrogate: Dibromofluoromethane	*33.2*		µg/l		*30.0*		*110*	*70-130*		
LCS Dup (9121485-BSD1)										
Prepared & Analyzed: 18-Dec-09										
Acetone	22.3	QR5	µg/l		20.0		112	31.7-144	64	50
Acrylonitrile	22.4		µg/l		20.0		112	70-130	13	25
Benzene	18.4		µg/l		20.0		92	70-130	8	25
Bromobenzene	19.4		µg/l		20.0		97	70-130	2	25
Bromochloromethane	22.5		µg/l		20.0		112	70-130	8	25
Bromodichloromethane	20.0		µg/l		20.0		100	70-130	5	25
Bromoform	17.9		µg/l		20.0		90	70-130	3	25
Bromomethane	18.7		µg/l		20.0		93	43-158	10	50
2-Butanone (MEK)	23.4		µg/l		20.0		117	54.5-137	5	50
n-Butylbenzene	17.1		µg/l		20.0		86	70-130	0.2	25
sec-Butylbenzene	17.9		µg/l		20.0		90	70-130	2	25
tert-Butylbenzene	17.7		µg/l		20.0		89	70-130	0.7	25
Carbon disulfide	18.4		µg/l		20.0		92	70-130	0.3	25
Carbon tetrachloride	21.0		µg/l		20.0		105	70-130	2	25
Chlorobenzene	18.9		µg/l		20.0		94	70-130	2	25
Chloroethane	19.1		µg/l		20.0		95	60.1-131	0.7	50
Chloroform	22.6		µg/l		20.0		113	70-130	5	25
Chloromethane	19.4		µg/l		20.0		97	70-130	0.2	25

Close File

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121485 - SW846 5030 Water MS										
LCS Dup (9121485-BSD1)										
Prepared & Analyzed: 18-Dec-09										
2-Chlorotoluene	20.7		µg/l		20.0		103	70-130	1	25
4-Chlorotoluene	18.9		µg/l		20.0		94	70-130	4	25
1,2-Dibromo-3-chloropropane	18.8		µg/l		20.0		94	70-130	9	25
Dibromochloromethane	18.6		µg/l		20.0		93	66.2-145	4	50
1,2-Dibromoethane (EDB)	23.2		µg/l		20.0		116	70-130	10	25
Dibromomethane	21.2		µg/l		20.0		106	70-130	12	25
1,2-Dichlorobenzene	21.3		µg/l		20.0		106	70-130	7	25
1,3-Dichlorobenzene	20.7		µg/l		20.0		103	70-130	3	25
1,4-Dichlorobenzene	18.5		µg/l		20.0		93	70-130	7	25
Dichlorodifluoromethane (Freon12)	18.4		µg/l		20.0		92	46.9-168	4	50
1,1-Dichloroethane	20.4		µg/l		20.0		102	70-130	4	25
1,2-Dichloroethane	20.6		µg/l		20.0		103	70-130	9	25
1,1-Dichloroethene	21.1		µg/l		20.0		105	70-130	4	25
cis-1,2-Dichloroethene	21.8		µg/l		20.0		109	70-130	5	25
trans-1,2-Dichloroethene	19.6		µg/l		20.0		98	70-130	7	25
1,2-Dichloropropane	19.8		µg/l		20.0		99	70-130	4	25
1,3-Dichloropropane	21.8		µg/l		20.0		109	70-130	7	25
2,2-Dichloropropane	17.7		µg/l		20.0		89	70-130	0.5	25
1,1-Dichloropropene	20.8		µg/l		20.0		104	70-130	5	25
cis-1,3-Dichloropropene	17.3		µg/l		20.0		86	70-130	3	25
trans-1,3-Dichloropropene	17.1		µg/l		20.0		85	70-130	3	25
Ethylbenzene	17.4		µg/l		20.0		87	70-130	2	25
Hexachlorobutadiene	17.5		µg/l		20.0		87	70-135	4	50
2-Hexanone (MBK)	19.0		µg/l		20.0		95	70-130	5	25
Isopropylbenzene	16.7		µg/l		20.0		83	70-130	0.8	25
4-Isopropyltoluene	17.9		µg/l		20.0		90	70-130	2	25
Methyl tert-butyl ether	22.7		µg/l		20.0		114	70-130	10	25
4-Methyl-2-pentanone (MIBK)	21.9		µg/l		20.0		110	57.6-130	9	50
Methylene chloride	20.4		µg/l		20.0		102	70-130	1	25
Naphthalene	14.6		µg/l		20.0		73	70-130	2	25
n-Propylbenzene	16.1		µg/l		20.0		81	70-130	2	25
Styrene	15.8		µg/l		20.0		79	70-130	0.1	25
1,1,1,2-Tetrachloroethane	18.2		µg/l		20.0		91	70-130	0.06	25
1,1,2,2-Tetrachloroethane	19.9		µg/l		20.0		100	70-130	5	25
Tetrachloroethene	21.1		µg/l		20.0		105	70-130	0.5	25
Toluene	20.0		µg/l		20.0		100	70-130	3	25
1,2,3-Trichlorobenzene	17.5		µg/l		20.0		88	70-130	2	25
1,2,4-Trichlorobenzene	14.9		µg/l		20.0		74	70-130	2	25
1,3,5-Trichlorobenzene	18.0		µg/l		20.0		90	70-130	2	25
1,1,1-Trichloroethane	20.9		µg/l		20.0		104	70-130	2	25
1,1,2-Trichloroethane	22.8		µg/l		20.0		114	70-130	6	25
Trichloroethene	21.4		µg/l		20.0		107	70-130	5	25
Trichlorofluoromethane (Freon 11)	21.0		µg/l		20.0		105	64.9-147	0.05	50
1,2,3-Trichloropropane	22.5		µg/l		20.0		112	70-130	5	25
1,2,4-Trimethylbenzene	16.8		µg/l		20.0		84	70-130	0.7	25
1,3,5-Trimethylbenzene	16.6		µg/l		20.0		83	70-130	1	25
Vinyl chloride	19.1		µg/l		20.0		95	70-130	7	25
m,p-Xylene	36.6		µg/l		40.0		92	70-130	1	25
o-Xylene	19.3		µg/l		20.0		97	70-130	3	25

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121485 - SW846 5030 Water MS										
LCS Dup (9121485-BSD1)										
Prepared & Analyzed: 18-Dec-09										
Tetrahydrofuran	24.6		µg/l		20.0		123	70-130	13	25
Ethyl ether	22.4		µg/l		20.0		112	70-130	10	50
Tert-amyl methyl ether	19.1		µg/l		20.0		95	70-130	6	25
Ethyl tert-butyl ether	20.8		µg/l		20.0		104	70-130	8	25
Di-isopropyl ether	22.2		µg/l		20.0		111	70-130	6	25
Tert-Butanol / butyl alcohol	223		µg/l		200		111	70-130	12	25
trans-1,4-Dichloro-2-butene	18.8		µg/l		20.0		94	70-130	8	25
Ethanol	453		µg/l		400		113	70-130	10	30
1,4-Dioxane	234		µg/l		200		117	53.8-137	5	25
Surrogate: 4-Bromofluorobenzene	*30.6*		µg/l		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*35.1*		µg/l		*30.0*		*117*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*34.5*		µg/l		*30.0*		*115*	*70-130*		
Surrogate: Dibromofluoromethane	*34.4*		µg/l		*30.0*		*115*	*70-130*		
Matrix Spike (9121485-MS1) **Source: SB05753-07**										
Prepared & Analyzed: 18-Dec-09										
Acetone	23.8		µg/l		20.0	BRL	119	70-130		
Acrylonitrile	20.7		µg/l		20.0	BRL	104	70-130		
Benzene	21.9		µg/l		20.0	BRL	109	70-130		
Bromobenzene	22.7		µg/l		20.0	BRL	114	70-130		
Bromochloromethane	22.4		µg/l		20.0	BRL	112	70-130		
Bromodichloromethane	20.7		µg/l		20.0	BRL	103	70-130		
Bromoform	20.3		µg/l		20.0	BRL	101	70-130		
Bromomethane	18.3		µg/l		20.0	BRL	91	70-130		
2-Butanone (MEK)	23.3		µg/l		20.0	BRL	116	70-130		
n-Butylbenzene	22.2		µg/l		20.0	BRL	111	70-130		
sec-Butylbenzene	22.5		µg/l		20.0	BRL	112	70-130		
tert-Butylbenzene	22.0		µg/l		20.0	BRL	110	70-130		
Carbon disulfide	19.0		µg/l		20.0	BRL	95	70-130		
Carbon tetrachloride	23.9		µg/l		20.0	BRL	119	70-130		
Chlorobenzene	22.7		µg/l		20.0	BRL	114	70-130		
Chloroethane	21.0		µg/l		20.0	1.6	97	70-130		
Chloroform	22.6		µg/l		20.0	BRL	113	70-130		
Chloromethane	19.2		µg/l		20.0	BRL	96	70-130		
2-Chlorotoluene	23.3		µg/l		20.0	BRL	116	70-130		
4-Chlorotoluene	22.6		µg/l		20.0	BRL	113	70-130		
1,2-Dibromo-3-chloropropane	20.6		µg/l		20.0	BRL	103	70-130		
Dibromochloromethane	19.4		µg/l		20.0	BRL	97	70-130		
1,2-Dibromoethane (EDB)	22.8		µg/l		20.0	BRL	114	70-130		
Dibromomethane	20.7		µg/l		20.0	BRL	103	70-130		
1,2-Dichlorobenzene	25.1		µg/l		20.0	BRL	126	70-130		
1,3-Dichlorobenzene	24.3		µg/l		20.0	BRL	122	70-130		
1,4-Dichlorobenzene	21.5		µg/l		20.0	BRL	108	70-130		
Dichlorodifluoromethane (Freon12)	17.8		µg/l		20.0	BRL	89	70-130		
1,1-Dichloroethane	22.3		µg/l		20.0	1.2	106	70-130		
1,2-Dichloroethane	21.6		µg/l		20.0	1.4	101	70-130		
1,1-Dichloroethene	22.5		µg/l		20.0	BRL	112	70-130		
cis-1,2-Dichloroethene	56.7		µg/l		20.0	41.3	77	70-130		
trans-1,2-Dichloroethene	20.8		µg/l		20.0	0.8	100	70-130		
1,2-Dichloropropane	21.0		µg/l		20.0	BRL	105	70-130		
1,3-Dichloropropane	21.7		µg/l		20.0	BRL	109	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121485 - SW846 5030 Water MS										
Matrix Spike (9121485-MS1)	**Source: SB05753-07**									
Prepared & Analyzed: 18-Dec-09										
2,2-Dichloropropane	19.8		µg/l		20.0	BRL	99	70-130		
1,1-Dichloropropene	22.6		µg/l		20.0	BRL	113	70-130		
cis-1,3-Dichloropropene	18.3		µg/l		20.0	BRL	91	70-130		
trans-1,3-Dichloropropene	17.5		µg/l		20.0	BRL	87	70-130		
Ethylbenzene	21.4		µg/l		20.0	BRL	107	70-130		
Hexachlorobutadiene	24.3		µg/l		20.0	BRL	122	70-130		
2-Hexanone (MBK)	18.8		µg/l		20.0	BRL	94	70-130		
Isopropylbenzene	20.1		µg/l		20.0	BRL	100	70-130		
4-Isopropyltoluene	22.4		µg/l		20.0	BRL	112	70-130		
Methyl tert-butyl ether	21.4		µg/l		20.0	BRL	107	70-130		
4-Methyl-2-pentanone (MIBK)	22.6		µg/l		20.0	BRL	113	70-130		
Methylene chloride	21.5		µg/l		20.0	1.1	102	70-130		
Naphthalene	19.2		µg/l		20.0	BRL	96	70-130		
n-Propylbenzene	20.6		µg/l		20.0	BRL	103	70-130		
Styrene	9.8	QM7	µg/l		20.0	BRL	49	70-130		
1,1,1,2-Tetrachloroethane	21.3		µg/l		20.0	BRL	107	70-130		
1,1,2,2-Tetrachloroethane	27.8		µg/l		20.0	4.7	116	70-130		
Tetrachloroethene	35.1		µg/l		20.0	14.4	103	70-130		
Toluene	20.9		µg/l		20.0	BRL	105	70-130		
1,2,3-Trichlorobenzene	22.1		µg/l		20.0	BRL	110	70-130		
1,2,4-Trichlorobenzene	19.3		µg/l		20.0	BRL	97	70-130		
1,1,1-Trichloroethane	26.3		µg/l		20.0	3.2	116	70-130		
1,3,5-Trichlorobenzene	23.3		µg/l		20.0	BRL	116	70-130		
1,1,2-Trichloroethane	22.8		µg/l		20.0	BRL	114	70-130		
Trichloroethene	155	QM7	µg/l		20.0	157	-7	70-130		
Trichlorofluoromethane (Freon 11)	22.6		µg/l		20.0	BRL	113	70-130		
1,2,3-Trichloropropane	25.0		µg/l		20.0	BRL	125	70-130		
1,2,4-Trimethylbenzene	20.2		µg/l		20.0	BRL	101	70-130		
1,3,5-Trimethylbenzene	20.3		µg/l		20.0	BRL	101	70-130		
Vinyl chloride	22.7		µg/l		20.0	4.5	91	70-130		
m,p-Xylene	44.0		µg/l		40.0	BRL	110	70-130		
o-Xylene	22.8		µg/l		20.0	BRL	114	70-130		
Tetrahydrofuran	22.5		µg/l		20.0	BRL	113	70-130		
Ethyl ether	21.5		µg/l		20.0	BRL	107	70-130		
Tert-amyl methyl ether	19.6		µg/l		20.0	BRL	98	70-130		
Ethyl tert-butyl ether	20.3		µg/l		20.0	BRL	101	70-130		
Di-isopropyl ether	22.0		µg/l		20.0	BRL	110	70-130		
Tert-Butanol / butyl alcohol	214		µg/l		200	BRL	107	70-130		
trans-1,4-Dichloro-2-butene	20.7		µg/l		20.0	BRL	104	70-130		
Ethanol	449		µg/l		400	BRL	112	70-130		
1,4-Dioxane	238		µg/l		200	BRL	119	70-130		
Surrogate: 4-Bromofluorobenzene	*30.0*		µg/l		*30.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*30.0*		µg/l		*30.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.4*		µg/l		*30.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*29.9*		µg/l		*30.0*		*100*	*70-130*		
Matrix Spike Dup (9121485-MSD1)	**Source: SB05753-07**									
Prepared & Analyzed: 18-Dec-09										
Acetone	21.1		µg/l		20.0	BRL	105	70-130	12	30
Acrylonitrile	20.4		µg/l		20.0	BRL	102	70-130	2	30
Benzene	20.5		µg/l		20.0	BRL	102	70-130	7	30

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121485 - SW846 5030 Water MS										
Matrix Spike Dup (9121485-MSD1)	**Source: SB05753-07**									
Prepared & Analyzed: 18-Dec-09										
Bromobenzene	18.3		µg/l		20.0	BRL	91	70-130	22	30
Bromochloromethane	20.8		µg/l		20.0	BRL	104	70-130	8	30
Bromodichloromethane	19.5		µg/l		20.0	BRL	98	70-130	6	30
Bromoform	17.4		µg/l		20.0	BRL	87	70-130	15	30
Bromomethane	17.0		µg/l		20.0	BRL	85	70-130	7	30
2-Butanone (MEK)	23.0		µg/l		20.0	BRL	115	70-130	1	30
n-Butylbenzene	18.0		µg/l		20.0	BRL	90	70-130	21	30
sec-Butylbenzene	18.3		µg/l		20.0	BRL	92	70-130	20	30
tert-Butylbenzene	18.4		µg/l		20.0	BRL	92	70-130	18	30
Carbon disulfide	16.6		µg/l		20.0	BRL	83	70-130	13	30
Carbon tetrachloride	21.7		µg/l		20.0	BRL	109	70-130	9	30
Chlorobenzene	17.8		µg/l		20.0	BRL	89	70-130	24	30
Chloroethane	19.8		µg/l		20.0	1.6	91	70-130	6	30
Chloroform	22.3		µg/l		20.0	BRL	111	70-130	2	30
Chloromethane	18.3		µg/l		20.0	BRL	91	70-130	5	30
2-Chlorotoluene	20.0		µg/l		20.0	BRL	100	70-130	15	30
4-Chlorotoluene	17.6		µg/l		20.0	BRL	88	70-130	25	30
1,2-Dibromo-3-chloropropane	17.0		µg/l		20.0	BRL	85	70-130	19	30
Dibromochloromethane	17.8		µg/l		20.0	BRL	89	70-130	9	30
1,2-Dibromoethane (EDB)	21.0		µg/l		20.0	BRL	105	70-130	8	30
Dibromomethane	19.6		µg/l		20.0	BRL	98	70-130	5	30
1,2-Dichlorobenzene	20.0		µg/l		20.0	BRL	100	70-130	23	30
1,3-Dichlorobenzene	19.2		µg/l		20.0	BRL	96	70-130	23	30
1,4-Dichlorobenzene	17.0		µg/l		20.0	BRL	85	70-130	24	30
Dichlorodifluoromethane (Freon12)	16.3		µg/l		20.0	BRL	81	70-130	9	30
1,1-Dichloroethane	21.9		µg/l		20.0	1.2	104	70-130	2	30
1,2-Dichloroethane	20.9		µg/l		20.0	1.4	98	70-130	3	30
1,1-Dichloroethene	19.7		µg/l		20.0	BRL	99	70-130	13	30
cis-1,2-Dichloroethene	59.7		µg/l		20.0	41.3	92	70-130	18	30
trans-1,2-Dichloroethene	18.4		µg/l		20.0	0.8	88	70-130	13	30
1,2-Dichloropropane	20.4		µg/l		20.0	BRL	102	70-130	3	30
1,3-Dichloropropane	20.5		µg/l		20.0	BRL	103	70-130	6	30
2,2-Dichloropropane	18.9		µg/l		20.0	BRL	94	70-130	5	30
1,1-Dichloropropene	19.5		µg/l		20.0	BRL	97	70-130	15	30
cis-1,3-Dichloropropene	17.1		µg/l		20.0	BRL	85	70-130	7	30
trans-1,3-Dichloropropene	16.3		µg/l		20.0	BRL	82	70-130	7	30
Ethylbenzene	17.1		µg/l		20.0	BRL	85	70-130	23	30
Hexachlorobutadiene	20.4		µg/l		20.0	BRL	102	70-130	17	30
2-Hexanone (MBK)	18.4		µg/l		20.0	BRL	92	70-130	2	30
Isopropylbenzene	16.6		µg/l		20.0	BRL	83	70-130	19	30
4-Isopropyltoluene	17.9		µg/l		20.0	BRL	89	70-130	22	30
Methyl tert-butyl ether	21.6		µg/l		20.0	BRL	108	70-130	0.5	30
4-Methyl-2-pentanone (MIBK)	15.7	QR2	µg/l		20.0	BRL	79	70-130	36	30
Methylene chloride	20.8		µg/l		20.0	1.1	99	70-130	3	30
Naphthalene	15.4		µg/l		20.0	BRL	77	70-130	22	30
n-Propylbenzene	16.0		µg/l		20.0	BRL	80	70-130	25	30
Styrene	14.4	QR5	µg/l		20.0	BRL	72	70-130	38	30
1,1,1,2-Tetrachloroethane	18.7		µg/l		20.0	BRL	94	70-130	13	30
1,1,2,2-Tetrachloroethane	24.6		µg/l		20.0	4.7	100	70-130	15	30

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121485 - SW846 5030 Water MS										
Matrix Spike Dup (9121485-MSD1)	**Source: SB05753-07**									
Prepared & Analyzed: 18-Dec-09										
Tetrachloroethene	33.6		µg/l		20.0	14.4	96	70-130	7	30
Toluene	19.1		µg/l		20.0	BRL	96	70-130	9	30
1,2,3-Trichlorobenzene	18.1		µg/l		20.0	BRL	90	70-130	20	30
1,2,4-Trichlorobenzene	15.2		µg/l		20.0	BRL	76	70-130	24	30
1,3,5-Trichlorobenzene	18.4		µg/l		20.0	BRL	92	70-130	23	30
1,1,1-Trichloroethane	25.3		µg/l		20.0	3.2	110	70-130	5	30
1,1,2-Trichloroethane	21.5		µg/l		20.0	BRL	108	70-130	6	30
Trichloroethene	170	QM7, QR5	µg/l		20.0	157	66	70-130	NR	30
Trichlorofluoromethane (Freon 11)	20.2		µg/l		20.0	BRL	101	70-130	11	30
1,2,3-Trichloropropane	20.8		µg/l		20.0	BRL	104	70-130	18	30
1,2,4-Trimethylbenzene	16.4		µg/l		20.0	BRL	82	70-130	21	30
1,3,5-Trimethylbenzene	15.8		µg/l		20.0	BRL	79	70-130	25	30
Vinyl chloride	22.1		µg/l		20.0	4.5	88	70-130	3	30
m,p-Xylene	34.3		µg/l		40.0	BRL	86	70-130	25	30
o-Xylene	18.5		µg/l		20.0	BRL	93	70-130	20	30
Tetrahydrofuran	21.8		µg/l		20.0	BRL	109	70-130	3	30
Ethyl ether	21.2		µg/l		20.0	BRL	106	70-130	1	30
Tert-amyl methyl ether	18.6		µg/l		20.0	BRL	93	70-130	5	30
Ethyl tert-butyl ether	20.0		µg/l		20.0	BRL	100	70-130	2	30
Di-isopropyl ether	21.6		µg/l		20.0	BRL	108	70-130	2	30
Tert-Butanol / butyl alcohol	199		µg/l		200	BRL	100	70-130	7	30
trans-1,4-Dichloro-2-butene	17.1		µg/l		20.0	BRL	86	70-130	19	30
Ethanol	427		µg/l		400	BRL	107	70-130	5	30
1,4-Dioxane	104	QM7, QR5	µg/l		200	BRL	52	70-130	78	30
Surrogate: 4-Bromofluorobenzene	*29.7*		µg/l		*30.0*		*99*	*70-130*		
Surrogate: Toluene-d8	*33.5*		µg/l		*30.0*		*112*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*33.4*		µg/l		*30.0*		*111*	*70-130*		
Surrogate: Dibromofluoromethane	*33.5*		µg/l		*30.0*		*112*	*70-130*		
Batch 9121571 - SW846 5030 Water MS										
Blank (9121571-BLK1)										
Prepared & Analyzed: 21-Dec-09										
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						

Close File

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121571 - SW846 5030 Water MS										
Blank (9121571-BLK1)										
Prepared & Analyzed: 21-Dec-09										
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						
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	CAL1	µg/l	1.0						
m,p-Xylene	BRL		µg/l	2.0						

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121571 - SW846 5030 Water MS										
Blank (9121571-BLK1)										
Prepared & Analyzed: 21-Dec-09										
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						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	400						
1,4-Dioxane	BRL		µg/l	20.0						
Surrogate: 4-Bromofluorobenzene	*48.1*		µg/l		*50.0*		*96*	*70-130*		
Surrogate: Toluene-d8	*49.9*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*55.5*		µg/l		*50.0*		*111*	*70-130*		
Surrogate: Dibromofluoromethane	*54.5*		µg/l		*50.0*		*109*	*70-130*		
LCS (9121571-BS1)										
Prepared & Analyzed: 21-Dec-09										
Acetone	20.3		µg/l		20.0		101	31.7-144		
Acrylonitrile	21.4		µg/l		20.0		107	70-130		
Benzene	19.6		µg/l		20.0		98	70-130		
Bromobenzene	20.9		µg/l		20.0		104	70-130		
Bromochloromethane	20.1		µg/l		20.0		100	70-130		
Bromodichloromethane	22.2		µg/l		20.0		111	70-130		
Bromoform	17.3		µg/l		20.0		86	70-130		
Bromomethane	20.9		µg/l		20.0		105	43-158		
2-Butanone (MEK)	18.9		µg/l		20.0		94	54.5-137		
n-Butylbenzene	21.6		µg/l		20.0		108	70-130		
sec-Butylbenzene	22.1		µg/l		20.0		110	70-130		
tert-Butylbenzene	21.0		µg/l		20.0		105	70-130		
Carbon disulfide	20.1		µg/l		20.0		101	70-130		
Carbon tetrachloride	16.4		µg/l		20.0		82	70-130		
Chlorobenzene	21.3		µg/l		20.0		107	70-130		
Chloroethane	20.9		µg/l		20.0		105	60.1-131		
Chloroform	21.4		µg/l		20.0		107	70-130		
Chloromethane	19.5		µg/l		20.0		97	70-130		
2-Chlorotoluene	21.0		µg/l		20.0		105	70-130		
4-Chlorotoluene	21.4		µg/l		20.0		107	70-130		
1,2-Dibromo-3-chloropropane	16.8		µg/l		20.0		84	70-130		
Dibromochloromethane	16.7		µg/l		20.0		83	66.2-145		
1,2-Dibromoethane (EDB)	20.9		µg/l		20.0		104	70-130		
Dibromomethane	21.4		µg/l		20.0		107	70-130		
1,2-Dichlorobenzene	21.2		µg/l		20.0		106	70-130		
1,3-Dichlorobenzene	22.1		µg/l		20.0		110	70-130		
1,4-Dichlorobenzene	21.1		µg/l		20.0		106	70-130		
Dichlorodifluoromethane (Freon12)	20.8		µg/l		20.0		104	46.9-168		
1,1-Dichloroethane	21.3		µg/l		20.0		107	70-130		
1,2-Dichloroethane	21.4		µg/l		20.0		107	70-130		
1,1-Dichloroethene	21.7		µg/l		20.0		108	70-130		
cis-1,2-Dichloroethene	22.4		µg/l		20.0		112	70-130		
trans-1,2-Dichloroethene	20.1		µg/l		20.0		100	70-130		
1,2-Dichloropropane	20.1		µg/l		20.0		101	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121571 - SW846 5030 Water MS										
LCS (9121571-BS1)										
Prepared & Analyzed: 21-Dec-09										
1,3-Dichloropropane	21.0		µg/l		20.0		105	70-130		
2,2-Dichloropropane	17.7		µg/l		20.0		89	70-130		
1,1-Dichloropropene	19.9		µg/l		20.0		100	70-130		
cis-1,3-Dichloropropene	18.6		µg/l		20.0		93	70-130		
trans-1,3-Dichloropropene	18.6		µg/l		20.0		93	70-130		
Ethylbenzene	20.2		µg/l		20.0		101	70-130		
Hexachlorobutadiene	18.3		µg/l		20.0		92	70-135		
2-Hexanone (MBK)	17.2		µg/l		20.0		86	70-130		
Isopropylbenzene	18.0		µg/l		20.0		90	70-130		
4-Isopropyltoluene	21.5		µg/l		20.0		107	70-130		
Methyl tert-butyl ether	20.0		µg/l		20.0		100	70-130		
4-Methyl-2-pentanone (MIBK)	16.2		µg/l		20.0		81	57.6-130		
Methylene chloride	21.1		µg/l		20.0		106	70-130		
Naphthalene	18.1		µg/l		20.0		90	70-130		
n-Propylbenzene	21.6		µg/l		20.0		108	70-130		
Styrene	20.3		µg/l		20.0		101	70-130		
1,1,1,2-Tetrachloroethane	19.8		µg/l		20.0		99	70-130		
1,1,2,2-Tetrachloroethane	22.3		µg/l		20.0		112	70-130		
Tetrachloroethene	21.6		µg/l		20.0		108	70-130		
Toluene	19.9		µg/l		20.0		99	70-130		
1,2,3-Trichlorobenzene	22.2		µg/l		20.0		111	70-130		
1,2,4-Trichlorobenzene	18.0		µg/l		20.0		90	70-130		
1,3,5-Trichlorobenzene	19.9		µg/l		20.0		100	70-130		
1,1,1-Trichloroethane	20.0		µg/l		20.0		100	70-130		
1,1,2-Trichloroethane	21.7		µg/l		20.0		109	70-130		
Trichloroethene	21.0		µg/l		20.0		105	70-130		
Trichlorofluoromethane (Freon 11)	27.3		µg/l		20.0		137	64.9-147		
1,2,3-Trichloropropane	24.2		µg/l		20.0		121	70-130		
1,2,4-Trimethylbenzene	20.8		µg/l		20.0		104	70-130		
1,3,5-Trimethylbenzene	20.4		µg/l		20.0		102	70-130		
Vinyl chloride	26.6	CAL1, QM9	µg/l		20.0		133	70-130		
m,p-Xylene	41.9		µg/l		40.0		105	70-130		
o-Xylene	21.1		µg/l		20.0		105	70-130		
Tetrahydrofuran	17.1		µg/l		20.0		86	70-130		
Ethyl ether	19.0		µg/l		20.0		95	70-130		
Tert-amyl methyl ether	24.6		µg/l		20.0		123	70-130		
Ethyl tert-butyl ether	17.0		µg/l		20.0		85	70-130		
Di-isopropyl ether	19.8		µg/l		20.0		99	70-130		
Tert-Butanol / butyl alcohol	189		µg/l		200		94	70-130		
trans-1,4-Dichloro-2-butene	21.0		µg/l		20.0		105	70-130		
Ethanol	436		µg/l		400		109	70-130		
1,4-Dioxane	172		µg/l		200		86	53.8-137		
Surrogate: 4-Bromofluorobenzene	*52.3*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*50.7*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*53.7*		µg/l		*50.0*		*107*	*70-130*		
Surrogate: Dibromofluoromethane	*52.7*		µg/l		*50.0*		*105*	*70-130*		
LCS Dup (9121571-BSD1)										
Prepared & Analyzed: 21-Dec-09										
Acetone	20.8		µg/l		20.0		104	60.2-138	3	50

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121571 - SW846 5030 Water MS										
LCS Dup (9121571-BSD1)										
Prepared & Analyzed: 21-Dec-09										
Acrylonitrile	21.5		µg/l		20.0		107	70-130	0.2	25
Benzene	19.4		µg/l		20.0		97	70-130	1	25
Bromobenzene	20.2		µg/l		20.0		101	70-130	3	25
Bromochloromethane	20.4		µg/l		20.0		102	70-130	2	25
Bromodichloromethane	22.0		µg/l		20.0		110	70-130	0.9	25
Bromoform	17.7		µg/l		20.0		88	70-130	2	25
Bromomethane	20.5		µg/l		20.0		103	56.4-147	2	50
2-Butanone (MEK)	20.1		µg/l		20.0		100	70-142	6	50
n-Butylbenzene	20.4		µg/l		20.0		102	70-130	6	25
sec-Butylbenzene	22.0		µg/l		20.0		110	70-130	0.2	25
tert-Butylbenzene	21.0		µg/l		20.0		105	70-130	0.05	25
Carbon disulfide	20.6		µg/l		20.0		103	70-130	2	25
Carbon tetrachloride	16.4		µg/l		20.0		82	70-130	0.4	25
Chlorobenzene	21.1		µg/l		20.0		106	70-130	0.8	25
Chloroethane	20.8		µg/l		20.0		104	67.2-130	0.6	50
Chloroform	20.9		µg/l		20.0		105	70-130	2	25
Chloromethane	19.1		µg/l		20.0		96	70-130	2	25
2-Chlorotoluene	21.1		µg/l		20.0		105	70-130	0.1	25
4-Chlorotoluene	21.2		µg/l		20.0		106	70-130	0.8	25
1,2-Dibromo-3-chloropropane	17.2		µg/l		20.0		86	70-130	3	25
Dibromochloromethane	17.1		µg/l		20.0		86	68.9-130	3	50
1,2-Dibromoethane (EDB)	20.9		µg/l		20.0		105	70-130	0.1	25
Dibromomethane	21.6		µg/l		20.0		108	70-130	0.8	25
1,2-Dichlorobenzene	20.8		µg/l		20.0		104	70-130	2	25
1,3-Dichlorobenzene	22.0		µg/l		20.0		110	70-130	0.3	25
1,4-Dichlorobenzene	21.0		µg/l		20.0		105	70-130	0.6	25
Dichlorodifluoromethane (Freon12)	19.9		µg/l		20.0		100	54.2-135	4	50
1,1-Dichloroethane	21.0		µg/l		20.0		105	70-130	2	25
1,2-Dichloroethane	21.1		µg/l		20.0		105	70-130	1	25
1,1-Dichloroethene	21.4		µg/l		20.0		107	70-130	1	25
cis-1,2-Dichloroethene	26.5	QM9	µg/l		20.0		132	70-130	17	25
trans-1,2-Dichloroethene	19.5		µg/l		20.0		98	70-130	3	25
1,2-Dichloropropane	20.2		µg/l		20.0		101	70-130	0.3	25
1,3-Dichloropropane	21.1		µg/l		20.0		106	70-130	0.7	25
2,2-Dichloropropane	17.3		µg/l		20.0		86	70-130	3	25
1,1-Dichloropropene	20.0		µg/l		20.0		100	70-130	0.3	25
cis-1,3-Dichloropropene	18.6		µg/l		20.0		93	70-130	0.2	25
trans-1,3-Dichloropropene	18.3		µg/l		20.0		92	70-130	1	25
Ethylbenzene	20.2		µg/l		20.0		101	70-130	0.4	25
Hexachlorobutadiene	17.5		µg/l		20.0		88	70-133	4	50
2-Hexanone (MBK)	17.6		µg/l		20.0		88	70-130	3	25
Isopropylbenzene	17.9		µg/l		20.0		89	70-130	0.5	25
4-Isopropyltoluene	20.8		µg/l		20.0		104	70-130	3	25
Methyl tert-butyl ether	20.0		µg/l		20.0		100	70-130	0.1	25
4-Methyl-2-pentanone (MIBK)	16.8		µg/l		20.0		84	69.1-130	4	50
Methylene chloride	20.8		µg/l		20.0		104	70-130	2	25
Naphthalene	17.6		µg/l		20.0		88	70-130	3	25
n-Propylbenzene	21.3		µg/l		20.0		106	70-130	2	25
Styrene	20.0		µg/l		20.0		100	70-130	1	25

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121571 - SW846 5030 Water MS										
LCS Dup (9121571-BSD1)										
Prepared & Analyzed: 21-Dec-09										
1,1,1,2-Tetrachloroethane	19.7		µg/l		20.0		98	70-130	0.9	25
1,1,2,2-Tetrachloroethane	22.1		µg/l		20.0		111	70-130	0.9	25
Tetrachloroethene	21.3		µg/l		20.0		107	70-130	1	25
Toluene	19.6		µg/l		20.0		98	70-130	1	25
1,2,3-Trichlorobenzene	21.3		µg/l		20.0		106	70-130	4	25
1,2,4-Trichlorobenzene	17.0		µg/l		20.0		85	70-130	6	25
1,1,1-Trichloroethane	20.0		µg/l		20.0		100	70-130	0.05	25
1,3,5-Trichlorobenzene	19.8		µg/l		20.0		99	70-130	0.6	25
1,1,2-Trichloroethane	21.8		µg/l		20.0		109	70-130	0.1	25
Trichloroethene	20.6		µg/l		20.0		103	70-130	2	25
Trichlorofluoromethane (Freon 11)	26.8		µg/l		20.0		134	69.8-161	2	50
1,2,3-Trichloropropane	24.0		µg/l		20.0		120	70-130	1	25
1,2,4-Trimethylbenzene	20.7		µg/l		20.0		104	70-130	0.1	25
1,3,5-Trimethylbenzene	20.4		µg/l		20.0		102	70-130	0.1	25
Vinyl chloride	25.0	CAL1	µg/l		20.0		125	70-130	6	25
m,p-Xylene	41.4		µg/l		40.0		104	70-130	1	25
o-Xylene	21.3		µg/l		20.0		106	70-130	0.9	25
Tetrahydrofuran	17.5		µg/l		20.0		87	70-130	2	25
Ethyl ether	19.7		µg/l		20.0		98	70-130	3	50
Tert-amyl methyl ether	24.4		µg/l		20.0		122	70-130	1	25
Ethyl tert-butyl ether	17.3		µg/l		20.0		86	70-130	2	25
Di-isopropyl ether	22.9		µg/l		20.0		115	70-130	14	25
Tert-Butanol / butyl alcohol	197		µg/l		200		98	70-130	4	25
trans-1,4-Dichloro-2-butene	20.1		µg/l		20.0		100	70-130	5	25
Ethanol	422		µg/l		400		106	70-130	3	30
1,4-Dioxane	174		µg/l		200		87	55.2-158	1	25
Surrogate: 4-Bromofluorobenzene	*51.2*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*50.4*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*52.5*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Dibromofluoromethane	*52.5*		µg/l		*50.0*		*105*	*70-130*		

Close File

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121445 - SW846 3510C										
Blank (9121445-BLK1)										
Prepared: 18-Dec-09 Analyzed: 21-Dec-09										
Fuel Oil #2	BRL		mg/l	0.1						
Fuel Oil #4	BRL		mg/l	0.1						
Fuel Oil #6	BRL		mg/l	0.1						
Motor Oil	BRL		mg/l	0.1						
Aviation Fuel	BRL		mg/l	0.1						
Unidentified	BRL		mg/l	0.1						
Other Oil	BRL		mg/l	0.1						
Diesel Range Organics (DRO)	BRL		mg/l	0.1						
Surrogate: 1-Chlorooctadecane	*0.0523*		mg/l		*0.0500*		*105*	*40-140*		
LCS (9121445-BS2)										
Prepared: 18-Dec-09 Analyzed: 21-Dec-09										
Fuel Oil #2	8.3		mg/l	0.1	10.0		83	40-140		
Surrogate: 1-Chlorooctadecane	*0.0453*		mg/l		*0.0500*		*91*	*40-140*		

Close File

Notes and Definitions

CAL1	Analyte quantified by quadratic equation type calibration.
E	The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
QM7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
QR2	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR5	RPD out of acceptance range.
R04	The Reporting Limits for this analysis are elevated due to sample foaming.
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.

Interpretation of Total Petroleum Hydrocarbon Report

Petroleum identification is determined by comparing the GC fingerprint obtained from the sample with a library of GC fingerprints obtained from analyses of various petroleum products. Possible match categories are as follows:

Gasoline - includes regular, unleaded, premium, etc.
Fuel Oil #2 - includes home heating oil, #2 fuel oil, and diesel
Fuel Oil #4 - includes #4 fuel oil
Fuel Oil #6 - includes #6 fuel oil and bunker "C" oil
Motor Oil - includes virgin and waste automobile oil
Ligroin - includes mineral spirits, petroleum naphtha, vm&p naphtha
Aviation Fuel - includes kerosene, Jet A and JP-4
Other Oil - includes lubricating and cutting oil, and silicon oil

At times, the unidentified petroleum product is quantified using a calibration that most closely approximates the distribution of compounds in the sample. When this occurs, the result is qualified as *TPH (Calculated as).

Close File

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.
June O'Connor
Nicole Leja

Close File

RMT

CHAIN OF CUSTODY RECORD

SB05753 53 77097

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
Phone 864/281-0030 • Fax 864/281-0288

Project No. 71360.31
Project/Client: MTD Westfield
Project Manager/Contact Person: S. Webb / B. Barnes

Lab No.	Yr. 09 Date	Time	Sample Station ID	Total Number of Containers	MATRIX	VOC / TPH GRO	TPH DRO	VOCs						Comments:
Filtered (Yes/No)						N	N	N						
Preserved (Code)						E	E	E						
	12/15	1700	MW-64S	5	GW	X	X							05753-01
	12/16	0900	PMP-01			X	X							02
		1115	MW-61S			X	X							03
		1200	MW-20CR			X	X							04
		1250	MW-62S			X	X							05
		1345	MW-20B			X	X							06
		1445	RW-09	3				X						07
		1455	RW-08					X						08
		1510	RW-01					X						09
		1520	RW-02					X						10

PRESERVED CODES
A — NONE
B — HNO_3
C — H_2SO_4
D — NaOH
E — HCl
F — METHANOL
G — _____

SPECIAL INSTRUCTIONS

SAMPLER Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
Kent Ashby	12/16/09		
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
CHRIS Kline	12/16 1715		12/16/09 1730
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time

HAZARDS ASSOCIATED WITH SAMPLES
- ☐ Flammable
- ☐ Corrosive
- ☐ Highly Toxic
- ☐ Other (list) _____

Turn Around (circle one) Normal Rush
Report Due _____

(For Lab Use Only)
Receipt Temp:
Temp Blank Y N
5.7°
Receipt pH (Wet/Metals)

Custody Seal: Present/Absent Intact/Not Intact Seal #s

F-268 (10/08)

WHITE—LABORATORY COPY YELLOW—REPORT APPENDIX PINK—SAMPLER/SUBMITTER

Close File

RMT

CHAIN OF CUSTODY RECORD

SB 05753 Dr

77098

30 Patewood Drive, Suite 100, Patewood Plaza One, Greenville, SC 29615-3535
Phone 864/281-0030 • Fax 864/281-0288

Project No. 71360.31

Project/Client: MTD Westfield

Project Manager/Contact Person: S. Webb / B. Barnes

Lab No.	Yr. 09 Date	Time	Sample Station ID	Total Number of Containers	MATRIX	Analyses Requested: VOCs	VOC/TPH/GRO TPH/DRO							Comments:
Filtered (Yes/No)						N								
Preserved (Code)						E								
	12/16	1530	RW-03	3	GW	X								05753-11
		1535	RW-04	3		X								12
		1545	RW-05	3		X								13
		1600	RW-06	3		X								14
			DUD9402	5	GW		X	X						15
			TBLK-09407	1	DI	X								16

PRESERVED CODES
A — NONE
B — HNO_3
C — H_2SO_4
D — NaOH
E — HCl
F — METHANOL
G — _____

SPECIAL INSTRUCTIONS

SAMPLER Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
Kat [illegible]	12/16/09		
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time
[illegible]	12/16 1715	[illegible]	12/16/09 1720
Relinquished by (Signature)	Date/Time	Received by (Signature)	Date/Time

Custody Seal: Present/Absent Intact/Not Intact Seal #s

HAZARDS ASSOCIATED WITH SAMPLES
- ☐ Flammable
- ☐ Corrosive
- ☐ Highly Toxic
- ☐ Other (list) _____

Turn Around (circle one) Normal Rush

Report Due _____

(For Lab Use Only)

Receipt Temp: 5.7°

Temp Blank Y (N)

Receipt pH (Wet/Metals) _____

F-268 (10/08)

WHITE—LABORATORY COPY YELLOW—REPORT APPENDIX PINK—SAMPLER/SUBMITTER

Close File

Report Date:
06-Jan-10 15:22

☐ Final Report
☐ Re-Issued Report
☑ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB05750-01	SB-204A/8-9	Soil	16-Dec-09 07:30	16-Dec-09 17:30
SB05750-02	DP-204/A	Ground Water	16-Dec-09 07:55	16-Dec-09 17:30
SB05750-03	SB-205A/9	Soil	16-Dec-09 08:30	16-Dec-09 17:30
SB05750-04	SB-205A/15	Soil	16-Dec-09 08:40	16-Dec-09 17:30
SB05750-05	DP-205/A	Ground Water	16-Dec-09 08:50	16-Dec-09 17:30
SB05750-06	SB-206A/8.5-9	Soil	16-Dec-09 09:45	16-Dec-09 17:30
SB05750-07	DP-206/A	Ground Water	16-Dec-09 10:20	16-Dec-09 17:30
SB05750-08	SB-207A/9.5	Soil	16-Dec-09 11:15	16-Dec-09 17:30
SB05750-09	DP-207/A	Ground Water	16-Dec-09 11:30	16-Dec-09 17:30
SB05750-10	SB-215A/7	Soil	16-Dec-09 12:00	16-Dec-09 17:30
SB05750-11	DP-215A	Ground Water	16-Dec-09 12:15	16-Dec-09 17:30
SB05750-12	SB-216A/7.5	Soil	16-Dec-09 13:15	16-Dec-09 17:30
SB05750-13	SB-216A/10.5	Soil	16-Dec-09 13:30	16-Dec-09 17:30
SB05750-14	DP-216A	Ground Water	16-Dec-09 13:45	16-Dec-09 17:30
SB05750-15	SB-208A/7	Soil	16-Dec-09 14:25	16-Dec-09 17:30
SB05750-16	SB-208A/8.5	Soil	16-Dec-09 14:30	16-Dec-09 17:30
SB05750-17	DP-208A	Ground Water	16-Dec-09 14:45	16-Dec-09 17:30

Close File

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 34 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.

Close File

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.

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.

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

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

SW846 8260B

Blanks:

9121571-BLK1

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

Laboratory Control Samples:

9121568-BS1

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

Trichlorofluoromethane (Freon 11)

9121568-BSD1

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

Trichlorofluoromethane (Freon 11)

9121571-BS1

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

Trichlorofluoromethane (Freon 11)

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

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.

Vinyl chloride

9121571-BSD1

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

Trichlorofluoromethane (Freon 11)

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

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.

cis-1,2-Dichloroethene

Close File

SW846 8260B

Samples:

S912483-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

Trichlorofluoromethane (Freon 11) (37.3%)

This affected the following samples:

SB-205A/15
SB-208A/8.5

S912489-CCV1

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05750-01 *SB-204A/8-9*

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

SB05750-02 *DP-204/A*

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

SB05750-03 *SB-205A/9*

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

SB05750-05 *DP-205/A*

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

SB05750-06 *SB-206A/8.5-9*

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

SB05750-07 *DP-206/A*

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

Insufficient preservative to reduce the sample pH to less than 2.

SB05750-08 *SB-207A/9.5*

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

SB05750-09 *DP-207/A*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

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

SB05750-10 *SB-215A/7*

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

Close File

SW846 8260B

Samples:

SB05750-11 *DP-215A*

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

Insufficient preservative to reduce the sample pH to less than 2.

SB05750-12 *SB-216A/7.5*

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

SB05750-13 *SB-216A/10.5*

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

Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

4-Bromofluorobenzene

SB05750-14 *DP-216A*

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

Insufficient preservative to reduce the sample pH to less than 2.

SB05750-15 *SB-208A/7*

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

SB05750-17 *DP-208A*

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

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-204A/8-9 SB05750-01	71360.31	Soil	16-Dec-09 07:30	16-Dec-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	17-Dec-09	17-Dec-09	9121410	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.23 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	659	500	SW846 8260B	18-Dec-09	19-Dec-09	9121512	
127-18-4	Tetrachloroethene	897		µg/kg dry	659	500	"	"	"	"	
79-01-6	Trichloroethene	2,770		µg/kg dry	659	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	659	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*99*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*111*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	85.6		%		1	SM2540 G Mod.	17-Dec-09	17-Dec-09	9121403	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-204/A SB05750-02	71360.31	Ground Water	16-Dec-09 07:55	16-Dec-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	25.0	25	SW846 8260B	18-Dec-09	18-Dec-09	9121480	
127-18-4	Tetrachloroethene	BRL		µg/l	25.0	25	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	25.0	25	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	25.0	25	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*95*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*84*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*99*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-205A/9 SB05750-03	71360.31	Soil	16-Dec-09 08:30	16-Dec-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	17-Dec-09	17-Dec-09	9121410	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 21.86 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	91.3	100	SW846 8260B	18-Dec-09	19-Dec-09	9121512	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	91.3	100	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	91.3	100	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	91.3	100	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*102*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*101*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*93*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	88.1		%		1	SM2540 G Mod.	17-Dec-09	17-Dec-09	9121403	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-205A/15 SB05750-04	71360.31	Soil	16-Dec-09 08:40	16-Dec-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	17-Dec-09	17-Dec-09	9121410	
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5035A Soil (low level)					Initial weight: 12.27 g						
Re-analysis of Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5035A Soil (low level)											
156-59-2	cis-1,2-Dichloroethene	26.7		µg/kg dry	3.1	1	SW846 8260B	21-Dec-09	21-Dec-09	9121568	
127-18-4	Tetrachloroethene	5.3		µg/kg dry	3.1	1	"	"	"	"	
79-01-6	Trichloroethene	43.6		µg/kg dry	3.1	1	"	"	"	"	
75-01-4	Vinyl chloride	4.3		µg/kg dry	3.1	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*92*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*108*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*97*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	86.7		%		1	SM2540 G Mod.	17-Dec-09	17-Dec-09	9121403	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-205/A SB05750-05	71360.31	Ground Water	16-Dec-09 08:50	16-Dec-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	25.7		µg/l	10.0	10	SW846 8260B	18-Dec-09	18-Dec-09	9121480	
127-18-4	Tetrachloroethene	BRL		µg/l	10.0	10	"	"	"	"	
79-01-6	Trichloroethene	46.1		µg/l	10.0	10	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	10.0	10	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*92*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*104*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*100*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-206A/8.5-9 SB05750-06	71360.31	Soil	16-Dec-09 09:45	16-Dec-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	17-Dec-09	17-Dec-09	9121410	
Volatile Organic Halocarbons by SW846 8260B			GS1								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 12.29 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	78.8	50	SW846 8260B	18-Dec-09	19-Dec-09	9121512	
127-18-4	Tetrachloroethene	998		µg/kg dry	78.8	50	"	"	"	"	
79-01-6	Trichloroethene	2,300		µg/kg dry	78.8	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	78.8	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*109*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*95*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*92*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	86.2		%		1	SM2540 G Mod.	17-Dec-09	17-Dec-09	9121403	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-206/A SB05750-07	71360.31	Ground Water	16-Dec-09 10:20	16-Dec-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B			PH, R05								
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	200	200	SW846 8260B	18-Dec-09	18-Dec-09	9121480	
127-18-4	Tetrachloroethene	288		µg/l	200	200	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	200	200	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	200	200	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*97*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*90*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*99*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-207A/9.5 SB05750-08	71360.31	Soil	16-Dec-09 11:15	16-Dec-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	17-Dec-09	17-Dec-09	9121410	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.55 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	397	250	SW846 8260B	18-Dec-09	19-Dec-09	9121512	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	397	250	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	397	250	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	397	250	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*117*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*99*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*88*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*86*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	75.9		%		1	SM2540 G Mod.	17-Dec-09	17-Dec-09	9121403	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-207/A SB05750-09	71360.31	Ground Water	16-Dec-09 11:30	16-Dec-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	5.0	5	SW846 8260B	21-Dec-09	21-Dec-09	9121571	
127-18-4	Tetrachloroethene	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*103*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*112*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-215A/7 SB05750-10	71360.31	Soil	16-Dec-09 12:00	16-Dec-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	17-Dec-09	17-Dec-09	9121410	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 15.57 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	722	500	SW846 8260B	18-Dec-09	19-Dec-09	9121512	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	722	500	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	722	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	722	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*103*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*90*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*89*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	80.3		%		1	SM2540 G Mod.	17-Dec-09	17-Dec-09	9121403	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-215A SB05750-11	71360.31	Ground Water	16-Dec-09 12:15	16-Dec-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B			PH, R05								
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	5.0	5	SW846 8260B	18-Dec-09	18-Dec-09	9121480	
127-18-4	Tetrachloroethene	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*97*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*98*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*89*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*86*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-216A/7.5 SB05750-12	71360.31	Soil	16-Dec-09 13:15	16-Dec-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	17-Dec-09	17-Dec-09	9121410	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 16.99 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	354	200	SW846 8260B	18-Dec-09	19-Dec-09	9121512	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	354	200	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	354	200	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	354	200	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*108*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*89*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*89*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	68.0		%		1	SM2540 G Mod.	17-Dec-09	17-Dec-09	9121403	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-216A/10.5 SB05750-13	71360.31	Soil	16-Dec-09 13:30	16-Dec-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	17-Dec-09	17-Dec-09	9121410	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 14.81 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	88.5	50	SW846 8260B	18-Dec-09	19-Dec-09	9121512	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	88.5	50	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	88.5	50	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	88.5	50	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*131*	SGC	*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*89*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*87*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	72.7		%		1	SM2540 G Mod.	17-Dec-09	17-Dec-09	9121403	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-216A SB05750-14	71360.31	Ground Water	16-Dec-09 13:45	16-Dec-09

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Cert.
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B			PH, R05								
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	5.0	5	SW846 8260B	18-Dec-09	18-Dec-09	9121480	
127-18-4	Tetrachloroethene	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*92*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*105*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*86*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*84*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-208A/7 SB05750-15	71360.31	Soil	16-Dec-09 14:25	16-Dec-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	17-Dec-09	17-Dec-09	9121410	
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Soil (high level)					Initial weight: 14.9 g						
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	836	500	SW846 8260B	21-Dec-09	21-Dec-09	9121573	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	836	500	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	836	500	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/kg dry	836	500	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*103*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*98*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*96*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*95*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	75.1		%		1	SM2540 G Mod.	17-Dec-09	17-Dec-09	9121403	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SB-208A/8.5 SB05750-16	71360.31	Soil	16-Dec-09 14:30	16-Dec-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	17-Dec-09	17-Dec-09	9121410	
Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5035A Soil (low level)						Initial weight: 7.67 g					
Re-analysis of Volatile Organic Halocarbons by SW846 8260B											
Prepared by method SW846 5035A Soil (low level)											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg dry	5.1	1	SW846 8260B	21-Dec-09	21-Dec-09	9121568	
127-18-4	Tetrachloroethene	BRL		µg/kg dry	5.1	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/kg dry	5.1	1	"	"	"	"	
75-01-4	Vinyl chloride	9.3		µg/kg dry	5.1	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*106*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*119*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*107*		*70-130 %*			"	"	"	"	
General Chemistry Parameters											
	% Solids	82.2		%		1	SM2540 G Mod.	17-Dec-09	17-Dec-09	9121403	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DP-208A SB05750-17	71360.31	Ground Water	16-Dec-09 14:45	16-Dec-09

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Batch*	*Cert.*
Volatile Organic Compounds											
Volatile Organic Halocarbons by SW846 8260B			R05								
Prepared by method SW846 5030 Water MS											
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	5.0	5	SW846 8260B	18-Dec-09	18-Dec-09	9121480	
127-18-4	Tetrachloroethene	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*119*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*105*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*90*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*91*		*70-130 %*			"	"	"	"	

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121480 - SW846 5030 Water MS										
Blank (9121480-BLK1)										
Prepared & Analyzed: 18-Dec-09										
Benzene	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
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						
Dibromochloromethane	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						
cis-1,3-Dichloropropene	BRL		µg/l	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Methylene chloride	BRL		µg/l	10.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	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						
Vinyl chloride	BRL		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*24.8*		µg/l		*30.0*		*83*	*70-130*		
Surrogate: Toluene-d8	*24.7*		µg/l		*30.0*		*82*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.0*		µg/l		*30.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*29.0*		µg/l		*30.0*		*97*	*70-130*		
LCS (9121480-BS1)										
Prepared & Analyzed: 18-Dec-09										
Bromodichloromethane	17.4		µg/l		20.0		87	70-130		
Bromoform	17.6		µg/l		20.0		88	70-130		
Bromomethane	15.8		µg/l		20.0		79	70-130		
Carbon tetrachloride	18.7		µg/l		20.0		94	70-130		
Chlorobenzene	19.2		µg/l		20.0		96	70-130		
Chloroethane	17.1		µg/l		20.0		86	70-130		
Chloroform	19.4		µg/l		20.0		97	70-130		
Chloromethane	17.1		µg/l		20.0		85	70-130		
Dibromochloromethane	16.0		µg/l		20.0		80	70-130		
1,2-Dichlorobenzene	21.5		µg/l		20.0		107	70-130		
1,3-Dichlorobenzene	22.0		µg/l		20.0		110	70-130		
1,4-Dichlorobenzene	18.6		µg/l		20.0		93	70-130		
1,1-Dichloroethane	18.0		µg/l		20.0		90	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121480 - SW846 5030 Water MS										
LCS (9121480-BS1)										
Prepared & Analyzed: 18-Dec-09										
1,2-Dichloroethane	17.7		µg/l		20.0		88	70-130		
1,1-Dichloroethene	18.0		µg/l		20.0		90	70-130		
cis-1,2-Dichloroethene	18.4		µg/l		20.0		92	70-130		
trans-1,2-Dichloroethene	16.9		µg/l		20.0		85	70-130		
1,2-Dichloropropane	16.7		µg/l		20.0		84	70-130		
cis-1,3-Dichloropropene	15.1		µg/l		20.0		75	70-130		
trans-1,3-Dichloropropene	15.2		µg/l		20.0		76	70-130		
Methylene chloride	17.5		µg/l		20.0		88	70-130		
1,1,2,2-Tetrachloroethane	19.6		µg/l		20.0		98	70-130		
Tetrachloroethene	17.3		µg/l		20.0		87	70-130		
1,1,1-Trichloroethane	18.4		µg/l		20.0		92	70-130		
1,1,2-Trichloroethane	18.0		µg/l		20.0		90	70-130		
Trichloroethene	17.7		µg/l		20.0		89	70-130		
Trichlorofluoromethane (Freon 11)	19.0		µg/l		20.0		95	70-130		
Vinyl chloride	17.5		µg/l		20.0		88	70-130		
Surrogate: 4-Bromofluorobenzene	*31.3*		µg/l		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*28.6*		µg/l		*30.0*		*95*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.9*		µg/l		*30.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*29.3*		µg/l		*30.0*		*98*	*70-130*		
LCS Dup (9121480-BSD1)										
Prepared & Analyzed: 18-Dec-09										
Bromodichloromethane	19.2		µg/l		20.0		96	70-130	9	30
Bromoform	18.4		µg/l		20.0		92	70-130	5	30
Bromomethane	18.6		µg/l		20.0		93	70-130	16	30
Carbon tetrachloride	20.3		µg/l		20.0		101	70-130	8	30
Chlorobenzene	18.1		µg/l		20.0		90	70-130	6	30
Chloroethane	18.3		µg/l		20.0		92	70-130	7	30
Chloroform	22.8		µg/l		20.0		114	70-130	16	30
Chloromethane	18.5		µg/l		20.0		93	70-130	8	30
Dibromochloromethane	17.6		µg/l		20.0		88	70-130	10	30
1,2-Dichlorobenzene	20.2		µg/l		20.0		101	70-130	6	30
1,3-Dichlorobenzene	20.7		µg/l		20.0		103	70-130	6	30
1,4-Dichlorobenzene	17.2		µg/l		20.0		86	70-130	7	30
1,1-Dichloroethane	20.1		µg/l		20.0		100	70-130	11	30
1,2-Dichloroethane	21.9		µg/l		20.0		110	70-130	21	30
1,1-Dichloroethene	20.0		µg/l		20.0		100	70-130	10	30
cis-1,2-Dichloroethene	21.2		µg/l		20.0		106	70-130	14	30
trans-1,2-Dichloroethene	18.6		µg/l		20.0		93	70-130	9	30
1,2-Dichloropropane	18.8		µg/l		20.0		94	70-130	12	30
cis-1,3-Dichloropropene	16.3		µg/l		20.0		82	70-130	8	30
trans-1,3-Dichloropropene	16.2		µg/l		20.0		81	70-130	6	30
Methylene chloride	21.1		µg/l		20.0		105	70-130	18	30
1,1,2,2-Tetrachloroethane	20.8		µg/l		20.0		104	70-130	6	30
Tetrachloroethene	18.8		µg/l		20.0		94	70-130	8	30
1,1,1-Trichloroethane	20.3		µg/l		20.0		101	70-130	10	30
1,1,2-Trichloroethane	21.8		µg/l		20.0		109	70-130	19	30
Trichloroethene	19.5		µg/l		20.0		97	70-130	9	30
Trichlorofluoromethane (Freon 11)	21.0		µg/l		20.0		105	70-130	10	30
Vinyl chloride	21.4		µg/l		20.0		107	70-130	20	30
Surrogate: 4-Bromofluorobenzene	*31.0*		µg/l		*30.0*		*103*	*70-130*		

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* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121480 - SW846 5030 Water MS										
LCS Dup (9121480-BSD1)										
Prepared & Analyzed: 18-Dec-09										
Surrogate: Toluene-d8	*33.2*		µg/l		*30.0*		*111*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*37.3*		µg/l		*30.0*		*124*	*70-130*		
Surrogate: Dibromofluoromethane	*36.1*		µg/l		*30.0*		*120*	*70-130*		
Batch 9121512 - SW846 5030 Soil (high level)										
Blank (9121512-BLK1)										
Prepared & Analyzed: 18-Dec-09										
Benzene	BRL		µg/kg wet we	50.0						
Bromodichloromethane	BRL		µg/kg wet we	50.0						
Bromoform	BRL		µg/kg wet we	50.0						
Bromomethane	BRL		µg/kg wet we	100						
Carbon tetrachloride	BRL		µg/kg wet we	50.0						
Chlorobenzene	BRL		µg/kg wet we	50.0						
Chloroethane	BRL		µg/kg wet we	100						
Chloroform	BRL		µg/kg wet we	50.0						
Chloromethane	BRL		µg/kg wet we	100						
Dibromochloromethane	BRL		µg/kg wet we	50.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	50.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	50.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	50.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	100						
1,1-Dichloroethane	BRL		µg/kg wet we	50.0						
1,2-Dichloroethane	BRL		µg/kg wet we	50.0						
1,1-Dichloroethene	BRL		µg/kg wet we	50.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	50.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	50.0						
1,2-Dichloropropane	BRL		µg/kg wet we	50.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	50.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	50.0						
Methylene chloride	BRL		µg/kg wet we	500						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	50.0						
Tetrachloroethene	BRL		µg/kg wet we	50.0						
Toluene	BRL		µg/kg wet we	50.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	50.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	50.0						
Trichloroethene	BRL		µg/kg wet we	50.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	50.0						
Vinyl chloride	BRL		µg/kg wet we	50.0						
Surrogate: 4-Bromofluorobenzene	*29.5*		µg/kg wet		*30.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*29.0*		µg/kg wet		*30.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.6*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Dibromofluoromethane	*29.4*		µg/kg wet		*30.0*		*98*	*70-130*		
LCS (9121512-BS1)										
Prepared & Analyzed: 18-Dec-09										
Bromodichloromethane	19.5		µg/kg wet		20.0		97	70-130		
Bromoform	15.0		µg/kg wet		20.0		75	70-130		
Bromomethane	20.2		µg/kg wet		20.0		101	70-130		
Carbon tetrachloride	16.6		µg/kg wet		20.0		83	70-130		
Chlorobenzene	21.0		µg/kg wet		20.0		105	70-130		
Chloroethane	21.5		µg/kg wet		20.0		107	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121512 - SW846 5030 Soil (high level)										
LCS (9121512-BS1)										
Prepared & Analyzed: 18-Dec-09										
Chloroform	22.2		µg/kg wet		20.0		111	70-130		
Chloromethane	20.3		µg/kg wet		20.0		101	70-130		
Dibromochloromethane	15.0		µg/kg wet		20.0		75	70-130		
1,2-Dichlorobenzene	22.9		µg/kg wet		20.0		115	70-130		
1,3-Dichlorobenzene	21.4		µg/kg wet		20.0		107	70-130		
1,4-Dichlorobenzene	21.2		µg/kg wet		20.0		106	70-130		
1,1-Dichloroethane	21.0		µg/kg wet		20.0		105	70-130		
1,2-Dichloroethane	20.6		µg/kg wet		20.0		103	70-130		
1,1-Dichloroethene	21.0		µg/kg wet		20.0		105	70-130		
cis-1,2-Dichloroethene	22.1		µg/kg wet		20.0		110	70-130		
trans-1,2-Dichloroethene	20.5		µg/kg wet		20.0		102	70-130		
1,2-Dichloropropane	20.4		µg/kg wet		20.0		102	70-130		
cis-1,3-Dichloropropene	19.4		µg/kg wet		20.0		97	70-130		
trans-1,3-Dichloropropene	17.7		µg/kg wet		20.0		88	70-130		
Methylene chloride	20.4		µg/kg wet		20.0		102	70-130		
1,1,2,2-Tetrachloroethane	18.9		µg/kg wet		20.0		94	70-130		
Tetrachloroethene	20.5		µg/kg wet		20.0		103	70-130		
1,1,1-Trichloroethane	19.6		µg/kg wet		20.0		98	70-130		
1,1,2-Trichloroethane	20.5		µg/kg wet		20.0		102	70-130		
Trichloroethene	21.3		µg/kg wet		20.0		106	70-130		
Trichlorofluoromethane (Freon 11)	21.9		µg/kg wet		20.0		110	70-130		
Vinyl chloride	19.5		µg/kg wet		20.0		98	70-130		
Surrogate: 4-Bromofluorobenzene	*29.6*		µg/kg wet		*30.0*		*99*	*70-130*		
Surrogate: Toluene-d8	*30.2*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.6*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Dibromofluoromethane	*28.4*		µg/kg wet		*30.0*		*94*	*70-130*		
LCS Dup (9121512-BSD1)										
Prepared & Analyzed: 18-Dec-09										
Bromodichloromethane	20.3		µg/kg wet		20.0		102	70-130	4	30
Bromoform	16.4		µg/kg wet		20.0		82	70-130	9	30
Bromomethane	21.3		µg/kg wet		20.0		107	70-130	5	30
Carbon tetrachloride	17.3		µg/kg wet		20.0		87	70-130	4	30
Chlorobenzene	22.2		µg/kg wet		20.0		111	70-130	5	30
Chloroethane	21.6		µg/kg wet		20.0		108	70-130	0.4	30
Chloroform	22.1		µg/kg wet		20.0		111	70-130	0.2	30
Chloromethane	19.9		µg/kg wet		20.0		100	70-130	2	30
Dibromochloromethane	14.9		µg/kg wet		20.0		75	70-130	0.8	30
1,2-Dichlorobenzene	22.8		µg/kg wet		20.0		114	70-130	0.4	30
1,3-Dichlorobenzene	22.6		µg/kg wet		20.0		113	70-130	5	30
1,4-Dichlorobenzene	21.4		µg/kg wet		20.0		107	70-130	1	30
1,1-Dichloroethane	22.0		µg/kg wet		20.0		110	70-130	5	30
1,2-Dichloroethane	21.7		µg/kg wet		20.0		109	70-130	5	30
1,1-Dichloroethene	22.2		µg/kg wet		20.0		111	70-130	6	30
cis-1,2-Dichloroethene	22.2		µg/kg wet		20.0		111	70-130	0.5	30
trans-1,2-Dichloroethene	20.9		µg/kg wet		20.0		104	70-130	2	30
1,2-Dichloropropane	21.5		µg/kg wet		20.0		108	70-130	5	30
cis-1,3-Dichloropropene	20.0		µg/kg wet		20.0		100	70-130	3	30
trans-1,3-Dichloropropene	17.9		µg/kg wet		20.0		89	70-130	1	30
Methylene chloride	20.4		µg/kg wet		20.0		102	70-130	0.05	30
1,1,2,2-Tetrachloroethane	20.6		µg/kg wet		20.0		103	70-130	9	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121512 - SW846 5030 Soil (high level)										
LCS Dup (9121512-BSD1)										
Prepared & Analyzed: 18-Dec-09										
Tetrachloroethene	21.0		µg/kg wet		20.0		105	70-130	2	30
1,1,1-Trichloroethane	20.4		µg/kg wet		20.0		102	70-130	4	30
1,1,2-Trichloroethane	21.8		µg/kg wet		20.0		109	70-130	6	30
Trichloroethene	22.0		µg/kg wet		20.0		110	70-130	3	30
Trichlorofluoromethane (Freon 11)	23.2		µg/kg wet		20.0		116	70-130	5	30
Vinyl chloride	20.1		µg/kg wet		20.0		100	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*30.0*		µg/kg wet		*30.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*29.5*		µg/kg wet		*30.0*		*98*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.3*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*29.2*		µg/kg wet		*30.0*		*97*	*70-130*		
Batch 9121568 - SW846 5035A Soil (low level)										
Blank (9121568-BLK1)										
Prepared & Analyzed: 21-Dec-09										
Benzene	BRL		µg/kg wet we	5.0						
Bromodichloromethane	BRL		µg/kg wet we	5.0						
Bromoform	BRL		µg/kg wet we	5.0						
Bromomethane	BRL		µg/kg wet we	10.0						
Carbon tetrachloride	BRL		µg/kg wet we	5.0						
Chlorobenzene	BRL		µg/kg wet we	5.0						
Chloroethane	BRL		µg/kg wet we	10.0						
Chloroform	BRL		µg/kg wet we	5.0						
Chloromethane	BRL		µg/kg wet we	10.0						
Dibromochloromethane	BRL		µg/kg wet we	5.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	5.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	5.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	5.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	10.0						
1,1-Dichloroethane	BRL		µg/kg wet we	5.0						
1,2-Dichloroethane	BRL		µg/kg wet we	5.0						
1,1-Dichloroethene	BRL		µg/kg wet we	5.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	5.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	5.0						
1,2-Dichloropropane	BRL		µg/kg wet we	5.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	5.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	5.0						
Methylene chloride	BRL		µg/kg wet we	50.0						
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	5.0						
Tetrachloroethene	BRL		µg/kg wet we	5.0						
Toluene	BRL		µg/kg wet we	5.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	5.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	5.0						
Trichloroethene	BRL		µg/kg wet we	5.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	5.0						
Vinyl chloride	BRL		µg/kg wet we	5.0						
Surrogate: 4-Bromofluorobenzene	*47.9*		µg/kg wet		*50.0*		*96*	*70-130*		
Surrogate: Toluene-d8	*51.1*		µg/kg wet		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*65.0*		µg/kg wet		*50.0*		*130*	*70-130*		
Surrogate: Dibromofluoromethane	*55.7*		µg/kg wet		*50.0*		*111*	*70-130*		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121568 - SW846 5035A Soil (low level)										
LCS (9121568-BS1)										
Prepared & Analyzed: 21-Dec-09										
Bromodichloromethane	20.6		µg/kg wet		20.0		103	70-130		
Bromoform	19.1		µg/kg wet		20.0		95	70-130		
Bromomethane	19.2		µg/kg wet		20.0		96	70-130		
Carbon tetrachloride	25.2		µg/kg wet		20.0		126	70-130		
Chlorobenzene	18.1		µg/kg wet		20.0		90	70-130		
Chloroethane	19.2		µg/kg wet		20.0		96	70-130		
Chloroform	18.6		µg/kg wet		20.0		93	70-130		
Chloromethane	19.4		µg/kg wet		20.0		97	70-130		
Dibromochloromethane	19.6		µg/kg wet		20.0		98	70-130		
1,2-Dichlorobenzene	19.3		µg/kg wet		20.0		96	70-130		
1,3-Dichlorobenzene	19.8		µg/kg wet		20.0		99	70-130		
1,4-Dichlorobenzene	18.2		µg/kg wet		20.0		91	70-130		
1,1-Dichloroethane	20.0		µg/kg wet		20.0		100	70-130		
1,2-Dichloroethane	20.0		µg/kg wet		20.0		100	70-130		
1,1-Dichloroethene	22.5		µg/kg wet		20.0		112	70-130		
cis-1,2-Dichloroethene	19.0		µg/kg wet		20.0		95	70-130		
trans-1,2-Dichloroethene	18.3		µg/kg wet		20.0		92	70-130		
1,2-Dichloropropane	18.9		µg/kg wet		20.0		95	70-130		
cis-1,3-Dichloropropene	20.4		µg/kg wet		20.0		102	70-130		
trans-1,3-Dichloropropene	19.7		µg/kg wet		20.0		98	70-130		
Methylene chloride	17.8		µg/kg wet		20.0		89	70-130		
1,1,2,2-Tetrachloroethane	18.3		µg/kg wet		20.0		91	70-130		
Tetrachloroethene	21.7		µg/kg wet		20.0		108	70-130		
1,1,1-Trichloroethane	23.1		µg/kg wet		20.0		116	70-130		
1,1,2-Trichloroethane	19.9		µg/kg wet		20.0		99	70-130		
Trichloroethene	20.1		µg/kg wet		20.0		101	70-130		
Trichlorofluoromethane (Freon 11)	26.7	QC2	µg/kg wet		20.0		134	70-130		
Vinyl chloride	20.5		µg/kg wet		20.0		102	70-130		
Surrogate: 4-Bromofluorobenzene	*54.4*		µg/kg wet		*50.0*		*109*	*70-130*		
Surrogate: Toluene-d8	*52.2*		µg/kg wet		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*53.6*		µg/kg wet		*50.0*		*107*	*70-130*		
Surrogate: Dibromofluoromethane	*50.0*		µg/kg wet		*50.0*		*100*	*70-130*		
LCS Dup (9121568-BSD1)										
Prepared & Analyzed: 21-Dec-09										
Bromodichloromethane	21.1		µg/kg wet		20.0		105	70-130	2	30
Bromoform	20.1		µg/kg wet		20.0		101	70-130	5	30
Bromomethane	18.3		µg/kg wet		20.0		91	70-130	5	30
Carbon tetrachloride	24.8		µg/kg wet		20.0		124	70-130	2	30
Chlorobenzene	18.2		µg/kg wet		20.0		91	70-130	0.8	30
Chloroethane	19.4		µg/kg wet		20.0		97	70-130	1	30
Chloroform	19.8		µg/kg wet		20.0		99	70-130	6	30
Chloromethane	19.5		µg/kg wet		20.0		98	70-130	0.4	30
Dibromochloromethane	21.2		µg/kg wet		20.0		106	70-130	8	30
1,2-Dichlorobenzene	20.6		µg/kg wet		20.0		103	70-130	6	30
1,3-Dichlorobenzene	21.3		µg/kg wet		20.0		106	70-130	7	30
1,4-Dichlorobenzene	20.0		µg/kg wet		20.0		100	70-130	9	30
1,1-Dichloroethane	20.4		µg/kg wet		20.0		102	70-130	2	30
1,2-Dichloroethane	20.5		µg/kg wet		20.0		102	70-130	3	30
1,1-Dichloroethene	22.8		µg/kg wet		20.0		114	70-130	1	30
cis-1,2-Dichloroethene	19.6		µg/kg wet		20.0		98	70-130	3	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121568 - SW846 5035A Soil (low level)										
LCS Dup (9121568-BSD1)										
Prepared & Analyzed: 21-Dec-09										
trans-1,2-Dichloroethene	18.6		µg/kg wet		20.0		93	70-130	2	30
1,2-Dichloropropane	19.3		µg/kg wet		20.0		97	70-130	2	30
cis-1,3-Dichloropropene	21.1		µg/kg wet		20.0		106	70-130	3	30
trans-1,3-Dichloropropene	20.4		µg/kg wet		20.0		102	70-130	3	30
Methylene chloride	18.0		µg/kg wet		20.0		90	70-130	1	30
1,1,2,2-Tetrachloroethane	19.3		µg/kg wet		20.0		96	70-130	5	30
Tetrachloroethene	25.1		µg/kg wet		20.0		125	70-130	15	30
1,1,1-Trichloroethane	23.2		µg/kg wet		20.0		116	70-130	0.5	30
1,1,2-Trichloroethane	20.8		µg/kg wet		20.0		104	70-130	4	30
Trichloroethene	21.2		µg/kg wet		20.0		106	70-130	5	30
Trichlorofluoromethane (Freon 11)	27.5	QC2	µg/kg wet		20.0		137	70-130	3	30
Vinyl chloride	20.2		µg/kg wet		20.0		101	70-130	2	30
Surrogate: 4-Bromofluorobenzene	*52.7*		µg/kg wet		*50.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*52.1*		µg/kg wet		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*53.9*		µg/kg wet		*50.0*		*108*	*70-130*		
Surrogate: Dibromofluoromethane	*49.6*		µg/kg wet		*50.0*		*99*	*70-130*		
Batch 9121571 - SW846 5030 Water MS										
Blank (9121571-BLK1)										
Prepared & Analyzed: 21-Dec-09										
Benzene	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	0.5						
Bromoform	BRL		µg/l	1.0						
Bromomethane	BRL		µg/l	2.0						
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						
Dibromochloromethane	BRL		µg/l	0.5						
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						
cis-1,3-Dichloropropene	BRL		µg/l	0.5						
trans-1,3-Dichloropropene	BRL		µg/l	0.5						
Methylene chloride	BRL		µg/l	5.0						
1,1,2,2-Tetrachloroethane	BRL		µg/l	0.5						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	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						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121571 - SW846 5030 Water MS										
Blank (9121571-BLK1)										
Prepared & Analyzed: 21-Dec-09										
Vinyl chloride	BRL	CAL1	µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*48.1*		µg/l		*50.0*		*96*	*70-130*		
Surrogate: Toluene-d8	*49.9*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*55.5*		µg/l		*50.0*		*111*	*70-130*		
Surrogate: Dibromofluoromethane	*54.5*		µg/l		*50.0*		*109*	*70-130*		
LCS (9121571-BS1)										
Prepared & Analyzed: 21-Dec-09										
Bromodichloromethane	22.2		µg/l		20.0		111	70-130		
Bromoform	17.3		µg/l		20.0		86	70-130		
Bromomethane	20.9		µg/l		20.0		105	70-130		
Carbon tetrachloride	16.4		µg/l		20.0		82	70-130		
Chlorobenzene	21.3		µg/l		20.0		107	70-130		
Chloroethane	20.9		µg/l		20.0		105	70-130		
Chloroform	21.4		µg/l		20.0		107	70-130		
Chloromethane	19.5		µg/l		20.0		97	70-130		
Dibromochloromethane	16.7		µg/l		20.0		83	70-130		
1,2-Dichlorobenzene	21.2		µg/l		20.0		106	70-130		
1,3-Dichlorobenzene	22.1		µg/l		20.0		110	70-130		
1,4-Dichlorobenzene	21.1		µg/l		20.0		106	70-130		
1,1-Dichloroethane	21.3		µg/l		20.0		107	70-130		
1,2-Dichloroethane	21.4		µg/l		20.0		107	70-130		
1,1-Dichloroethene	21.7		µg/l		20.0		108	70-130		
cis-1,2-Dichloroethene	22.4		µg/l		20.0		112	70-130		
trans-1,2-Dichloroethene	20.1		µg/l		20.0		100	70-130		
1,2-Dichloropropane	20.1		µg/l		20.0		101	70-130		
cis-1,3-Dichloropropene	18.6		µg/l		20.0		93	70-130		
trans-1,3-Dichloropropene	18.6		µg/l		20.0		93	70-130		
Methylene chloride	21.1		µg/l		20.0		106	70-130		
1,1,2,2-Tetrachloroethane	22.3		µg/l		20.0		112	70-130		
Tetrachloroethene	21.6		µg/l		20.0		108	70-130		
1,1,1-Trichloroethane	20.0		µg/l		20.0		100	70-130		
1,1,2-Trichloroethane	21.7		µg/l		20.0		109	70-130		
Trichloroethene	21.0		µg/l		20.0		105	70-130		
Trichlorofluoromethane (Freon 11)	27.3	QC2	µg/l		20.0		137	70-130		
Vinyl chloride	26.6	CAL1, QM9	µg/l		20.0		133	70-130		
Surrogate: 4-Bromofluorobenzene	*52.3*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*50.7*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*53.7*		µg/l		*50.0*		*107*	*70-130*		
Surrogate: Dibromofluoromethane	*52.7*		µg/l		*50.0*		*105*	*70-130*		
LCS Dup (9121571-BSD1)										
Prepared & Analyzed: 21-Dec-09										
Bromodichloromethane	22.0		µg/l		20.0		110	70-130	0.9	25
Bromoform	17.7		µg/l		20.0		88	70-130	2	25
Bromomethane	20.5		µg/l		20.0		103	70-130	2	50
Carbon tetrachloride	16.4		µg/l		20.0		82	70-130	0.4	25
Chlorobenzene	21.1		µg/l		20.0		106	70-130	0.8	25
Chloroethane	20.8		µg/l		20.0		104	70-130	0.6	50
Chloroform	20.9		µg/l		20.0		105	70-130	2	25
Chloromethane	19.1		µg/l		20.0		96	70-130	2	25
Dibromochloromethane	17.1		µg/l		20.0		86	70-130	3	50

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121571 - SW846 5030 Water MS										
LCS Dup (9121571-BSD1)										
Prepared & Analyzed: 21-Dec-09										
1,2-Dichlorobenzene	20.8		µg/l		20.0		104	70-130	2	25
1,3-Dichlorobenzene	22.0		µg/l		20.0		110	70-130	0.3	25
1,4-Dichlorobenzene	21.0		µg/l		20.0		105	70-130	0.6	25
1,1-Dichloroethane	21.0		µg/l		20.0		105	70-130	2	25
1,2-Dichloroethane	21.1		µg/l		20.0		105	70-130	1	25
1,1-Dichloroethene	21.4		µg/l		20.0		107	70-130	1	25
cis-1,2-Dichloroethene	26.5	QM9	µg/l		20.0		132	70-130	17	25
trans-1,2-Dichloroethene	19.5		µg/l		20.0		98	70-130	3	25
1,2-Dichloropropane	20.2		µg/l		20.0		101	70-130	0.3	25
cis-1,3-Dichloropropene	18.6		µg/l		20.0		93	70-130	0.2	25
trans-1,3-Dichloropropene	18.3		µg/l		20.0		92	70-130	1	25
Methylene chloride	20.8		µg/l		20.0		104	70-130	2	25
1,1,2,2-Tetrachloroethane	22.1		µg/l		20.0		111	70-130	0.9	25
Tetrachloroethene	21.3		µg/l		20.0		107	70-130	1	25
1,1,1-Trichloroethane	20.0		µg/l		20.0		100	70-130	0.05	25
1,1,2-Trichloroethane	21.8		µg/l		20.0		109	70-130	0.1	25
Trichloroethene	20.6		µg/l		20.0		103	70-130	2	25
Trichlorofluoromethane (Freon 11)	26.8	QC2	µg/l		20.0		134	70-130	2	50
Vinyl chloride	25.0	CAL1	µg/l		20.0		125	70-130	6	25
Surrogate: 4-Bromofluorobenzene	*51.2*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*50.4*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*52.5*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Dibromofluoromethane	*52.5*		µg/l		*50.0*		*105*	*70-130*		
Batch 9121573 - SW846 5030 Soil (high level)										
Blank (9121573-BLK1)										
Prepared & Analyzed: 21-Dec-09										
Benzene	BRL		µg/kg wet we	50.0						
Bromodichloromethane	BRL		µg/kg wet we	50.0						
Bromoform	BRL		µg/kg wet we	50.0						
Bromomethane	BRL		µg/kg wet we	100						
Carbon tetrachloride	BRL		µg/kg wet we	50.0						
Chlorobenzene	BRL		µg/kg wet we	50.0						
Chloroethane	BRL		µg/kg wet we	100						
Chloroform	BRL		µg/kg wet we	50.0						
Chloromethane	BRL		µg/kg wet we	100						
Dibromochloromethane	BRL		µg/kg wet we	50.0						
1,2-Dichlorobenzene	BRL		µg/kg wet we	50.0						
1,3-Dichlorobenzene	BRL		µg/kg wet we	50.0						
1,4-Dichlorobenzene	BRL		µg/kg wet we	50.0						
Dichlorodifluoromethane (Freon12)	BRL		µg/kg wet we	100						
1,1-Dichloroethane	BRL		µg/kg wet we	50.0						
1,2-Dichloroethane	BRL		µg/kg wet we	50.0						
1,1-Dichloroethene	BRL		µg/kg wet we	50.0						
cis-1,2-Dichloroethene	BRL		µg/kg wet we	50.0						
trans-1,2-Dichloroethene	BRL		µg/kg wet we	50.0						
1,2-Dichloropropane	BRL		µg/kg wet we	50.0						
cis-1,3-Dichloropropene	BRL		µg/kg wet we	50.0						
trans-1,3-Dichloropropene	BRL		µg/kg wet we	50.0						
Methylene chloride	BRL		µg/kg wet we	500						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121573 - SW846 5030 Soil (high level)										
Blank (9121573-BLK1)										
Prepared & Analyzed: 21-Dec-09										
1,1,2,2-Tetrachloroethane	BRL		µg/kg wet we	50.0						
Tetrachloroethene	BRL		µg/kg wet we	50.0						
Toluene	BRL		µg/kg wet we	50.0						
1,1,1-Trichloroethane	BRL		µg/kg wet we	50.0						
1,1,2-Trichloroethane	BRL		µg/kg wet we	50.0						
Trichloroethene	BRL		µg/kg wet we	50.0						
Trichlorofluoromethane (Freon 11)	BRL		µg/kg wet we	50.0						
Vinyl chloride	BRL		µg/kg wet we	50.0						
Surrogate: 4-Bromofluorobenzene	*26.1*		µg/kg wet		*30.0*		*87*	*70-130*		
Surrogate: Toluene-d8	*27.4*		µg/kg wet		*30.0*		*92*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*29.4*		µg/kg wet		*30.0*		*98*	*70-130*		
Surrogate: Dibromofluoromethane	*29.8*		µg/kg wet		*30.0*		*99*	*70-130*		
LCS (9121573-BS1)										
Prepared & Analyzed: 21-Dec-09										
Bromodichloromethane	18.7		µg/kg wet		20.0		94	70-130		
Bromoform	18.7		µg/kg wet		20.0		94	70-130		
Bromomethane	16.6		µg/kg wet		20.0		83	70-130		
Carbon tetrachloride	22.2		µg/kg wet		20.0		111	70-130		
Chlorobenzene	19.6		µg/kg wet		20.0		98	70-130		
Chloroethane	17.8		µg/kg wet		20.0		89	70-130		
Chloroform	20.5		µg/kg wet		20.0		102	70-130		
Chloromethane	18.2		µg/kg wet		20.0		91	70-130		
Dibromochloromethane	17.2		µg/kg wet		20.0		86	70-130		
1,2-Dichlorobenzene	21.5		µg/kg wet		20.0		108	70-130		
1,3-Dichlorobenzene	21.7		µg/kg wet		20.0		108	70-130		
1,4-Dichlorobenzene	18.4		µg/kg wet		20.0		92	70-130		
1,1-Dichloroethane	18.9		µg/kg wet		20.0		95	70-130		
1,2-Dichloroethane	18.5		µg/kg wet		20.0		92	70-130		
1,1-Dichloroethene	18.8		µg/kg wet		20.0		94	70-130		
cis-1,2-Dichloroethene	19.2		µg/kg wet		20.0		96	70-130		
trans-1,2-Dichloroethene	17.4		µg/kg wet		20.0		87	70-130		
1,2-Dichloropropane	18.7		µg/kg wet		20.0		94	70-130		
cis-1,3-Dichloropropene	17.1		µg/kg wet		20.0		86	70-130		
trans-1,3-Dichloropropene	16.9		µg/kg wet		20.0		84	70-130		
Methylene chloride	18.4		µg/kg wet		20.0		92	70-130		
1,1,2,2-Tetrachloroethane	19.5		µg/kg wet		20.0		98	70-130		
Tetrachloroethene	18.6		µg/kg wet		20.0		93	70-130		
1,1,1-Trichloroethane	20.8		µg/kg wet		20.0		104	70-130		
1,1,2-Trichloroethane	18.6		µg/kg wet		20.0		93	70-130		
Trichloroethene	19.8		µg/kg wet		20.0		99	70-130		
Trichlorofluoromethane (Freon 11)	20.8		µg/kg wet		20.0		104	70-130		
Vinyl chloride	18.6		µg/kg wet		20.0		93	70-130		
Surrogate: 4-Bromofluorobenzene	*30.5*		µg/kg wet		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*29.1*		µg/kg wet		*30.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.6*		µg/kg wet		*30.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*29.4*		µg/kg wet		*30.0*		*98*	*70-130*		
LCS Dup (9121573-BSD1)										
Prepared & Analyzed: 21-Dec-09										
Bromodichloromethane	17.5		µg/kg wet		20.0		87	70-130	7	30
Bromoform	18.0		µg/kg wet		20.0		90	70-130	4	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121573 - SW846 5030 Soil (high level)										
LCS Dup (9121573-BSD1)										
Prepared & Analyzed: 21-Dec-09										
Bromomethane	14.6		µg/kg wet		20.0		73	70-130	13	30
Carbon tetrachloride	18.6		µg/kg wet		20.0		93	70-130	17	30
Chlorobenzene	18.0		µg/kg wet		20.0		90	70-130	8	30
Chloroethane	15.4		µg/kg wet		20.0		77	70-130	15	30
Chloroform	18.3		µg/kg wet		20.0		92	70-130	11	30
Chloromethane	15.6		µg/kg wet		20.0		78	70-130	15	30
Dibromochloromethane	15.8		µg/kg wet		20.0		79	70-130	8	30
1,2-Dichlorobenzene	20.0		µg/kg wet		20.0		100	70-130	7	30
1,3-Dichlorobenzene	20.1		µg/kg wet		20.0		100	70-130	8	30
1,4-Dichlorobenzene	17.5		µg/kg wet		20.0		88	70-130	5	30
1,1-Dichloroethane	16.9		µg/kg wet		20.0		85	70-130	11	30
1,2-Dichloroethane	17.2		µg/kg wet		20.0		86	70-130	7	30
1,1-Dichloroethene	16.6		µg/kg wet		20.0		83	70-130	12	30
cis-1,2-Dichloroethene	17.3		µg/kg wet		20.0		86	70-130	11	30
trans-1,2-Dichloroethene	15.9		µg/kg wet		20.0		80	70-130	9	30
1,2-Dichloropropane	19.3		µg/kg wet		20.0		96	70-130	3	30
cis-1,3-Dichloropropene	15.9		µg/kg wet		20.0		80	70-130	7	30
trans-1,3-Dichloropropene	16.0		µg/kg wet		20.0		80	70-130	5	30
Methylene chloride	16.8		µg/kg wet		20.0		84	70-130	9	30
1,1,2,2-Tetrachloroethane	18.5		µg/kg wet		20.0		93	70-130	5	30
Tetrachloroethene	16.6		µg/kg wet		20.0		83	70-130	11	30
1,1,1-Trichloroethane	18.2		µg/kg wet		20.0		91	70-130	14	30
1,1,2-Trichloroethane	17.9		µg/kg wet		20.0		89	70-130	4	30
Trichloroethene	19.9		µg/kg wet		20.0		100	70-130	0.9	30
Trichlorofluoromethane (Freon 11)	18.0		µg/kg wet		20.0		90	70-130	15	30
Vinyl chloride	16.4		µg/kg wet		20.0		82	70-130	13	30
Surrogate: 4-Bromofluorobenzene	*30.4*		µg/kg wet		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*29.1*		µg/kg wet		*30.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.5*		µg/kg wet		*30.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*29.3*		µg/kg wet		*30.0*		*98*	*70-130*		

Close File

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
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
PH	Insufficient preservative to reduce the sample pH to less than 2.
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.
R05	Elevated Reporting Limits due to the presence of high levels of non-target analytes.
SGC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
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
Rebecca Merz

Close File

SB05750 EM

SPECTRUM ANALYTICAL, INC.
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CHAIN OF CUSTODY RECORD

Page 1 of 2

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

Report To: Britney Barnes

Telephone #: (864) 234-9453

Project Mgr. Steve Webb

Invoice To: RMT, INC Mad. WI

P.O. No.: 71360.31 RQN:

Project No.: ~~Columbia~~ 71360.31

Site Name: Columbia

Location: Westfield State: Ma

Sampler(s): Bill Medlin

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

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

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

State specific reporting standards: _____

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		Containers:	Analyses: PCE,TCE,cis 1,2DCE, Vinyl Chloride	Analyses: Moisture						
05750.01	SB-204A/8.9	12/16/09	0730	G	Soil	2	1					X	X						
02	DP-204/A		0755	G	GW	3						X							
03	SB-205A/9		0830	G	Soil	2	1					X	X						
04	SB-205A/15		0840	G	Soil	2	1					X	X						
05	DP-205/A		0850	G	GW	3						X							
06	SB-206A/8.5-9		0945	G	Soil	2	1					X	X						
07	DP-206A		1020	G	GW	3						X							
08	SB-207A/9.5		1115	G	Soil	2	1					X	X						
09	DP-207A		1130	G	GW	3						X							
10	SB-215A/7	12/16/09	1200	G	Soil	2	1					X	X						

Relinquished by:	Received by:	Date:	Time:	Temp°C
12/16		12/16	17:30	2.3°C

☐ EDD Format _____
☐ E-mail to _____

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

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SB05750 BM

SPECTRUM ANALYTICAL, INC.
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CHAIN OF CUSTODY RECORD

Page 2 of 2

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: Britney Barnes

Telephone #: (864) 234-9453
Project Mgr. Steve Webb

Invoice To: RMT, Inc
Mad. WI

P.O. No.: 71360.31 RQN: _____

Project No.: 71360.31
Site Name: Columbia
Location: Westfield State: Ma
Sampler(s): Bill Medlin

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

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

State specific reporting standards:

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

Containers: # of VOA Vials, # of Amber Glass, # of Clear Glass, # of Plastic

Analyses: PCE, TCE, cis 1,2 DCE, Vinyl Chloride; Moisture

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	PCE, TCE, cis 1,2 DCE, Vinyl Chloride	Moisture
05750-11	DP-215A	12/16/09	1215	G	GW	3				X	
12	SB-216A/7.5		1315	G	Soil	2	1			X	X
13	SB-216A/10.5		1330	G	Soil	2	1			X	X
14	DP-216A		1345	G	GW	3				X	
15	SB-208A/7		1425	G	Soil	2	1			X	X
16	SB-208A/8.5		1430	G	Soil	2	1			X	X
17	DP-208A	12/16/09	1445	G	GW	3				X	

Relinquished by:	Received by:	Date:	Time:	Temp°C
12/16		12/16/09	17:30	2.3

☐ EDD Format _____
☐ E-mail to _____

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

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Report Date:
22-Dec-09 17:22

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
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Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB05835-01	MW-13SRR	Ground Water	17-Dec-09 10:10	17-Dec-09 17:40
SB05835-02	MW-53I	Ground Water	17-Dec-09 13:10	17-Dec-09 17:40
SB05835-03	OW-08	Ground Water	17-Dec-09 15:40	17-Dec-09 17:40
SB05835-04	MW-53D	Ground Water	17-Dec-09 16:50	17-Dec-09 17:40
SB05835-05	OW-02	Ground Water	17-Dec-09 11:35	17-Dec-09 17:40
SB05835-06	MW-32S	Ground Water	17-Dec-09 13:30	17-Dec-09 17:40
SB05835-07	MW-32I	Ground Water	17-Dec-09 15:00	17-Dec-09 17:40
SB05835-08	MW-46S	Ground Water	17-Dec-09 16:10	17-Dec-09 17:40
SB05835-09	DU-09401	Ground Water	17-Dec-09 00:00	17-Dec-09 17:40
SB05835-10	TBLK-09408	Deionized Water	17-Dec-09 00:00	17-Dec-09 17:40

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 49 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.

Close File

CASE NARRATIVE:

The samples were received 2.1 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.

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.

+Mod 8015

Samples:

SB05835-01 *MW-13SRR*

Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

2,5-Dibromotoluene (PID)

SW846 8260B

Blanks:

9121482-BLK1

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

Close File

SW846 8260B

Laboratory Control Samples:

9121482-BS1

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

Carbon tetrachloride

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

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.

Vinyl chloride

9121482-BSD1

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

Carbon tetrachloride

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

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.

2,2-Dichloropropane

9121486-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.

Tetrahydrofuran

9121565-BSD1

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

Tetrahydrofuran

9121651-BS1

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

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.

Naphthalene

9121651-BSD1

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

1,4-Dioxane

Close File

SW846 8260B

Samples:

S912422-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

Tetrahydrofuran (36.4%)

This affected the following samples:

MW-32S
MW-53D
MW-53I
OW-02
OW-08

S912472-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

2,2-Dichloropropane (34.8%)
Carbon tetrachloride (34.4%)

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

This affected the following samples:

MW-32I
MW-46S
TBLK-09408

SB05835-07 *MW-32I*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05835-08 *MW-46S*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05835-09 *DU-09401*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05835-10 *TBLK-09408*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

Data confirmed with duplicate analysis.

Chloromethane

This compound is a common laboratory contaminant.

Chloromethane

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-13SRR	71360.31	Ground Water	17-Dec-09 10:10	17-Dec-09
SB05835-01				

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											
67-64-1	Acetone	1,080		µg/l	250	25	SW846 8260B	21-Dec-09	21-Dec-09	9121565	
107-13-1	Acrylonitrile	BRL		µg/l	25.0	25	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	25.0	25	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	25.0	25	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	25.0	25	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	25.0	25	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	25.0	25	"	"	"	"	
74-83-9	Bromomethane	374		µg/l	50.0	25	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	250	25	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	25.0	25	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	25.0	25	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	25.0	25	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	125	25	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	25.0	25	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	25.0	25	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	50.0	25	"	"	"	"	
67-66-3	Chloroform	41.0		µg/l	25.0	25	"	"	"	"	
74-87-3	Chloromethane	2,120		µg/l	50.0	25	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	25.0	25	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	25.0	25	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	50.0	25	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	25.0	25	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	25.0	25	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	25.0	25	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	25.0	25	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	25.0	25	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	25.0	25	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	50.0	25	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	25.0	25	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	25.0	25	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	25.0	25	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	25.0	25	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	25.0	25	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	25.0	25	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	25.0	25	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	25.0	25	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	25.0	25	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	25.0	25	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	25.0	25	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	25.0	25	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	25.0	25	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	250	25	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	25.0	25	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	25.0	25	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	25.0	25	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	250	25	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	250	25	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	25.0	25	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	25.0	25	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	25.0	25	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-13SRR SB05835-01	71360.31	Ground Water	17-Dec-09 10:10	17-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	25.0	25	SW846 8260B	21-Dec-09	21-Dec-09	9121565	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	25.0	25	"	"	"	"	
127-18-4	Tetrachloroethene	252		µg/l	25.0	25	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	25.0	25	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	25.0	25	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	25.0	25	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	25.0	25	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	25.0	25	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	25.0	25	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	25.0	25	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	25.0	25	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	25.0	25	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	25.0	25	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	25.0	25	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	50.0	25	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	25.0	25	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*97*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*109*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*106*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	21-Dec-09	22-Dec-09	9121563	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*138*	SGC	*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*128*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	18-Dec-09	21-Dec-09	9121445	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	1.5		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	1.5		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*87*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-53I	71360.31	Ground Water	17-Dec-09 13:10	17-Dec-09
SB05835-02				

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											
67-64-1	Acetone	BRL		µg/l	100	10	SW846 8260B	18-Dec-09	18-Dec-09	9121486	
107-13-1	Acrylonitrile	BRL		µg/l	10.0	10	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	10.0	10	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	10.0	10	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	10.0	10	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	10.0	10	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	10.0	10	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	20.0	10	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	100	10	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	50.0	10	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	10.0	10	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	20.0	10	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	10.0	10	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	20.0	10	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	10.0	10	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	10.0	10	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	20.0	10	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	10.0	10	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	10.0	10	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	10.0	10	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	20.0	10	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	10.0	10	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	10.0	10	"	"	"	"	
75-35-4	1,1-Dichloroethene	21.9		µg/l	10.0	10	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	95.5		µg/l	10.0	10	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	10.0	10	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	10.0	10	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	10.0	10	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	10.0	10	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	10.0	10	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	10.0	10	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	10.0	10	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	10.0	10	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	100	10	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	10.0	10	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	10.0	10	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	100	10	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	100	10	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	10.0	10	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	10.0	10	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-53I SB05835-02	71360.31	Ground Water	17-Dec-09 13:10	17-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	10.0	10	SW846 8260B	18-Dec-09	18-Dec-09	9121486	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	10.0	10	"	"	"	"	
127-18-4	Tetrachloroethene	705		µg/l	10.0	10	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	10.0	10	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	10.0	10	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	10.0	10	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	10.0	10	"	"	"	"	
79-01-6	Trichloroethene	267		µg/l	10.0	10	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	10.0	10	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	10.0	10	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	10.0	10	"	"	"	"	
75-01-4	Vinyl chloride	126		µg/l	10.0	10	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	20.0	10	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	10.0	10	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*93*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*105*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
OW-08 SB05835-03	71360.31	Ground Water	17-Dec-09 15:40	17-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	18-Dec-09	9121486	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
OW-08	71360.31	Ground Water	17-Dec-09 15:40	17-Dec-09
SB05835-03				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	18-Dec-09	9121486	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	1.6		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*92*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*108*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	21-Dec-09	21-Dec-09	9121563	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*123*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*127*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	18-Dec-09	21-Dec-09	9121445	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	BRL		mg/l	0.2	1	"	"	"	"	
	Other Oil	BRL		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	BRL		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*99*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-53D	71360.31	Ground Water	17-Dec-09 16:50	17-Dec-09
SB05835-04				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	18-Dec-09	9121486	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-53D SB05835-04	71360.31	Ground Water	17-Dec-09 16:50	17-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	18-Dec-09	9121486	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*94*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
OW-02	71360.31	Ground Water	17-Dec-09 11:35	17-Dec-09
SB05835-05				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	18-Dec-09	9121486	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	9.1		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
OW-02	71360.31	Ground Water	17-Dec-09 11:35	17-Dec-09
SB05835-05				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	18-Dec-09	9121486	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	1.3		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*94*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*104*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	21-Dec-09	21-Dec-09	9121563	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*116*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*122*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	18-Dec-09	21-Dec-09	9121445	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	BRL		mg/l	0.2	1	"	"	"	"	
	Other Oil	BRL		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	BRL		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*105*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-32S	71360.31	Ground Water	17-Dec-09 13:30	17-Dec-09
SB05835-06				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	18-Dec-09	9121486	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	1.1		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	78.1		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-32S SB05835-06	71360.31	Ground Water	17-Dec-09 13:30	17-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	18-Dec-09	9121486	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	6.3		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	5.2		µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*93*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*106*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*97*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-32I	71360.31	Ground Water	17-Dec-09 15:00	17-Dec-09
SB05835-07				

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											
67-64-1	Acetone	BRL		µg/l	50.0	5	SW846 8260B	18-Dec-09	19-Dec-09	9121482	
107-13-1	Acrylonitrile	BRL		µg/l	5.0	5	"	"	"	"	
71-43-2	Benzene	6.0		µg/l	5.0	5	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	5.0	5	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	5.0	5	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	5.0	5	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	5.0	5	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	10.0	5	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	50.0	5	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	25.0	5	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	5.0	5	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	10.0	5	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	5.0	5	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	10.0	5	"	"	"	"	
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	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	5.0	5	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	5.0	5	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	5.0	5	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	10.0	5	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	217		µg/l	5.0	5	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	5.0	5	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	5.0	5	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	5.0	5	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	50.0	5	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	5.0	5	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	5.0	5	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	50.0	5	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	50.0	5	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	5.0	5	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	5.0	5	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-32I	71360.31	Ground Water	17-Dec-09 15:00	17-Dec-09
SB05835-07				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	5.0	5	SW846 8260B	18-Dec-09	19-Dec-09	9121482	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	5.0	5	"	"	"	"	
127-18-4	Tetrachloroethene	7.4		µg/l	5.0	5	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	5.0	5	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	5.0	5	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	5.0	5	"	"	"	"	
79-01-6	Trichloroethene	152		µg/l	5.0	5	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	5.0	5	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	5.0	5	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	5.0	5	"	"	"	"	
75-01-4	Vinyl chloride	22.2	CAL1	µg/l	5.0	5	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	10.0	5	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	5.0	5	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*97*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*110*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*109*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-46S	71360.31	Ground Water	17-Dec-09 16:10	17-Dec-09
SB05835-08				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121482	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	20.4		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-46S SB05835-08	71360.31	Ground Water	17-Dec-09 16:10	17-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121482	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	18.4		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*97*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*110*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*107*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DU-09401 SB05835-09	71360.31	Ground Water	17-Dec-09 00:00	17-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	22-Dec-09	22-Dec-09	9121651	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	37.7		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DU-09401 SB05835-09	71360.31	Ground Water	17-Dec-09 00:00	17-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	22-Dec-09	22-Dec-09	9121651	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	2.8		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	46.0		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	1.3	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*83*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*81*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*97*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*95*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK-09408 SB05835-10	71360.31	Deionized Water	17-Dec-09 00:00	17-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121482	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	2.2	O01, V11	µg/l	2.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK-09408	71360.31	Deionized Water	17-Dec-09 00:00	17-Dec-09
SB05835-10				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	18-Dec-09	19-Dec-09	9121482	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*96*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*100*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*108*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	1	+Mod 8015	21-Dec-09	21-Dec-09	9121563	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*100*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*106*		*70-130 %*			"	"	"	"	

Close File

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121482 - SW846 5030 Water MS										
Blank (9121482-BLK1)										
Prepared & Analyzed: 18-Dec-09										
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	1.0						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
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	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/l	1.0						
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	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	1.0						
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	10.0						
Naphthalene	BRL		µg/l	1.0						
n-Propylbenzene	BRL		µg/l	1.0						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121482 - SW846 5030 Water MS										
Blank (9121482-BLK1)										
Prepared & Analyzed: 18-Dec-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	1.0						
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						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	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	CAL1	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						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	500						
1,4-Dioxane	BRL		µg/l	20.0						
Surrogate: 4-Bromofluorobenzene	*47.1*		µg/l		*50.0*		*94*	*70-130*		
Surrogate: Toluene-d8	*50.0*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*54.8*		µg/l		*50.0*		*110*	*70-130*		
Surrogate: Dibromofluoromethane	*53.4*		µg/l		*50.0*		*107*	*70-130*		
LCS (9121482-BS1)										
Prepared & Analyzed: 18-Dec-09										
Acetone	20.4		µg/l		20.0		102	31.7-144		
Acrylonitrile	21.7		µg/l		20.0		108	70-130		
Benzene	19.6		µg/l		20.0		98	70-130		
Bromobenzene	21.0		µg/l		20.0		105	70-130		
Bromochloromethane	17.7		µg/l		20.0		88	70-130		
Bromodichloromethane	20.2		µg/l		20.0		101	70-130		
Bromoform	14.0		µg/l		20.0		70	70-130		
Bromomethane	21.8		µg/l		20.0		109	43-158		
2-Butanone (MEK)	20.1		µg/l		20.0		101	54.5-137		
n-Butylbenzene	22.2		µg/l		20.0		111	70-130		
sec-Butylbenzene	23.1		µg/l		20.0		115	70-130		
tert-Butylbenzene	21.6		µg/l		20.0		108	70-130		
Carbon disulfide	20.7		µg/l		20.0		104	70-130		
Carbon tetrachloride	13.7	QC2	µg/l		20.0		68	70-130		
Chlorobenzene	21.8		µg/l		20.0		109	70-130		
Chloroethane	20.8		µg/l		20.0		104	60.1-131		
Chloroform	21.3		µg/l		20.0		107	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121482 - SW846 5030 Water MS										
LCS (9121482-BS1)										
Prepared & Analyzed: 18-Dec-09										
Chloromethane	19.4		µg/l		20.0		97	70-130		
2-Chlorotoluene	22.0		µg/l		20.0		110	70-130		
4-Chlorotoluene	21.9		µg/l		20.0		109	70-130		
1,2-Dibromo-3-chloropropane	15.2		µg/l		20.0		76	70-130		
Dibromochloromethane	14.1		µg/l		20.0		71	66.2-145		
1,2-Dibromoethane (EDB)	20.8		µg/l		20.0		104	70-130		
Dibromomethane	21.1		µg/l		20.0		106	70-130		
1,2-Dichlorobenzene	21.6		µg/l		20.0		108	70-130		
1,3-Dichlorobenzene	22.8		µg/l		20.0		114	70-130		
1,4-Dichlorobenzene	21.2		µg/l		20.0		106	70-130		
Dichlorodifluoromethane (Freon12)	21.2		µg/l		20.0		106	46.9-168		
1,1-Dichloroethane	21.5		µg/l		20.0		107	70-130		
1,2-Dichloroethane	21.6		µg/l		20.0		108	70-130		
1,1-Dichloroethene	22.4		µg/l		20.0		112	70-130		
cis-1,2-Dichloroethene	22.4		µg/l		20.0		112	70-130		
trans-1,2-Dichloroethene	20.5		µg/l		20.0		102	70-130		
1,2-Dichloropropane	20.2		µg/l		20.0		101	70-130		
1,3-Dichloropropane	21.6		µg/l		20.0		108	70-130		
2,2-Dichloropropane	14.4		µg/l		20.0		72	70-130		
1,1-Dichloropropene	19.9		µg/l		20.0		99	70-130		
cis-1,3-Dichloropropene	16.8		µg/l		20.0		84	70-130		
trans-1,3-Dichloropropene	16.0		µg/l		20.0		80	70-130		
Ethylbenzene	20.6		µg/l		20.0		103	70-130		
Hexachlorobutadiene	18.8		µg/l		20.0		94	70-135		
2-Hexanone (MBK)	17.1		µg/l		20.0		85	70-130		
Isopropylbenzene	18.8		µg/l		20.0		94	70-130		
4-Isopropyltoluene	21.9		µg/l		20.0		110	70-130		
Methyl tert-butyl ether	19.8		µg/l		20.0		99	70-130		
4-Methyl-2-pentanone (MIBK)	15.6		µg/l		20.0		78	57.6-130		
Methylene chloride	20.8		µg/l		20.0		104	70-130		
Naphthalene	17.8		µg/l		20.0		89	70-130		
n-Propylbenzene	22.4		µg/l		20.0		112	70-130		
Styrene	20.4		µg/l		20.0		102	70-130		
1,1,1,2-Tetrachloroethane	17.0		µg/l		20.0		85	70-130		
1,1,2,2-Tetrachloroethane	22.7		µg/l		20.0		113	70-130		
Tetrachloroethene	21.9		µg/l		20.0		110	70-130		
Toluene	20.5		µg/l		20.0		102	70-130		
1,2,3-Trichlorobenzene	22.4		µg/l		20.0		112	70-130		
1,2,4-Trichlorobenzene	17.9		µg/l		20.0		89	70-130		
1,1,1-Trichloroethane	18.1		µg/l		20.0		90	70-130		
1,3,5-Trichlorobenzene	20.3		µg/l		20.0		102	70-130		
1,1,2-Trichloroethane	21.7		µg/l		20.0		109	70-130		
Trichloroethene	20.9		µg/l		20.0		105	70-130		
Trichlorofluoromethane (Freon 11)	28.1		µg/l		20.0		140	64.9-147		
1,2,3-Trichloropropane	23.9		µg/l		20.0		120	70-130		
1,2,4-Trimethylbenzene	21.2		µg/l		20.0		106	70-130		
1,3,5-Trimethylbenzene	21.3		µg/l		20.0		107	70-130		
Vinyl chloride	26.5	CAL1, QM9	µg/l		20.0		133	70-130		
m,p-Xylene	42.9		µg/l		40.0		107	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121482 - SW846 5030 Water MS										
LCS (9121482-BS1)										
Prepared & Analyzed: 18-Dec-09										
o-Xylene	21.7		µg/l		20.0		109	70-130		
Tetrahydrofuran	17.1		µg/l		20.0		86	70-130		
Ethyl ether	19.7		µg/l		20.0		99	70-130		
Tert-amyl methyl ether	26.0		µg/l		20.0		130	70-130		
Ethyl tert-butyl ether	16.3		µg/l		20.0		82	70-130		
Di-isopropyl ether	20.2		µg/l		20.0		101	70-130		
Tert-Butanol / butyl alcohol	187		µg/l		200		94	70-130		
trans-1,4-Dichloro-2-butene	19.0		µg/l		20.0		95	70-130		
Ethanol	444		µg/l		400		111	70-130		
1,4-Dioxane	181		µg/l		200		90	53.8-137		
Surrogate: 4-Bromofluorobenzene	*51.0*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*50.2*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*52.8*		µg/l		*50.0*		*106*	*70-130*		
Surrogate: Dibromofluoromethane	*52.2*		µg/l		*50.0*		*104*	*70-130*		
LCS Dup (9121482-BSD1)										
Prepared & Analyzed: 18-Dec-09										
Acetone	20.5		µg/l		20.0		103	31.7-144	0.7	50
Acrylonitrile	21.3		µg/l		20.0		106	70-130	2	25
Benzene	18.8		µg/l		20.0		94	70-130	4	25
Bromobenzene	20.6		µg/l		20.0		103	70-130	2	25
Bromochloromethane	20.2		µg/l		20.0		101	70-130	13	25
Bromodichloromethane	19.8		µg/l		20.0		99	70-130	2	25
Bromoform	14.7		µg/l		20.0		73	70-130	5	25
Bromomethane	21.5		µg/l		20.0		108	43-158	1	50
2-Butanone (MEK)	19.4		µg/l		20.0		97	54.5-137	4	50
n-Butylbenzene	21.3		µg/l		20.0		107	70-130	4	25
sec-Butylbenzene	22.3		µg/l		20.0		112	70-130	3	25
tert-Butylbenzene	21.3		µg/l		20.0		106	70-130	2	25
Carbon disulfide	20.1		µg/l		20.0		101	70-130	3	25
Carbon tetrachloride	13.5	QC2	µg/l		20.0		68	70-130	1	25
Chlorobenzene	21.2		µg/l		20.0		106	70-130	3	25
Chloroethane	20.4		µg/l		20.0		102	60.1-131	2	50
Chloroform	20.7		µg/l		20.0		103	70-130	3	25
Chloromethane	18.7		µg/l		20.0		94	70-130	4	25
2-Chlorotoluene	21.2		µg/l		20.0		106	70-130	4	25
4-Chlorotoluene	21.1		µg/l		20.0		106	70-130	3	25
1,2-Dibromo-3-chloropropane	15.4		µg/l		20.0		77	70-130	1	25
Dibromochloromethane	14.7		µg/l		20.0		74	66.2-145	4	50
1,2-Dibromoethane (EDB)	20.7		µg/l		20.0		104	70-130	0.5	25
Dibromomethane	21.0		µg/l		20.0		105	70-130	0.6	25
1,2-Dichlorobenzene	21.2		µg/l		20.0		106	70-130	2	25
1,3-Dichlorobenzene	22.0		µg/l		20.0		110	70-130	4	25
1,4-Dichlorobenzene	20.8		µg/l		20.0		104	70-130	2	25
Dichlorodifluoromethane (Freon12)	20.3		µg/l		20.0		102	46.9-168	4	50
1,1-Dichloroethane	21.0		µg/l		20.0		105	70-130	3	25
1,2-Dichloroethane	20.6		µg/l		20.0		103	70-130	4	25
1,1-Dichloroethene	21.4		µg/l		20.0		107	70-130	4	25
cis-1,2-Dichloroethene	21.8		µg/l		20.0		109	70-130	3	25
trans-1,2-Dichloroethene	19.5		µg/l		20.0		98	70-130	5	25
1,2-Dichloropropane	19.7		µg/l		20.0		98	70-130	3	25

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* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121482 - SW846 5030 Water MS										
LCS Dup (9121482-BSD1)										
Prepared & Analyzed: 18-Dec-09										
1,3-Dichloropropane	20.6		µg/l		20.0		103	70-130	5	25
2,2-Dichloropropane	13.7	QM9	µg/l		20.0		69	70-130	5	25
1,1-Dichloropropene	19.5		µg/l		20.0		97	70-130	2	25
cis-1,3-Dichloropropene	16.8		µg/l		20.0		84	70-130	0.4	25
trans-1,3-Dichloropropene	16.2		µg/l		20.0		81	70-130	1	25
Ethylbenzene	20.2		µg/l		20.0		101	70-130	2	25
Hexachlorobutadiene	18.0		µg/l		20.0		90	70-135	4	50
2-Hexanone (MBK)	17.7		µg/l		20.0		88	70-130	4	25
Isopropylbenzene	18.0		µg/l		20.0		90	70-130	4	25
4-Isopropyltoluene	21.4		µg/l		20.0		107	70-130	2	25
Methyl tert-butyl ether	19.6		µg/l		20.0		98	70-130	0.7	25
4-Methyl-2-pentanone (MIBK)	16.4		µg/l		20.0		82	57.6-130	5	50
Methylene chloride	20.5		µg/l		20.0		103	70-130	1	25
Naphthalene	17.3		µg/l		20.0		86	70-130	3	25
n-Propylbenzene	21.5		µg/l		20.0		108	70-130	4	25
Styrene	19.7		µg/l		20.0		98	70-130	4	25
1,1,1,2-Tetrachloroethane	17.1		µg/l		20.0		86	70-130	0.8	25
1,1,2,2-Tetrachloroethane	22.4		µg/l		20.0		112	70-130	1	25
Tetrachloroethene	21.2		µg/l		20.0		106	70-130	3	25
Toluene	19.7		µg/l		20.0		98	70-130	4	25
1,2,3-Trichlorobenzene	21.8		µg/l		20.0		109	70-130	3	25
1,2,4-Trichlorobenzene	17.2		µg/l		20.0		86	70-130	4	25
1,3,5-Trichlorobenzene	19.7		µg/l		20.0		98	70-130	3	25
1,1,1-Trichloroethane	18.2		µg/l		20.0		91	70-130	0.9	25
1,1,2-Trichloroethane	21.2		µg/l		20.0		106	70-130	3	25
Trichloroethene	20.7		µg/l		20.0		104	70-130	0.9	25
Trichlorofluoromethane (Freon 11)	26.5		µg/l		20.0		132	64.9-147	6	50
1,2,3-Trichloropropane	24.3		µg/l		20.0		122	70-130	2	25
1,2,4-Trimethylbenzene	20.7		µg/l		20.0		104	70-130	2	25
1,3,5-Trimethylbenzene	20.6		µg/l		20.0		103	70-130	3	25
Vinyl chloride	25.0	CAL1	µg/l		20.0		125	70-130	6	25
m,p-Xylene	41.9		µg/l		40.0		105	70-130	2	25
o-Xylene	21.1		µg/l		20.0		105	70-130	3	25
Tetrahydrofuran	17.3		µg/l		20.0		87	70-130	1	25
Ethyl ether	19.3		µg/l		20.0		97	70-130	2	50
Tert-amyl methyl ether	25.2		µg/l		20.0		126	70-130	3	25
Ethyl tert-butyl ether	16.2		µg/l		20.0		81	70-130	0.6	25
Di-isopropyl ether	19.6		µg/l		20.0		98	70-130	3	25
Tert-Butanol / butyl alcohol	188		µg/l		200		94	70-130	0.4	25
trans-1,4-Dichloro-2-butene	19.2		µg/l		20.0		96	70-130	0.7	25
Ethanol	424		µg/l		400		106	70-130	5	30
1,4-Dioxane	188		µg/l		200		94	53.8-137	4	25
Surrogate: 4-Bromofluorobenzene	*51.6*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*50.4*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*52.7*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Dibromofluoromethane	*52.0*		µg/l		*50.0*		*104*	*70-130*		
Batch 9121486 - SW846 5030 Water MS										
Blank (9121486-BLK1)										
Prepared & Analyzed: 18-Dec-09										

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121486 - SW846 5030 Water MS										
Blank (9121486-BLK1)										
Prepared & Analyzed: 18-Dec-09										
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						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121486 - SW846 5030 Water MS										
Blank (9121486-BLK1)										
Prepared & Analyzed: 18-Dec-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						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	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						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	400						
1,4-Dioxane	BRL		µg/l	20.0						
Surrogate: 4-Bromofluorobenzene	*47.1*		µg/l		*50.0*		*94*	*70-130*		
Surrogate: Toluene-d8	*50.8*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*51.7*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Dibromofluoromethane	*49.2*		µg/l		*50.0*		*98*	*70-130*		
LCS (9121486-BS1)										
Prepared & Analyzed: 18-Dec-09										
Acetone	14.9		µg/l		20.0		75	60.2-138		
Acrylonitrile	16.2		µg/l		20.0		81	70-130		
Benzene	18.3		µg/l		20.0		91	70-130		
Bromobenzene	18.9		µg/l		20.0		94	70-130		
Bromochloromethane	19.2		µg/l		20.0		96	70-130		
Bromodichloromethane	18.3		µg/l		20.0		92	70-130		
Bromoform	19.6		µg/l		20.0		98	70-130		
Bromomethane	19.5		µg/l		20.0		97	56.4-147		
2-Butanone (MEK)	19.6		µg/l		20.0		98	70-142		
n-Butylbenzene	22.7		µg/l		20.0		114	70-130		
sec-Butylbenzene	23.6		µg/l		20.0		118	70-130		
tert-Butylbenzene	23.6		µg/l		20.0		118	70-130		
Carbon disulfide	19.2		µg/l		20.0		96	70-130		
Carbon tetrachloride	19.0		µg/l		20.0		95	70-130		
Chlorobenzene	23.3		µg/l		20.0		116	70-130		
Chloroethane	18.3		µg/l		20.0		91	67.2-130		
Chloroform	21.1		µg/l		20.0		106	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121486 - SW846 5030 Water MS										
LCS (9121486-BS1)										
Prepared & Analyzed: 18-Dec-09										
Chloromethane	17.0		µg/l		20.0		85	70-130		
2-Chlorotoluene	22.6		µg/l		20.0		113	70-130		
4-Chlorotoluene	22.3		µg/l		20.0		112	70-130		
1,2-Dibromo-3-chloropropane	16.8		µg/l		20.0		84	70-130		
Dibromochloromethane	17.6		µg/l		20.0		88	68.9-130		
1,2-Dibromoethane (EDB)	17.2		µg/l		20.0		86	70-130		
Dibromomethane	16.1		µg/l		20.0		81	70-130		
1,2-Dichlorobenzene	20.2		µg/l		20.0		101	70-130		
1,3-Dichlorobenzene	20.7		µg/l		20.0		104	70-130		
1,4-Dichlorobenzene	23.0		µg/l		20.0		115	70-130		
Dichlorodifluoromethane (Freon12)	18.4		µg/l		20.0		92	54.2-135		
1,1-Dichloroethane	20.5		µg/l		20.0		102	70-130		
1,2-Dichloroethane	20.5		µg/l		20.0		102	70-130		
1,1-Dichloroethene	19.9		µg/l		20.0		100	70-130		
cis-1,2-Dichloroethene	20.5		µg/l		20.0		103	70-130		
trans-1,2-Dichloroethene	18.8		µg/l		20.0		94	70-130		
1,2-Dichloropropane	18.4		µg/l		20.0		92	70-130		
1,3-Dichloropropane	19.8		µg/l		20.0		99	70-130		
2,2-Dichloropropane	17.5		µg/l		20.0		87	70-130		
1,1-Dichloropropene	18.0		µg/l		20.0		90	70-130		
cis-1,3-Dichloropropene	17.9		µg/l		20.0		89	70-130		
trans-1,3-Dichloropropene	19.1		µg/l		20.0		95	70-130		
Ethylbenzene	21.5		µg/l		20.0		108	70-130		
Hexachlorobutadiene	20.5		µg/l		20.0		103	70-133		
2-Hexanone (MBK)	15.6		µg/l		20.0		78	70-130		
Isopropylbenzene	18.7		µg/l		20.0		93	70-130		
4-Isopropyltoluene	22.0		µg/l		20.0		110	70-130		
Methyl tert-butyl ether	20.7		µg/l		20.0		103	70-130		
4-Methyl-2-pentanone (MIBK)	16.5		µg/l		20.0		82	69.1-130		
Methylene chloride	18.7		µg/l		20.0		94	70-130		
Naphthalene	23.3		µg/l		20.0		117	70-130		
n-Propylbenzene	22.2		µg/l		20.0		111	70-130		
Styrene	22.1		µg/l		20.0		110	70-130		
1,1,1,2-Tetrachloroethane	19.1		µg/l		20.0		96	70-130		
1,1,2,2-Tetrachloroethane	17.7		µg/l		20.0		89	70-130		
Tetrachloroethene	16.9		µg/l		20.0		85	70-130		
Toluene	17.2		µg/l		20.0		86	70-130		
1,2,3-Trichlorobenzene	21.6		µg/l		20.0		108	70-130		
1,2,4-Trichlorobenzene	19.2		µg/l		20.0		96	70-130		
1,1,1-Trichloroethane	18.3		µg/l		20.0		92	70-130		
1,3,5-Trichlorobenzene	19.3		µg/l		20.0		96	70-130		
1,1,2-Trichloroethane	16.5		µg/l		20.0		83	70-130		
Trichloroethene	19.8		µg/l		20.0		99	70-130		
Trichlorofluoromethane (Freon 11)	23.2		µg/l		20.0		116	69.8-161		
1,2,3-Trichloropropane	19.3		µg/l		20.0		97	70-130		
1,2,4-Trimethylbenzene	23.4		µg/l		20.0		117	70-130		
1,3,5-Trimethylbenzene	22.7		µg/l		20.0		114	70-130		
Vinyl chloride	18.1		µg/l		20.0		91	70-130		
m,p-Xylene	43.9		µg/l		40.0		110	70-130		

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121486 - SW846 5030 Water MS										
LCS (9121486-BS1)										
Prepared & Analyzed: 18-Dec-09										
o-Xylene	22.0		µg/l		20.0		110	70-130		
Tetrahydrofuran	12.7	QM9	µg/l		20.0		64	70-130		
Ethyl ether	18.7		µg/l		20.0		93	70-130		
Tert-amyl methyl ether	18.7		µg/l		20.0		93	70-130		
Ethyl tert-butyl ether	17.2		µg/l		20.0		86	70-130		
Di-isopropyl ether	16.3		µg/l		20.0		81	70-130		
Tert-Butanol / butyl alcohol	191		µg/l		200		96	70-130		
trans-1,4-Dichloro-2-butene	18.3		µg/l		20.0		91	70-130		
Ethanol	334		µg/l		400		84	70-130		
1,4-Dioxane	156		µg/l		200		78	55.2-158		
Surrogate: 4-Bromofluorobenzene	*51.2*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*50.5*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.5*		µg/l		*50.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*45.7*		µg/l		*50.0*		*91*	*70-130*		
LCS Dup (9121486-BSD1)										
Prepared & Analyzed: 18-Dec-09										
Acetone	13.1		µg/l		20.0		66	60.2-138	13	50
Acrylonitrile	17.4		µg/l		20.0		87	70-130	7	25
Benzene	17.8		µg/l		20.0		89	70-130	3	25
Bromobenzene	17.3		µg/l		20.0		87	70-130	9	25
Bromochloromethane	18.8		µg/l		20.0		94	70-130	2	25
Bromodichloromethane	17.8		µg/l		20.0		89	70-130	3	25
Bromoform	18.4		µg/l		20.0		92	70-130	6	25
Bromomethane	17.5		µg/l		20.0		87	56.4-147	11	50
2-Butanone (MEK)	21.2		µg/l		20.0		106	70-142	8	50
n-Butylbenzene	21.6		µg/l		20.0		108	70-130	5	25
sec-Butylbenzene	22.2		µg/l		20.0		111	70-130	6	25
tert-Butylbenzene	21.7		µg/l		20.0		108	70-130	8	25
Carbon disulfide	18.4		µg/l		20.0		92	70-130	4	25
Carbon tetrachloride	17.6		µg/l		20.0		88	70-130	8	25
Chlorobenzene	21.8		µg/l		20.0		109	70-130	7	25
Chloroethane	17.0		µg/l		20.0		85	67.2-130	7	50
Chloroform	21.0		µg/l		20.0		105	70-130	0.7	25
Chloromethane	16.5		µg/l		20.0		83	70-130	3	25
2-Chlorotoluene	21.4		µg/l		20.0		107	70-130	6	25
4-Chlorotoluene	20.8		µg/l		20.0		104	70-130	7	25
1,2-Dibromo-3-chloropropane	17.3		µg/l		20.0		87	70-130	3	25
Dibromochloromethane	17.4		µg/l		20.0		87	68.9-130	1	50
1,2-Dibromoethane (EDB)	16.9		µg/l		20.0		85	70-130	2	25
Dibromomethane	15.8		µg/l		20.0		79	70-130	2	25
1,2-Dichlorobenzene	18.8		µg/l		20.0		94	70-130	7	25
1,3-Dichlorobenzene	19.0		µg/l		20.0		95	70-130	9	25
1,4-Dichlorobenzene	21.5		µg/l		20.0		107	70-130	7	25
Dichlorodifluoromethane (Freon12)	16.8		µg/l		20.0		84	54.2-135	9	50
1,1-Dichloroethane	20.1		µg/l		20.0		101	70-130	2	25
1,2-Dichloroethane	21.2		µg/l		20.0		106	70-130	3	25
1,1-Dichloroethene	18.9		µg/l		20.0		95	70-130	5	25
cis-1,2-Dichloroethene	19.8		µg/l		20.0		99	70-130	4	25
trans-1,2-Dichloroethene	17.6		µg/l		20.0		88	70-130	7	25
1,2-Dichloropropane	18.3		µg/l		20.0		91	70-130	0.9	25

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121486 - SW846 5030 Water MS										
LCS Dup (9121486-BSD1)										
Prepared & Analyzed: 18-Dec-09										
1,3-Dichloropropane	20.1		µg/l		20.0		100	70-130	1	25
2,2-Dichloropropane	16.8		µg/l		20.0		84	70-130	4	25
1,1-Dichloropropene	16.6		µg/l		20.0		83	70-130	8	25
cis-1,3-Dichloropropene	17.7		µg/l		20.0		89	70-130	1	25
trans-1,3-Dichloropropene	18.8		µg/l		20.0		94	70-130	2	25
Ethylbenzene	20.3		µg/l		20.0		102	70-130	6	25
Hexachlorobutadiene	18.1		µg/l		20.0		90	70-133	13	50
2-Hexanone (MBK)	16.9		µg/l		20.0		84	70-130	8	25
Isopropylbenzene	17.6		µg/l		20.0		88	70-130	6	25
4-Isopropyltoluene	20.6		µg/l		20.0		103	70-130	7	25
Methyl tert-butyl ether	20.7		µg/l		20.0		104	70-130	0.2	25
4-Methyl-2-pentanone (MIBK)	17.8		µg/l		20.0		89	69.1-130	8	50
Methylene chloride	18.6		µg/l		20.0		93	70-130	0.4	25
Naphthalene	21.9		µg/l		20.0		110	70-130	6	25
n-Propylbenzene	20.9		µg/l		20.0		105	70-130	6	25
Styrene	20.7		µg/l		20.0		104	70-130	6	25
1,1,1,2-Tetrachloroethane	18.0		µg/l		20.0		90	70-130	6	25
1,1,2,2-Tetrachloroethane	17.4		µg/l		20.0		87	70-130	2	25
Tetrachloroethene	15.5		µg/l		20.0		78	70-130	9	25
Toluene	16.4		µg/l		20.0		82	70-130	5	25
1,2,3-Trichlorobenzene	19.9		µg/l		20.0		100	70-130	8	25
1,2,4-Trichlorobenzene	17.6		µg/l		20.0		88	70-130	9	25
1,3,5-Trichlorobenzene	17.8		µg/l		20.0		89	70-130	8	25
1,1,1-Trichloroethane	17.3		µg/l		20.0		86	70-130	6	25
1,1,2-Trichloroethane	16.7		µg/l		20.0		84	70-130	1	25
Trichloroethene	19.3		µg/l		20.0		96	70-130	3	25
Trichlorofluoromethane (Freon 11)	21.8		µg/l		20.0		109	69.8-161	6	50
1,2,3-Trichloropropane	19.4		µg/l		20.0		97	70-130	0.5	25
1,2,4-Trimethylbenzene	21.7		µg/l		20.0		109	70-130	7	25
1,3,5-Trimethylbenzene	21.3		µg/l		20.0		106	70-130	6	25
Vinyl chloride	17.9		µg/l		20.0		90	70-130	1	25
m,p-Xylene	40.7		µg/l		40.0		102	70-130	8	25
o-Xylene	20.4		µg/l		20.0		102	70-130	8	25
Tetrahydrofuran	14.5		µg/l		20.0		73	70-130	13	25
Ethyl ether	17.7		µg/l		20.0		89	70-130	5	50
Tert-amyl methyl ether	18.5		µg/l		20.0		92	70-130	1	25
Ethyl tert-butyl ether	17.4		µg/l		20.0		87	70-130	0.8	25
Di-isopropyl ether	16.6		µg/l		20.0		83	70-130	2	25
Tert-Butanol / butyl alcohol	199		µg/l		200		100	70-130	4	25
trans-1,4-Dichloro-2-butene	17.7		µg/l		20.0		88	70-130	3	25
Ethanol	346		µg/l		400		86	70-130	3	30
1,4-Dioxane	164		µg/l		200		82	55.2-158	5	25
Surrogate: 4-Bromofluorobenzene	*51.4*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*50.4*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*48.1*		µg/l		*50.0*		*96*	*70-130*		
Surrogate: Dibromofluoromethane	*45.6*		µg/l		*50.0*		*91*	*70-130*		
Batch 9121563 - VPH - EPA 5030B										
LCS (9121563-BS1)										
Prepared & Analyzed: 21-Dec-09										

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121563 - VPH - EPA 5030B										
LCS (9121563-BS1)										
Prepared & Analyzed: 21-Dec-09										
Gasoline Range Organics	270		µg/l		280		96	70-130		
Surrogate: 2,5-Dibromotoluene (PID)	*55.8*		µg/l		*50.0*		*112*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*59.9*		µg/l		*50.0*		*120*	*70-130*		
LCS Dup (9121563-BSD1)										
Prepared & Analyzed: 21-Dec-09										
Gasoline Range Organics	287		µg/l		280		102	70-130	6	25
Surrogate: 2,5-Dibromotoluene (PID)	*54.1*		µg/l		*50.0*		*108*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*58.1*		µg/l		*50.0*		*116*	*70-130*		
Batch 9121565 - SW846 5030 Water MS										
Blank (9121565-BLK1)										
Prepared & Analyzed: 21-Dec-09										
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						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121565 - SW846 5030 Water MS										
Blank (9121565-BLK1)										
Prepared & Analyzed: 21-Dec-09										
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						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	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						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	400						
1,4-Dioxane	BRL		µg/l	20.0						
Surrogate: 4-Bromofluorobenzene	*48.4*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*50.2*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*53.5*		µg/l		*50.0*		*107*	*70-130*		
Surrogate: Dibromofluoromethane	*55.4*		µg/l		*50.0*		*111*	*70-130*		
Blank (9121565-BLK2)										
Prepared & Analyzed: 21-Dec-09										
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						

Close File

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121565 - SW846 5030 Water MS										
Blank (9121565-BLK2)										
Prepared & Analyzed: 21-Dec-09										
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						
1,2,3-Trichlorobenzene	BRL		µg/l	1.0						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121565 - SW846 5030 Water MS										
Blank (9121565-BLK2)										
Prepared & Analyzed: 21-Dec-09										
1,2,4-Trichlorobenzene	BRL		µg/l	1.0						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	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						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	400						
1,4-Dioxane	BRL		µg/l	20.0						
Surrogate: 4-Bromofluorobenzene	*48.1*		µg/l		*50.0*		*96*	*70-130*		
Surrogate: Toluene-d8	*50.0*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*55.0*		µg/l		*50.0*		*110*	*70-130*		
Surrogate: Dibromofluoromethane	*54.7*		µg/l		*50.0*		*109*	*70-130*		
LCS (9121565-BS1)										
Prepared & Analyzed: 21-Dec-09										
Acetone	21.7		µg/l		20.0		109	60.2-138		
Acrylonitrile	22.5		µg/l		20.0		112	70-130		
Benzene	19.3		µg/l		20.0		96	70-130		
Bromobenzene	20.7		µg/l		20.0		104	70-130		
Bromochloromethane	24.9		µg/l		20.0		124	70-130		
Bromodichloromethane	21.8		µg/l		20.0		109	70-130		
Bromoform	22.5		µg/l		20.0		112	70-130		
Bromomethane	24.0		µg/l		20.0		120	56.4-147		
2-Butanone (MEK)	24.0		µg/l		20.0		120	70-142		
n-Butylbenzene	21.9		µg/l		20.0		110	70-130		
sec-Butylbenzene	22.6		µg/l		20.0		113	70-130		
tert-Butylbenzene	23.0		µg/l		20.0		115	70-130		
Carbon disulfide	21.9		µg/l		20.0		110	70-130		
Carbon tetrachloride	22.3		µg/l		20.0		112	70-130		
Chlorobenzene	23.7		µg/l		20.0		118	70-130		
Chloroethane	22.7		µg/l		20.0		114	67.2-130		
Chloroform	24.8		µg/l		20.0		124	70-130		
Chloromethane	21.3		µg/l		20.0		107	70-130		
2-Chlorotoluene	22.1		µg/l		20.0		110	70-130		
4-Chlorotoluene	22.2		µg/l		20.0		111	70-130		
1,2-Dibromo-3-chloropropane	22.6		µg/l		20.0		113	70-130		
Dibromochloromethane	21.0		µg/l		20.0		105	68.9-130		
1,2-Dibromoethane (EDB)	20.1		µg/l		20.0		101	70-130		

Close File

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121565 - SW846 5030 Water MS										
LCS (9121565-BS1)										
Prepared & Analyzed: 21-Dec-09										
Dibromomethane	19.4		µg/l		20.0		97	70-130		
1,2-Dichlorobenzene	20.6		µg/l		20.0		103	70-130		
1,3-Dichlorobenzene	20.8		µg/l		20.0		104	70-130		
1,4-Dichlorobenzene	23.6		µg/l		20.0		118	70-130		
Dichlorodifluoromethane (Freon12)	21.5		µg/l		20.0		107	54.2-135		
1,1-Dichloroethane	23.9		µg/l		20.0		119	70-130		
1,2-Dichloroethane	24.4		µg/l		20.0		122	70-130		
1,1-Dichloroethene	23.8		µg/l		20.0		119	70-130		
cis-1,2-Dichloroethene	25.0		µg/l		20.0		125	70-130		
trans-1,2-Dichloroethene	23.0		µg/l		20.0		115	70-130		
1,2-Dichloropropane	21.6		µg/l		20.0		108	70-130		
1,3-Dichloropropane	22.3		µg/l		20.0		112	70-130		
2,2-Dichloropropane	20.9		µg/l		20.0		104	70-130		
1,1-Dichloropropene	19.7		µg/l		20.0		99	70-130		
cis-1,3-Dichloropropene	20.4		µg/l		20.0		102	70-130		
trans-1,3-Dichloropropene	22.1		µg/l		20.0		111	70-130		
Ethylbenzene	20.6		µg/l		20.0		103	70-130		
Hexachlorobutadiene	22.0		µg/l		20.0		110	70-133		
2-Hexanone (MBK)	19.8		µg/l		20.0		99	70-130		
Isopropylbenzene	18.1		µg/l		20.0		90	70-130		
4-Isopropyltoluene	21.4		µg/l		20.0		107	70-130		
Methyl tert-butyl ether	23.8		µg/l		20.0		119	70-130		
4-Methyl-2-pentanone (MIBK)	20.2		µg/l		20.0		101	69.1-130		
Methylene chloride	23.7		µg/l		20.0		119	70-130		
Naphthalene	22.7		µg/l		20.0		113	70-130		
n-Propylbenzene	21.3		µg/l		20.0		107	70-130		
Styrene	22.0		µg/l		20.0		110	70-130		
1,1,1,2-Tetrachloroethane	21.4		µg/l		20.0		107	70-130		
1,1,2,2-Tetrachloroethane	19.2		µg/l		20.0		96	70-130		
Tetrachloroethene	19.4		µg/l		20.0		97	70-130		
Toluene	18.7		µg/l		20.0		94	70-130		
1,2,3-Trichlorobenzene	22.9		µg/l		20.0		115	70-130		
1,2,4-Trichlorobenzene	20.2		µg/l		20.0		101	70-130		
1,1,1-Trichloroethane	21.5		µg/l		20.0		107	70-130		
1,3,5-Trichlorobenzene	20.0		µg/l		20.0		100	70-130		
1,1,2-Trichloroethane	19.6		µg/l		20.0		98	70-130		
Trichloroethene	23.8		µg/l		20.0		119	70-130		
Trichlorofluoromethane (Freon 11)	26.3		µg/l		20.0		131	69.8-161		
1,2,3-Trichloropropane	20.9		µg/l		20.0		105	70-130		
1,2,4-Trimethylbenzene	22.8		µg/l		20.0		114	70-130		
1,3,5-Trimethylbenzene	22.0		µg/l		20.0		110	70-130		
Vinyl chloride	22.1		µg/l		20.0		111	70-130		
m,p-Xylene	43.0		µg/l		40.0		107	70-130		
o-Xylene	22.3		µg/l		20.0		111	70-130		
Tetrahydrofuran	22.6		µg/l		20.0		113	70-130		
Ethyl ether	23.0		µg/l		20.0		115	70-130		
Tert-amyl methyl ether	22.5		µg/l		20.0		112	70-130		
Ethyl tert-butyl ether	20.1		µg/l		20.0		100	70-130		
Di-isopropyl ether	18.9		µg/l		20.0		94	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121565 - SW846 5030 Water MS										
LCS (9121565-BS1)										
Prepared & Analyzed: 21-Dec-09										
Tert-Butanol / butyl alcohol	260		µg/l		200		130	70-130		
trans-1,4-Dichloro-2-butene	21.4		µg/l		20.0		107	70-130		
Ethanol	492		µg/l		400		123	70-130		
1,4-Dioxane	220		µg/l		200		110	55.2-158		
Surrogate: 4-Bromofluorobenzene	*51.3*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*50.0*		µg/l		*50.0*		*100*	*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 (9121565-BSD1)										
Prepared & Analyzed: 21-Dec-09										
Acetone	20.7		µg/l		20.0		104	60.2-138	5	50
Acrylonitrile	22.0		µg/l		20.0		110	70-130	2	25
Benzene	18.1		µg/l		20.0		91	70-130	6	25
Bromobenzene	20.8		µg/l		20.0		104	70-130	0.4	25
Bromochloromethane	24.2		µg/l		20.0		121	70-130	3	25
Bromodichloromethane	20.8		µg/l		20.0		104	70-130	4	25
Bromoform	23.6		µg/l		20.0		118	70-130	5	25
Bromomethane	23.1		µg/l		20.0		116	56.4-147	4	50
2-Butanone (MEK)	22.4		µg/l		20.0		112	70-142	7	50
n-Butylbenzene	19.0		µg/l		20.0		95	70-130	15	25
sec-Butylbenzene	21.6		µg/l		20.0		108	70-130	4	25
tert-Butylbenzene	22.6		µg/l		20.0		113	70-130	2	25
Carbon disulfide	19.6		µg/l		20.0		98	70-130	11	25
Carbon tetrachloride	21.0		µg/l		20.0		105	70-130	6	25
Chlorobenzene	23.5		µg/l		20.0		117	70-130	0.8	25
Chloroethane	20.7		µg/l		20.0		103	67.2-130	9	50
Chloroform	23.6		µg/l		20.0		118	70-130	5	25
Chloromethane	18.9		µg/l		20.0		94	70-130	12	25
2-Chlorotoluene	21.0		µg/l		20.0		105	70-130	5	25
4-Chlorotoluene	21.5		µg/l		20.0		108	70-130	3	25
1,2-Dibromo-3-chloropropane	19.5		µg/l		20.0		98	70-130	14	25
Dibromochloromethane	21.2		µg/l		20.0		106	68.9-130	1	50
1,2-Dibromoethane (EDB)	20.6		µg/l		20.0		103	70-130	2	25
Dibromomethane	18.6		µg/l		20.0		93	70-130	4	25
1,2-Dichlorobenzene	19.8		µg/l		20.0		99	70-130	4	25
1,3-Dichlorobenzene	21.3		µg/l		20.0		106	70-130	2	25
1,4-Dichlorobenzene	22.1		µg/l		20.0		110	70-130	6	25
Dichlorodifluoromethane (Freon12)	19.2		µg/l		20.0		96	54.2-135	11	50
1,1-Dichloroethane	21.8		µg/l		20.0		109	70-130	9	25
1,2-Dichloroethane	23.1		µg/l		20.0		115	70-130	5	25
1,1-Dichloroethene	21.8		µg/l		20.0		109	70-130	9	25
cis-1,2-Dichloroethene	23.9		µg/l		20.0		120	70-130	4	25
trans-1,2-Dichloroethene	21.2		µg/l		20.0		106	70-130	8	25
1,2-Dichloropropane	20.3		µg/l		20.0		102	70-130	6	25
1,3-Dichloropropane	21.9		µg/l		20.0		109	70-130	2	25
2,2-Dichloropropane	18.5		µg/l		20.0		93	70-130	12	25
1,1-Dichloropropene	17.8		µg/l		20.0		89	70-130	10	25
cis-1,3-Dichloropropene	19.4		µg/l		20.0		97	70-130	5	25
trans-1,3-Dichloropropene	21.3		µg/l		20.0		106	70-130	4	25
Ethylbenzene	19.6		µg/l		20.0		98	70-130	5	25

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121565 - SW846 5030 Water MS										
LCS Dup (9121565-BSD1)										
Prepared & Analyzed: 21-Dec-09										
Hexachlorobutadiene	21.1		µg/l		20.0		105	70-133	4	50
2-Hexanone (MBK)	18.6		µg/l		20.0		93	70-130	6	25
Isopropylbenzene	17.8		µg/l		20.0		89	70-130	2	25
4-Isopropyltoluene	19.5		µg/l		20.0		97	70-130	10	25
Methyl tert-butyl ether	23.1		µg/l		20.0		116	70-130	3	25
4-Methyl-2-pentanone (MIBK)	18.7		µg/l		20.0		93	69.1-130	8	50
Methylene chloride	22.4		µg/l		20.0		112	70-130	6	25
Naphthalene	21.8		µg/l		20.0		109	70-130	4	25
n-Propylbenzene	20.0		µg/l		20.0		100	70-130	6	25
Styrene	21.3		µg/l		20.0		107	70-130	3	25
1,1,1,2-Tetrachloroethane	21.7		µg/l		20.0		108	70-130	1	25
1,1,2,2-Tetrachloroethane	19.1		µg/l		20.0		96	70-130	0.2	25
Tetrachloroethene	20.0		µg/l		20.0		100	70-130	3	25
Toluene	17.8		µg/l		20.0		89	70-130	5	25
1,2,3-Trichlorobenzene	22.5		µg/l		20.0		112	70-130	2	25
1,2,4-Trichlorobenzene	19.4		µg/l		20.0		97	70-130	4	25
1,1,1-Trichloroethane	20.0		µg/l		20.0		100	70-130	7	25
1,3,5-Trichlorobenzene	19.1		µg/l		20.0		95	70-130	5	25
1,1,2-Trichloroethane	19.3		µg/l		20.0		96	70-130	2	25
Trichloroethene	21.6		µg/l		20.0		108	70-130	9	25
Trichlorofluoromethane (Freon 11)	24.7		µg/l		20.0		124	69.8-161	6	50
1,2,3-Trichloropropane	20.8		µg/l		20.0		104	70-130	0.8	25
1,2,4-Trimethylbenzene	22.2		µg/l		20.0		111	70-130	2	25
1,3,5-Trimethylbenzene	21.6		µg/l		20.0		108	70-130	2	25
Vinyl chloride	19.6		µg/l		20.0		98	70-130	12	25
m,p-Xylene	42.1		µg/l		40.0		105	70-130	2	25
o-Xylene	22.2		µg/l		20.0		111	70-130	0.6	25
Tetrahydrofuran	17.0	QR2	µg/l		20.0		85	70-130	28	25
Ethyl ether	21.2		µg/l		20.0		106	70-130	8	50
Tert-amyl methyl ether	20.4		µg/l		20.0		102	70-130	10	25
Ethyl tert-butyl ether	19.2		µg/l		20.0		96	70-130	5	25
Di-isopropyl ether	17.0		µg/l		20.0		85	70-130	10	25
Tert-Butanol / butyl alcohol	245		µg/l		200		122	70-130	6	25
trans-1,4-Dichloro-2-butene	21.3		µg/l		20.0		106	70-130	0.6	25
Ethanol	434		µg/l		400		109	70-130	13	30
1,4-Dioxane	218		µg/l		200		109	55.2-158	0.8	25
Surrogate: 4-Bromofluorobenzene	*52.2*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*50.5*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.2*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*52.4*		µg/l		*50.0*		*105*	*70-130*		
Batch 9121651 - SW846 5030 Water MS										
Blank (9121651-BLK1)										
Prepared & Analyzed: 22-Dec-09										
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	1.0						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						

Close File

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121651 - SW846 5030 Water MS										
Blank (9121651-BLK1)										
Prepared & Analyzed: 22-Dec-09										
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	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/l	1.0						
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	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	1.0						
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	10.0						
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	1.0						
Tetrachloroethene	BRL		µg/l	1.0						
Toluene	BRL		µg/l	1.0						
1,2,3-Trichlorobenzene	BRL		µg/l	1.0						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121651 - SW846 5030 Water MS										
Blank (9121651-BLK1)										
Prepared & Analyzed: 22-Dec-09										
1,2,4-Trichlorobenzene	BRL		µg/l	1.0						
1,1,1-Trichloroethane	BRL		µg/l	1.0						
1,3,5-Trichlorobenzene	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						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	500						
1,4-Dioxane	BRL		µg/l	20.0						
Surrogate: 4-Bromofluorobenzene	*24.8*		µg/l		*30.0*		*83*	*70-130*		
Surrogate: Toluene-d8	*24.2*		µg/l		*30.0*		*81*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*30.4*		µg/l		*30.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*29.2*		µg/l		*30.0*		*97*	*70-130*		
LCS (9121651-BS1)										
Prepared & Analyzed: 22-Dec-09										
Acetone	19.0		µg/l		20.0		95	31.7-144		
Acrylonitrile	16.3		µg/l		20.0		81	70-130		
Benzene	18.1		µg/l		20.0		90	70-130		
Bromobenzene	19.6		µg/l		20.0		98	70-130		
Bromochloromethane	18.8		µg/l		20.0		94	70-130		
Bromodichloromethane	17.1		µg/l		20.0		86	70-130		
Bromoform	16.9		µg/l		20.0		85	70-130		
Bromomethane	17.7		µg/l		20.0		88	43-158		
2-Butanone (MEK)	19.2		µg/l		20.0		96	54.5-137		
n-Butylbenzene	18.7		µg/l		20.0		93	70-130		
sec-Butylbenzene	20.2		µg/l		20.0		101	70-130		
tert-Butylbenzene	19.8		µg/l		20.0		99	70-130		
Carbon disulfide	18.2		µg/l		20.0		91	70-130		
Carbon tetrachloride	20.8		µg/l		20.0		104	70-130		
Chlorobenzene	19.0		µg/l		20.0		95	70-130		
Chloroethane	17.5		µg/l		20.0		88	60.1-131		
Chloroform	19.6		µg/l		20.0		98	70-130		
Chloromethane	17.8		µg/l		20.0		89	70-130		
2-Chlorotoluene	21.5		µg/l		20.0		108	70-130		
4-Chlorotoluene	20.3		µg/l		20.0		102	70-130		
1,2-Dibromo-3-chloropropane	15.8		µg/l		20.0		79	70-130		
Dibromochloromethane	15.0		µg/l		20.0		75	66.2-145		
1,2-Dibromoethane (EDB)	17.0		µg/l		20.0		85	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121651 - SW846 5030 Water MS										
LCS (9121651-BS1)										
Prepared & Analyzed: 22-Dec-09										
Dibromomethane	18.0		µg/l		20.0		90	70-130		
1,2-Dichlorobenzene	21.0		µg/l		20.0		105	70-130		
1,3-Dichlorobenzene	21.6		µg/l		20.0		108	70-130		
1,4-Dichlorobenzene	18.3		µg/l		20.0		92	70-130		
Dichlorodifluoromethane (Freon12)	20.1		µg/l		20.0		100	46.9-168		
1,1-Dichloroethane	18.2		µg/l		20.0		91	70-130		
1,2-Dichloroethane	17.6		µg/l		20.0		88	70-130		
1,1-Dichloroethene	19.3		µg/l		20.0		97	70-130		
cis-1,2-Dichloroethene	18.7		µg/l		20.0		93	70-130		
trans-1,2-Dichloroethene	16.8		µg/l		20.0		84	70-130		
1,2-Dichloropropane	17.6		µg/l		20.0		88	70-130		
1,3-Dichloropropane	16.5		µg/l		20.0		82	70-130		
2,2-Dichloropropane	19.3		µg/l		20.0		96	70-130		
1,1-Dichloropropene	19.2		µg/l		20.0		96	70-130		
cis-1,3-Dichloropropene	15.3		µg/l		20.0		76	70-130		
trans-1,3-Dichloropropene	15.0		µg/l		20.0		75	70-130		
Ethylbenzene	18.2		µg/l		20.0		91	70-130		
Hexachlorobutadiene	19.1		µg/l		20.0		96	70-135		
2-Hexanone (MBK)	14.9		µg/l		20.0		74	70-130		
Isopropylbenzene	18.2		µg/l		20.0		91	70-130		
4-Isopropyltoluene	19.0		µg/l		20.0		95	70-130		
Methyl tert-butyl ether	17.5		µg/l		20.0		87	70-130		
4-Methyl-2-pentanone (MIBK)	16.8		µg/l		20.0		84	57.6-130		
Methylene chloride	18.0		µg/l		20.0		90	70-130		
Naphthalene	12.4	QM9	µg/l		20.0		62	70-130		
n-Propylbenzene	17.9		µg/l		20.0		89	70-130		
Styrene	16.6		µg/l		20.0		83	70-130		
1,1,1,2-Tetrachloroethane	18.5		µg/l		20.0		92	70-130		
1,1,2,2-Tetrachloroethane	17.7		µg/l		20.0		88	70-130		
Tetrachloroethene	17.6		µg/l		20.0		88	70-130		
Toluene	16.5		µg/l		20.0		83	70-130		
1,2,3-Trichlorobenzene	16.2		µg/l		20.0		81	70-130		
1,2,4-Trichlorobenzene	14.4		µg/l		20.0		72	70-130		
1,1,1-Trichloroethane	20.0		µg/l		20.0		100	70-130		
1,3,5-Trichlorobenzene	18.4		µg/l		20.0		92	70-130		
1,1,2-Trichloroethane	17.0		µg/l		20.0		85	70-130		
Trichloroethene	18.4		µg/l		20.0		92	70-130		
Trichlorofluoromethane (Freon 11)	21.2		µg/l		20.0		106	64.9-147		
1,2,3-Trichloropropane	20.0		µg/l		20.0		100	70-130		
1,2,4-Trimethylbenzene	18.3		µg/l		20.0		91	70-130		
1,3,5-Trimethylbenzene	17.8		µg/l		20.0		89	70-130		
Vinyl chloride	18.6	CAL1	µg/l		20.0		93	70-130		
m,p-Xylene	38.7		µg/l		40.0		97	70-130		
o-Xylene	20.0		µg/l		20.0		100	70-130		
Tetrahydrofuran	17.2		µg/l		20.0		86	70-130		
Ethyl ether	17.4		µg/l		20.0		87	70-130		
Tert-amyl methyl ether	16.7		µg/l		20.0		84	70-130		
Ethyl tert-butyl ether	17.2		µg/l		20.0		86	70-130		
Di-isopropyl ether	18.5		µg/l		20.0		92	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121651 - SW846 5030 Water MS										
LCS (9121651-BS1)										
Prepared & Analyzed: 22-Dec-09										
Tert-Butanol / butyl alcohol	161		µg/l		200		81	70-130		
trans-1,4-Dichloro-2-butene	17.4		µg/l		20.0		87	70-130		
Ethanol	380		µg/l		400		95	70-130		
1,4-Dioxane	168		µg/l		200		84	53.8-137		
Surrogate: 4-Bromofluorobenzene	*31.1*		µg/l		*30.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*27.8*		µg/l		*30.0*		*93*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.4*		µg/l		*30.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*29.4*		µg/l		*30.0*		*98*	*70-130*		
LCS Dup (9121651-BSD1)										
Prepared & Analyzed: 22-Dec-09										
Acetone	18.4		µg/l		20.0		92	31.7-144	3	50
Acrylonitrile	17.2		µg/l		20.0		86	70-130	5	25
Benzene	18.4		µg/l		20.0		92	70-130	2	25
Bromobenzene	20.4		µg/l		20.0		102	70-130	4	25
Bromochloromethane	19.5		µg/l		20.0		98	70-130	4	25
Bromodichloromethane	18.1		µg/l		20.0		90	70-130	5	25
Bromoform	17.6		µg/l		20.0		88	70-130	4	25
Bromomethane	18.2		µg/l		20.0		91	43-158	3	50
2-Butanone (MEK)	19.3		µg/l		20.0		96	54.5-137	0.5	50
n-Butylbenzene	20.6		µg/l		20.0		103	70-130	10	25
sec-Butylbenzene	20.5		µg/l		20.0		102	70-130	1	25
tert-Butylbenzene	20.0		µg/l		20.0		100	70-130	0.7	25
Carbon disulfide	18.4		µg/l		20.0		92	70-130	0.8	25
Carbon tetrachloride	21.1		µg/l		20.0		105	70-130	2	25
Chlorobenzene	19.7		µg/l		20.0		98	70-130	3	25
Chloroethane	17.8		µg/l		20.0		89	60.1-131	2	50
Chloroform	20.4		µg/l		20.0		102	70-130	4	25
Chloromethane	18.0		µg/l		20.0		90	70-130	0.8	25
2-Chlorotoluene	21.8		µg/l		20.0		109	70-130	1	25
4-Chlorotoluene	20.8		µg/l		20.0		104	70-130	2	25
1,2-Dibromo-3-chloropropane	18.4		µg/l		20.0		92	70-130	15	25
Dibromochloromethane	15.3		µg/l		20.0		77	66.2-145	2	50
1,2-Dibromoethane (EDB)	18.0		µg/l		20.0		90	70-130	6	25
Dibromomethane	19.5		µg/l		20.0		98	70-130	8	25
1,2-Dichlorobenzene	22.7		µg/l		20.0		114	70-130	8	25
1,3-Dichlorobenzene	22.7		µg/l		20.0		113	70-130	5	25
1,4-Dichlorobenzene	19.7		µg/l		20.0		98	70-130	7	25
Dichlorodifluoromethane (Freon12)	20.5		µg/l		20.0		103	46.9-168	2	50
1,1-Dichloroethane	18.6		µg/l		20.0		93	70-130	2	25
1,2-Dichloroethane	18.2		µg/l		20.0		91	70-130	4	25
1,1-Dichloroethene	19.3		µg/l		20.0		97	70-130	0.1	25
cis-1,2-Dichloroethene	19.0		µg/l		20.0		95	70-130	1	25
trans-1,2-Dichloroethene	17.6		µg/l		20.0		88	70-130	4	25
1,2-Dichloropropane	20.0		µg/l		20.0		100	70-130	13	25
1,3-Dichloropropane	17.2		µg/l		20.0		86	70-130	4	25
2,2-Dichloropropane	19.7		µg/l		20.0		99	70-130	2	25
1,1-Dichloropropene	19.7		µg/l		20.0		98	70-130	2	25
cis-1,3-Dichloropropene	15.9		µg/l		20.0		80	70-130	4	25
trans-1,3-Dichloropropene	15.4		µg/l		20.0		77	70-130	3	25
Ethylbenzene	18.9		µg/l		20.0		94	70-130	4	25

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121651 - SW846 5030 Water MS										
LCS Dup (9121651-BSD1)										
Prepared & Analyzed: 22-Dec-09										
Hexachlorobutadiene	21.1		µg/l		20.0		105	70-135	10	50
2-Hexanone (MBK)	15.9		µg/l		20.0		79	70-130	6	25
Isopropylbenzene	18.2		µg/l		20.0		91	70-130	0	25
4-Isopropyltoluene	20.6		µg/l		20.0		103	70-130	8	25
Methyl tert-butyl ether	18.8		µg/l		20.0		94	70-130	7	25
4-Methyl-2-pentanone (MIBK)	18.5		µg/l		20.0		92	57.6-130	9	50
Methylene chloride	18.6		µg/l		20.0		93	70-130	3	25
Naphthalene	15.4		µg/l		20.0		77	70-130	21	25
n-Propylbenzene	18.2		µg/l		20.0		91	70-130	2	25
Styrene	17.3		µg/l		20.0		86	70-130	4	25
1,1,1,2-Tetrachloroethane	19.0		µg/l		20.0		95	70-130	3	25
1,1,2,2-Tetrachloroethane	19.2		µg/l		20.0		96	70-130	8	25
Tetrachloroethene	18.6		µg/l		20.0		93	70-130	5	25
Toluene	17.4		µg/l		20.0		87	70-130	5	25
1,2,3-Trichlorobenzene	19.5		µg/l		20.0		98	70-130	19	25
1,2,4-Trichlorobenzene	16.7		µg/l		20.0		84	70-130	15	25
1,1,1-Trichloroethane	20.5		µg/l		20.0		102	70-130	2	25
1,3,5-Trichlorobenzene	20.9		µg/l		20.0		104	70-130	12	25
1,1,2-Trichloroethane	18.2		µg/l		20.0		91	70-130	7	25
Trichloroethene	22.4		µg/l		20.0		112	70-130	20	25
Trichlorofluoromethane (Freon 11)	21.7		µg/l		20.0		108	64.9-147	2	50
1,2,3-Trichloropropane	21.5		µg/l		20.0		108	70-130	8	25
1,2,4-Trimethylbenzene	19.2		µg/l		20.0		96	70-130	5	25
1,3,5-Trimethylbenzene	18.8		µg/l		20.0		94	70-130	5	25
Vinyl chloride	14.7		µg/l		20.0		73	70-130	24	25
m,p-Xylene	39.3		µg/l		40.0		98	70-130	2	25
o-Xylene	20.5		µg/l		20.0		102	70-130	2	25
Tetrahydrofuran	19.2		µg/l		20.0		96	70-130	11	25
Ethyl ether	17.8		µg/l		20.0		89	70-130	2	50
Tert-amyl methyl ether	18.0		µg/l		20.0		90	70-130	8	25
Ethyl tert-butyl ether	18.3		µg/l		20.0		92	70-130	6	25
Di-isopropyl ether	19.0		µg/l		20.0		95	70-130	3	25
Tert-Butanol / butyl alcohol	189		µg/l		200		94	70-130	16	25
trans-1,4-Dichloro-2-butene	18.7		µg/l		20.0		94	70-130	7	25
Ethanol	368		µg/l		400		92	70-130	3	30
1,4-Dioxane	257	QR2	µg/l		200		129	53.8-137	42	25
Surrogate: 4-Bromofluorobenzene	*30.7*		µg/l		*30.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*27.7*		µg/l		*30.0*		*92*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*28.5*		µg/l		*30.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*29.0*		µg/l		*30.0*		*96*	*70-130*		

Close File

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121445 - SW846 3510C										
Blank (9121445-BLK1)										
Prepared: 18-Dec-09 Analyzed: 21-Dec-09										
Fuel Oil #2	BRL		mg/l	0.1						
Fuel Oil #4	BRL		mg/l	0.1						
Fuel Oil #6	BRL		mg/l	0.1						
Motor Oil	BRL		mg/l	0.1						
Aviation Fuel	BRL		mg/l	0.1						
Unidentified	BRL		mg/l	0.1						
Other Oil	BRL		mg/l	0.1						
Diesel Range Organics (DRO)	BRL		mg/l	0.1						
Surrogate: 1-Chlorooctadecane	*0.0523*		mg/l		*0.0500*		*105*	*40-140*		
LCS (9121445-BS2)										
Prepared: 18-Dec-09 Analyzed: 21-Dec-09										
Fuel Oil #2	8.3		mg/l	0.1	10.0		83	40-140		
Surrogate: 1-Chlorooctadecane	*0.0453*		mg/l		*0.0500*		*91*	*40-140*		

Close File

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
O01	This compound is a common laboratory contaminant.
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.
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.
SGC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
V11	Data confirmed with duplicate analysis.
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.

Interpretation of Total Petroleum Hydrocarbon Report

Petroleum identification is determined by comparing the GC fingerprint obtained from the sample with a library of GC fingerprints obtained from analyses of various petroleum products. Possible match categories are as follows:

Gasoline - includes regular, unleaded, premium, etc.
Fuel Oil #2 - includes home heating oil, #2 fuel oil, and diesel
Fuel Oil #4 - includes #4 fuel oil
Fuel Oil #6 - includes #6 fuel oil and bunker "C" oil
Motor Oil - includes virgin and waste automobile oil
Ligroin - includes mineral spirits, petroleum naphtha, vm&p naphtha
Aviation Fuel - includes kerosene, Jet A and JP-4
Other Oil - includes lubricating and cutting oil, and silicon oil

At times, the unidentified petroleum product is quantified using a calibration that most closely approximates the distribution of compounds in the sample. When this occurs, the result is qualified as *TPH (Calculated as).

Close File

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

Close File

SB 05835

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 72hr
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Britney Barnes

Telephone #: (864) 234-9453

Project Mgr. Steve Webb

Invoice To: RMT, Inc Madi. WI

P.O. No.: 71360.31 RQN:

Project No.: 71360.31

Site Name: MTD

Location: westfield State: Ma

Sampler(s): Bill Medlin

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=

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

List preservative code below: 2 2 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:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOC/~~TPH GRO~~ Method 8260B	TPH DRO	VOC's 8260B
05835-01	mw-13SRR	12/17/09	1010	G	GW	4	1			X	X	
-02	mw-53I	12/17/09	1310	G	GW	3				~~X~~		X
-03	OW-08	12/17/09	1540	G	GW	4	1			X	X	
-04	mw-53D	12/17/09	1650	G	GW	3						X
-05	OW-02	12/17/09	1135	G	GW	4	1			X	X	
-06	mw-32S	12/17/09	1330	G	GW	3						X
-07	mw-32I	12/17/09	1500	G	GW	3						X
-08	mw-46S	12/17/09	1610	G	GW	3						X
-09	DU-09401	12/17/09		G	GW	3						X
-10	TBLK-09408	12/17/09			DI	1				X		X

Relinquished by:	Received by:	Date:	Time:	Temp°C
		12/17/09	1740	2.1

☐ EDD Format
☐ E-mail to

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

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

Close File

Report Date:
04-Jan-10 11:57

☐ Final Report
☐ Re-Issued Report
☑ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

RMT, Inc.
Patewood Plaza One, Suite 100, 30 Patewood Drive
Greenville, SC 29615-3535
Attn: Britney Barnes

Project: MTD-Columbia Manufacturing-Westfield, MA
Project #: 71360.31

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB05918-01	RW-07	Ground Water	18-Dec-09 10:15	18-Dec-09 17:10
SB05918-02	MW-58S	Ground Water	18-Dec-09 12:30	18-Dec-09 17:10
SB05918-03	MW-58I	Ground Water	18-Dec-09 14:00	18-Dec-09 17:10
SB05918-04	MW-43S	Ground Water	18-Dec-09 15:05	18-Dec-09 17:10
SB05918-05	MW-40S	Ground Water	18-Dec-09 10:45	18-Dec-09 17:10
SB05918-06	MW-40I	Ground Water	18-Dec-09 14:35	18-Dec-09 17:10
SB05918-07	OW-09	Ground Water	18-Dec-09 12:00	18-Dec-09 17:10
SB05918-08	MW-41S	Ground Water	18-Dec-09 13:35	18-Dec-09 17:10
SB05918-09	MW-51S	Ground Water	18-Dec-09 15:20	18-Dec-09 17:10
SB05918-10	TBLK-09409	Deionized Water	18-Dec-09 00:00	18-Dec-09 17:10
SB05918-11	DU-09403	Ground Water	18-Dec-09 00:00	18-Dec-09 17:10

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 39 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.

Close File

CASE NARRATIVE:

The samples were received 3.5 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.

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

Blanks:

9121575-BLK1

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

Laboratory Control Samples:

9121575-BS1

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

2,2-Dichloropropane
Carbon tetrachloride
Tert-amyl methyl ether

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

9121575-BSD1

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

2,2-Dichloropropane
Carbon tetrachloride
Tert-amyl methyl ether

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

Close File

SW846 8260B

Spikes:

9121575-MS1 *Source: SB05918-01*

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

Carbon tetrachloride

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

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

1,2-Dibromo-3-chloropropane
1,4-Dioxane
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Bromoform
Dibromochloromethane
Ethyl tert-butyl ether
Tetrahydrofuran
trans-1,3-Dichloropropene
Vinyl chloride

9121575-MSD1 *Source: SB05918-01*

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

Carbon tetrachloride

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

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

1,2-Dibromo-3-chloropropane
1,4-Dioxane
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Bromoform
Dibromochloromethane
Ethyl tert-butyl ether
trans-1,3-Dichloropropene
Vinyl chloride

Close File

SW846 8260B

Samples:

S912524-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

2,2-Dichloropropane (36%)
Carbon tetrachloride (36.4%)

This affected the following samples:

DU-09403
MW-40I
MW-40S
MW-41S
MW-43S
MW-51S
MW-58I
MW-58S
OW-09
RW-07
TBLK-09409

SB05918-01 *RW-07*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05918-02 *MW-58S*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05918-03 *MW-58I*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05918-04 *MW-43S*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05918-05 *MW-40S*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05918-06 *MW-40I*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05918-07 *OW-09*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

Close File

SW846 8260B

Samples:

SB05918-08 *MW-41S*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05918-09 *MW-51S*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05918-10 *TBLK-09409*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

SB05918-11 *DU-09403*

Analyte quantified by quadratic equation type calibration.

Vinyl chloride

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-07 SB05918-01	71360.31	Ground Water	18-Dec-09 10:15	18-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	4.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
RW-07 SB05918-01	71360.31	Ground Water	18-Dec-09 10:15	18-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	2.7		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	9.7		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*97*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*111*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*109*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-58S	71360.31	Ground Water	18-Dec-09 12:30	18-Dec-09
SB05918-02				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	4.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

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

* Reportable Detection Limit BRL = Below Reporting Limit

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-58S SB05918-02	71360.31	Ground Water	18-Dec-09 12:30	18-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*96*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*112*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*110*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	21-Dec-09	21-Dec-09	9121564	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*82*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*99*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	22-Dec-09	23-Dec-09	9121638	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	BRL		mg/l	0.2	1	"	"	"	"	
	Other Oil	BRL		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	BRL		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*109*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-58I	71360.31	Ground Water	18-Dec-09 14:00	18-Dec-09
SB05918-03				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	4.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-58I	71360.31	Ground Water	18-Dec-09 14:00	18-Dec-09
SB05918-03				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	1.4		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	5.0		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*113*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*110*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-43S SB05918-04	71360.31	Ground Water	18-Dec-09 15:05	18-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	4.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-43S SB05918-04	71360.31	Ground Water	18-Dec-09 15:05	18-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*96*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*114*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*109*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-40S SB05918-05	71360.31	Ground Water	18-Dec-09 10:45	18-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	4.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	2.0		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-40S SB05918-05	71360.31	Ground Water	18-Dec-09 10:45	18-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	1.2		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	6.1		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*94*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*115*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*111*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	21-Dec-09	21-Dec-09	9121564	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*89*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*110*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	22-Dec-09	23-Dec-09	9121638	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	BRL		mg/l	0.2	1	"	"	"	"	
	Other Oil	BRL		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	BRL		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*99*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-40I	71360.31	Ground Water	18-Dec-09 14:35	18-Dec-09
SB05918-06				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	4.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-40I	71360.31	Ground Water	18-Dec-09 14:35	18-Dec-09
SB05918-06				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*95*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*115*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*110*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
OW-09 SB05918-07	71360.31	Ground Water	18-Dec-09 12:00	18-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	4.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
OW-09	71360.31	Ground Water	18-Dec-09 12:00	18-Dec-09
SB05918-07				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*96*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*115*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*111*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	21-Dec-09	21-Dec-09	9121564	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*84*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*103*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	22-Dec-09	23-Dec-09	9121638	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	BRL		mg/l	0.2	1	"	"	"	"	
	Other Oil	BRL		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	BRL		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*98*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-41S SB05918-08	71360.31	Ground Water	18-Dec-09 13:35	18-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	1.9		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	1.7		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	4.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	2.2		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	3.6		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	16.8		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	1.1		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	1.6		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	1.6		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-41S SB05918-08	71360.31	Ground Water	18-Dec-09 13:35	18-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	3.0		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	1.3		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	3.7	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*99*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*103*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*114*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*112*		*70-130 %*			"	"	"	"	
Gasoline Range Organics											
Prepared by method VPH - EPA 5030B											
	Gasoline Range Organics	BRL		mg/l	0.4	5	+Mod 8015	21-Dec-09	21-Dec-09	9121564	
Surrogate recoveries:											
615-59-8	*2,5-Dibromotoluene (PID)*	*99*		*70-130 %*			"	"	"	"	
615-59-8	*2,5-Dibromotoluene (FID)*	*120*		*70-130 %*			"	"	"	"	
Extractable Petroleum Hydrocarbons											
Diesel Range Organics											
Prepared by method SW846 3510C											
68476-30-2	Fuel Oil #2	BRL		mg/l	0.2	1	8015BM	22-Dec-09	23-Dec-09	9121638	
68476-31-3	Fuel Oil #4	BRL		mg/l	0.2	1	"	"	"	"	
68553-00-4	Fuel Oil #6	BRL		mg/l	0.2	1	"	"	"	"	
M09800000	Motor Oil	BRL		mg/l	0.2	1	"	"	"	"	
J00100000	Aviation Fuel	BRL		mg/l	0.2	1	"	"	"	"	
	Unidentified	8.3		mg/l	0.2	1	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	1	"	"	"	"	
	Diesel Range Organics (DRO)	8.3		mg/l	0.2	1	"	"	"	"	
Surrogate recoveries:											
3386-33-2	*1-Chlorooctadecane*	*117*		*40-140 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-51S	71360.31	Ground Water	18-Dec-09 15:20	18-Dec-09
SB05918-09				

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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	1.6		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	4.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	65.2		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-51S SB05918-09	71360.31	Ground Water	18-Dec-09 15:20	18-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	9.7		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	9.8	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*104*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*102*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*109*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*105*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK-09409 SB05918-10	71360.31	Deionized Water	18-Dec-09 00:00	18-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	4.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TBLK-09409	71360.31	Deionized Water	18-Dec-09 00:00	18-Dec-09
SB05918-10				

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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	BRL		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*110*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*		*70-130 %*			"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DU-09403 SB05918-11	71360.31	Ground Water	18-Dec-09 00:00	18-Dec-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											
67-64-1	Acetone	BRL		µg/l	10.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
107-13-1	Acrylonitrile	BRL		µg/l	1.0	1	"	"	"	"	
71-43-2	Benzene	BRL		µg/l	1.0	1	"	"	"	"	
108-86-1	Bromobenzene	BRL		µg/l	1.0	1	"	"	"	"	
74-97-5	Bromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-27-4	Bromodichloromethane	BRL		µg/l	1.0	1	"	"	"	"	
75-25-2	Bromoform	BRL		µg/l	1.0	1	"	"	"	"	
74-83-9	Bromomethane	BRL		µg/l	2.0	1	"	"	"	"	
78-93-3	2-Butanone (MEK)	BRL		µg/l	10.0	1	"	"	"	"	
104-51-8	n-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
135-98-8	sec-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
98-06-6	tert-Butylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-15-0	Carbon disulfide	BRL		µg/l	5.0	1	"	"	"	"	
56-23-5	Carbon tetrachloride	BRL		µg/l	1.0	1	"	"	"	"	
108-90-7	Chlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-00-3	Chloroethane	BRL		µg/l	2.0	1	"	"	"	"	
67-66-3	Chloroform	BRL		µg/l	1.0	1	"	"	"	"	
74-87-3	Chloromethane	BRL		µg/l	4.0	1	"	"	"	"	
95-49-8	2-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
106-43-4	4-Chlorotoluene	BRL		µg/l	1.0	1	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/l	2.0	1	"	"	"	"	
124-48-1	Dibromochloromethane	BRL		µg/l	1.0	1	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	1.0	1	"	"	"	"	
74-95-3	Dibromomethane	BRL		µg/l	1.0	1	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/l	2.0	1	"	"	"	"	
75-34-3	1,1-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
75-35-4	1,1-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	BRL		µg/l	1.0	1	"	"	"	"	
78-87-5	1,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
142-28-9	1,3-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
594-20-7	2,2-Dichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
563-58-6	1,1-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/l	1.0	1	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
87-68-3	Hexachlorobutadiene	BRL		µg/l	1.0	1	"	"	"	"	
591-78-6	2-Hexanone (MBK)	BRL		µg/l	10.0	1	"	"	"	"	
98-82-8	Isopropylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
99-87-6	4-Isopropyltoluene	BRL		µg/l	1.0	1	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/l	10.0	1	"	"	"	"	
75-09-2	Methylene chloride	BRL		µg/l	10.0	1	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	
103-65-1	n-Propylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
100-42-5	Styrene	BRL		µg/l	1.0	1	"	"	"	"	

Close File

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
DU-09403 SB05918-11	71360.31	Ground Water	18-Dec-09 00:00	18-Dec-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											
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/l	1.0	1	SW846 8260B	21-Dec-09	22-Dec-09	9121575	
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/l	1.0	1	"	"	"	"	
127-18-4	Tetrachloroethene	1.5		µg/l	1.0	1	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/l	1.0	1	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL		µg/l	1.0	1	"	"	"	"	
79-01-6	Trichloroethene	5.3		µg/l	1.0	1	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/l	1.0	1	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	BRL		µg/l	1.0	1	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	
75-01-4	Vinyl chloride	BRL	CAL1	µg/l	1.0	1	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*97*		*70-130 %*			"	"	"	"	
2037-26-5	*Toluene-d8*	*101*		*70-130 %*			"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*113*		*70-130 %*			"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*111*		*70-130 %*			"	"	"	"	

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121564 - VPH - EPA 5030B										
Blank (9121564-BLK1)										
Prepared & Analyzed: 21-Dec-09										
Gasoline Range Organics	BRL		mg/l	0.4						
Surrogate: 2,5-Dibromotoluene (PID)	*44.2*		µg/l		*50.0*		*88*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*51.9*		µg/l		*50.0*		*104*	*70-130*		
LCS (9121564-BS1)										
Prepared & Analyzed: 21-Dec-09										
Gasoline Range Organics	288		µg/l		280		103	70-130		
Surrogate: 2,5-Dibromotoluene (PID)	*50.3*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*59.6*		µg/l		*50.0*		*119*	*70-130*		
LCS Dup (9121564-BSD1)										
Prepared & Analyzed: 21-Dec-09										
Gasoline Range Organics	284		µg/l		280		102	70-130	1	25
Surrogate: 2,5-Dibromotoluene (PID)	*45.2*		µg/l		*50.0*		*90*	*70-130*		
Surrogate: 2,5-Dibromotoluene (FID)	*57.5*		µg/l		*50.0*		*115*	*70-130*		
Batch 9121575 - SW846 5030 Water MS										
Blank (9121575-BLK1)										
Prepared & Analyzed: 21-Dec-09										
Acetone	BRL		µg/l	10.0						
Acrylonitrile	BRL		µg/l	1.0						
Benzene	BRL		µg/l	1.0						
Bromobenzene	BRL		µg/l	1.0						
Bromochloromethane	BRL		µg/l	1.0						
Bromodichloromethane	BRL		µg/l	1.0						
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	4.0						
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	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/l	1.0						
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						

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121575 - SW846 5030 Water MS										
Blank (9121575-BLK1)										
Prepared & Analyzed: 21-Dec-09										
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	1.0						
trans-1,3-Dichloropropene	BRL		µg/l	1.0						
Ethylbenzene	BRL		µg/l	1.0						
Hexachlorobutadiene	BRL		µg/l	1.0						
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	10.0						
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	1.0						
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	CAL1	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						
trans-1,4-Dichloro-2-butene	BRL		µg/l	5.0						
Ethanol	BRL		µg/l	500						
1,4-Dioxane	BRL		µg/l	20.0						
Surrogate: 4-Bromofluorobenzene	*48.5*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*50.1*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*55.3*		µg/l		*50.0*		*111*	*70-130*		
Surrogate: Dibromofluoromethane	*53.7*		µg/l		*50.0*		*107*	*70-130*		
LCS (9121575-BS1)										
Prepared & Analyzed: 21-Dec-09										
Acetone	21.2		µg/l		20.0		106	31.7-144		

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121575 - SW846 5030 Water MS										
LCS (9121575-BS1)										
Prepared & Analyzed: 21-Dec-09										
Acrylonitrile	22.6		µg/l		20.0		113	70-130		
Benzene	20.0		µg/l		20.0		100	70-130		
Bromobenzene	21.8		µg/l		20.0		109	70-130		
Bromochloromethane	21.5		µg/l		20.0		107	70-130		
Bromodichloromethane	22.0		µg/l		20.0		110	70-130		
Bromoform	16.4		µg/l		20.0		82	70-130		
Bromomethane	22.6		µg/l		20.0		113	43-158		
2-Butanone (MEK)	20.3		µg/l		20.0		102	54.5-137		
n-Butylbenzene	20.0		µg/l		20.0		100	70-130		
sec-Butylbenzene	21.5		µg/l		20.0		107	70-130		
tert-Butylbenzene	20.2		µg/l		20.0		101	70-130		
Carbon disulfide	19.3		µg/l		20.0		96	70-130		
Carbon tetrachloride	13.2	QC2	µg/l		20.0		66	70-130		
Chlorobenzene	22.4		µg/l		20.0		112	70-130		
Chloroethane	20.7		µg/l		20.0		103	60.1-131		
Chloroform	22.9		µg/l		20.0		114	70-130		
Chloromethane	20.1		µg/l		20.0		100	70-130		
2-Chlorotoluene	21.9		µg/l		20.0		110	70-130		
4-Chlorotoluene	22.2		µg/l		20.0		111	70-130		
1,2-Dibromo-3-chloropropane	15.4		µg/l		20.0		77	70-130		
Dibromochloromethane	16.7		µg/l		20.0		84	66.2-145		
1,2-Dibromoethane (EDB)	21.7		µg/l		20.0		109	70-130		
Dibromomethane	22.2		µg/l		20.0		111	70-130		
1,2-Dichlorobenzene	21.9		µg/l		20.0		109	70-130		
1,3-Dichlorobenzene	23.2		µg/l		20.0		116	70-130		
1,4-Dichlorobenzene	21.8		µg/l		20.0		109	70-130		
Dichlorodifluoromethane (Freon12)	18.2		µg/l		20.0		91	46.9-168		
1,1-Dichloroethane	22.4		µg/l		20.0		112	70-130		
1,2-Dichloroethane	22.8		µg/l		20.0		114	70-130		
1,1-Dichloroethene	20.7		µg/l		20.0		103	70-130		
cis-1,2-Dichloroethene	23.8		µg/l		20.0		119	70-130		
trans-1,2-Dichloroethene	20.4		µg/l		20.0		102	70-130		
1,2-Dichloropropane	20.9		µg/l		20.0		104	70-130		
1,3-Dichloropropane	22.4		µg/l		20.0		112	70-130		
2,2-Dichloropropane	13.8	QC2	µg/l		20.0		69	70-130		
1,1-Dichloropropene	18.8		µg/l		20.0		94	70-130		
cis-1,3-Dichloropropene	18.6		µg/l		20.0		93	70-130		
trans-1,3-Dichloropropene	17.4		µg/l		20.0		87	70-130		
Ethylbenzene	20.5		µg/l		20.0		103	70-130		
Hexachlorobutadiene	18.1		µg/l		20.0		90	70-135		
2-Hexanone (MBK)	17.9		µg/l		20.0		90	70-130		
Isopropylbenzene	17.8		µg/l		20.0		89	70-130		
4-Isopropyltoluene	20.5		µg/l		20.0		102	70-130		
Methyl tert-butyl ether	20.8		µg/l		20.0		104	70-130		
4-Methyl-2-pentanone (MIBK)	16.8		µg/l		20.0		84	57.6-130		
Methylene chloride	21.7		µg/l		20.0		108	70-130		
Naphthalene	18.1		µg/l		20.0		91	70-130		
n-Propylbenzene	21.2		µg/l		20.0		106	70-130		
Styrene	21.1		µg/l		20.0		106	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121575 - SW846 5030 Water MS										
LCS (9121575-BS1)										
Prepared & Analyzed: 21-Dec-09										
1,1,1,2-Tetrachloroethane	19.2		µg/l		20.0		96	70-130		
1,1,2,2-Tetrachloroethane	21.9		µg/l		20.0		109	70-130		
Tetrachloroethene	20.7		µg/l		20.0		104	70-130		
Toluene	20.9		µg/l		20.0		105	70-130		
1,2,3-Trichlorobenzene	22.5		µg/l		20.0		113	70-130		
1,2,4-Trichlorobenzene	18.0		µg/l		20.0		90	70-130		
1,1,1-Trichloroethane	17.9		µg/l		20.0		90	70-130		
1,3,5-Trichlorobenzene	20.5		µg/l		20.0		102	70-130		
1,1,2-Trichloroethane	22.7		µg/l		20.0		113	70-130		
Trichloroethene	22.0		µg/l		20.0		110	70-130		
Trichlorofluoromethane (Freon 11)	23.9		µg/l		20.0		119	64.9-147		
1,2,3-Trichloropropane	24.2		µg/l		20.0		121	70-130		
1,2,4-Trimethylbenzene	21.3		µg/l		20.0		106	70-130		
1,3,5-Trimethylbenzene	20.7		µg/l		20.0		103	70-130		
Vinyl chloride	25.7	CAL1	µg/l		20.0		129	70-130		
m,p-Xylene	42.4		µg/l		40.0		106	70-130		
o-Xylene	21.9		µg/l		20.0		110	70-130		
Tetrahydrofuran	17.9		µg/l		20.0		89	70-130		
Ethyl ether	20.6		µg/l		20.0		103	70-130		
Tert-amyl methyl ether	26.7	QC2	µg/l		20.0		134	70-130		
Ethyl tert-butyl ether	17.6		µg/l		20.0		88	70-130		
Di-isopropyl ether	21.1		µg/l		20.0		105	70-130		
Tert-Butanol / butyl alcohol	194		µg/l		200		97	70-130		
trans-1,4-Dichloro-2-butene	18.5		µg/l		20.0		93	70-130		
Ethanol	435		µg/l		400		109	70-130		
1,4-Dioxane	175		µg/l		200		87	53.8-137		
Surrogate: 4-Bromofluorobenzene	*52.1*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*51.4*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*54.6*		µg/l		*50.0*		*109*	*70-130*		
Surrogate: Dibromofluoromethane	*53.4*		µg/l		*50.0*		*107*	*70-130*		
LCS Dup (9121575-BSD1)										
Prepared & Analyzed: 21-Dec-09										
Acetone	21.8		µg/l		20.0		109	31.7-144	3	50
Acrylonitrile	22.6		µg/l		20.0		113	70-130	0.04	25
Benzene	20.0		µg/l		20.0		100	70-130	0.2	25
Bromobenzene	21.3		µg/l		20.0		106	70-130	2	25
Bromochloromethane	21.6		µg/l		20.0		108	70-130	0.6	25
Bromodichloromethane	22.9		µg/l		20.0		114	70-130	4	25
Bromoform	16.4		µg/l		20.0		82	70-130	0	25
Bromomethane	21.6		µg/l		20.0		108	43-158	4	50
2-Butanone (MEK)	20.1		µg/l		20.0		100	54.5-137	1	50
n-Butylbenzene	20.1		µg/l		20.0		100	70-130	0.7	25
sec-Butylbenzene	20.6		µg/l		20.0		103	70-130	4	25
tert-Butylbenzene	20.4		µg/l		20.0		102	70-130	1	25
Carbon disulfide	18.8		µg/l		20.0		94	70-130	2	25
Carbon tetrachloride	13.8	QC2	µg/l		20.0		69	70-130	5	25
Chlorobenzene	22.0		µg/l		20.0		110	70-130	2	25
Chloroethane	20.9		µg/l		20.0		105	60.1-131	1	50
Chloroform	22.4		µg/l		20.0		112	70-130	2	25
Chloromethane	19.8		µg/l		20.0		99	70-130	1	25

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121575 - SW846 5030 Water MS										
LCS Dup (9121575-BSD1)										
Prepared & Analyzed: 21-Dec-09										
2-Chlorotoluene	22.4		µg/l		20.0		112	70-130	2	25
4-Chlorotoluene	22.2		µg/l		20.0		111	70-130	0.09	25
1,2-Dibromo-3-chloropropane	15.9		µg/l		20.0		80	70-130	3	25
Dibromochloromethane	17.2		µg/l		20.0		86	66.2-145	3	50
1,2-Dibromoethane (EDB)	21.9		µg/l		20.0		110	70-130	0.9	25
Dibromomethane	22.3		µg/l		20.0		112	70-130	0.4	25
1,2-Dichlorobenzene	21.5		µg/l		20.0		108	70-130	2	25
1,3-Dichlorobenzene	22.8		µg/l		20.0		114	70-130	2	25
1,4-Dichlorobenzene	21.9		µg/l		20.0		110	70-130	0.6	25
Dichlorodifluoromethane (Freon12)	17.3		µg/l		20.0		86	46.9-168	5	50
1,1-Dichloroethane	21.8		µg/l		20.0		109	70-130	2	25
1,2-Dichloroethane	23.1		µg/l		20.0		115	70-130	1	25
1,1-Dichloroethene	20.2		µg/l		20.0		101	70-130	2	25
cis-1,2-Dichloroethene	23.8		µg/l		20.0		119	70-130	0.1	25
trans-1,2-Dichloroethene	20.0		µg/l		20.0		100	70-130	2	25
1,2-Dichloropropane	21.1		µg/l		20.0		106	70-130	1	25
1,3-Dichloropropane	22.3		µg/l		20.0		112	70-130	0.4	25
2,2-Dichloropropane	13.5	QC2	µg/l		20.0		67	70-130	3	25
1,1-Dichloropropene	18.3		µg/l		20.0		92	70-130	3	25
cis-1,3-Dichloropropene	18.2		µg/l		20.0		91	70-130	2	25
trans-1,3-Dichloropropene	17.7		µg/l		20.0		89	70-130	2	25
Ethylbenzene	20.2		µg/l		20.0		101	70-130	2	25
Hexachlorobutadiene	17.1		µg/l		20.0		85	70-135	6	50
2-Hexanone (MBK)	18.0		µg/l		20.0		90	70-130	0.4	25
Isopropylbenzene	17.6		µg/l		20.0		88	70-130	1	25
4-Isopropyltoluene	20.3		µg/l		20.0		102	70-130	0.8	25
Methyl tert-butyl ether	20.9		µg/l		20.0		105	70-130	0.6	25
4-Methyl-2-pentanone (MIBK)	17.4		µg/l		20.0		87	57.6-130	3	50
Methylene chloride	21.4		µg/l		20.0		107	70-130	1	25
Naphthalene	18.2		µg/l		20.0		91	70-130	0.2	25
n-Propylbenzene	20.1		µg/l		20.0		100	70-130	5	25
Styrene	20.6		µg/l		20.0		103	70-130	3	25
1,1,1,2-Tetrachloroethane	19.3		µg/l		20.0		97	70-130	0.7	25
1,1,2,2-Tetrachloroethane	21.5		µg/l		20.0		108	70-130	2	25
Tetrachloroethene	21.3		µg/l		20.0		106	70-130	3	25
Toluene	20.7		µg/l		20.0		103	70-130	1	25
1,2,3-Trichlorobenzene	23.0		µg/l		20.0		115	70-130	2	25
1,2,4-Trichlorobenzene	18.0		µg/l		20.0		90	70-130	0.06	25
1,3,5-Trichlorobenzene	20.2		µg/l		20.0		101	70-130	1	25
1,1,1-Trichloroethane	18.0		µg/l		20.0		90	70-130	0.4	25
1,1,2-Trichloroethane	22.8		µg/l		20.0		114	70-130	0.4	25
Trichloroethene	21.8		µg/l		20.0		109	70-130	1	25
Trichlorofluoromethane (Freon 11)	23.9		µg/l		20.0		119	64.9-147	0.1	50
1,2,3-Trichloropropane	24.3		µg/l		20.0		121	70-130	0.2	25
1,2,4-Trimethylbenzene	21.3		µg/l		20.0		106	70-130	0.05	25
1,3,5-Trimethylbenzene	20.5		µg/l		20.0		102	70-130	1	25
Vinyl chloride	24.4	CAL1	µg/l		20.0		122	70-130	5	25
m,p-Xylene	42.1		µg/l		40.0		105	70-130	0.8	25
o-Xylene	21.8		µg/l		20.0		109	70-130	0.6	25

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121575 - SW846 5030 Water MS										
LCS Dup (9121575-BSD1)										
Prepared & Analyzed: 21-Dec-09										
Tetrahydrofuran	18.3		µg/l		20.0		91	70-130	2	25
Ethyl ether	20.4		µg/l		20.0		102	70-130	0.9	50
Tert-amyl methyl ether	26.3	QC2	µg/l		20.0		131	70-130	2	25
Ethyl tert-butyl ether	17.7		µg/l		20.0		89	70-130	0.5	25
Di-isopropyl ether	20.9		µg/l		20.0		105	70-130	0.8	25
Tert-Butanol / butyl alcohol	201		µg/l		200		100	70-130	3	25
trans-1,4-Dichloro-2-butene	18.6		µg/l		20.0		93	70-130	0.4	25
Ethanol	455		µg/l		400		114	70-130	4	30
1,4-Dioxane	189		µg/l		200		95	53.8-137	8	25
Surrogate: 4-Bromofluorobenzene	*50.8*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*50.6*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*53.7*		µg/l		*50.0*		*107*	*70-130*		
Surrogate: Dibromofluoromethane	*53.1*		µg/l		*50.0*		*106*	*70-130*		
Matrix Spike (9121575-MS1)	**Source: SB05918-01**									
Prepared & Analyzed: 21-Dec-09										
Acetone	14.4		µg/l		20.0	BRL	72	70-130		
Acrylonitrile	16.2		µg/l		20.0	BRL	81	70-130		
Benzene	15.7		µg/l		20.0	BRL	79	70-130		
Bromobenzene	17.8		µg/l		20.0	BRL	89	70-130		
Bromochloromethane	15.9		µg/l		20.0	BRL	80	70-130		
Bromodichloromethane	17.5		µg/l		20.0	BRL	87	70-130		
Bromoform	12.8	QM7	µg/l		20.0	BRL	64	70-130		
Bromomethane	15.5		µg/l		20.0	0.7	74	70-130		
2-Butanone (MEK)	16.8		µg/l		20.0	BRL	84	70-130		
n-Butylbenzene	22.7		µg/l		20.0	BRL	113	70-130		
sec-Butylbenzene	22.4		µg/l		20.0	BRL	112	70-130		
tert-Butylbenzene	19.8		µg/l		20.0	BRL	99	70-130		
Carbon disulfide	16.3		µg/l		20.0	BRL	82	70-130		
Carbon tetrachloride	13.8	QC2	µg/l		20.0	BRL	69	70-130		
Chlorobenzene	18.3		µg/l		20.0	BRL	91	70-130		
Chloroethane	16.4		µg/l		20.0	BRL	82	70-130		
Chloroform	16.4		µg/l		20.0	BRL	82	70-130		
Chloromethane	14.4		µg/l		20.0	BRL	72	70-130		
2-Chlorotoluene	19.6		µg/l		20.0	BRL	98	70-130		
4-Chlorotoluene	19.4		µg/l		20.0	BRL	97	70-130		
1,2-Dibromo-3-chloropropane	12.7	QM7	µg/l		20.0	BRL	64	70-130		
Dibromochloromethane	12.8	QM7	µg/l		20.0	BRL	64	70-130		
1,2-Dibromoethane (EDB)	16.2		µg/l		20.0	BRL	81	70-130		
Dibromomethane	16.6		µg/l		20.0	BRL	83	70-130		
1,2-Dichlorobenzene	19.2		µg/l		20.0	BRL	96	70-130		
1,3-Dichlorobenzene	20.8		µg/l		20.0	BRL	104	70-130		
1,4-Dichlorobenzene	19.5		µg/l		20.0	BRL	98	70-130		
Dichlorodifluoromethane (Freon12)	16.5		µg/l		20.0	BRL	82	70-130		
1,1-Dichloroethane	17.0		µg/l		20.0	BRL	85	70-130		
1,2-Dichloroethane	16.2		µg/l		20.0	BRL	81	70-130		
1,1-Dichloroethene	18.4		µg/l		20.0	BRL	92	70-130		
cis-1,2-Dichloroethene	21.7		µg/l		20.0	BRL	109	70-130		
trans-1,2-Dichloroethene	17.1		µg/l		20.0	BRL	85	70-130		
1,2-Dichloropropane	15.7		µg/l		20.0	BRL	79	70-130		
1,3-Dichloropropane	16.3		µg/l		20.0	BRL	81	70-130		

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121575 - SW846 5030 Water MS										
Matrix Spike (9121575-MS1)	**Source: SB05918-01**									
Prepared & Analyzed: 21-Dec-09										
2,2-Dichloropropane	14.7		µg/l		20.0	BRL	74	70-130		
1,1-Dichloropropene	17.9		µg/l		20.0	BRL	90	70-130		
cis-1,3-Dichloropropene	14.0		µg/l		20.0	BRL	70	70-130		
trans-1,3-Dichloropropene	13.5	QM7	µg/l		20.0	BRL	68	70-130		
Ethylbenzene	17.6		µg/l		20.0	BRL	88	70-130		
Hexachlorobutadiene	22.0		µg/l		20.0	BRL	110	70-130		
2-Hexanone (MBK)	12.5	QM7	µg/l		20.0	BRL	62	70-130		
Isopropylbenzene	16.5		µg/l		20.0	BRL	83	70-130		
4-Isopropyltoluene	21.3		µg/l		20.0	BRL	106	70-130		
Methyl tert-butyl ether	15.5		µg/l		20.0	BRL	78	70-130		
4-Methyl-2-pentanone (MIBK)	12.0	QM7	µg/l		20.0	BRL	60	70-130		
Methylene chloride	16.5		µg/l		20.0	BRL	82	70-130		
Naphthalene	15.3		µg/l		20.0	BRL	77	70-130		
n-Propylbenzene	19.9		µg/l		20.0	BRL	99	70-130		
Styrene	16.5		µg/l		20.0	BRL	83	70-130		
1,1,1,2-Tetrachloroethane	14.9		µg/l		20.0	BRL	75	70-130		
1,1,2,2-Tetrachloroethane	17.0		µg/l		20.0	BRL	85	70-130		
Tetrachloroethene	23.4		µg/l		20.0	2.7	104	70-130		
Toluene	16.9		µg/l		20.0	BRL	84	70-130		
1,2,3-Trichlorobenzene	21.7		µg/l		20.0	BRL	109	70-130		
1,2,4-Trichlorobenzene	17.9		µg/l		20.0	BRL	89	70-130		
1,1,1-Trichloroethane	16.6		µg/l		20.0	BRL	83	70-130		
1,3,5-Trichlorobenzene	20.4		µg/l		20.0	BRL	102	70-130		
1,1,2-Trichloroethane	17.1		µg/l		20.0	BRL	86	70-130		
Trichloroethene	27.3		µg/l		20.0	9.7	88	70-130		
Trichlorofluoromethane (Freon 11)	24.3		µg/l		20.0	BRL	122	70-130		
1,2,3-Trichloropropane	18.2		µg/l		20.0	BRL	91	70-130		
1,2,4-Trimethylbenzene	19.1		µg/l		20.0	BRL	95	70-130		
1,3,5-Trimethylbenzene	18.8		µg/l		20.0	BRL	94	70-130		
Vinyl chloride	8.7	CAL1, QM7	µg/l		20.0	BRL	44	70-130		
m,p-Xylene	36.8		µg/l		40.0	BRL	92	70-130		
o-Xylene	18.3		µg/l		20.0	BRL	92	70-130		
Tetrahydrofuran	13.0	QM7	µg/l		20.0	BRL	65	70-130		
Ethyl ether	14.8		µg/l		20.0	BRL	74	70-130		
Tert-amyl methyl ether	19.1		µg/l		20.0	BRL	96	70-130		
Ethyl tert-butyl ether	13.0	QM7	µg/l		20.0	BRL	65	70-130		
Di-isopropyl ether	18.2		µg/l		20.0	BRL	91	70-130		
Tert-Butanol / butyl alcohol	140		µg/l		200	0.7	70	70-130		
trans-1,4-Dichloro-2-butene	14.8		µg/l		20.0	BRL	74	70-130		
Ethanol	331		µg/l		400	BRL	83	70-130		
1,4-Dioxane	125	QM7	µg/l		200	BRL	63	70-130		
Surrogate: 4-Bromofluorobenzene	*50.6*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*50.5*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*53.9*		µg/l		*50.0*		*108*	*70-130*		
Surrogate: Dibromofluoromethane	*53.3*		µg/l		*50.0*		*107*	*70-130*		
Matrix Spike Dup (9121575-MSD1)	**Source: SB05918-01**									
Prepared & Analyzed: 21-Dec-09										
Acetone	15.4		µg/l		20.0	BRL	77	70-130	7	30
Acrylonitrile	16.8		µg/l		20.0	BRL	84	70-130	4	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121575 - SW846 5030 Water MS										
Matrix Spike Dup (9121575-MSD1)	**Source: SB05918-01**									
Prepared & Analyzed: 21-Dec-09										
Benzene	15.8		µg/l		20.0	BRL	79	70-130	0.7	30
Bromobenzene	17.6		µg/l		20.0	BRL	88	70-130	0.9	30
Bromochloromethane	16.2		µg/l		20.0	BRL	81	70-130	2	30
Bromodichloromethane	17.2		µg/l		20.0	BRL	86	70-130	2	30
Bromoform	13.0	QM7	µg/l		20.0	BRL	65	70-130	0.9	30
Bromomethane	16.3		µg/l		20.0	0.7	78	70-130	5	30
2-Butanone (MEK)	14.7		µg/l		20.0	BRL	74	70-130	13	30
n-Butylbenzene	22.4		µg/l		20.0	BRL	112	70-130	1	30
sec-Butylbenzene	22.3		µg/l		20.0	BRL	111	70-130	0.3	30
tert-Butylbenzene	20.0		µg/l		20.0	BRL	100	70-130	1	30
Carbon disulfide	16.2		µg/l		20.0	BRL	81	70-130	1	30
Carbon tetrachloride	13.3	QC2	µg/l		20.0	BRL	67	70-130	3	30
Chlorobenzene	18.1		µg/l		20.0	BRL	90	70-130	1	30
Chloroethane	16.3		µg/l		20.0	BRL	81	70-130	0.6	30
Chloroform	16.4		µg/l		20.0	BRL	82	70-130	0.5	30
Chloromethane	14.4		µg/l		20.0	BRL	72	70-130	0.6	30
2-Chlorotoluene	18.9		µg/l		20.0	BRL	94	70-130	4	30
4-Chlorotoluene	19.3		µg/l		20.0	BRL	97	70-130	0.2	30
1,2-Dibromo-3-chloropropane	12.7	QM7	µg/l		20.0	BRL	63	70-130	0.3	30
Dibromochloromethane	13.2	QM7	µg/l		20.0	BRL	66	70-130	3	30
1,2-Dibromoethane (EDB)	16.6		µg/l		20.0	BRL	83	70-130	2	30
Dibromomethane	16.6		µg/l		20.0	BRL	83	70-130	0.2	30
1,2-Dichlorobenzene	18.3		µg/l		20.0	BRL	92	70-130	5	30
1,3-Dichlorobenzene	20.5		µg/l		20.0	BRL	103	70-130	1	30
1,4-Dichlorobenzene	19.3		µg/l		20.0	BRL	96	70-130	1	30
Dichlorodifluoromethane (Freon12)	16.5		µg/l		20.0	BRL	82	70-130	0.06	30
1,1-Dichloroethane	17.2		µg/l		20.0	BRL	86	70-130	0.9	30
1,2-Dichloroethane	16.4		µg/l		20.0	BRL	82	70-130	1	30
1,1-Dichloroethene	18.3		µg/l		20.0	BRL	92	70-130	0.3	30
cis-1,2-Dichloroethene	21.6		µg/l		20.0	BRL	108	70-130	0.6	30
trans-1,2-Dichloroethene	16.9		µg/l		20.0	BRL	84	70-130	1	30
1,2-Dichloropropane	15.7		µg/l		20.0	BRL	79	70-130	0	30
1,3-Dichloropropane	16.5		µg/l		20.0	BRL	82	70-130	1	30
2,2-Dichloropropane	15.0		µg/l		20.0	BRL	75	70-130	2	30
1,1-Dichloropropene	17.7		µg/l		20.0	BRL	89	70-130	1	30
cis-1,3-Dichloropropene	14.2		µg/l		20.0	BRL	71	70-130	2	30
trans-1,3-Dichloropropene	13.6	QM7	µg/l		20.0	BRL	68	70-130	0.1	30
Ethylbenzene	17.5		µg/l		20.0	BRL	88	70-130	0.5	30
Hexachlorobutadiene	21.7		µg/l		20.0	BRL	108	70-130	1	30
2-Hexanone (MBK)	13.5	QM7	µg/l		20.0	BRL	67	70-130	8	30
Isopropylbenzene	16.4		µg/l		20.0	BRL	82	70-130	0.7	30
4-Isopropyltoluene	20.8		µg/l		20.0	BRL	104	70-130	2	30
Methyl tert-butyl ether	15.6		µg/l		20.0	BRL	78	70-130	0.7	30
4-Methyl-2-pentanone (MIBK)	13.6	QM7	µg/l		20.0	BRL	68	70-130	13	30
Methylene chloride	16.5		µg/l		20.0	BRL	82	70-130	0	30
Naphthalene	15.7		µg/l		20.0	BRL	79	70-130	2	30
n-Propylbenzene	20.4		µg/l		20.0	BRL	102	70-130	3	30
Styrene	16.7		µg/l		20.0	BRL	84	70-130	1	30
1,1,1,2-Tetrachloroethane	15.1		µg/l		20.0	BRL	75	70-130	0.9	30

Close File

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121575 - SW846 5030 Water MS										
Matrix Spike Dup (9121575-MSD1)	**Source: SB05918-01**									
Prepared & Analyzed: 21-Dec-09										
1,1,2,2-Tetrachloroethane	17.1		µg/l		20.0	BRL	85	70-130	0.8	30
Tetrachloroethene	22.7		µg/l		20.0	2.7	100	70-130	4	30
Toluene	16.7		µg/l		20.0	BRL	83	70-130	1	30
1,2,3-Trichlorobenzene	21.4		µg/l		20.0	BRL	107	70-130	2	30
1,2,4-Trichlorobenzene	17.9		µg/l		20.0	BRL	89	70-130	0	30
1,1,1-Trichloroethane	16.2		µg/l		20.0	BRL	81	70-130	2	30
1,3,5-Trichlorobenzene	20.1		µg/l		20.0	BRL	100	70-130	1	30
1,1,2-Trichloroethane	17.0		µg/l		20.0	BRL	85	70-130	0.4	30
Trichloroethene	26.7		µg/l		20.0	9.7	85	70-130	3	30
Trichlorofluoromethane (Freon 11)	23.9		µg/l		20.0	BRL	120	70-130	2	30
1,2,3-Trichloropropane	18.7		µg/l		20.0	BRL	94	70-130	3	30
1,2,4-Trimethylbenzene	18.9		µg/l		20.0	BRL	95	70-130	0.6	30
1,3,5-Trimethylbenzene	19.2		µg/l		20.0	BRL	96	70-130	2	30
Vinyl chloride	11.2	CAL1, QM7	µg/l		20.0	BRL	56	70-130	25	30
m,p-Xylene	36.7		µg/l		40.0	BRL	92	70-130	0.4	30
o-Xylene	18.1		µg/l		20.0	BRL	90	70-130	1	30
Tetrahydrofuran	13.9		µg/l		20.0	BRL	70	70-130	7	30
Ethyl ether	14.8		µg/l		20.0	BRL	74	70-130	0.07	30
Tert-amyl methyl ether	19.6		µg/l		20.0	BRL	98	70-130	2	30
Ethyl tert-butyl ether	13.2	QM7	µg/l		20.0	BRL	66	70-130	1	30
Di-isopropyl ether	17.1		µg/l		20.0	BRL	85	70-130	7	30
Tert-Butanol / butyl alcohol	148		µg/l		200	0.7	74	70-130	6	30
trans-1,4-Dichloro-2-butene	15.1		µg/l		20.0	BRL	76	70-130	2	30
Ethanol	318		µg/l		400	BRL	80	70-130	4	30
1,4-Dioxane	117	QM7	µg/l		200	BRL	58	70-130	7	30
Surrogate: 4-Bromofluorobenzene	*50.5*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*50.8*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*54.1*		µg/l		*50.0*		*108*	*70-130*		
Surrogate: Dibromofluoromethane	*53.0*		µg/l		*50.0*		*106*	*70-130*		

Close File

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 9121638 - SW846 3510C										
Blank (9121638-BLK1)										
Prepared: 22-Dec-09 Analyzed: 23-Dec-09										
Fuel Oil #2	BRL		mg/l	0.1						
Fuel Oil #4	BRL		mg/l	0.1						
Fuel Oil #6	BRL		mg/l	0.1						
Motor Oil	BRL		mg/l	0.1						
Aviation Fuel	BRL		mg/l	0.1						
Unidentified	BRL		mg/l	0.1						
Other Oil	BRL		mg/l	0.1						
Diesel Range Organics (DRO)	BRL		mg/l	0.1						
Surrogate: 1-Chlorooctadecane	*0.0455*		mg/l		*0.0500*		*91*	*40-140*		
LCS (9121638-BS2)										
Prepared: 22-Dec-09 Analyzed: 23-Dec-09										
Fuel Oil #2	7.6		mg/l	0.1	10.0		76	40-140		
Surrogate: 1-Chlorooctadecane	*0.0448*		mg/l		*0.0500*		*90*	*40-140*		

Close File

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.
QM7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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.

Interpretation of Total Petroleum Hydrocarbon Report

Petroleum identification is determined by comparing the GC fingerprint obtained from the sample with a library of GC fingerprints obtained from analyses of various petroleum products. Possible match categories are as follows:

Gasoline - includes regular, unleaded, premium, etc.
Fuel Oil #2 - includes home heating oil, #2 fuel oil, and diesel
Fuel Oil #4 - includes #4 fuel oil
Fuel Oil #6 - includes #6 fuel oil and bunker "C" oil
Motor Oil - includes virgin and waste automobile oil
Ligroin - includes mineral spirits, petroleum naphtha, vm&p naphtha
Aviation Fuel - includes kerosene, Jet A and JP-4
Other Oil - includes lubricating and cutting oil, and silicon oil

At times, the unidentified petroleum product is quantified using a calibration that most closely approximates the distribution of compounds in the sample. When this occurs, the result is qualified as *TPH (Calculated as).

Close File

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

SB05918

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 2

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: Britney Barnes

Telephone #: (864) 234-9453

Project Mgr. Steve Weld

Invoice To: RMT, Inc Madi. WI

P.O. No.: 71360.31 RQN: _____

Project No.: 71360.31

Site Name: MTD

Location: westfield State: Ma

Sampler(s): Bill Medlin

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= _____

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

List preservative code below: 2 2 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: _____

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOC/TPH GRO Method 8260B	TPH DRO	VOC's 8260B
05918-01	RW-07	12/18/09	1015	G	GW	3						X
-02	MW-58S	12/18/09	1230	G	GW	4	1			X	X	
-03	MW-58I	12/18/09	1400	G	GW	3						X
-04	MW-43S	12/18/09	1505	G	GW	3						X
-05	MW-40S	12/18/09	1045	G	GW	4	1			X	X	
-06	MW-40I	12/18/09	1435	G	GW	3						X
-07	OW-09	12/18/09	1200	G	GW	4	1			X	X	
-08	MW-41S	12/18/09	1335	G	GW	4	1			X	X	
-09	MW-51S	12/18/09	1520	G	GW	3						X
-10	TBLK-09409	12/18/09	—	—	DI	1						X

Relinquished by:	Received by:	Date:	Time:	Temp°C
[signature]	[signature]	12/18/09	17:10	3.5

☐ EDD Format _____
☐ E-mail to _____

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

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

Close File

05918

SPECTRUM ANALYTICAL, INC.
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CHAIN OF CUSTODY RECORD

Page 2 of 2

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: Britney Barnes

Telephone #: (864) 234-9453
Project Mgr. Steve Webb

Invoice To: RMT Madison Wi

P.O. No.: 71360.31 RQN: _____

Project No.: 71360.31
Site Name: MTD
Location: Westfield State: Ma
Sampler(s): CK/WKA/WEM

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	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOC's 8260B							
05918-11	DU-09403	12/18/09	—	G	GW	3				X							

Containers: Analyses:

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: _____

Relinquished by:	Received by:	Date:	Time:	Temp°C
		12/18/09	17:10	3.5

☐ EDD Format _____
☐ E-mail to _____

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