

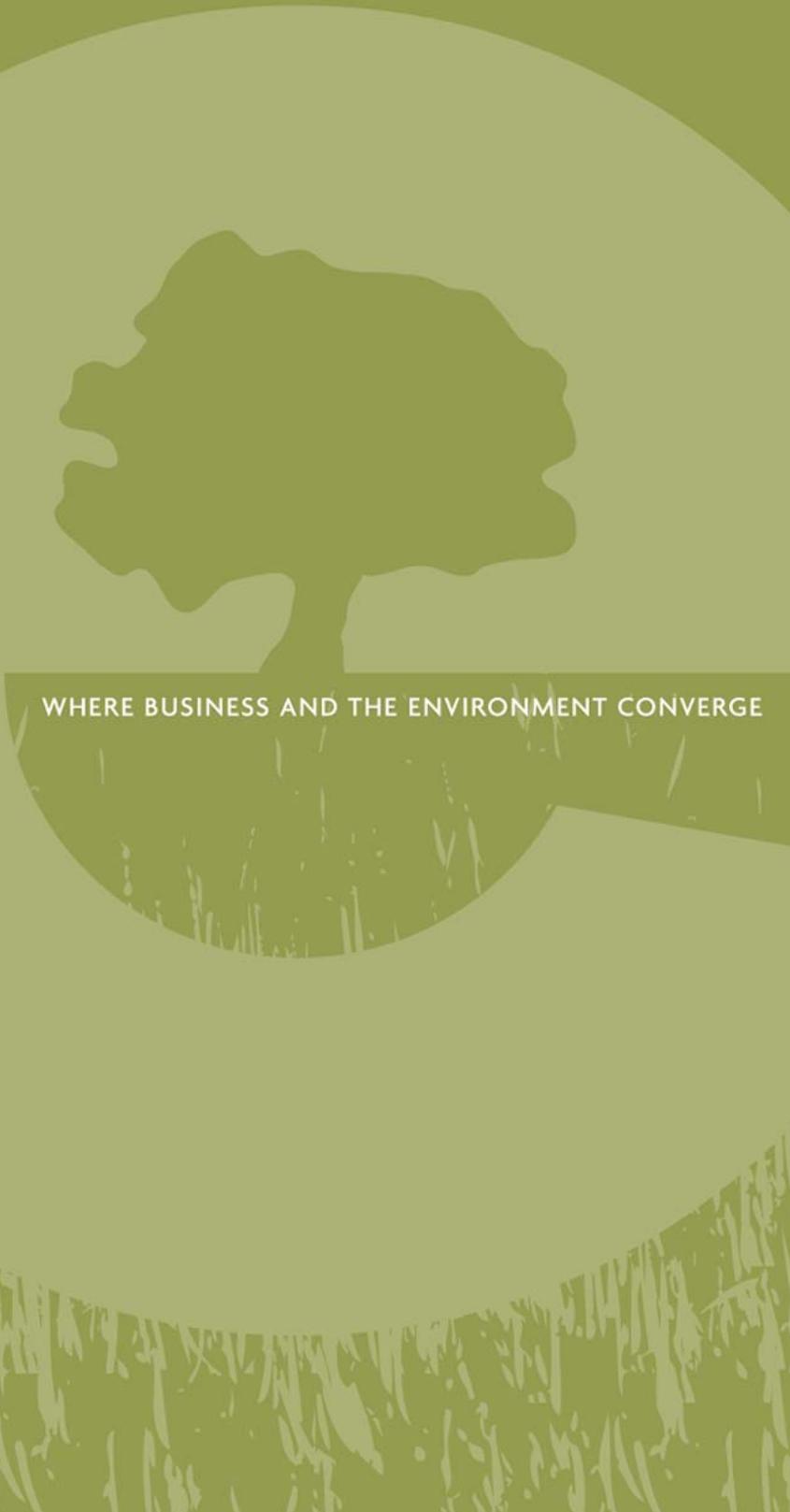


**UNITED CHURCH OF CABOT
2 COMMON WAY
CABOT, VT
JUNE 2015 GROUNDWATER
MONITORING REPORT**

Prepared for:
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United Church of Cabot
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Project No. 08-221382.00
SMS No. 2014-4464
September 2015

Prepared by:
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A large, stylized green silhouette of a tree is centered on the left side of the page. The tree is set against a background of a light green circular shape that resembles a sun or moon. Below the tree, there is a dark green horizontal band containing the text 'WHERE BUSINESS AND THE ENVIRONMENT CONVERGE'. The bottom of the page features a pattern of vertical green lines of varying heights, suggesting grass or a field.

WHERE BUSINESS AND THE ENVIRONMENT CONVERGE

EXECUTIVE SUMMARY

Environmental Compliance Services, Inc. (ECS), on behalf of the United Church of Cabot and in cooperation with the Vermont Department of Environmental Conservation (VT DEC), has performed groundwater monitoring following corrective actions to mitigate petroleum-related contamination associated with a former #2 fuel oil underground storage tank (UST) at the United Church of Cabot (Site), located at 2 Common Way in Cabot, Vermont (SMS Site #2014-4464). The site is located adjacent to the Cabot School.

On 30 December 2013, ECS performed an assessment of soil and groundwater during the removal of a 1,000-gallon fuel oil UST. Fuel oil contamination was observed in the soil at concentrations up to 130 parts per million (ppm) as measured by a photoionization detector (PID), which exceeds the VT DEC threshold of 10 ppm for fuel oil. Evidence of impacted groundwater was observed at a depth of approximately 6.5 feet below the ground surface within the UST excavation. The church building is slab on grade construction with no basement; however, the floor of the church is partially below the ground surface. The church and nearby buildings are connected to the municipal water system.

ECS completed an Initial Site Investigation (ISI) in June 2014. Six soil borings were advanced and four borings were completed as groundwater monitoring wells. Groundwater was encountered between two and four feet below ground surface (bgs) and light non-aqueous phase liquid (LNAPL) was detected in two monitoring wells near the former UST on 8 May 2014. No volatile organic compounds (VOCs) were detected in upgradient and downgradient monitoring wells, suggesting that the contamination was confined to the vicinity of the former tank area located on the north east corner of the church building. It was not known if contaminants had migrated beneath the church building. Because of the close proximity of the contamination to the church building and nearby storm drain, ECS recommended additional site investigation and an evaluation of remedial alternatives. The VT DEC did not approve of the additional site investigation and requested soil excavation and disposal in a letter dated 5 August 2014. It was determined that work would commence during a school vacation to minimize disruption.

On 29 and 30 December 2014, ECS provided oversight of the excavation of contaminated soils from the northeast corner of the church building. Approximately 115 tons of petroleum-contaminated soils were excavated and transported off-Site by Calkins Excavating Inc. for thermal treatment and recycling at ESMI, Inc. of Loudon, New Hampshire. ECS applied an oxygen-releasing compound, ORCAAdvanced™, to the northeast corner of the church foundation at the base of excavation to facilitate biologic degradation of any remaining residual contamination. Two groundwater monitoring wells were destroyed during the excavation, but were subsequently replaced.

Groundwater sampling occurred on 11 June 2015. No VOCs were detected above Vermont Groundwater Enforcement Standards (VGES). Based on water quality concentrations and ambient air screening results in nearby buildings and catch basins, the groundwater and vapor intrusion risk has been significantly reduced by the contaminated soil excavation.

ECS recommends abandoning the four existing monitoring wells prior to assigning a Sites Management Activities Completed (SMAC) designation to the Site. The Town of Cabot should be notified of the potential presence of residual soil contamination along the utilities between the United Church of Cabot and Cabot Historical Museum buildings during future public works projects. Prior to implementation of any of ECS' recommendations, a copy of this report should be submitted to Mr. Gerold Noyes of the VT DEC for review and comment.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
1.0 INTRODUCTION	1
2.0 INVESTIGATIVE PROCEDURES AND RESULTS	2
2.1 GROUNDWATER CHARACTERISTICS	2
2.2 SAMPLING AND ANALYSIS	2
2.3 AMBIENT AIR AND CATCH BASIN SCREENING	3
2.4 SITE RESTORATION & ENGINEERING EVALUATION	3
3.0 CONCLUSIONS & RECOMMENDATIONS	4

FIGURES

Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Groundwater Flow Direction Map
Figure 4	Contaminant Concentration Map
Figures 5-8	Timeseries Graphs

TABLES

Table 1	Groundwater Elevation Calculations
Table 2	Summary of Analytical Results

APPENDICES

Appendix A	Laboratory Analytical Reports
Appendix B	Structural Engineering Report

1.0 INTRODUCTION

ECS has prepared this groundwater monitoring report on behalf of United Church of Cabot following the excavation and disposal of petroleum-impacted soils at the United Church of Cabot (Site) located at 2 Common Way in Cabot, Vermont (Figure 1).

The Site currently is used for religious purposes and locally overseen by Mr. Walter Bothfeld. The surrounding buildings include the Cabot School, the Cabot Historical Society Museum and residential properties west of Route 215 (refer to Figure 2). The church and nearby buildings are connected to the municipal water and wastewater system.

On 30 December 2014, an ECS Scientist inspected the removal of one 1,000-gallon fuel oil UST and the associated piping system. The underground storage tank (UST) was observed to be in fair condition upon removal with the suspected release at a welded seam per the removal contractor. At the request of the Vermont Department of Environmental Conservation (VT DEC), all contaminated soil was backfilled to the UST excavation. Soil headspace readings were obtained with a portable photoionization detector (PID) ranging from zero to 130 parts per million (ppm). The lateral and vertical limits of contamination were not defined. Groundwater was encountered at approximately 6.5 feet below ground surface (bgs). Nearby sensitive receptors that were identified included soil and groundwater, water service line, nearby storm drains, the Winooski River, and ambient air quality in nearby buildings, including a school.

ECS completed an Initial Site Investigation in June 2014. Six soil borings were advanced and four borings were completed as groundwater monitoring wells. Groundwater was encountered between two and four feet below ground surface (bgs) and light non-aqueous phase liquid (LNAPL) was detected in two monitoring wells near the former UST on 8 May 2014. No volatile organic compounds (VOCs) were detected in upgradient and downgradient monitoring wells, suggesting that the contamination is confined to the vicinity of the former tank grave at the northwest corner of the building; however, it was not known if contaminants may have migrated beneath the church building. Because of the close proximity of the contamination to the church building and the storm drain, ECS recommended additional site investigation and an evaluation of remedial alternatives.

The VT DEC did not approve of the additional investigation and requested soil excavation and disposal in a letter dated 5 August 2014. ECS prepared a work plan for source area soil excavation with the addition an oxygen releasing compound (ORC) prior to backfill, since there was a potential for contaminated soil to remain in place at the building foundation.

Mr. Gerold Noyes of the Vermont Department of Environmental Conservation (VT DEC), Sites Management Section (SMS) approved implementation of the excavation plan in a letter dated 24 September 2014. This report summarizes the follow-up groundwater monitoring performed at the Site as part of the previously approved work plan.

2.0 INVESTIGATIVE PROCEDURES AND RESULTS

2.1 GROUNDWATER CHARACTERISTICS

Based on the hydrogeologic data, the groundwater in the unconfined surficial aquifer at the site appears to flow generally northeast toward the Cabot Historical Society Museum (Figure 3). Shallow groundwater flow direction may be locally influenced by the Church building foundation and downgradient storm drain and suspected sewer line. The average horizontal hydraulic gradient is approximately 5.1 percent between MW-1 and MW-4. The vertical groundwater flow components at the site, and the hydraulic relationship between the shallow unconfined aquifer and the bedrock aquifer, are currently unknown.

Fluid levels were measured in the monitoring wells on June 11, 2015 to calculate the groundwater flow direction. No LNAPL was detected in the four on-site monitoring wells. Depths to groundwater in the on-site monitoring wells ranged from 2.53 feet (MW-1) to 3.37 feet (MW-3R) below top-of-casing.

Static water-table elevations were computed for each monitoring well by subtracting the measured depth-to-water readings from the surveyed top-of-casing elevations, which are relative to an arbitrary site datum of 100.00 feet. Water-level measurements and elevation calculations are presented in Table 1. Groundwater flow direction maps were prepared using these data (Figures 3).

2.2 SAMPLING AND ANALYSIS

Groundwater samples were collected on June 11, 2015 from the existing and newly-installed replacement monitoring wells (MW-1, MW-2R, MW-3R and MW-4) for laboratory analysis of total petroleum hydrocarbons (TPH) via EPA Method 8100 and the short list of targeted VOCs by EPA Method 8021B

VOCs were detected at MW-3R at concentrations below the respective Vermont Groundwater Enforcement Standards (VGES), including ethylbenzene, trimethylbenzene and naphthalene. No VOCs were detected in groundwater samples collected from MW-1, MW-2R, and MW-4 (Figure 4). Contaminant levels decreased significantly at replacement wells within the excavation area when compared with the May 2014 conditions. Concentrations at the MW-2 location went from LNAPL in May 2014 to below reporting limits in June 2015 at MW-2R. Concentrations at the MW-3 location decreased from the presence of LNAPL in May 2014 to concentrations below the VGES in June 2015. Timeseries graphs are presented in Figures 5-8.

TPH was detected in MW-2R and MW-3R at concentrations of 1.1 milligrams per liter (mg/L) and 1.4 mg/L, respectively. TPH fuel identification was identified as #2 fuel oil in MW-2R and unidentified in MW-3R.

Prior to groundwater sample collection, the monitoring wells were purged with a bailer and then sampled using disposable bailers and dropline, in accordance with ECS standard protocols. Purge water was discharged directly to the ground in the vicinity of each well. A duplicate sample was collected from MW3R. Analytical results of the duplicate sample were within the EPA recommended limit of 30 percent. A trip blank was also collected to ensure that adequate quality assurance/quality control (QA/QC) standards were maintained during collection and transport. No petroleum-related compounds were detected in the trip blank. Analytical results are summarized in Table 2 and the laboratory analytical reports are presented in Appendix A. All samples were transported under chain-of-custody in an ice-filled cooler to Spectrum Analytical, Inc. of Agawam, Massachusetts.

2.3 AMBIENT AIR AND CATCH BASIN SCREENING

The ambient airspace at the United Church of Cabot and the Historical Society Museum were screened with a PID on 11 June 2015. All PID readings were at background concentrations. The United Church of Cabot is slab on grade; however, the Historical Society Museum contains a 3 foot crawl space below the footprint of the building with a dirt floor and partial concrete wall. There appears to be a moisture barrier (polyethylene sheeting) in place; which is hummocky and not extensive across the entire floor. Neither of these buildings is continuously occupied. Vapor intrusion risk is considered low following the excavation of contaminated soils against the United Church of Cabot building.

ECS also screened the ambient air within two nearby catch basins. No PID readings or fuel oil odors were noted at either catch basin.

2.4 SITE RESTORATION & ENGINEERING EVALUATION

The soil excavation occurred in December 2014. Due to the winter conditions, ECS recommended site restoration and a final engineering inspection to occur during Spring 2015. Calkins Excavating restored the site on May 27, 2015 with additional compacted gravel in traveled areas and top soil/seed/mulch in grassy areas.

A representative of Engineering Ventures inspected the Church of Cabot building on August 14, 2015. No structural impacts or settlement of the backfill was identified. A copy of the engineering report is included in Appendix B.

3.0 CONCLUSIONS & RECOMMENDATIONS

Based on the results of the site monitoring described above, the soil excavation in late December 2014 successfully reduced contamination concentrations in the source area. ECS concludes the following:

- Depth to water ranged from 2.53 feet bgs to 3.37 feet bgs. No LNAPL was measured in any of the four on-site monitoring wells. The groundwater flow direction appears to be flowing north toward the Cabot Historical Society Museum. Shallow groundwater flow direction may be locally influenced by the Church building foundation and downgradient storm drain and suspected sewer line.
- VOCs were detected at MW-3R at concentrations below the respective VGES, including ethylbenzene, trimethylbenzene and naphthalene. No VOCs were detected in groundwater samples collected from MW-1, MW-2R, and MW-4.
- Contaminant levels decreased significantly at replacement wells within the excavation area when compared with the May 2014 conditions, from the presence of LNAPL to VOC concentrations below VGES.
- The ambient airspace at the United Church of Cabot, the Historical Society Museum crawl space and the catch basins were screened with a PID on 11 June 2015. All PID readings were at background concentrations.
- Sensitive receptor risk has been minimized following the removal of impacted soil in December 2014. Based on water quality concentrations and ambient air screening results in June 2015, the groundwater and vapor intrusion risk has been significantly reduced. As stated in the soil excavation summary report, contaminated soils may still exist under the United Church of Cabot building and along the utilities between the on-site building and the Historical Society building. If petroleum contamination is present in soil at these locations the concentrations of contamination are considered to be residual and are expected to naturally attenuate over time. However, if subsurface work occurs in these locations in the future it would be prudent to plan in advance for possibly encountering contaminated soil.

Based on the conclusions stated above, ECS recommends the following:

- 1) Submit this report to Mr. Gerold Noyes of the VT DEC for review and comment.
- 2) Groundwater monitoring wells should be properly abandoned in accordance with Chapter 12 of the Water Supply Rule.
- 3) The Town of Cabot should be notified of the potential residual contamination surrounding the storm water and sewer lines between the United Church of Cabot and the Historical Society Museum buildings for future public works projects.
- 4) A Sites Management Activities Completed (SMAC) designation should be assigned to the property.

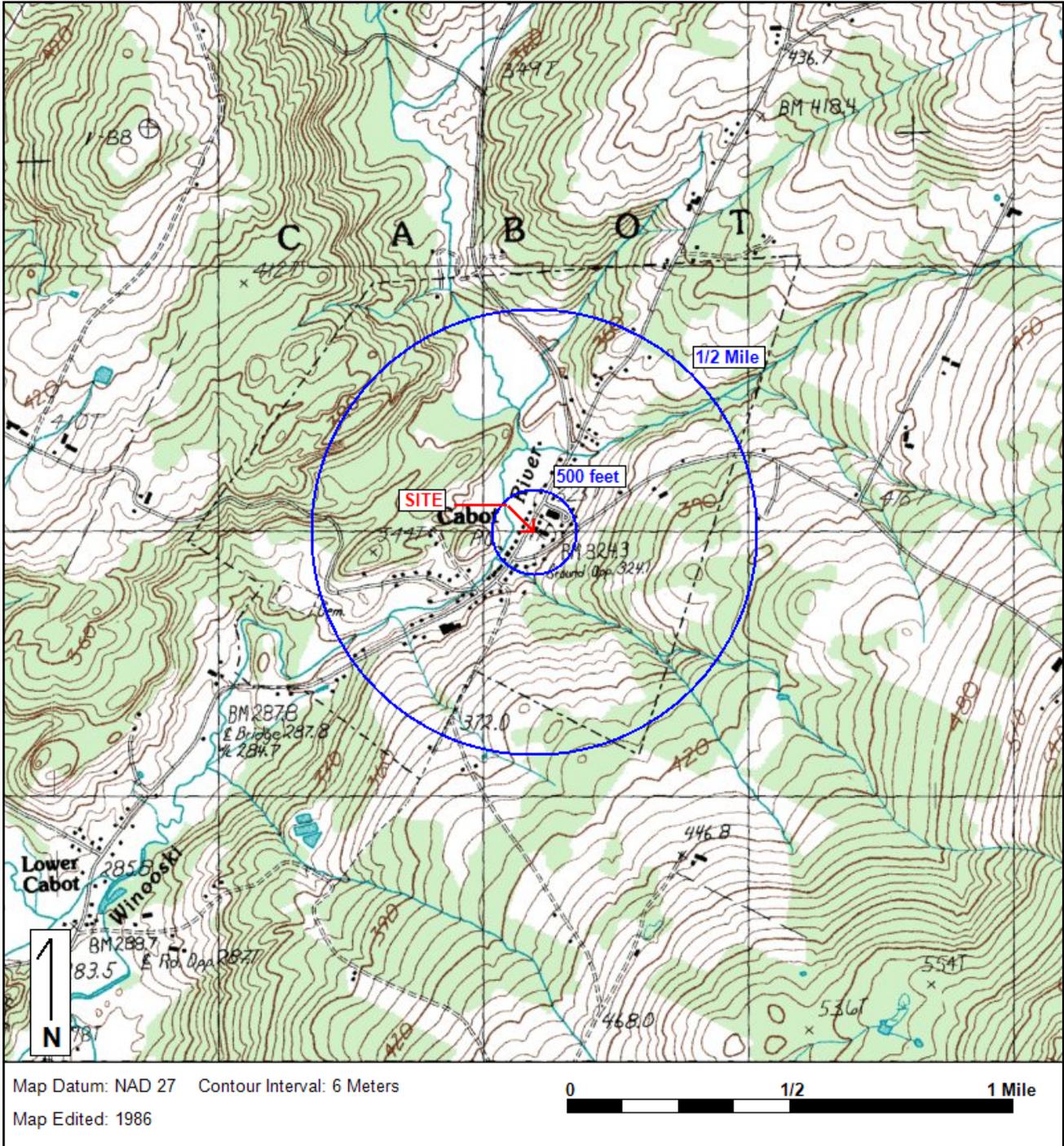
FIGURES



Environmental Compliance Services, Inc.
 1 Elm Street, Suite 3
 Waterbury, VT 05676
 Phone 802.241.4131 Fax 802.244.6894
 www.ecsconsult.com

United Church of Cabot
 3224 Route 215
 Hardwick, VT 05843

Figure 1: SITE LOCUS



Base Map: U.S. Geological Survey; Quadrangle Location: Cabot, VT

Lat/Lon: 44 24' 13" NORTH, 72 19' 25" WEST - UTM Coordinates: 18 714218.75 EAST / 4920221.5 NORTH

Generated By: Rick Starodoj

Cabot Historical Society Museum

Route 215

SB-5

Fire Escape Stairs

MW-3R
MW-3
(destroyed)

Storm Drain

Excavation Area

MW-4

Water Line

MW-2R

MW-2
(destroyed)

Lateral Discharge

Former UST

Dry Well

SB-6

Parking

United Church of Cabot

The Cabot School

MW-1

Door

Common Way

MW-1



Monitoring Well

GRAPHIC SCALE:



1 Elm Street, Suite 3 * Waterbury, VT 05676
Phone: 802-241-4131 Fax: 802-244-0894
ecsconsult.com

PROJECT:

UNITED CHURCH OF CABOT

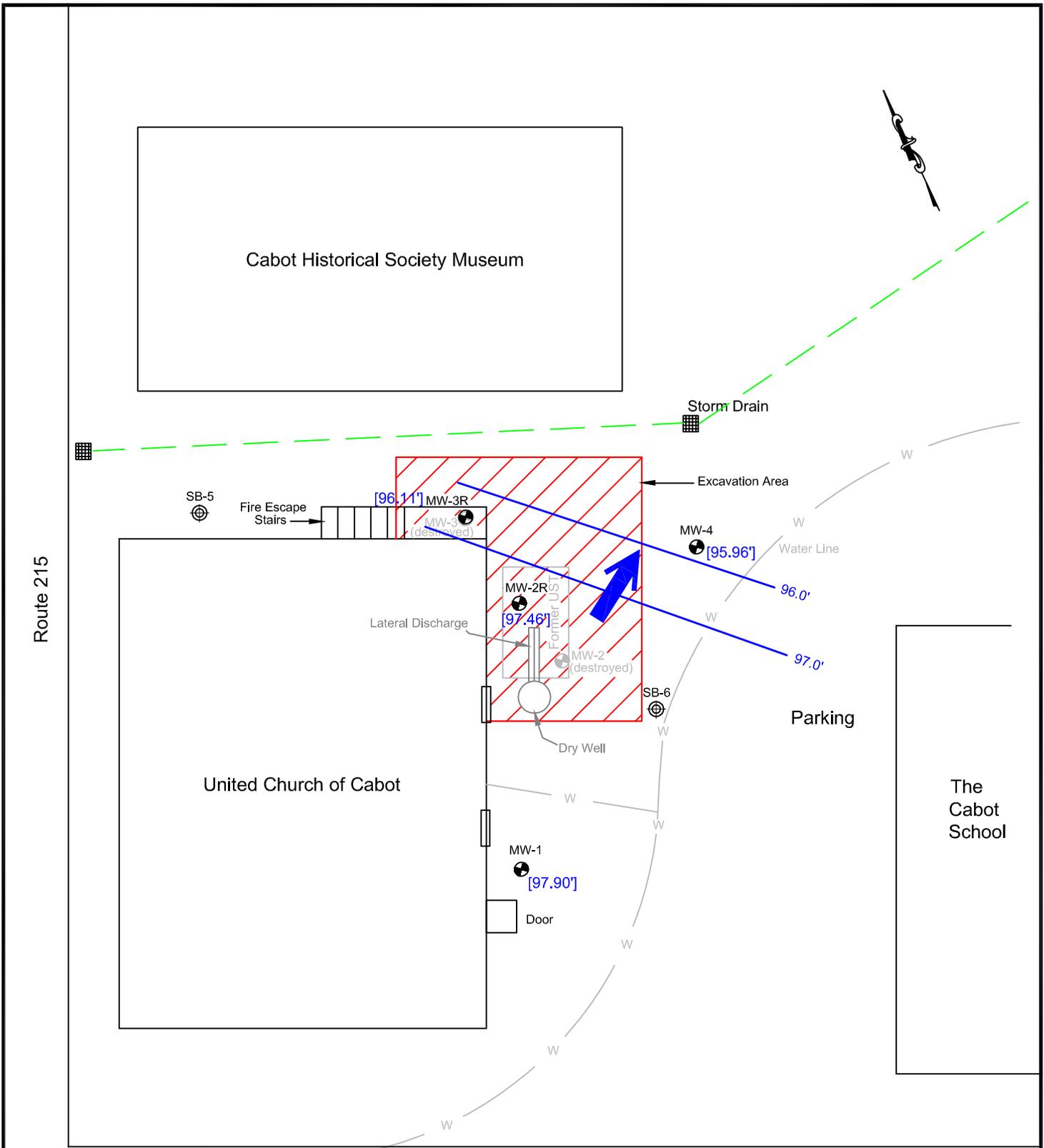
2 COMMON WAY
CABOT, VT

TITLE:

Site Plan with Excavation Area

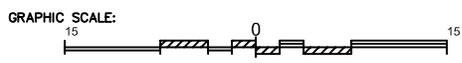
COMPUTER CADFILE: Box/221382

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
AC	ZC	JH	LW
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
1"=15'	1-14-15	08-221382.00	2



95.5' ——— Water Table Contour (Dashed where inferred)
 Flow Direction Indicator
 [95.28'] Groundwater Elevation
 MW-1  Monitoring Well

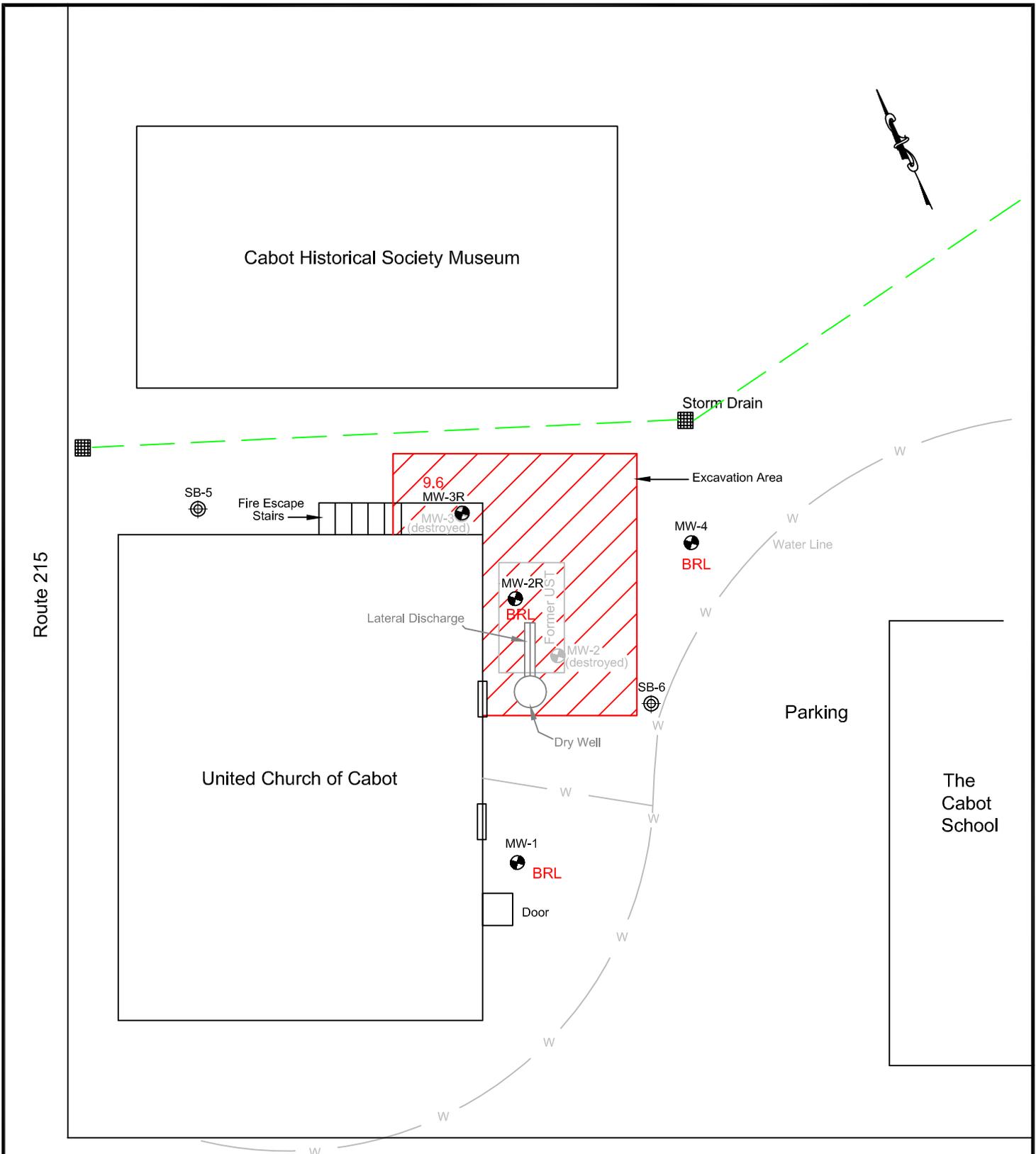
Common Way




1 Elm Street, Suite 3 • Waterbury, VT 05676
 Phone: 802-241-4131 Fax: 802-244-0894
 ecsconsult.com

PROJECT: **UNITED CHURCH OF CABOT**
 2 COMMON WAY
 CABOT, VT
 TITLE: **Ground Water Flow Direction**
 Sample Date: 6-11-15

COMPUTER CADFILE: Box/221382			
DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
AC	LW	JH	LW
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
1"=15'	9-08-15	08-221382.00	3

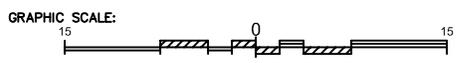


9.6 Total VOCs (Volatile Organic Compounds)
Reported in $\mu\text{g/L}$ (Micrograms per liter)

BRL Below Reporting Limits

MW-1
Monitoring Well

Common Way




1 Elm Street, Suite 3 • Waterbury, VT 05676
Phone: 802-241-4131 Fax: 802-244-0894
ecsconsult.com

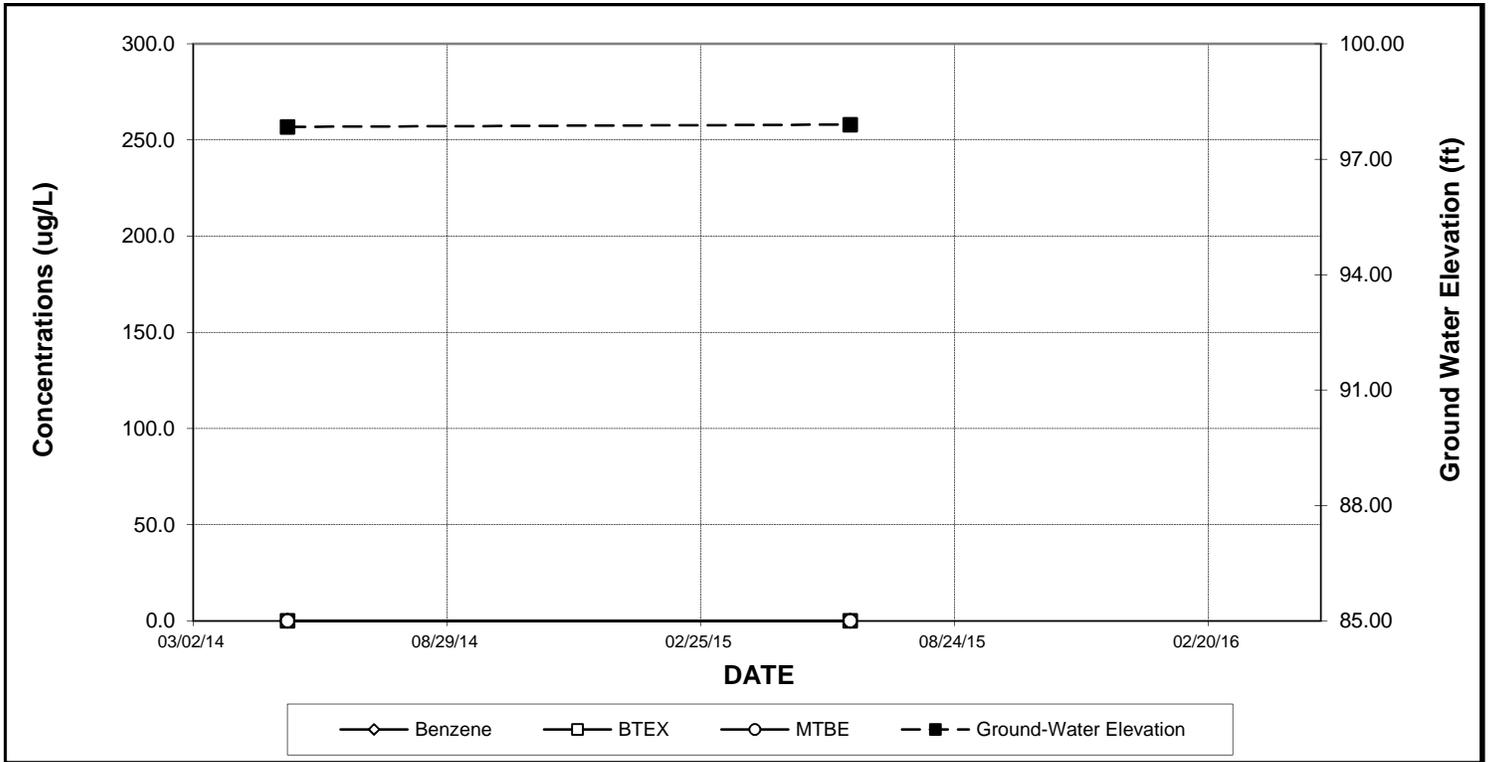
PROJECT:
UNITED CHURCH OF CABOT
2 COMMON WAY
CABOT, VT

TITLE:
Sample Date: 6-11-15
Contaminant Concentration Map

COMPUTER CADFILE: Box/221382			
DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
AC	ZC	JH	LW
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
1"=15'	9-08-15	08-221382.00	4

FIGURE 5. MW-1 VOC Concentrations

Church of Cabot
Cabot, Vermont
08-221382.00



Date	MTBE	Benzene	Toluene	Ethyl benzene	BTEX	Xylenes	Trimethyl Benzenes	Naphthalene	Ground-Water Elevation
05/08/14	BRL<1.0	BRL<1.0	BRL<1.0	BRL<1.0	BRL	BRL<3.0	BRL<2.0	BRL<1.0	97.84
06/11/15	BRL<1.0	BRL<1.0	BRL<1.0	BRL<1.0	BRL	BRL<3.0	BRL<2.0	BRL<1.0	97.90
<i>VGES</i>	<i>40</i>	<i>5</i>	<i>1,000</i>	<i>700</i>	<i>--</i>	<i>10,000</i>	<i>350</i>	<i>20</i>	<i>----</i>

Notes:

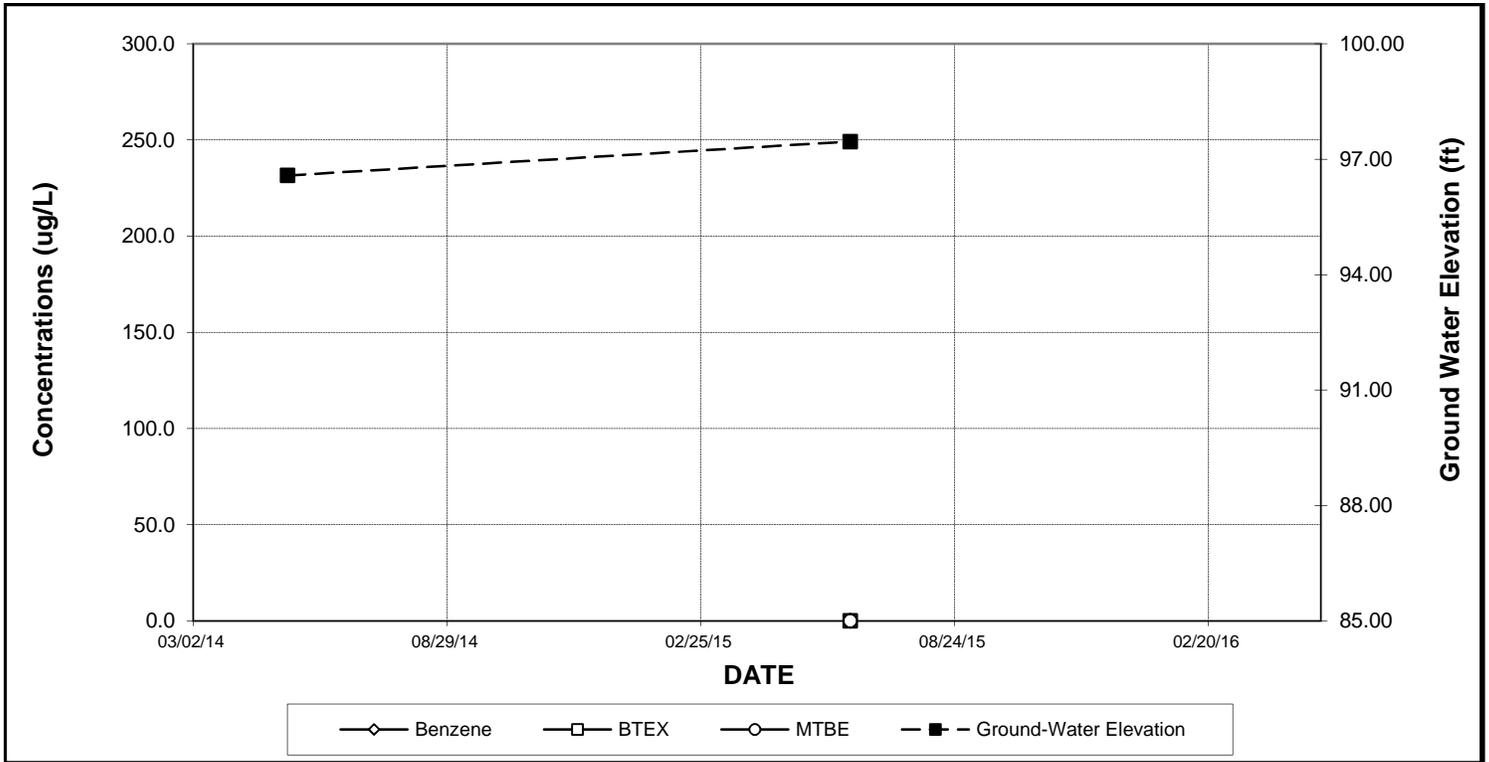
Results given in micrograms per liter (ug/L).

VGES - Vermont Groundwater Enforcement Standards

Shaded areas denote VGES exceedence

FIGURE 6. MW-2R VOC Concentrations

Church of Cabot
Cabot, Vermont
08-221382.01



Date	MTBE	Benzene	Toluene	Ethyl benzene	BTEX	Xylenes	Trimethyl Benzenes	Naphthalene	Ground-Water Elevation
05/08/14	FP	FP	FP	FP	FP	FP	FP	FP	96.58
06/11/15	BRL<1.0	BRL<1.0	BRL<1.0	BRL<1.0	BRL	BRL<3.0	BRL<2.0	BRL<1.0	97.46
VGES	40	5	1,000	700	--	10,000	350	20	----

Notes:

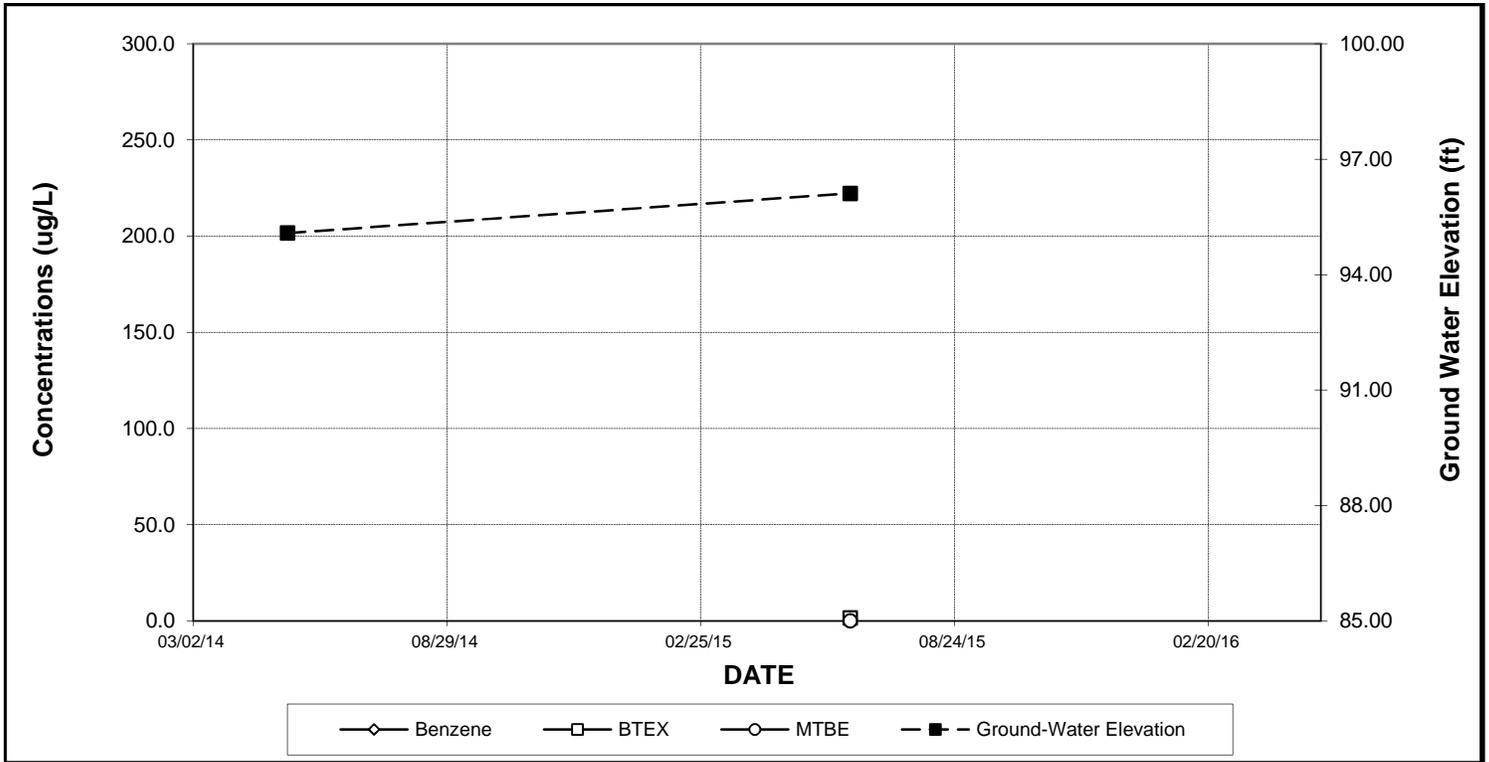
Results given in micrograms per liter (ug/L).

VGES - Vermont Groundwater Enforcement Standards

Shaded areas denote VGES exceedence

FIGURE 7. MW-3R VOC Concentrations

Church of Cabot
Cabot, Vermont
08-221382.01



Date	MTBE	Benzene	Toluene	Ethyl benzene	BTEX	Xylenes	Trimethyl Benzenes	Naphthalene	Ground-Water Elevation
05/08/14	FP	FP	FP	FP	FP	FP	FP	FP	95.08
06/11/15	BRL<1.0	BRL<1.0	BRL<1.0	1.5	1.5	BRL<3.0	5.7	2.4	96.11
VGES	40	5	1,000	700	--	10,000	350	20	----

Notes:

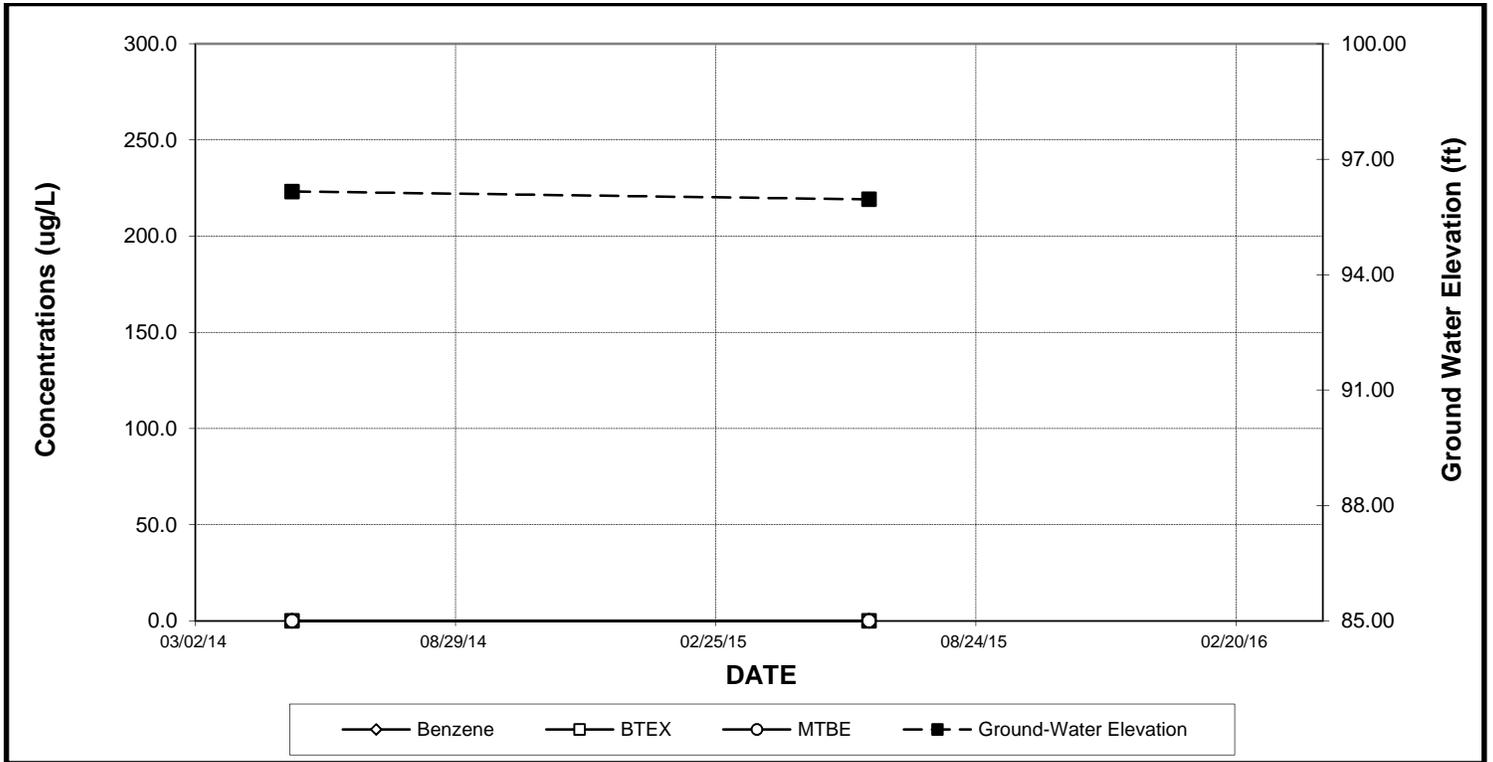
Results given in micrograms per liter (ug/L).

VGES - Vermont Groundwater Enforcement Standards

Shaded areas denote VGES exceedence

FIGURE 8. MW-4 VOC Concentrations

Church of Cabot
Cabot, Vermont
08-221382.01



Date	MTBE	Benzene	Toluene	Ethyl benzene	BTEX	Xylenes	Trimethyl Benzenes	Naphthalene	Ground-Water Elevation
05/08/14	BRL<1.0	BRL<1.0	BRL<1.0	BRL<1.0	BRL	BRL<3.0	BRL<2.0	BRL<1.0	96.16
06/11/15	BRL<1.0	BRL<1.0	BRL<1.0	BRL<1.0	BRL	BRL<3.0	BRL<2.0	BRL<1.0	95.96
VGES	40	5	1,000	700	--	10,000	350	20	----

Notes:

Results given in micrograms per liter (ug/L).

VGES - Vermont Groundwater Enforcement Standards

Shaded areas denote VGES exceedence

TABLES

TABLE 1. GROUNDWATER ELEVATION CALCULATIONS

**United Church of Cabot
2 Common Way
Cabot, VT**

Monitoring Date: 11 June 2015

Well I.D.	Top of Casing Elevation	Depth to Product	Depth to Water	Product Thickness	Corrected Depth to Water	Water Table Elevation
MW-1	100.43	--	2.53	--	--	97.90
MW-2R	100.05	--	2.59	--	--	97.46
MW-3R	99.48	--	3.37	--	--	96.11
MW-4	98.86	--	2.90	--	--	95.96

Notes:

All values reported in feet relative to an arbitrary 100' datum.

Corrected depth to water = product thickness multiplied by 0.8 (specific gravity) plus measured depth to water.

TABLE 2. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

United Church of Cabot
 2 Common Way
 Cabot, VT

Monitoring Date: 11 June 2015

Well I.D.	MTBE	Benzene	Toluene	Ethyl-benzene	BTEX	Xylenes	TMB	Naphthalene	Total VOCs	TPH
MW-1	BRL<1.0	BRL<1.0	BRL<1.0	BRL<1.0	BRL	BRL<3.0	BRL<2.0	BRL<1.0	BRL	BRL<0.2
MW-2R	BRL<1.0	BRL<1.0	BRL<1.0	BRL<1.0	BRL	BRL<3.0	BRL<2.0	BRL<1.0	BRL	1.1
MW-3R	BRL<1.0	BRL<1.0	BRL<1.0	1.5	1.5	BRL<3.0	5.7	2.4	9.6	1.4
MW-4	BRL<1.0	BRL<1.0	BRL<1.0	BRL<1.0	BRL	BRL<3.0	BRL<2.0	BRL<1.0	BRL	BRL<0.2
Duplicate (MW-3R)	BRL<1.0	BRL<1.0	BRL<1.0	1.3	1.3	BRL<3.0	4.8	2.3	8.4	1.3
RPD	--	--	--	14	--	--	17	4	--	7
Trip Blank	BRL<1.0	BRL<1.0	BRL<1.0	BRL<1.0	BRL	BRL<3.0	BRL<2.0	BRL<1.0	BRL	NA
VGES	40	5	1,000	700	--	10,000	350	20		--

Notes:

Results in micrograms per liter (µg/L)

VGES = Vermont Groundwater Enforcement Standards, shaded area denotes exceedance of VGES.

TPH = Extractable Petroleum Hydrocarbons

TMB - Total Trimethylbenzenes

BRL = Below Reporting Limits

RPD = relative percent difference

NA = Not analyzed

APPENDIX A
LABORATORY REPORT

Report Date:
23-Jun-15 15:29



SPECTRUM ANALYTICAL, INC.

Laboratory Report

- Final Report
- Re-Issued Report
- Revised Report

Environmental Compliance Services
1 Elm St. Suite 3
Waterbury, VT 05676
Attn: Laura Woodard

Project: Church of Cabot - Cabot, VT
Project #: 08-221382.01

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SC08776-01	MW-1	Ground Water	11-Jun-15 11:30	12-Jun-15 10:33
SC08776-02	MW-2R	Ground Water	11-Jun-15 11:55	12-Jun-15 10:33
SC08776-03	MW-3R	Ground Water	11-Jun-15 12:05	12-Jun-15 10:33
SC08776-04	MW-4	Ground Water	11-Jun-15 11:45	12-Jun-15 10:33
SC08776-05	Trip Blank	Deionized Water	11-Jun-15 00:00	12-Jun-15 10:33
SC08776-06	Duplicate	Ground Water	11-Jun-15 00:00	12-Jun-15 10:33

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 # E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011
New York # 11393
Pennsylvania # 68-04426/68-02924
Rhode Island # LAO00098
USDA # S-51435



Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 16 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).

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

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

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 +/- 1.0 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 8260C

Calibration:

1505103

Analyte quantified by quadratic equation type calibration.

Naphthalene

This affected the following samples:

1511740-BLK1
1511740-BS1
1511740-BSD1
1511740-MS1
1511740-MSD1
Duplicate
MW-1
MW-3R
S505009-ICV1
S505786-CCV1
Trip Blank

1506026

Analyte quantified by quadratic equation type calibration.

1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
m,p-Xylene
Naphthalene

This affected the following samples:

1511832-BLK1
1511832-BS1
1511832-BSD1
MW-2R
MW-4
S505673-ICV1
S505811-CCV1

Samples:

S505811-CCV1

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

1,2-Dibromoethane (EDB) (23.9%)

SW846 8260C

Samples:

S505811-CCV1

This affected the following samples:

1511832-BLK1

1511832-BS1

1511832-BSD1

MW-2R

MW-4

Sample Acceptance Check Form

Client: Environmental Compliance Services - Waterbury, VT
 Project: Church of Cabot - Cabot, VT / 08-221382.01
 Work Order: SC08776
 Sample(s) received on: 6/12/2015

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Were custody seals present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were custody seals intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples cooled on ice upon transfer to laboratory representative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were sample containers received intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples accompanied by a Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did sample container labels agree with Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples received within method-specific holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Summary of Hits

Lab ID: SC08776-02

Client ID: MW-2R

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Fuel Oil #2	Calculated as		0.2	mg/l	SW846 8100Mod.
Total Petroleum Hydrocarbons	1.1		0.2	mg/l	SW846 8100Mod.
Unidentified	1.1		0.2	mg/l	SW846 8100Mod.

Lab ID: SC08776-03

Client ID: MW-3R

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Other Oil	Calculated as		0.2	mg/l	SW846 8100Mod.
Total Petroleum Hydrocarbons	1.4		0.2	mg/l	SW846 8100Mod.
Unidentified	1.4		0.2	mg/l	SW846 8100Mod.
1,2,4-Trimethylbenzene	5.7		1.0	µg/l	SW846 8260C
Ethylbenzene	1.5		1.0	µg/l	SW846 8260C
Naphthalene	2.4		1.0	µg/l	SW846 8260C

Lab ID: SC08776-06

Client ID: Duplicate

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Other Oil	Calculated as		0.2	mg/l	SW846 8100Mod.
Total Petroleum Hydrocarbons	1.3		0.2	mg/l	SW846 8100Mod.
Unidentified	1.3		0.2	mg/l	SW846 8100Mod.
1,2,4-Trimethylbenzene	4.8		1.0	µg/l	SW846 8260C
Ethylbenzene	1.3		1.0	µg/l	SW846 8260C
Naphthalene	2.3		1.0	µg/l	SW846 8260C

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

Sample Identification

MW-1 Client Project # 08-221382.01 Matrix Ground Water Collection Date/Time 11-Jun-15 11:30 Received 12-Jun-15
 SC08776-01

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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Volatile Organic Compounds

Volatile Organic Compounds by GC/MS

Prepared by method SW846 5030 Water MS

71-43-2	Benzene	< 1.0		µg/l	1.0	0.2	1	SW846 8260C	16-Jun-15	17-Jun-15	GMA	1511740	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.5		µg/l	0.5	0.3	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.0		µg/l	1.0	0.9	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.0		µg/l	2.0	0.4	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.0		µg/l	1.0	0.5	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	94			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	98			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	104			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	97			70-130 %			"	"	"	"	"	

Extractable Petroleum Hydrocarbons

Fingerprinting by GC

Prepared by method SW846 3510C

8006-61-9	Gasoline	< 0.2		mg/l	0.2	0.1	1	SW846 8100Mod.	16-Jun-15	22-Jun-15	SEP	1511726	
68476-30-2	Fuel Oil #2	< 0.2		mg/l	0.2	0.08	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.06	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.06	1	"	"	"	"	"	
	Hydraulic Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Dielectric Fluid	< 0.2		mg/l	0.2	0.06	1	"	"	"	"	"	
	Unidentified	< 0.2		mg/l	0.2	0.06	1	"	"	"	"	"	
	Other Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	

Surrogate recoveries:

3386-33-2	1-Chlorooctadecane	73			40-140 %			"	"	"	"	"	
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Sample Identification

MW-2R
SC08776-02

Client Project #
08-221382.01

Matrix
Ground Water

Collection Date/Time
11-Jun-15 11:55

Received
12-Jun-15

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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Volatile Organic Compounds

Re-analysis of Volatile Organic Compounds
by GC/MS

Prepared by method SW846 5030 Water MS

71-43-2	Benzene	< 1.0		µg/l	1.0	0.2	1	SW846 8260C	17-Jun-15	17-Jun-15	GMA	1511832	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.5		µg/l	0.5	0.3	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.0		µg/l	1.0	0.9	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.0		µg/l	2.0	0.4	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.0		µg/l	1.0	0.5	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	94			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 %			"	"	"	"	"	

Extractable Petroleum Hydrocarbons

Fingerprinting by GC

Prepared by method SW846 3510C

8006-61-9	Gasoline	< 0.2		mg/l	0.2	0.1	1	SW846 8100Mod.	16-Jun-15	22-Jun-15	SEP	1511726	
68476-30-2	Fuel Oil #2	Calculated as		mg/l	0.2	0.08	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Hydraulic Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Dielectric Fluid	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Unidentified	1.1		mg/l	0.2	0.05	1	"	"	"	"	"	
	Other Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	1.1		mg/l	0.2	0.02	1	"	"	"	"	"	

Surrogate recoveries:

3386-33-2	1-Chlorooctadecane	72			40-140 %			"	"	"	"	"	
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Sample Identification

MW-3R
SC08776-03

Client Project #
08-221382.01

Matrix
Ground Water

Collection Date/Time
11-Jun-15 12:05

Received
12-Jun-15

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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Volatile Organic Compounds

Volatile Organic Compounds by GC/MS

Prepared by method SW846 5030 Water MS

71-43-2	Benzene	< 1.0		µg/l	1.0	0.2	1	SW846 8260C	16-Jun-15	17-Jun-15	GMA	1511740	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.5		µg/l	0.5	0.3	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	1.5		µg/l	1.0	0.2	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
91-20-3	Naphthalene	2.4		µg/l	1.0	0.4	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	5.7		µg/l	1.0	0.4	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.0		µg/l	1.0	0.9	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.0		µg/l	2.0	0.4	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.0		µg/l	1.0	0.5	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	96			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	99			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	105			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	96			70-130 %			"	"	"	"	"	

Extractable Petroleum Hydrocarbons

Fingerprinting by GC

Prepared by method SW846 3510C

8006-61-9	Gasoline	< 0.2		mg/l	0.2	0.1	1	SW846 8100Mod.	16-Jun-15	22-Jun-15	SEP	1511726	
68476-30-2	Fuel Oil #2	< 0.2		mg/l	0.2	0.08	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Hydraulic Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Dielectric Fluid	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Unidentified	1.4		mg/l	0.2	0.05	1	"	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	0.02	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	1.4		mg/l	0.2	0.02	1	"	"	"	"	"	

Surrogate recoveries:

3386-33-2	1-Chlorooctadecane	72			40-140 %			"	"	"	"	"	
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Sample Identification

MW-4
SC08776-04

Client Project #
08-221382.01

Matrix
Ground Water

Collection Date/Time
11-Jun-15 11:45

Received
12-Jun-15

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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Volatile Organic Compounds

Volatile Organic Compounds by GC/MS

Prepared by method SW846 5030 Water MS

71-43-2	Benzene	< 1.0		µg/l	1.0	0.2	1	SW846 8260C	17-Jun-15	17-Jun-15	GMA	1511832	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.5		µg/l	0.5	0.3	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.0		µg/l	1.0	0.9	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.0		µg/l	2.0	0.4	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.0		µg/l	1.0	0.5	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	94			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	105			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	111			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	108			70-130 %			"	"	"	"	"	

Extractable Petroleum Hydrocarbons

Fingerprinting by GC

Prepared by method SW846 3510C

8006-61-9	Gasoline	< 0.2		mg/l	0.2	0.1	1	SW846 8100Mod.	16-Jun-15	22-Jun-15	SEP	1511726	
68476-30-2	Fuel Oil #2	< 0.2		mg/l	0.2	0.08	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Hydraulic Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Dielectric Fluid	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Unidentified	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Other Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	

Surrogate recoveries:

3386-33-2	1-Chlorooctadecane	66			40-140 %			"	"	"	"	"	
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Sample Identification

Trip Blank
SC08776-05

Client Project #
08-221382.01

Matrix
Deionized Water

Collection Date/Time
11-Jun-15 00:00

Received
12-Jun-15

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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Volatile Organic Compounds

Volatile Organic Compounds by GC/MS

Prepared by method SW846 5030 Water MS

71-43-2	Benzene	< 1.0		µg/l	1.0	0.2	1	SW846 8260C	16-Jun-15	17-Jun-15	GMA	1511740	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.5		µg/l	0.5	0.3	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.0		µg/l	1.0	0.9	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.0		µg/l	2.0	0.4	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.0		µg/l	1.0	0.5	1	"	"	"	"	"	X

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	105			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	90			70-130 %			"	"	"	"	"	

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Sample Identification

Duplicate SC08776-06
 Client Project # 08-221382.01
 Matrix Ground Water
 Collection Date/Time 11-Jun-15 00:00
 Received 12-Jun-15

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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Volatile Organic Compounds

Volatile Organic Compounds by GC/MS
 Prepared by method SW846 5030 Water MS

71-43-2	Benzene	< 1.0		µg/l	1.0	0.2	1	SW846 8260C	16-Jun-15	17-Jun-15	GMA	1511740	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.5		µg/l	0.5	0.3	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	1.3		µg/l	1.0	0.2	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X
91-20-3	Naphthalene	2.3		µg/l	1.0	0.4	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	4.8		µg/l	1.0	0.4	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.0		µg/l	1.0	0.9	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.0		µg/l	2.0	0.4	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.0		µg/l	1.0	0.5	1	"	"	"	"	"	X

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	104			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	95			70-130 %			"	"	"	"	"	

Extractable Petroleum Hydrocarbons

Fingerprinting by GC
 Prepared by method SW846 3510C

8006-61-9	Gasoline	< 0.2		mg/l	0.2	0.1	1	SW846 8100Mod.	16-Jun-15	22-Jun-15	SEP	1511726	
68476-30-2	Fuel Oil #2	< 0.2		mg/l	0.2	0.08	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Hydraulic Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Dielectric Fluid	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Unidentified	1.3		mg/l	0.2	0.05	1	"	"	"	"	"	
	Other Oil	Calculated as		mg/l	0.2	0.02	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	1.3		mg/l	0.2	0.02	1	"	"	"	"	"	

Surrogate recoveries:

3386-33-2	1-Chlorooctadecane	72			40-140 %			"	"	"	"	"	
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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 1511740 - SW846 5030 Water MS										
<u>Blank (1511740-BLK1)</u>					<u>Prepared & Analyzed: 16-Jun-15</u>					
Benzene	< 1.0		µg/l	1.0						
1,2-Dibromoethane (EDB)	< 0.5		µg/l	0.5						
1,2-Dichloroethane	< 1.0		µg/l	1.0						
Ethylbenzene	< 1.0		µg/l	1.0						
Methyl tert-butyl ether	< 1.0		µg/l	1.0						
Naphthalene	< 1.0		µg/l	1.0						
Toluene	< 1.0		µg/l	1.0						
1,2,4-Trimethylbenzene	< 1.0		µg/l	1.0						
1,3,5-Trimethylbenzene	< 1.0		µg/l	1.0						
m,p-Xylene	< 2.0		µg/l	2.0						
o-Xylene	< 1.0		µg/l	1.0						
<i>Surrogate: 4-Bromofluorobenzene</i>	47.2		µg/l		50.0		94	70-130		
<i>Surrogate: Toluene-d8</i>	49.0		µg/l		50.0		98	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.7		µg/l		50.0		101	70-130		
<i>Surrogate: Dibromofluoromethane</i>	45.0		µg/l		50.0		90	70-130		
<u>LCS (1511740-BS1)</u>					<u>Prepared & Analyzed: 16-Jun-15</u>					
Benzene	20.6		µg/l		20.0		103	70-130		
1,2-Dibromoethane (EDB)	21.1		µg/l		20.0		106	70-130		
1,2-Dichloroethane	20.4		µg/l		20.0		102	70-130		
Ethylbenzene	21.1		µg/l		20.0		106	70-130		
Methyl tert-butyl ether	19.6		µg/l		20.0		98	70-130		
Naphthalene	23.7		µg/l		20.0		119	70-130		
Toluene	19.6		µg/l		20.0		98	70-130		
1,2,4-Trimethylbenzene	21.9		µg/l		20.0		109	70-130		
1,3,5-Trimethylbenzene	21.6		µg/l		20.0		108	70-130		
m,p-Xylene	20.8		µg/l		20.0		104	70-130		
o-Xylene	21.7		µg/l		20.0		108	70-130		
<i>Surrogate: 4-Bromofluorobenzene</i>	48.6		µg/l		50.0		97	70-130		
<i>Surrogate: Toluene-d8</i>	49.0		µg/l		50.0		98	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.7		µg/l		50.0		101	70-130		
<i>Surrogate: Dibromofluoromethane</i>	46.2		µg/l		50.0		92	70-130		
<u>LCS Dup (1511740-BSD1)</u>					<u>Prepared & Analyzed: 16-Jun-15</u>					
Benzene	19.3		µg/l		20.0		97	70-130	7	20
1,2-Dibromoethane (EDB)	21.1		µg/l		20.0		105	70-130	0.3	20
1,2-Dichloroethane	19.6		µg/l		20.0		98	70-130	4	20
Ethylbenzene	19.7		µg/l		20.0		99	70-130	7	20
Methyl tert-butyl ether	19.3		µg/l		20.0		97	70-130	1	20
Naphthalene	22.8		µg/l		20.0		114	70-130	4	20
Toluene	18.6		µg/l		20.0		93	70-130	5	20
1,2,4-Trimethylbenzene	20.8		µg/l		20.0		104	70-130	5	20
1,3,5-Trimethylbenzene	20.3		µg/l		20.0		102	70-130	6	20
m,p-Xylene	20.1		µg/l		20.0		101	70-130	3	20
o-Xylene	20.6		µg/l		20.0		103	70-130	5	20
<i>Surrogate: 4-Bromofluorobenzene</i>	49.0		µg/l		50.0		98	70-130		
<i>Surrogate: Toluene-d8</i>	49.0		µg/l		50.0		98	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	51.0		µg/l		50.0		102	70-130		
<i>Surrogate: Dibromofluoromethane</i>	46.3		µg/l		50.0		93	70-130		
<u>Matrix Spike (1511740-MS1)</u>					<u>Source: SC08776-02</u>		<u>Prepared & Analyzed: 16-Jun-15</u>			
Benzene	20.0	D	µg/l		20.0	BRL	100	70-130		
1,2-Dibromoethane (EDB)	21.1	D	µg/l		20.0	BRL	105	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 1511740 - SW846 5030 Water MS										
Matrix Spike (1511740-MS1)			Source: SC08776-02			Prepared & Analyzed: 16-Jun-15				
1,2-Dichloroethane	20.1	D	µg/l		20.0	BRL	100	70-130		
Ethylbenzene	20.8	D	µg/l		20.0	BRL	104	70-130		
Methyl tert-butyl ether	19.1	D	µg/l		20.0	BRL	96	70-130		
Naphthalene	23.5	D	µg/l		20.0	BRL	117	70-130		
Toluene	19.4	D	µg/l		20.0	BRL	97	70-130		
1,2,4-Trimethylbenzene	21.6	D	µg/l		20.0	BRL	108	70-130		
1,3,5-Trimethylbenzene	21.2	D	µg/l		20.0	BRL	106	70-130		
m,p-Xylene	21.0	D	µg/l		20.0	BRL	105	70-130		
o-Xylene	21.0	D	µg/l		20.0	BRL	105	70-130		
<hr/>										
Surrogate: 4-Bromofluorobenzene	49.4		µg/l		50.0		99	70-130		
Surrogate: Toluene-d8	49.4		µg/l		50.0		99	70-130		
Surrogate: 1,2-Dichloroethane-d4	49.6		µg/l		50.0		99	70-130		
Surrogate: Dibromofluoromethane	48.0		µg/l		50.0		96	70-130		
Matrix Spike Dup (1511740-MSD1)			Source: SC08776-02			Prepared & Analyzed: 16-Jun-15				
Benzene	21.2	D	µg/l		20.0	BRL	106	70-130	6	20
1,2-Dibromoethane (EDB)	21.0	D	µg/l		20.0	BRL	105	70-130	0.2	20
1,2-Dichloroethane	20.6	D	µg/l		20.0	BRL	103	70-130	3	20
Ethylbenzene	22.1	D	µg/l		20.0	BRL	110	70-130	6	20
Methyl tert-butyl ether	19.6	D	µg/l		20.0	BRL	98	70-130	3	20
Naphthalene	23.0	D	µg/l		20.0	BRL	115	70-130	2	20
Toluene	20.3	D	µg/l		20.0	BRL	102	70-130	5	20
1,2,4-Trimethylbenzene	22.9	D	µg/l		20.0	BRL	114	70-130	6	20
1,3,5-Trimethylbenzene	22.8	D	µg/l		20.0	BRL	114	70-130	7	20
m,p-Xylene	22.1	D	µg/l		20.0	BRL	110	70-130	5	20
o-Xylene	22.4	D	µg/l		20.0	BRL	112	70-130	6	20
<hr/>										
Surrogate: 4-Bromofluorobenzene	49.7		µg/l		50.0		99	70-130		
Surrogate: Toluene-d8	49.5		µg/l		50.0		99	70-130		
Surrogate: 1,2-Dichloroethane-d4	49.9		µg/l		50.0		100	70-130		
Surrogate: Dibromofluoromethane	47.7		µg/l		50.0		95	70-130		
<hr/>										
Batch 1511832 - SW846 5030 Water MS										
Blank (1511832-BLK1)						Prepared & Analyzed: 17-Jun-15				
Benzene	< 1.0		µg/l	1.0						
1,2-Dibromoethane (EDB)	< 0.5		µg/l	0.5						
1,2-Dichloroethane	< 1.0		µg/l	1.0						
Ethylbenzene	< 1.0		µg/l	1.0						
Methyl tert-butyl ether	< 1.0		µg/l	1.0						
Naphthalene	< 1.0		µg/l	1.0						
Toluene	< 1.0		µg/l	1.0						
1,2,4-Trimethylbenzene	< 1.0		µg/l	1.0						
1,3,5-Trimethylbenzene	< 1.0		µg/l	1.0						
m,p-Xylene	< 2.0		µg/l	2.0						
o-Xylene	< 1.0		µg/l	1.0						
<hr/>										
Surrogate: 4-Bromofluorobenzene	47.3		µg/l		50.0		95	70-130		
Surrogate: Toluene-d8	51.8		µg/l		50.0		104	70-130		
Surrogate: 1,2-Dichloroethane-d4	51.5		µg/l		50.0		103	70-130		
Surrogate: Dibromofluoromethane	50.2		µg/l		50.0		100	70-130		
LCS (1511832-BS1)						Prepared & Analyzed: 17-Jun-15				
Benzene	23.9		µg/l		20.0		120	70-130		
1,2-Dibromoethane (EDB)	24.6		µg/l		20.0		123	70-130		
1,2-Dichloroethane	22.4		µg/l		20.0		112	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 1511832 - SW846 5030 Water MS										
<u>LCS (1511832-BS1)</u>					<u>Prepared & Analyzed: 17-Jun-15</u>					
Ethylbenzene	24.3		µg/l		20.0		121	70-130		
Methyl tert-butyl ether	22.0		µg/l		20.0		110	70-130		
Naphthalene	22.1		µg/l		20.0		110	70-130		
Toluene	23.3		µg/l		20.0		116	70-130		
1,2,4-Trimethylbenzene	21.9		µg/l		20.0		109	70-130		
1,3,5-Trimethylbenzene	22.6		µg/l		20.0		113	70-130		
m,p-Xylene	22.5		µg/l		20.0		113	70-130		
o-Xylene	23.8		µg/l		20.0		119	70-130		
<i>Surrogate: 4-Bromofluorobenzene</i>	51.0		µg/l		50.0		102	70-130		
<i>Surrogate: Toluene-d8</i>	51.8		µg/l		50.0		104	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	48.4		µg/l		50.0		97	70-130		
<i>Surrogate: Dibromofluoromethane</i>	50.5		µg/l		50.0		101	70-130		
<u>LCS Dup (1511832-BSD1)</u>					<u>Prepared & Analyzed: 17-Jun-15</u>					
Benzene	23.2		µg/l		20.0		116	70-130	3	20
1,2-Dibromoethane (EDB)	25.0		µg/l		20.0		125	70-130	2	20
1,2-Dichloroethane	21.6		µg/l		20.0		108	70-130	3	20
Ethylbenzene	22.7		µg/l		20.0		114	70-130	7	20
Methyl tert-butyl ether	22.6		µg/l		20.0		113	70-130	3	20
Naphthalene	21.9		µg/l		20.0		110	70-130	0.8	20
Toluene	22.0		µg/l		20.0		110	70-130	6	20
1,2,4-Trimethylbenzene	20.5		µg/l		20.0		103	70-130	6	20
1,3,5-Trimethylbenzene	20.7		µg/l		20.0		104	70-130	9	20
m,p-Xylene	21.7		µg/l		20.0		108	70-130	4	20
o-Xylene	22.4		µg/l		20.0		112	70-130	6	20
<i>Surrogate: 4-Bromofluorobenzene</i>	51.1		µg/l		50.0		102	70-130		
<i>Surrogate: Toluene-d8</i>	52.4		µg/l		50.0		105	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	48.9		µg/l		50.0		98	70-130		
<i>Surrogate: Dibromofluoromethane</i>	50.4		µg/l		50.0		101	70-130		

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Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1511726 - SW846 3510C										
<u>Blank (1511726-BLK1)</u>					<u>Prepared: 16-Jun-15 Analyzed: 17-Jun-15</u>					
Gasoline	< 0.2		mg/l	0.2						
Fuel Oil #2	< 0.2		mg/l	0.2						
Fuel Oil #4	< 0.2		mg/l	0.2						
Fuel Oil #6	< 0.2		mg/l	0.2						
Motor Oil	< 0.2		mg/l	0.2						
Ligroin	< 0.2		mg/l	0.2						
Aviation Fuel	< 0.2		mg/l	0.2						
Hydraulic Oil	< 0.2		mg/l	0.2						
Dielectric Fluid	< 0.2		mg/l	0.2						
Unidentified	< 0.2		mg/l	0.2						
Other Oil	< 0.2		mg/l	0.2						
Total Petroleum Hydrocarbons	< 0.2		mg/l	0.2						
<i>Surrogate: 1-Chlorooctadecane</i>	<i>0.0381</i>		<i>mg/l</i>		<i>0.0500</i>		<i>76</i>	<i>40-140</i>		
<u>LCS (1511726-BS2)</u>					<u>Prepared & Analyzed: 16-Jun-15</u>					
Fuel Oil #2	2.3		mg/l	0.2	2.00		115	40-140		
<i>Surrogate: 1-Chlorooctadecane</i>	<i>0.0431</i>		<i>mg/l</i>		<i>0.0500</i>		<i>86</i>	<i>40-140</i>		
<u>LCS Dup (1511726-BSD2)</u>					<u>Prepared & Analyzed: 16-Jun-15</u>					
Fuel Oil #2	1.8		mg/l	0.2	2.00		91	40-140	23	200
<i>Surrogate: 1-Chlorooctadecane</i>	<i>0.0405</i>		<i>mg/l</i>		<i>0.0500</i>		<i>81</i>	<i>40-140</i>		

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Notes and Definitions

D	Data reported from a dilution
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

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 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.

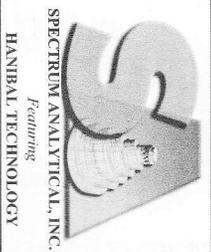
Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

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.

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

Validated by:
Rebecca Merz



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

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

Report To: ECS
1 ELM STREET SUITE 3
WATERBURY, VT 05676

Invoice To: JAME
P.O. No.: 08-221382.01
Quote/RON: SPECIAL

Project No.: 08-221382.01
Site Name: CHECK OF CARBOT
Location: CARBOT
Sampler(s): PCR
State: VT

Telephone #: 802-241-4131
Project Mgr: LARA WOODARD

List Preservative Code below:
2 2

F=Field Filtered 1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid
7=CH₃OH 8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11= _____ 12= _____

QA/QC Reporting Notes:
* additional charges may apply

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers				Temp °C	Observed Concentration Factor	Check if chlorinated	MA DEP MCP CAM Report? CT DPH RCT Report? <input checked="" type="checkbox"/> Standard <input type="checkbox"/> No QC <input type="checkbox"/> DQA* <input type="checkbox"/> ASP A* <input type="checkbox"/> ASP B* <input type="checkbox"/> NJ Reduced* <input type="checkbox"/> NJ Full* <input type="checkbox"/> Tier II* <input type="checkbox"/> Tier IV* Other: _____ State-specific reporting standards: _____
						# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic				
SC08776-a	MN-1	6-11-15	11:30	G	GW	3	1			X	X		
	MW-2R		11:55			3	1			X	X		
	MW-3R		12:05			3	1			X	X		
	MN-4		11:45			3	1			X	X		
	TRAP BLANK												
	DUPLICATE												

Relinquished by: [Signature] Received by: [Signature] Date: 6-11-15 Time: 15:45 Temp °C: 5.2

Condition upon receipt: Ambient Used Refrigerated DI VOA Frozen Present Intact Broken

Custody Seals: Present Intact Broken

E-mail to: LWOODARD@ESCONVLT.COM

SC08776JW

UPS CampussShip: View/Print Label

1. Ensure there are no other shipping or tracking labels attached to your package. Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. Fold the printed label at the solid line below. Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. GETTING YOUR SHIPMENT TO UPS
UPS locations include the UPS Store®, UPS drop boxes, UPS customer centers, authorized retail outlets and UPS drivers.

Schedule a same day or future day Pickup to have a UPS driver pickup all your CampussShip

packages.

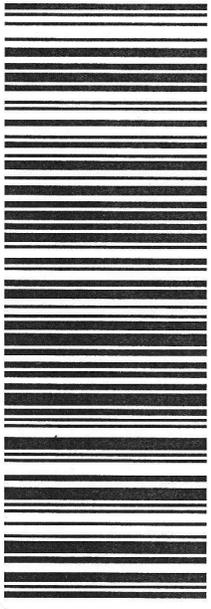
Hand the package to any UPS driver in your area.

Take your package to any location of The UPS Store®, UPS Drop Box, UPS Customer Center, UPS Alliances (Office Depot® or Staples®) or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampussShip and select UPS Locations.

Customers with a Daily Pickup

Your driver will pickup your shipment(s) as usual.

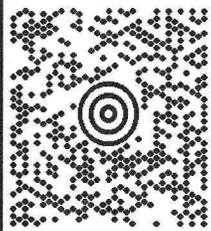
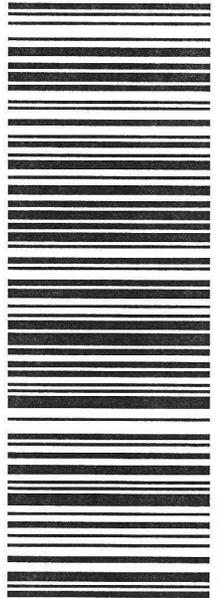
FOLD HERE

<p>AMY BETH CONNELL 8024344500 EGS WATERBURY 1 ELM STREET WATERBURY VT 05676</p>	<p>26 LBS</p>	<p>1 OF 1</p>
<p>SHIP TO: LAB 413 789 9018 SPECTRUM ANALYTICAL 11 ALMGREN DRIVE AGAWAM MA 01001-3831</p>	<p>MA 011 9-06</p> 	
<p>UPS NEXT DAY AIR</p> <p>TRACKING #: 1Z F31 7E5 01 9093 6497</p> <p>1</p>		
<p>BILLING: F/C BILL RECEIVER</p>		
<p>Location Reference: 0008 Project Number: Samples</p>	<p>CS 17.2.07. WINTNV50 63.0A 04/2015</p> 	

UPS CampussShip: View/Print Label

1. Ensure there are no other shipping or tracking labels attached to your package. Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.
 2. Fold the printed label at the solid line below. Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.
 3. GETTING YOUR SHIPMENT TO UPS
 UPS locations include the UPS Store[®], UPS drop boxes, UPS customer centers, authorized retail outlets and UPS drivers.
 Schedule a same day or future day Pickup to have a UPS driver pickup all your CampussShip packages.
 Hand the package to any UPS driver in your area.
 Take your package to any location of The UPS Store[®], UPS Drop Box, UPS Customer Center, UPS Alliances (Office Depot[®] or Staples[®]) or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampussShip and select UPS Locations.
- Customers with a Daily Pickup
 Your driver will pickup your shipment(s) as usual.

FOLD HERE

AMY BETH CONNELL 8024344500 ECS WATERBURY 1 ELM STREET WATERBURY VT 05676	33 LBS	1 OF 1
SHIP TO: LAB 413 789 9018 SPECTRUM ANALYTICAL 11 ALMGREN DRIVE AGAWAM MA 01001-3831		
	MA 011 9-06 	
UPS NEXT DAY AIR 1 TRACKING #: 1Z F31 7E5 01 9273 1883		
		
BILLING: F/C BILL RECEIVER		
Location Reference: 0008 Project Number: Samples		
<small>CS 17.2.07. WINTNV50 63.04.04/2015</small>		

APPENDIX B
ENGINEERING REPORT

August 14, 2015

Laura Woodard
ECS
1 Elm Street #3
Waterbury, VT 05676

Re: United Church of Cabot
Follow up from January 2, 2015 Site Visit

EV 14698

Dear Laura:

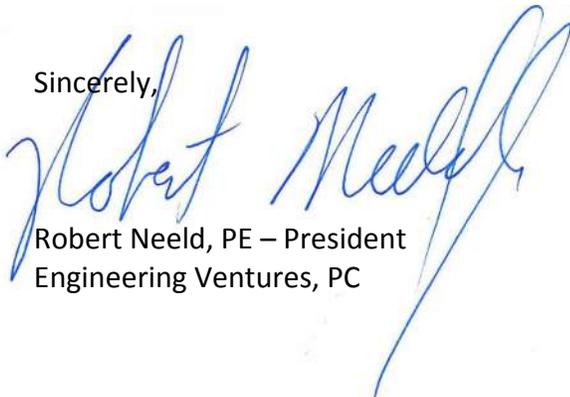
At your request, a follow up site visit was made on August 13, 2015 to review the conditions at the Cabot United Church. We were on site during excavation of contaminated soils on January 2nd.

The following was noted:

- The foundation had been backfilled and the grass area seeded and mulched.
- There were no signs of foundation movement noted.
- There were no signs of significant settlement of backfill at the exterior of the foundation.
- The seeded area had some grass growing, but the grass was far from robust.
- Several areas of the gravel drive were slightly eroded due to storm runoff.

We are pleased to be of service.

Sincerely,



Robert Neeld, PE – President
Engineering Ventures, PC

