Waite-Heindel
Environmental Management

October 20, 2014

Mr. Richard Spiese
Waste Management Division
Agency of Natural Resources
1 National Life Drive - Davis 1
Montpelier, VT 05620-3704
Email only: richard.spiese@state.vt.us

RE: Spillane's Service Center (SMS #87-0012)
Shelburne, Vermont
July 2014 Groundwater Monitoring Report

Dear Richard:

Enclosed please find Waite-Heindel Environmental Management's *July 2014 Groundwater Monitoring Report* for the above referenced site. The report details groundwater monitoring performed in July 2014.

Should you have any questions, please do not hesitate to contact me at (802) 860-9400 ext. 103 or wkrembs@waiteenv.com.

Best regards,

Wendy Krembs

Wendy Krembs
Project Scientist

Enclosure

cc: Scott Bigger, Spillane's

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SPILLANE'S SERVICE CENTER
SHELBURNE, VERMONT

GROUNDWATER MONITORING REPORT
JULY 2014

VERMONT SITE #87-0012

October 20, 2014

Prepared for:

Scott Bigger
Spillane's Service Center
7 Commerce Avenue
South Burlington, VT 05403

Prepared by:

Waite - Heindel
Environmental Management

7 Kilburn St. Suite 301
Burlington, Vermont 05401
(802) 860-9400

www.waiteenv.com

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1.0 INTRODUCTION

This report was prepared by Waite-Heindel Environmental Management (WHEM) to discuss the details and results of groundwater monitoring at Spillane's Service Center (SMS #87-0012) located in Shelburne, Vermont (the Site). This site is currently monitored on a semi-annual basis, in the spring and fall of each year. The site was sampled on July 24, 2014, and results from this sampling event are described below.

2.0 GROUNDWATER FLOW

Depth to groundwater measurements for groundwater contours was measured from SB-6A, SB-11, SB-12, SB-14, SB-15, SB-16, SB-21, SB-23, SB-25, SB-26, SB-27, SB-28, SB-29, SB-32, SB-40, MW-1, MW-100, MW-105, MW-110, MW-113, MW-114 and RW-1 on July 24, 2014.

Depth to groundwater data was subtracted from surveyed top of casing (TOC) elevations to determine groundwater elevations at each monitoring well. Refer to Appendix 1, pages 1-2 for maps and data table 1 in Appendix 2, page 1 for a tabulated summary of groundwater elevation results. Groundwater elevations were generally stable across the site compared to the last sampling event in December 2013.

Groundwater elevation contours were mapped to determine flow direction and gradient. Refer to Appendix 1, pages 1-2 for the groundwater contour maps generated from the July 2014 monitoring data. As indicated by these data, groundwater flow direction at the Site is northwesterly, which is consistent with historical data. The hydraulic gradient is 0.008 ft/ft (SB-12 to SB-25), also consistent with historically collected data.

3.0 GROUNDWATER QUALITY SAMPLING

During the July 2014 sampling event, SB-6A, SB-11, SB-12, SB-15, SB-16, SB-21, SB-25, SB-27, SB-28, SB-29, SB-32, SB-40, MW-1, MW-110, MW-113, and RW-1 were sampled for water quality analysis. Each well was purged of three well volumes of groundwater (or until dry) using individual disposable bailers prior to sample collection. The samples were preserved with hydrochloric acid, stored on ice and transported to Endyne, Inc., a certified environmental laboratory in Williston, Vermont. All samples were analyzed for Volatile Organic Compounds (VOCs) by EPA Method 8021B with the exception of monitoring wells SB-28 and MW-1, which were analyzed for VOCs by EPA Method 8260C. SB-29 is typically analyzed by EPA Method 8260C, but due to laboratory oversight, was only analyzed by EPA Method 8021B. Refer to data table 2 in Appendix 2, pages 2-5 for a tabulated summary of the results, and Appendix 3 for full laboratory reports.

3.1 Ethanol Analysis

During the December 2010, July 2012, November 2012 and June 2013 sampling events, WHEM sampled select monitoring wells for ethanol to assist in determining if there was a new release at the site after a spike in VOC detections were noted. Ethanol, in this case, was used as a signature of a new release since it is a more common component of gasoline in recent years. Ethanol was non-detected below laboratory limits in all sampled wells during the June 2013 sampling event. The most recent ethanol detection was 147 ppb in SB-6A in July 2012. Ethanol was not detected within the MTBE and BTEX plume above laboratory detection limits of 100 ppb and 500 ppb in November 2012 or June 2013. Due to the high concentrations of VOCs in the monitoring wells, it is not possible to reduce the ethanol reporting limit further. Based on the non-detect results from the November 2012 and June 2013 sampling events, the State agreed that ethanol analysis is no longer required.

4.0 GROUNDWATER QUALITY

As indicated by the groundwater quality data in Appendix 2, pages 2-5, fifteen of the sixteen sampled wells contained detectable concentrations of VOCs. Of these, seven wells had concentrations of at least one compound that was at, or exceeded the Vermont Groundwater Enforcement Standards (VGES). An isoconcentration plume map was created for BTEX and MTBE concentrations, which are included in Appendix 1, pages 1-2, respectively. They are discussed in detail below.

4.1 BTEX Plume

As indicated by the BTEX isoconcentration map in Appendix 1, page 1, BTEX contaminant concentrations were elevated east, north and west of Spillane's Service Center with a complex west/northwest trending plume. The complexity of the plume is likely due to the presence of many underground conduits/trenches associated with the former remediation system that provide preferential paths of contaminant movement. The plume footprint continues to encompass four off-site properties. The core of the plume encompasses SB-25, SB-27, SB-40, MW-1, and RW-1. BTEX concentrations in SB-25, SB-27, MW-1 and RW-1 have all increased since the previous sampling event in December 2013, while BTEX concentration in SB-40 has decreased. The degree of BTEX contamination in the core of the plume increased significantly through 2009 and into 2010, and has appeared to be on a decreasing trend over time, although this event showed generally increased trends since the last sampling event in December 2013. Refer to the graphs in Appendix 2, pages 8-10 which illustrates total BTEX concentration trends in select wells in the plume core since the beginning of 2001.

SB-25: Total BTEX concentrations in SB-25 show a spike between 2006 and May 2009, when BTEX concentrations reached 76,700 ppb. Concentrations have decreased, but still remain elevated since UST associated upgrades occurred in July 2009. The UST piping replacement in July 2009 did indicate significant contamination in the UST area, which may have been resultant of recent releases, but no equipment leaks were identified by site contractors or during oversight. Free phase product has not been observed during groundwater sampling, although petroleum sheens and/or strong odors continue to be noted. Although BTEX concentrations increased since the last sampling event in December 2013, concentrations continue to show a steady decline since 2009. A graph depicting the BTEX trends in SB-25 since 1991 is included in Appendix 1, page 9.

SB-27: Total BTEX concentrations in SB-27 had been declining significantly since a spike in May 2010. However, concentrations have been steadily increasing since July 2012 and are back within recently high concentrations. Generally, BTEX concentrations tend to fluctuate in this well. A graph depicting the BTEX trends in SB-27 since 1991 is included in Appendix 1, page 10.

SB-40: Total BTEX concentrations in SB-40 had been declining significantly since a spike in May 2010 until the last sampling event in December 2013, when concentrations increased. BTEX concentrations appear to be declining this round when compared to the previous December 2013 sampling event.

MW-1: The decline in BTEX concentrations in MW-1 has not been dramatic over time but steady and slightly erratic, indicating a residual source of contamination is likely still present in the soils and groundwater. Concentrations increased this round since the last sampling event in December 2013. Xylenes continue to dominate the groundwater VOC chemistry in MW-1, indicating the presence of a newer, less weathered gasoline source in addition to the residual source. A graph depicting the BTEX trends in MW-1 since 1991 is included in Appendix 1, page 9.

RW-1: Total BTEX concentrations in RW-1 continue to show sporadic fluctuations over time, and are generally within recent normal historic trends.

SB-28: The groundwater chemistry in SB-28 downgradient of the source area is typically dominated by trimethylbenzenes, indicating an older, weathered gasoline source. During the November 2009 sampling event, benzene was detected in this well for the first time since 2007 at 46.8 parts per billion (ppb), and continues to be detected, usually above the VGES. A graph depicting the BTEX trend in SB-28 since 1991 included in Appendix 2, page 10.
Benzene data from 1991 to the present is included in a compliance projection graph for SB-28, as it is the compound most frequently over the VGES. This compliance graph shows that benzene concentrations are on a downward trend. A copy of the projection graph is included in Appendix 2, page 11.

4.2 MTBE Plume

As indicated by the MTBE isoconcentration map in Appendix 1, page 2, MTBE concentrations were elevated generally west/northwest of Spillane's Service Center. The highest MTBE concentration surrounds RW-1 and extends southwestward to SB-6A and SB-16 and east to SB-40 and SB-11. The plume also extends to the northeastern corner of the DeWahl house footprint to SB-12 where MTBE was detected at 3.5 ppb. MTBE was non-detect in all of the wells near the former USTs. MTBE plumes are very dynamic due to the highly soluble nature of the contaminant. This suggests that the contamination now centered on RW-1 may be due to plume migration. The plume footprint appears generally stable due to equilibrium between dissolution of material and contaminant attenuation at its perimeter. The complete extent of the MTBE plume is not defined by the current monitoring well array.

During the July 2014 sampling event, MTBE concentrations above laboratory detection limits were detectable in SB-6A, SB-11, SB-12, SB-16, SB-40 and RW-1. The MTBE concentration in the core of the plume centered on RW-1 is 28.9 ppb this round, which is well below the VGES of 40 ppb. A graph depicting the MTBE trends in select wells that historically have shown high concentrations since 1991 is included in Appendix 1, page 8.

4.3 Other Contaminants of Concern

The August 2006 report noted that tetrachloroethene (PCE) was detected at 1.1 ppb in SB-29, just above the detection limit of 1 ppb. This had not been noted previously at this site and the source is still unknown. The compound has not been detected since, and only low levels of additional 8260 compounds were detected this round. Cis-1,2-dichlororethene (cis-1,2-DCE), a breakdown product of PCE, had been detected in SB-28 between November 2012 and December 2013, well below the VGES of 70 ppb. However, it was non-detect during this July 2014 sampling event.

4.4 Quality Assurance/Quality Control (QA/QC)

As part of the quality assurance/quality control (QA/QC) program, WHEM collected a field duplicate sample during the July 2014 event. Sample "Duplicate" was collected in conjunction with SB-6A. The duplicate sample was analyzed by Endyne using the same method (EPA Method 8021B). Upon comparison of paired results, precision in these field duplicate samples was acceptable (less than 30% RPD) for all target analytes greater than 2 times the quantitation limit.

Also during the July 2014 sampling event, one trip blank was added to the cooler and submitted for analysis by EPA Method 8260B. No target compounds were reported in the trip blank sample.

5.0 WELL REPAIR

During the July 2014 groundwater sampling event, WHEN conducted repairs to various groundwater monitoring wells. This included re-tapping of well box bolts on wells located in high traffic areas. Re-tapping of the bolts will prevent well box covers from being knocked off or destroyed during winter plowing. At this time, well boxes located in non-paved areas were not repaired, but do not run the risk of winter damage.

6.0 RESIDENTIAL AIR QUALITY SCREENING

The basement of the Fisher residence and DeWahl house were screened during the groundwater sampling event on July 24, 2014. A photo ionization detector (PID) equipped with a 10.6 eV lamp to measure volatile organic compounds (VOCs) in the ambient air was used. VOCs were not detected with the PID and there was no olfactory evidence of contamination.

7.0 OVERALL WATER QUALITY ANALYSIS

Table 3 (Appendix 2, page 6) tabulates the yearly average concentrations of benzene, BTEX and MTBE and provides the percent reduction in each compound for several key wells since 1991. As indicated by this table, overall water quality at the Site has improved since sampling began in 1991. The current average BTEX trend shows general fluctuations since 2007 in wells SB-21 and SB-25, with peaks in 2009.

8.0 CONCLUSIONS AND RECOMMENDATIONS

This site is currently monitored on a semi-annual basis, in the spring and fall of each year. It was most recently sampled on July 24, 2014. The BTEX and MTBE plume footprint continues to encompass four off-site properties.

BTEX contaminant concentrations were elevated east, north and west of Spillane's Service Center with a generally west/northwest trending plume. The core of the BTEX plume encompasses SB-25, SB-27, SB-40, MW-1, and RW-1. The BTEX concentrations in SB-27, MW-1 and RW-1 and have all increased since the previous sampling event in December 2013, while BTEX concentrations in SB-40 have decreased. The degree of BTEX contamination in the core of the plume increased significantly through 2009 and into 2010, and has appeared to be on decreasing trend over time, although this event showed generally increased trends since the last sampling event in December 2013.

MTBE concentrations were elevated generally west/northwest of Spillane's Service Center. The highest MTBE concentration surrounds RW-1 and extends southwestward to SB-6A and SB-16 and east to SB-40 and SB-11. The plume also extends to the northeast corner of the DeWahl house footprint to SB-12 where MTBE was detected at 3.5 ppb. MTBE was non-detect in all of the wells near the former USTs. MTBE plumes are very dynamic due to the highly soluble nature of the contaminant. This suggests that the contamination now centered on RW-1 may be due to plume migration. The plume footprint appears generally stable due to equilibrium between dissolution of material and contaminant attenuation at its perimeter. The complete extent of the MTBE plume is not defined by the current monitoring well array.

While the MTBE plume extends to the footprint of the DeWahl house, it does not appear to intercept the Fisher house at this time. VOCs were not detected with the PID in either basement and there was no olfactory evidence of contamination.

Based on these results, WHEM makes the following recommendations:

- WHEM recommends a reduction in sampling frequency to annual sampling, with the next event scheduled for the spring of 2015. Groundwater sampling should occur from the following fifteen wells: SB-6A, SB-11, SB-12, SB-16, SB-21, SB-25, SB-27, SB-28, SB-29, SB-32, SB-40, MW-1, MW-110, MW-113, and RW-1. Prior to sampling, each well will be purged of three well volumes of groundwater (or until dry) using individual disposable bailers.
- Groundwater depths should be collected from only those wells that are sampled, as the long history of groundwater elevation data has shown a stable flow direction.
- Samples should be analyzed for VOCS via Method 8021B, with select wells (SB-28, SB-29 and MW-1) analyzed via Method 8260. The next sampling event should occur in the spring of 2015.

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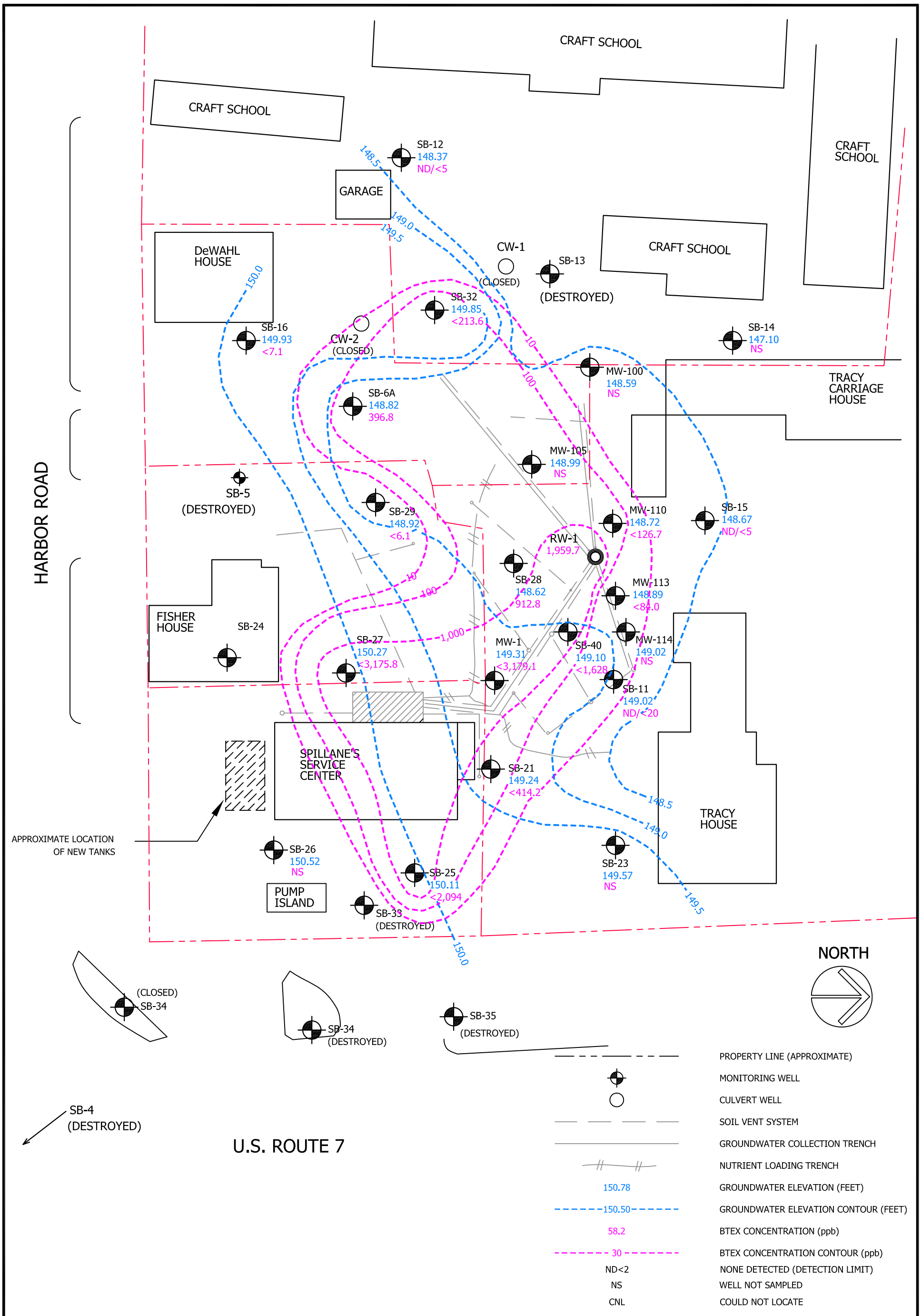
APPENDIX 1



SPLILLANE'S SERVICE CENTER
5252 SHELBURNE ROAD
SHELBURNE, VERMONT

GROUNDWATER ELEVATION CONTOUR AND BTEX CONCENTRATION CONTOUR MAP FOR 7/24/2014

SCALE: 1"=30'

FILE: \SPILLANE\ShelburneRoad\CADD\dwg\Spillane-Siteplan.dwg

DATE:	9/2/2014
PROJECT NO.	93856.1
DRAWN BY:	D.W.F.
PROJ. MGR:	W.K.
APPROVED:	

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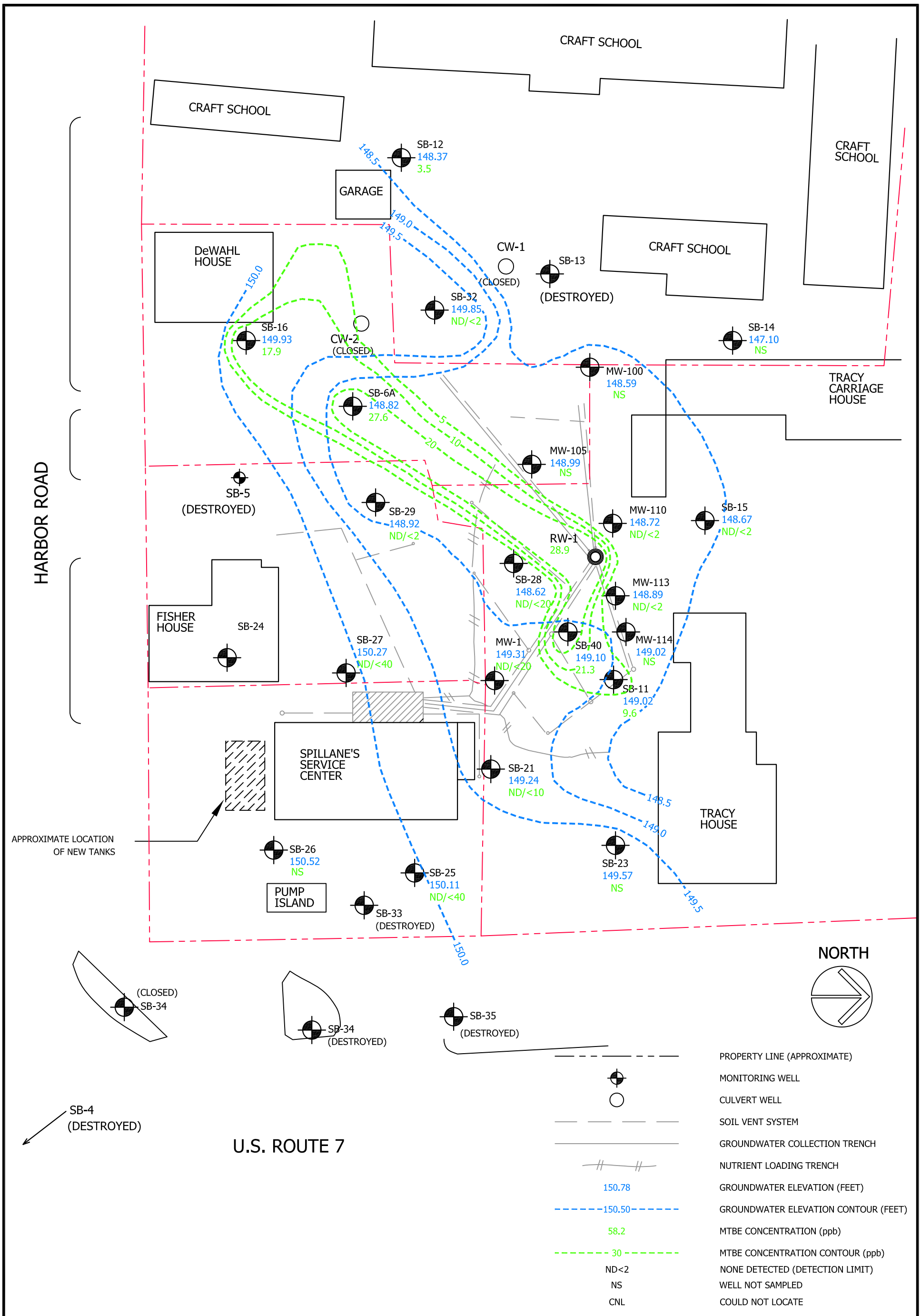

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GROUNDWATER ELEVATION CONTOUR AND MTBE CONCENTRATION CONTOUR MAP FOR 7/24/2014

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APPENDIX 2

TABLE 1
GROUNDWATER ELEVATION DATA (ft)
SPILLANE'S SERVICE CENTER, SHELBURNE, VERMONT

Well	Location	Top of Pipe Elevation	5/18/2009	11/17/2009	5/20/2010	12/2/2010	7/17/2012	11/26/2012	6/10/2013	12/27/2013	7/24/2014
SB-06A	SB-06A	154.29	149.67	148.79	149.62	149.92	149.27	148.85	150.82	CNL	148.82
SB-11	SB-11	154.39	149.79	148.44	149.84	150.12	148.38	148.86	151.35	148.17	149.02
SB-12	SB-12	154.04	149.24	148.01	154.04	149.59	147.74	148.29	150.46	147.82	148.37
SB-14	SB-14	153.48	148.27	146.83	148.07	148.91	146.84	147.25	NS	146.71	147.10
SB-15	SB-15	153.76	149.35	147.98	149.41	149.98	147.99	148.59	151.05	CNL	148.67
SB-16	SB-16	156.47	150.67	149.44	150.62	150.80	149.38	149.82	151.60	149.33	149.93
SB-21	SB-21	154.15	150.06	148.68	150.07	150.24	148.72	149.14	151.33	148.51	149.24
SB-23	SB-23	154.77	150.08	148.65	150.15	150.30	148.85	149.34	151.44	148.59	149.57
SB-25	SB-25	156.68*	150.44	149.41	150.73	150.78	149.50	149.96	151.69	149.24	150.11
SB-26	SB-26	157.29	broken	broken	151.89	150.98	no data	150.34	151.84	149.99	150.52
SB-27	SB-27	157.45	150.96	149.93	151.01	151.19	149.70	150.15	152.09	149.53	150.27
SB-28	SB-28	152.52	149.48	148.17	149.46	149.74	148.03	148.59	150.90	147.97	148.62
SB-29	SB-29	155.97*	149.65	148.27	149.65	149.93	148.31	148.93	150.15	149.39	148.92
SB-32	SB-32	153.51	150.71	149.36	150.74	151.03	149.15	149.82	152.09	149.20	149.85
SB-40	SB-40	153.42	149.74	148.55	150.09	150.09	148.54	149.07	151.26	148.25	149.10
MW-1	MW-1	153.29	149.96	148.72	149.95	150.26	148.82	149.22	151.29	148.59	149.31
MW-100	MW-100	152.30	149.42	148.09	149.55	149.86	147.94	148.71	151.09	148.08	148.59
MW-105	MW-105	152.29	149.76	148.30	149.70	149.96	148.36	149.11	151.08	148.43	148.99
MW-110	MW-110	152.96	149.62	148.26	149.59	149.90	148.07	148.72	151.22	147.93	148.72
MW-113	MW-113	153.82	149.67	148.32	149.67	149.95	148.24	148.84	151.14	148.12	148.89
MW-114	MW-114	154.39	149.71	148.44	149.63	150.01	148.39	148.89	151.07	148.18	149.02

Notes:
*wells cut down 11/19/03, and pipe elevation was adjusted appropriately
Previous data available upon request

TABLE 2
GROUNDWATER QUALITY RESULTS (ug/L)
SPILLANE'S SERVICE CENTER, SHELBURNE, VERMONT

Well	Compound	VGES	VGES Revised Feb-07	5/18/2009	11/17/2009	5/20/2010	12/2/2010	7/17/2012	11/26/2012	6/10/2013	12/27/2013	7/24/2014
SB-6A	Benzene	5	5	< 20	< 10	<5	8.3	16.7	13.9	< 1		9.4
	Toluene	1000	1000	< 20	< 10	< 5	1.4	4.0	6.1	< 1		3.9
	Ethylbenzene	700	700	224	21	13.2	< 1	15.6	5.4	< 1		89.5
	Xylenes, Total	10000	10000	361	232	137	129	219	298	< 2		294
	BTEX	--	--	< 625	< 273	< 155	< 139.7	255.3	323.4	< 5		396.8
	MTBE	40	40	121	163	51.5	58.2	42.8	28.7	< 2	CNL	27.6
	1,3,5-Trimethylbenzene	4	350	< 333	< 156	< 162	127.7	194.7	252.6	< 2		424.9
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	< 2	20.3	13.9	23.2	33.9	59.9	< 2		29
	UIPs	--	--	> 10	> 10	> 10	> 10	> 10	> 10	8		>10
SB-11	Benzene	5	5	< 20	< 20	<20	< 5	< 5	< 5	< 1	< 1	< 1
	Toluene	1000	1000	98.6	< 20	< 20	< 5	< 5	< 5	< 1	< 1	< 1
	Ethylbenzene	700	700	315	167	96.2	66.3	66.5	35.6	< 1	8.6	14.9
	Xylenes, Total	10000	10000	2,010	986	366	150	205	61.3	< 2	3.7	3.1
	BTEX	--	--	< 2,443.6	< 1,193	< 482.2	< 226.3	< 281.5	< 106.9	< 5	< 14.3	< 20.0
	MTBE	40	40	< 40	< 40	< 40	17.2	21.7	19.5	< 2	10	9.6
	1,3,5-Trimethylbenzene	4	350	< 1,093	< 925.2	< 389.6	258.9	393.0	249.0	< 2.0	< 16.6	5.1
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	73.7	78.0	<40	26.6	60.0	25.4	< 2	2.6	2.1
	UIPs	--	--	> 10	> 10	> 10	> 10	> 10	> 10	0	> 10	>10
SB-12	Benzene	5	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Toluene	1000	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Ethylbenzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Xylenes, Total	10000	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	BTEX	--	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	MTBE	40	40	26.9	60.5	45.1	15.4	3.3	3.5	2.5	2	3.5
	1,3,5-Trimethylbenzene	4	350	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	UIPs	--	--	1	3	2	0	0	0	1	0	0
SB-15	Benzene	5	5	< 1	< 100	< 1	< 1	< 1	< 1	< 1		< 1
	Toluene	1000	1000	20.6	6,190	94.4	< 1	1.1	< 1	< 1		< 1
	Ethylbenzene	700	700	< 1	< 100	< 1	< 1	< 1	< 1	< 1		< 1
	Xylenes, Total	10000	10000	< 2	< 200	< 2	< 2	< 2	< 2	< 2		< 2
	BTEX	--	--	< 24.6	< 6,590	< 98.4	< 5	< 5.1	< 5	< 5		< 5
	MTBE	40	40	< 2	< 200	< 2	< 2	< 2	< 2	< 2	CNL	< 2
	1,3,5-Trimethylbenzene	4	350	< 2	< 200	< 2	< 2	< 2	< 2	< 2		< 2
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	< 2	< 200	< 2	< 2	< 2	< 2	< 2		< 2
	UIPs	--	--	1	0	0	0	1	0	0		0
SB-16	Benzene	5	5	3.7	43.6	< 1	1.5	15.8	15.5	< 1	4.7	3.1
	Toluene	1000	1000	< 1	3.3	< 1	< 1	1.3	2.8	< 1	< 1	< 1
	Ethylbenzene	700	700	< 1	< 1	< 1	< 1	3.5	3.5	< 1	< 1	< 1
	Xylenes, Total	10000	10000	< 2	79.1	< 2	4.6	16.3	67.7	< 2	3.9	< 2
	BTEX	--	--	< 7.7	< 127.0	< 5	< 8.1	36.9	89.5	< 5	< 10.6	< 7.1
	MTBE	40	40	25.9	80.0	30.9	5.4	25.6	25.8	< 2	22.4	17.9
	1,3,5-Trimethylbenzene	4	350	< 2	9.8	< 2	< 2.2	< 9.6	15.9	< 2	< 4.6	< 2
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	UIPs	--	--	3	> 10	2	0	> 10	> 10	0	> 10	5

Shaded value exceed VGES
*Value exceed analytical cal range
ND=Non detected at indicated concentration
--No VGES
NS=Not Sampled

TABLE 2
GROUNDWATER QUALITY RESULTS (ug/L)
SPILLANE'S SERVICE CENTER, SHELBURNE, VERMONT

Well	Compound	VGES	VGES Revised Feb-07	5/18/2009	11/17/2009	5/20/2010	12/2/2010	7/17/2012	11/26/2012	6/10/2013	12/27/2013	7/24/2014
SB-21	Benzene	5	5	< 1	< 100	< 1	< 1	< 10	< 5	< 1	< 1	< 5
	Toluene	1000	1000	39	1,950	3	74.3	66.7	45.2	< 1	116	25.2
	Ethylbenzene	700	700	17.5	1,810	20.4	128	127	76.1	6.1	428	77
	Xylenes, Total	10000	10000	68	9,930	59.4	539	522	496	19.9	1,880	307
	BTEX	--	--	< 125.5	< 13,790	< 83.8	< 742.3	< 725.7	< 622.3	< 28.0	< 2,425	< 414.2
	MTBE	40	40	< 2	< 200	< 2	3.8	< 20	< 10	< 2	7.7	< 10
	1,3,5-Trimethylbenzene	4	350	12	1,388	< 18	82.3	106.1	87.5	8.6	324.3	72.4
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	< 2	204	3	14.9	36.3	17	3	67.2	16.5
	UIPs	--	--	> 10	> 10	> 10	2	4	4	5	> 10	>10
SB-25	Benzene	5	5	6,670	635	130	55.2	< 50	< 50	< 50	< 20	< 20
	Toluene	1000	1000	42,900	16,800	3,690	2,220	207	98.2	< 50	< 20	< 20
	Ethylbenzene	700	700	2,930	850	633	624	264	429	318	212	264
	Xylenes, Total	10000	10000	24,200	5110	8030	4,640	2,820	3,750	2,350	1,670	1,790
	BTEX	--	--	76,700	23,395	12,483	7,539.2	< 3,341	< 4,327.2	< 2,768	< 1,922	< 2,094
	MTBE	40	40	< 1,000	< 1,000	<100	< 40	< 100	< 100	< 100	< 40	< 40
	1,3,5-Trimethylbenzene	4	350	4620	< 1,000	< 1,309	315.6	753	735	350.1	284.4	< 122
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	< 1,000	< 1,000	163	79.1	125.0	166.0	< 100	50.8	< 40.0
	UIPs	--	--	> 10	3	>10	>10	4	4	3	> 10	>10
SB-27	Benzene	5	5	< 10	< 5	<20	< 20	< 2	< 5	< 10	< 5	< 20
	Toluene	1000	1000	27.6	< 5	51.6	48.1	2.5	8	< 10	29.4	30.8
	Ethylbenzene	700	700	71.2	134	557	463	82.5	250	55.9	497	585
	Xylenes, Total	10000	10000	208	185	2,480	1,860	185	660	194	1,440	2,540
	BTEX	--	--	< 316.8	< 329	< 3,088.6	< 2,391.1	< 272.0	< 923	< 269.9	< 1971.4	< 3175.8
	MTBE	40	40	< 20	< 10	< 40	< 40	< 4	10.6	< 20	15	< 40
	1,3,5-Trimethylbenzene	4	350	< 165	< 302	< 1,677	1,494	207.1	724	182.4	1,645	2,057
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	60.5	34.1	123.0	172	15.8	125	< 20.0	247	250
	UIPs	--	--	> 10	> 10	> 10	> 10	> 10	> 10	> 10	> 10	>10
SB-28	Benzene	5	5	< 20	46.8	< 20	25.4	29.3	21.0	3.2	10.3	11.9
	Toluene	1000	1000	< 20	21.6	< 20	21.2	13.3	14.9	1.1	40	21.9
	Ethylbenzene	700	700	40.2	66.8	106	64.6	427	60.8	27.2	275	285
	Xylenes, Total	10000	10000	256	327	400	561	748	161	29.3	586	594
	BTEX	--	--	336.2	462.2	546	672.2	1,217.6	257.7	60.8	911.3	912.8
	MTBE	40	40	< 40	< 40	< 40	< 40	24.6	< 10	< 2	< 2	< 20
	1,3,5-Trimethylbenzene	4	350	1,566	2,121	2,394	2,820	590.8	1,053	137.1	697	914
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	< 40	< 40	< 40	68.6	126.0	22.7	3.7	36.8	50.4
	Isopropylbenzene	--	--	< 20	< 20	< 20	< 20	Not Analyzed	5.9	1.6	12.8	14.9
	sec-Butylbenzene	--	--	< 20	< 20	< 20	< 20		< 5	1.4	5.5	< 10
	p-Isopropyltoluene	--	--	< 20	< 20	29.4	21.4		7.1	1	5.8	< 10
	n-Propylbenzene	--	--	< 20	< 20	< 20	< 20		13	2.7	30	39.7
	1,2,3-trichloropropane	--	--	< 40	< 40	< 40	< 40		< 10	< 2	< 2	< 20
	n-Butylbenzene	--	--	65.2	86.2	52.8	111		< 5	8.5	< 2	< 10
	1,2-Dibromo-3-Chloropropane	--	--	< 40	< 40	60	< 40		< 10	< 2	< 2	< 50
	cis-1,2-Dichloroethene	70	70	< 20	< 20	< 20	< 20		6.3	1.3	2.4	< 10
	UIPs	--	--	> 10	> 10	> 10	> 10	> 10	> 10	> 10	> 10	>10

Shaded value exceed VGES
*Value exceed analytical cal range
ND=Non detected at indicated concentration
--No VGES
NS=Not Sampled

TABLE 2
GROUNDWATER QUALITY RESULTS (ug/L)
SPILLANE'S SERVICE CENTER, SHELBURNE, VERMONT

Well	Compound	VGES	VGES Revised Feb-07	5/18/2009	11/17/2009	5/20/2010	12/2/2010	7/17/2012	11/26/2012	6/10/2013	12/27/2013	7/24/2014
SB-29	Benzene	5	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Toluene	1000	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Ethylbenzene	700	700	< 1	< 1	< 1	< 1	**4.4**	**1.9**	< 1	**23.6**	**1.1**
	Xylenes, Total	10000	10000	< 2	< 2	< 2	< 2	**22.7**	**4.8**	< 2	**50.3**	**3**
	BTEX	--	--	< 5	< 5	< 5	< 5	**< 29.1**	**< 8.7**	< 5	**< 75.9**	**< 6.1**
	MTBE	40	40	< 2	**3.1**	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	1,3,5-Trimethylbenzene	4	350	< 2	**< 2.6**	< 2.0	< 2.0	**< 11.8**	**< 3.5**	< 2.0	**76.6**	**< 2.7**
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	< 2	< 2	< 2	< 2	< 2	< 2	< 2	**3.6**	< 2
	Isopropylbenzene	--	--	< 1	< 1	< 1	< 1	Not Analyzed	< 1	< 1	**9.8**	Not Analyzed
	sec-Butylbenzene	--	--	< 1	< 1	< 1	< 1		< 1	< 1	**1.4**	
	n-Propylbenzene	--	--	< 1	< 1	< 1	< 1		< 1	< 1	**10.8**	
	Tetrachloroethene	5	5	< 1	< 1	< 1	< 1		< 1	< 1	< 1	
	UIPs	--	--	0	> 10	0	0	**4**	**4**	**0**	> 10	>10
SB-32	Benzene	5	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Toluene	1000	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**7.6**
	Ethylbenzene	700	700	< 1	**19.4**	**2.3**	< 1	**6.1**	**6.3**	**1.7**	**18.6**	**67**
	Xylenes, Total	10000	10000	< 2	**11.6**	< 2	< 2	**5.4**	< 2	**2.1**	**13.3**	**138**
	BTEX	--	--	< 5	**< 33.0**	**< 6.3**	< 5	**< 13.5**	**< 10.3**	**< 5.8**	**< 33.9**	**< 213.6**
	MTBE	40	40	< 2	**13.3**	< 2	< 2	**7.5**	**5.2**	< 2	**6.4**	< 2
	1,3,5-Trimethylbenzene	4	350	< 2	**< 12.1**	< 2	< 2	**< 6.6**	**< 4.4**	**< 2.9**	**< 16.8**	**73.5**
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	**8.1**
	UIPs	--	--	0	> 10	0	0	**3**	**2**	**3**	> 10	>10
SB-40	Benzene	5	5	**29.8**	< 5	**29.8**	**< 20**	**< 20**	**< 10**	< 5	**< 20**	**< 10**
	Toluene	1000	1000	**337**	**72.6**	**130**	**923**	**102**	**13.1**	**10.8**	**359**	**113**
	Ethylbenzene	700	700	**951**	**98.9**	**832**	**661**	**307**	**67.9**	**9.8**	**552**	**235**
	Xylenes, Total	10000	10000	**3,660**	**360**	**4,050**	**3,110**	**1,420**	**284**	**118**	**3,030**	**1,270**
	BTEX	--	--	**4,977.8**	**< 536.5**	**< 5,041.8**	**< 4,714**	**< 1,849**	**< 375.0**	**< 143.6**	**< 3,961**	**< 1,628**
	MTBE	40	40	**< 40**	< 10	**< 40**	**< 40**	**< 40**	< 10	< 10	**45.7**	**21.3**
	1,3,5-Trimethylbenzene	4	350	**1,405**	**153.2**	**1,418**	**795.1**	**812.8**	**203.4**	**25.4**	**1,414**	**737.8**
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	**216**	**17.4**	**101.0**	**95.6**	**113.0**	**23.8**	**13**	**179**	**74**
	UIPs	--	--	> 10	> 10	> 10	> 10	> 10	> 10	> 10	> 10	>10
MW-1	Benzene	5	5	**< 50**	**< 50**	**< 20**	**< 20**	**< 50**	**< 20**	< 1	< 5	**< 10**
	Toluene	1000	1000	**462**	**119**	**184**	**197**	**58.6**	**47**	**2.9**	**32.7**	**18.1**
	Ethylbenzene	700	700	**1,660**	**589**	**1,400**	**1,290**	**547**	**626**	**83.7**	**433**	**511**
	Xylenes, Total	10000	10000	**8,470**	**2,980**	**6,940**	**7,240**	**3,320**	**3,170**	**222**	**2,220**	**2,640**
	BTEX	--	--	**10,642**	**< 3,738**	**< 8,544**	**< 8,747**	**< 3,976**	**< 3,863**	**< 309.6**	**< 2690.7**	**< 3179.1**
	MTBE	40	40	**< 100**	**< 100**	**< 40**	**< 40**	**< 100**	**< 40**	< 2	< 10	< 20
	1,3,5-Trimethylbenzene	4	350	**1,319**	**825**	**1,777**	**1,716**	**764**	**725**	**133.1**	**731**	**1,084**
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	**157**	**123**	**184**	**317**	**156**	**151**	**19**	**108**	**152**
	Isopropylbenzene	--	--	**79.5**	< 50	**37.2**	**65.2**	Not Analyzed	**26**	**5.8**	**24**	**35.7**
	n-Propylbenzene	--	--	**115.0**	**88.5**	**124.0**	**164**		**81**	**17.3**	**73.3**	**136**
	sec-Butylbenzene	--	--	< 50	< 50	< 20	< 20		< 20	**1**	**< 5**	< 10
	UIPs	--	--	> 6	> 10	> 10	> 10	**5**	**4**	> 10	> 10	>10

Shaded value exceed VGES
*Value exceed analytical cal range
ND=Non detected at indicated concentration
--No VGES
NS=Not Sampled

TABLE 2
GROUNDWATER QUALITY RESULTS (ug/L)
SPILLANE'S SERVICE CENTER, SHELBURNE, VERMONT

Well	Compound	VGES	VGES Revised Feb-07	5/18/2009	11/17/2009	5/20/2010	12/2/2010	7/17/2012	11/26/2012	6/10/2013	12/27/2013	7/24/2014
MW-110	Benzene	5	5	< 1	< 5	< 1	< 1	**1.2**	< 1	< 1	**1.7**	< 1
	Toluene	1000	1000	**12.7**	**16.4**	< 1	< 1	**11.9**	**20.9**	< 1	**3.4**	**5.2**
	Ethylbenzene	700	700	**41.7**	**124**	< 1	**3.5**	**47.4**	**84.2**	< 1	**73**	**28**
	Xylenes, Total	10000	10000	**287**	**316**	**13.2**	**23.6**	**146**	**466**	< 2	**181**	**92.5**
	BTEX	--	--	**< 342.4**	**< 461.4**	**< 16.2**	**< 29.1**	**206.5**	**< 572.1**	< 5	**259.1**	**< 126.7**
	MTBE	40	40	< 2	< 10	< 2	< 2	< 2	**2.1**	< 2	**2.8**	< 2
	1,3,5-Trimethylbenzene	4	350	**117.1**	**< 152**	< 2	**10.3**	**64.5**	**238.4**	< 2	**94.1**	**< 36.8**
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	**19.7**	**16.2**	< 2	**5.6**	**12.3**	**39.1**	< 2	**17**	**10.3**
	UIPs	--	--	> 10	> 10	**2**	> 10	> 10	> 10	0	> 10	>10
MW-113	Benzene	5	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Toluene	1000	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**5.8**
	Ethylbenzene	700	700	< 1	< 1	< 1	< 1	**3**	< 1	< 1	< 1	**12.4**
	Xylenes, Total	10000	10000	< 2	< 2	< 2	< 2	**7.2**	< 2	< 2	< 2	**64.8**
	BTEX	--	--	< 5	< 5	< 5	< 5	**< 12.2**	< 5	< 5	< 5	**< 84.0**
	MTBE	40	40	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	1,3,5-Trimethylbenzene	4	350	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	**26.1**
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	**2.4**
	UIPs	--	--	0	0	0	0	**2**	0	> 10	0	>10
RW-1	Benzene	5	5	**3.8**	**< 10**	**2.8**	< 1	**10.2**	**< 20**	< 1	**9.4**	**7.2**
	Toluene	1000	1000	**17.9**	**23.8**	**5**	< 1	**230**	**289**	< 1	**11.8**	**86.5**
	Ethylbenzene	700	700	**67.9**	**580**	**24.9**	< 1	**499**	**614**	< 1	**409**	**426**
	Xylenes, Total	10000	10000	**252**	**282**	**82.9**	**3.4**	**1,970**	**2,760**	< 2	**585**	**1,440**
	BTEX	--	--	**341.6**	**895.8**	**115.6**	**6.4**	**2,709.2**	**3,683**	< 5	**1,015.2**	**1,959.7**
	MTBE	40	40	< 4	< 20	< 2	< 2	**21.2**	**< 40**	< 2	**19**	**28.9**
	1,3,5-Trimethylbenzene	4	350	**160.6**	**< 543**	**33.3**	< 2	**909.5**	**1,099.9**	< 2	**340.4**	**977.1**
	1,2,4-Trimethylbenzene	5										
	Naphthalene	20	20	**23.4**	**36.6**	**15.2**	< 2	**193**	**170**	< 2	**53.1**	**119**
	UIPs	--	--	> 10	> 10	> 10	> 10	> 10	> 10	1	> 10	>10

Shaded value exceed VGES
*Value exceed analytical cal range
ND=Non detected at indicated concentration
--No VGES
NS=Not Sampled

TABLE 3
HISTORICAL GROUNDWATER QUALITY RESULTS SUMMARY
AVERAGE ANNUAL CONCENTRATIONS (ug/L)
SPILLANE'S SERVICE CENTER, SHELBURNE, VERMONT

Well	Compound (VGES)	2003	2004	2005	2006	2007	2008	2009	2010	2012	2013	2014	Reduction since 1991
SB-11	Benzene (5 ppb)	4	2	1	2	11	3	20	5	5	1	1	100%
	BTEX (none)	261	174	30	35	1,710	144	1,818	354	194	10	17	100%
	MTBE (40 ppb)	10	4	2	2	21	6	40	29	21	6	10	97%
SB-21	Benzene (5 ppb)	4	2	1	15	1	1	51	1	8	1	3	99%
	BTEX (none)	938	162	288	1,198	13	110	6,958	413	674	1,227	1,420	73%
	MTBE (40 ppb)	4	5	3	29	2	2	101	3	15	5	9	90%
SB-25	Benzene (5 ppb)	10	4	4	4	3	8	3,653	93	50	35	20	94%
	BTEX (none)	103	31	27	23	592	1,070	50,048	10,011	3,834	2,345	2,008	76%
	MTBE (40 ppb)	21	10	9	11	6	15	1,000	40	100	70	40	92%
SB-27	Benzene (5 ppb)	17	52	40	30	15	15	8	20	4	8	13	99%
	BTEX (none)	2,097	8,970	4,839	7,233	2,279	3,579	323	2,740	598	1,121	2,574	80%
	MTBE (40 ppb)	163	154	96	45	30	30	15	40	7	18	28	93%
SB-28	Benzene (5 ppb)	74	50	31	27	37	20	33	23	25	7	11	99%
	BTEX (none)	1,599	908	790	750	565	595	399	609	738	486	912	97%
	MTBE (40 ppb)	100	100	50	15	30	40	40	40	17	2	11	96%
SB-29	Benzene (5 ppb)	1	2	1	1	2	1	1	1	1	1	1	100%
	BTEX (none)	7	220	6	5	99	5	5	5	19	40	41	100%
	MTBE (40 ppb)	2	6	2	2	39	2	3	2	2	2	2	99%
SB-32	Benzene (5 ppb)	6	3	1	1	6	1	1	1	1	1	1	100%
	BTEX (none)	647	817	54	10	314	9	19	6	12	20	124	94%
	MTBE (40 ppb)	171	73	6	4	2	2	8	2	6	4	4	97%
MW-1	Benzene (5 ppb)	21	25	20	15	20	20	50	20	35	3	8	96%
	BTEX (none)	5,552	5,251	3,376	3,749	2,673	3,822	7,190	8,646	3,919	1,500	2,935	65%
	MTBE (40 ppb)	40	50	40	30	40	40	100	40	70	6	15	92%

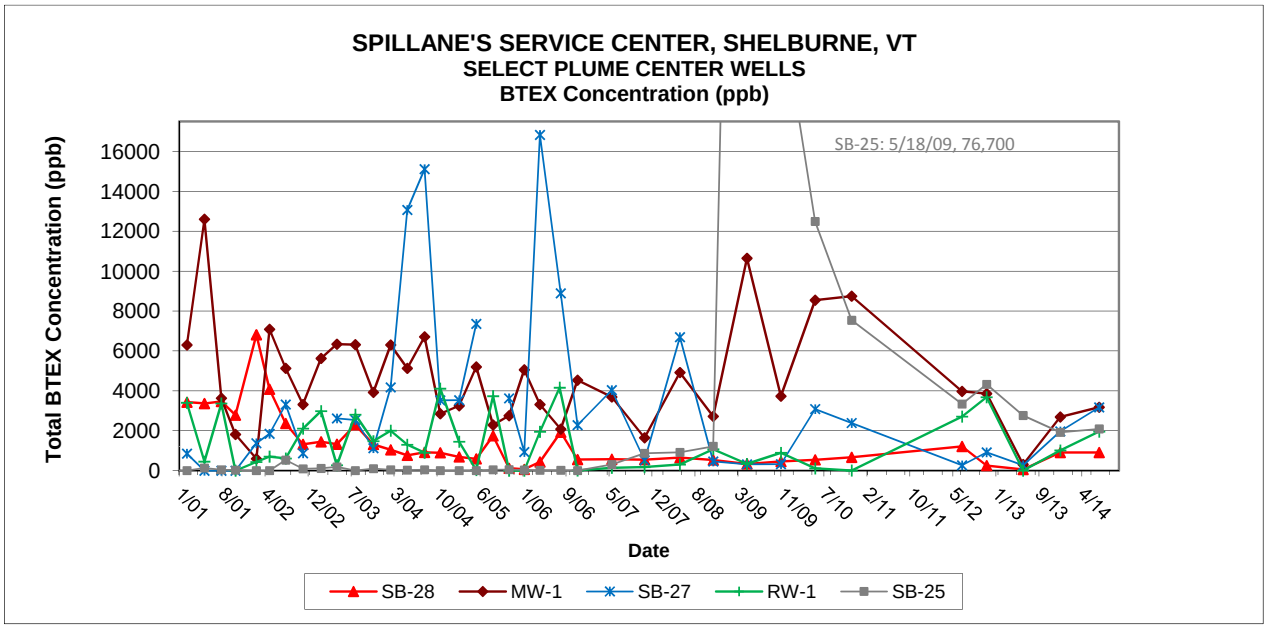
ND=Non detect
NS=No standard
VGES=Vermont Groundwater Enforcement Standard
TBQ=Trace beyond quantitation
limit
*=Value exceeded analytical calibration range
shaded=Exceeds VGES

TABLE 4
QUALITY ASSURANCE/QUALITY CONTROL DATA
SPILLANE'S SERVICE CENTER, SHELBURNE, VERMONT

Sample Location	Trip Blank	SB-6A	Duplicate	RPD
Sample Date	**7/24/2014**	**7/24/2014**	**7/24/2014**	**7/24/2014**
Benzene	< 1	9.4	9.5	**-1.1**
Toluene	< 1	3.9	< 5.0	**-24.7**
Ethylbenzene	< 1	89.5	100	**-11.1**
Xylenes, Total	< 2	294	355	**-18.8**
MTBE	< 2	27.6	23.4	**16.5**
1,3,5-Trimethylbenzene	< 2	424.9	< 345	
1,2,4-Trimethylbenzene				**20.8**
Naphthalene	< 2	29	29.9	**-3.1**
UIPs	0	>10	>10	NA

Note:

1. The results of the laboratory analysis of the duplicate sample were analyzed using a relative percent difference (RPD) analysis. The RPD is defined as 100 times the difference in reported concentration between sample and duplicate, divided by the mean of the two samples. A small RPD indicates good correlation between sample and duplicate. RPD values cannot be calculated ("na") for undetected compounds.


SPILLANE'S SERVICE CENTER, SHELBURNE, VT
SELECT PLUME CENTER WELLS
BTEX Concentration (ppb)
Total BTEX Concentration (ppb)
16000
14000
12000
10000
8000
6000
4000
2000
0
SB-25: 5/18/09, 76,700
1/01
8/01
4/02
12/02
7/03
3/04
10/04
6/05
1/06
9/06
5/07
12/07
8/08
3/09
11/09
7/10
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10/11
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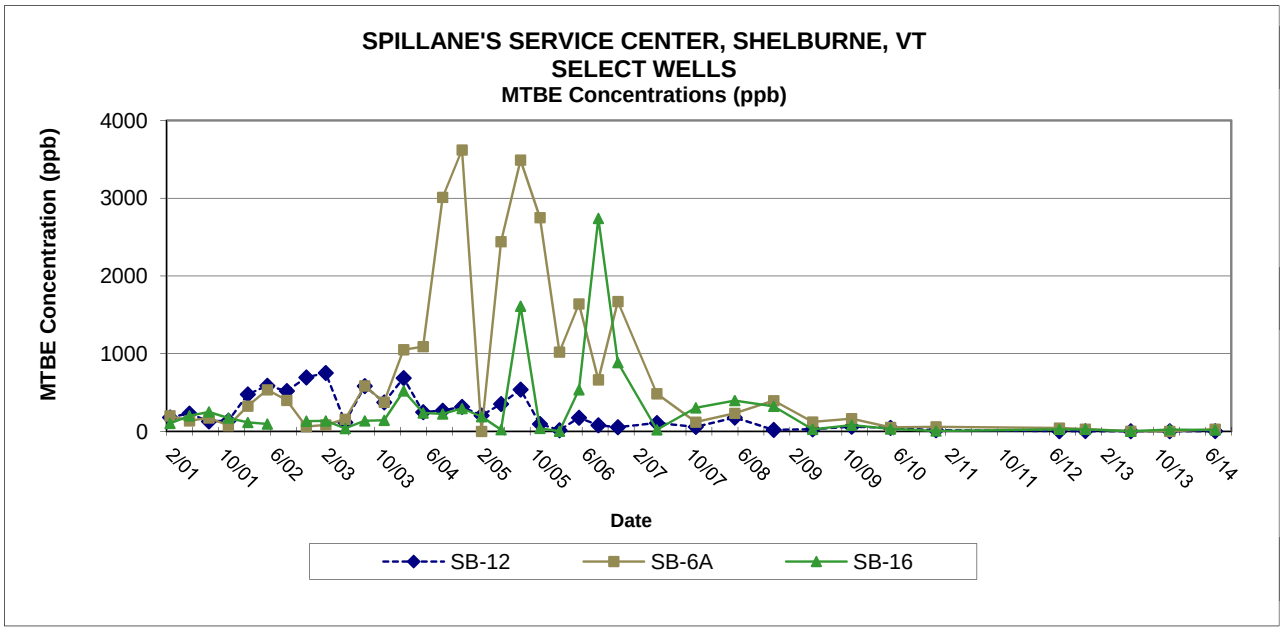
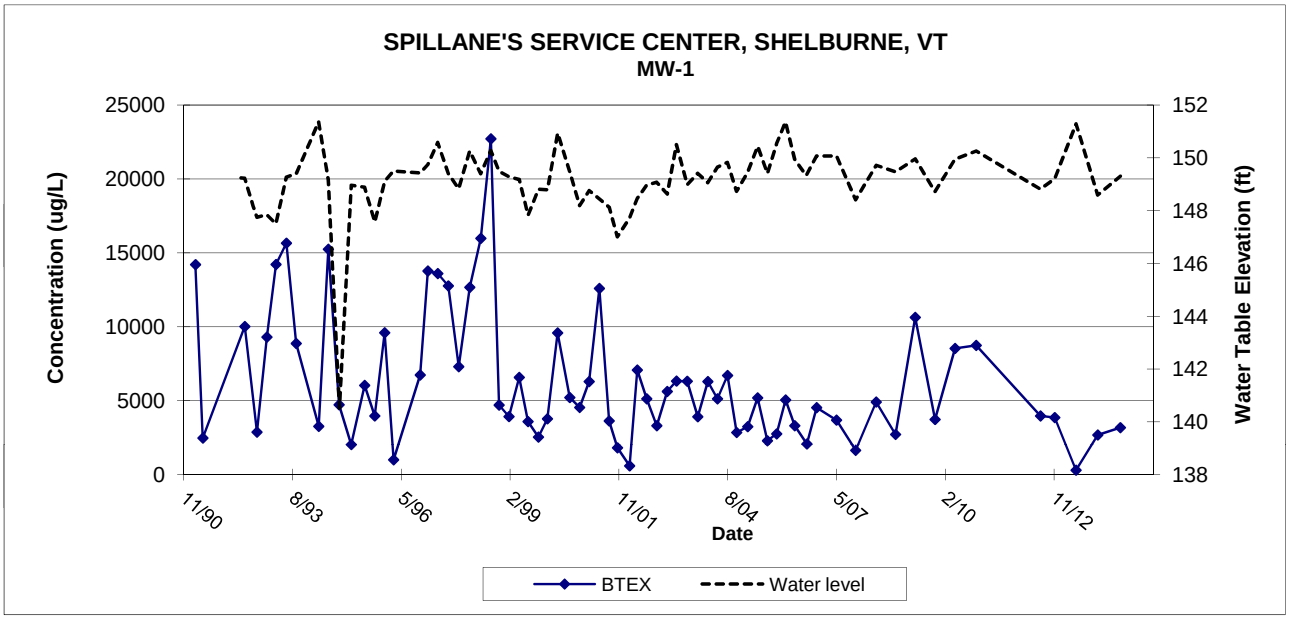
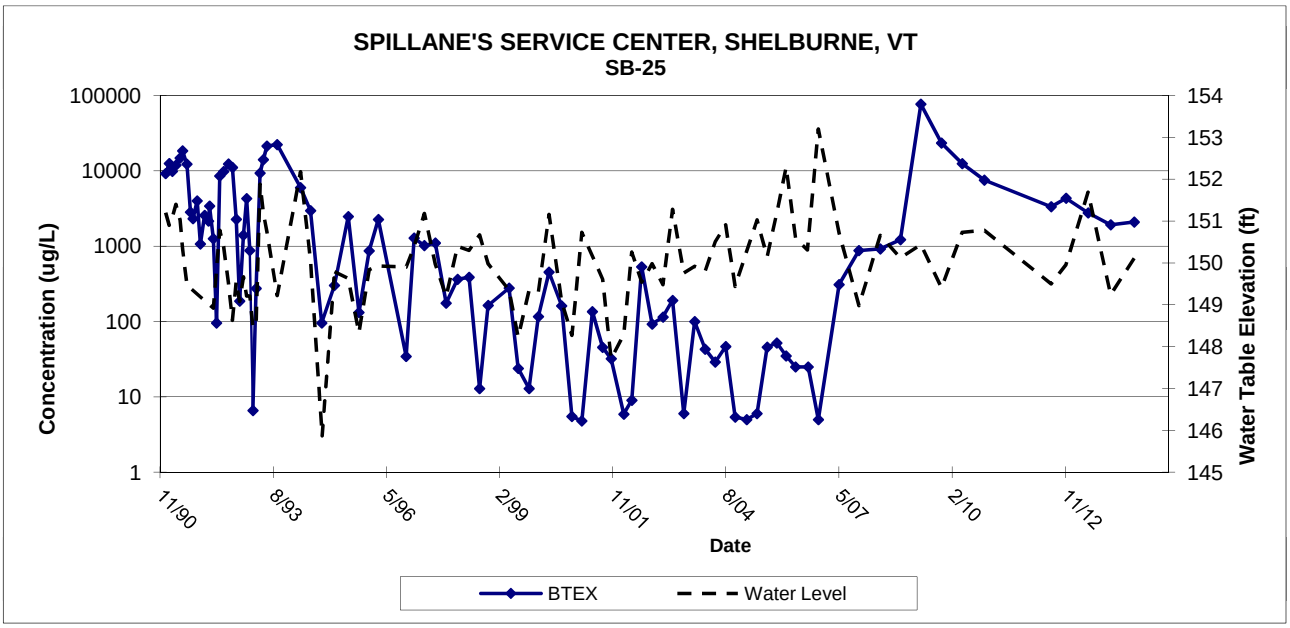
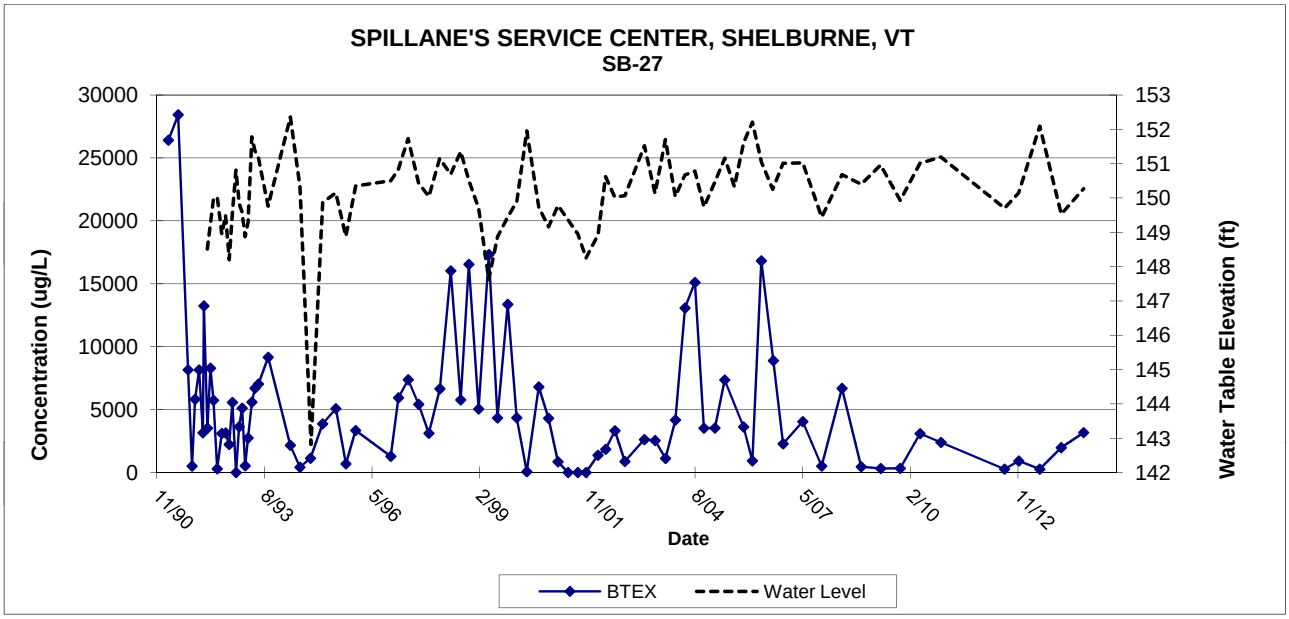
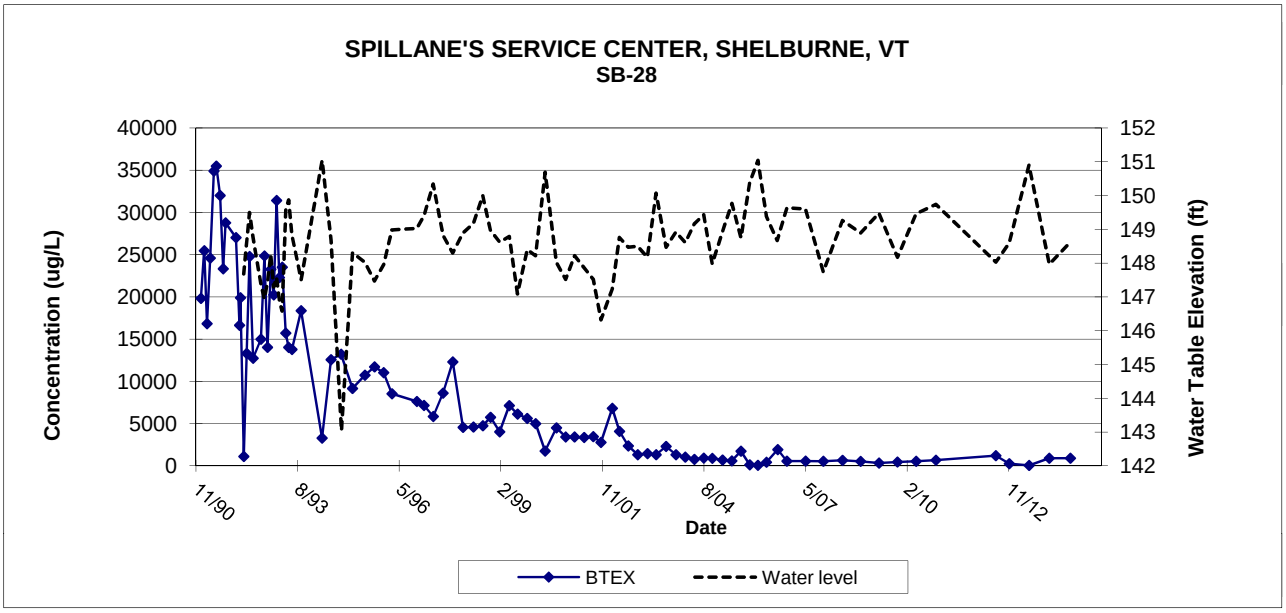
1/13
9/13
4/14
Date
SB-28
MW-1
SB-27
RW-1
SB-25


SPILLANE'S SERVICE CENTER, SHELBURNE, VT
SELECT WELLS
MTBE Concentrations (ppb)
MTBE Concentration (ppb)
4000
3000
2000
1000
0
2/01
10/01
6/02
2/03
10/03
6/04
2/05
10/05
6/06
2/07
10/07
6/08
2/09
10/09
6/10
2/11
10/11
6/12
2/13
10/13
6/14
Date
SB-12
SB-6A
SB-16

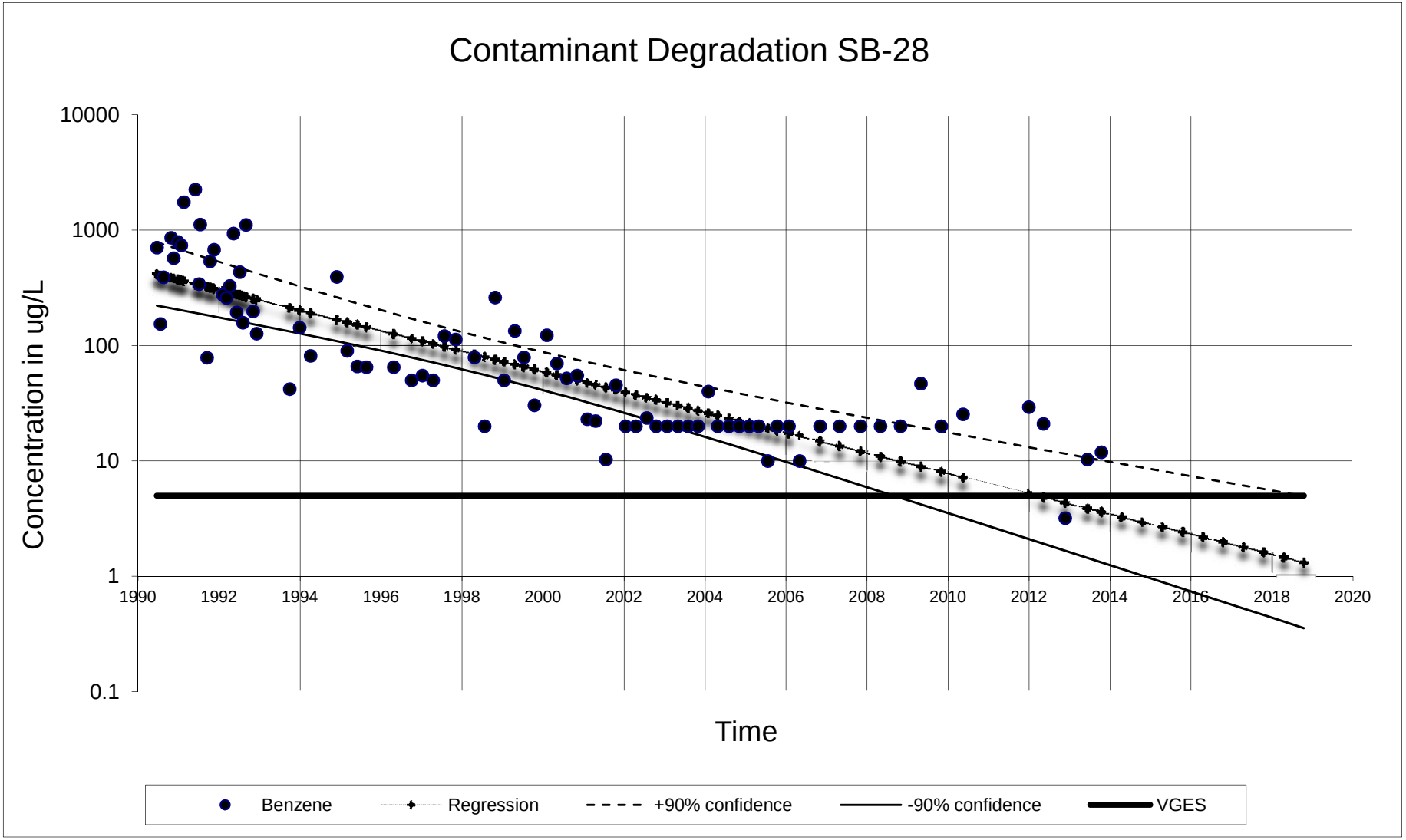

SPILLANE'S SERVICE CENTER, SHELBURNE, VT
MW-1
Concentration (ug/L)
Water Table Elevation (ft)
Date
25000
20000
15000
10000
5000
0
152
150
148
146
144
142
140
138
11/90
8/93
5/96
2/99
11/01
8/04
5/07
2/10
11/12
BTEX
Water level


SPILLANE'S SERVICE CENTER, SHELBURNE, VT
SB-25
Concentration (ug/L)
Water Table Elevation (ft)
Date
100000
10000
1000
100
10
1
154
153
152
151
150
149
148
147
146
145
11/90
8/93
5/96
2/99
11/01
8/04
5/07
2/10
11/12
BTEX
Water Level


SPILLANE'S SERVICE CENTER, SHELBURNE, VT
SB-27
Concentration (ug/L)
Water Table Elevation (ft)
Date
BTEX
Water Level


SPILLANE'S SERVICE CENTER, SHELBURNE, VT
SB-28
Concentration (ug/L)
Water Table Elevation (ft)
Date
BTEX
Water level

SPILLANE'S SERVICE CENTER, SHELBURNE, VERMONT



Waite-Heindel Environmental Management;
Page 1 of 1;
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APPENDIX 3

ENDYNE Inc.
Environmental Laboratories

Laboratory Report

WaiteHeindel Environmental Mgt	100675
7 Kilburn Street	
Suite 301	
Burlington, VT 05406	
Atten: Miles Waite	

PROJECT: Spillanes

WORK ORDER: **1407-14622**

DATE RECEIVED: July 25, 2014

DATE REPORTED: August 08, 2014

SAMPLER: Stefan Christie

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. All required method quality control elements including instrument calibration were performed in accordance with method requirements and determined to be acceptable unless otherwise noted.

The column labeled Lab/Tech in the accompanying report denotes the laboratory facility where the testing was performed and the technician who conducted the assay. A "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Lebanon, NH facility under certification NH 2037 and "N" the Plattsburgh, NY lab under certification ELAP 11892. "Sub" indicates the testing was performed by a subcontracted laboratory. The accreditation status of the subcontracted lab is referenced in the corresponding NELAC and Qual fields.

The NELAC column also denotes the accreditation status of each laboratory for each reported parameter. "A" indicates the referenced laboratory is NELAC accredited for the parameter reported. "N" indicates the laboratory is not accredited. "U" indicates that NELAC does not offer accreditation for that parameter in that specific matrix. Test results denoted with an "A" meet all National Environmental Laboratory Accreditation Program requirements except where denoted by pertinent data qualifiers. Test results are representative of the samples as they were received at the laboratory

Endyne, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose.

Reviewed by:

Harry B. Locker, Ph.D.
Laboratory Director

CLIENT: WaiteHeindel Environmental Mgt
PROJECT: Spillanes
REPORT DATE: 8/8/2014

WORK ORDER: **1407-14622**
DATE RECEIVED: 07/25/2014

TEST METHOD: EPA 8021B

001 Site: SB-6A Date Sampled: 7/24/14 09:25 Analysis Date: 7/29/14 W MHM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	27.6	ug/L	N		Benzene	9.4	ug/L	N	
Toluene	3.9	ug/L	N		Ethylbenzene	89.5	ug/L	N	
Xylenes, Total	294	ug/L	N		1,3,5-Trimethylbenzene	2.9	ug/L	N	
1,2,4-Trimethylbenzene	422	ug/L	N		Naphthalene	29.0	ug/L	N	
Surr. 1 (Bromobenzene)	91	%	N		Unidentified Peaks	>10		N	

TEST METHOD: EPA 8021B

002 Site: SB-11 Date Sampled: 7/24/14 11:30 Analysis Date: 7/29/14 W SJM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	9.6	ug/L	N		Benzene	< 1.0	ug/L	N	
Toluene	< 1.0	ug/L	N		Ethylbenzene	14.9	ug/L	N	
Xylenes, Total	3.1	ug/L	N		1,3,5-Trimethylbenzene	1.2	ug/L	N	
1,2,4-Trimethylbenzene	3.9	ug/L	N		Naphthalene	2.1	ug/L	N	
Surr. 1 (Bromobenzene)	108	%	N		Unidentified Peaks	>10		N	

TEST METHOD: EPA 8021B

003 Site: SB-12 Date Sampled: 7/24/14 13:53 Analysis Date: 7/29/14 W SJM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	3.5	ug/L	N		Benzene	< 1.0	ug/L	N	
Toluene	< 1.0	ug/L	N		Ethylbenzene	< 1.0	ug/L	N	
Xylenes, Total	< 2.0	ug/L	N		1,3,5-Trimethylbenzene	< 1.0	ug/L	N	
1,2,4-Trimethylbenzene	< 1.0	ug/L	N		Naphthalene	< 2.0	ug/L	N	
Surr. 1 (Bromobenzene)	115	%	N		Unidentified Peaks	0		N	

TEST METHOD: EPA 8021B

004 Site: SB-15 Date Sampled: 7/24/14 13:20 Analysis Date: 7/29/14 W SJM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	< 2.0	ug/L	N		Benzene	< 1.0	ug/L	N	
Toluene	< 1.0	ug/L	N		Ethylbenzene	< 1.0	ug/L	N	
Xylenes, Total	< 2.0	ug/L	N		1,3,5-Trimethylbenzene	< 1.0	ug/L	N	
1,2,4-Trimethylbenzene	< 1.0	ug/L	N		Naphthalene	< 2.0	ug/L	N	
Surr. 1 (Bromobenzene)	107	%	N		Unidentified Peaks	0		N	

TEST METHOD: EPA 8021B

005 Site: SB-16 Date Sampled: 7/24/14 13:40 Analysis Date: 7/29/14 W SJM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	17.9	ug/L	N		Benzene	3.1	ug/L	N	
Toluene	< 1.0	ug/L	N		Ethylbenzene	< 1.0	ug/L	N	
Xylenes, Total	< 2.0	ug/L	N		1,3,5-Trimethylbenzene	< 1.0	ug/L	N	
1,2,4-Trimethylbenzene	< 1.0	ug/L	N		Naphthalene	< 2.0	ug/L	N	
Surr. 1 (Bromobenzene)	103	%	N		Unidentified Peaks	5		N	

CLIENT: WaiteHeindel Environmental Mgt
PROJECT: Spillanes
REPORT DATE: 8/8/2014

WORK ORDER: **1407-14622**
DATE RECEIVED: 07/25/2014

TEST METHOD: EPA 8021B

006 Site: SB-21 Date Sampled: 7/24/14 11:15 Analysis Date: 7/30/14 W MHM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	< 10.0	ug/L	N		Benzene	< 5.0	ug/L	N	
Toluene	25.2	ug/L	N		Ethylbenzene	77.0	ug/L	N	
Xylenes, Total	307	ug/L	N		1,3,5-Trimethylbenzene	8.6	ug/L	N	
1,2,4-Trimethylbenzene	63.8	ug/L	N		Naphthalene	16.5	ug/L	N	
Surr. 1 (Bromobenzene)	102	%	N		Unidentified Peaks	>10		N	

TEST METHOD: EPA 8021B

007 Site: SB-25 Date Sampled: 7/24/14 09:50 Analysis Date: 7/29/14 W SJM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	< 40.0	ug/L	N		Benzene	< 20.0	ug/L	N	
Toluene	< 20.0	ug/L	N		Ethylbenzene	264	ug/L	N	
Xylenes, Total	1,790	ug/L	N		1,3,5-Trimethylbenzene	< 20.0	ug/L	N	
1,2,4-Trimethylbenzene	102	ug/L	N		Naphthalene	< 40.0	ug/L	N	
Surr. 1 (Bromobenzene)	107	%	N		Unidentified Peaks	>10		N	

TEST METHOD: EPA 8021B

008 Site: SB-27 Date Sampled: 7/24/14 14:26 Analysis Date: 7/29/14 W SJM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	< 40.0	ug/L	N		Benzene	< 20.0	ug/L	N	
Toluene	30.8	ug/L	N		Ethylbenzene	585	ug/L	N	
Xylenes, Total	2,540	ug/L	N		1,3,5-Trimethylbenzene	317	ug/L	N	
1,2,4-Trimethylbenzene	1,740	ug/L	N		Naphthalene	250	ug/L	N	
Surr. 1 (Bromobenzene)	97	%	N		Unidentified Peaks	>10		N	

TEST METHOD: EPA 8021B

009 Site: SB-32 Date Sampled: 7/24/14 14:08 Analysis Date: 7/29/14 W SJM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	< 2.0	ug/L	N		Benzene	< 1.0	ug/L	N	
Toluene	7.6	ug/L	N		Ethylbenzene	67.0	ug/L	N	
Xylenes, Total	138	ug/L	N		1,3,5-Trimethylbenzene	2.6	ug/L	N	
1,2,4-Trimethylbenzene	70.9	ug/L	N		Naphthalene	8.1	ug/L	N	
Surr. 1 (Bromobenzene)	99	%	N		Unidentified Peaks	>10		N	

TEST METHOD: EPA 8021B

010 Site: SB-40 Date Sampled: 7/24/14 11:50 Analysis Date: 7/30/14 W MHM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	21.3	ug/L	N		Benzene	< 10.0	ug/L	N	
Toluene	113	ug/L	N		Ethylbenzene	235	ug/L	N	
Xylenes, Total	1,270	ug/L	N		1,3,5-Trimethylbenzene	89.8	ug/L	N	
1,2,4-Trimethylbenzene	648	ug/L	N		Naphthalene	74.0	ug/L	N	
Surr. 1 (Bromobenzene)	98	%	N		Unidentified Peaks	>10		N	

CLIENT: WaiteHeindel Environmental Mgt
PROJECT: Spillanes
REPORT DATE: 8/8/2014

WORK ORDER: **1407-14622**
DATE RECEIVED: 07/25/2014

TEST METHOD: EPA 8021B

011 Site: MW-110 Date Sampled: 7/24/14 13:05 Analysis Date: 7/30/14 W MHM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	< 2.0	ug/L	N		Benzene	< 1.0	ug/L	N	
Toluene	5.2	ug/L	N		Ethylbenzene	28.0	ug/L	N	
Xylenes, Total	92.5	ug/L	N		1,3,5-Trimethylbenzene	< 1.0	ug/L	N	
1,2,4-Trimethylbenzene	35.8	ug/L	N		Naphthalene	10.3	ug/L	N	
Surr. 1 (Bromobenzene)	96	%	N		Unidentified Peaks	>10		N	

TEST METHOD: EPA 8021B

012 Site: MW-113 Date Sampled: 7/24/14 12:35 Analysis Date: 7/30/14 W MHM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	< 2.0	ug/L	N		Benzene	< 1.0	ug/L	N	
Toluene	5.8	ug/L	N		Ethylbenzene	12.4	ug/L	N	
Xylenes, Total	64.8	ug/L	N		1,3,5-Trimethylbenzene	4.9	ug/L	N	
1,2,4-Trimethylbenzene	21.2	ug/L	N		Naphthalene	2.4	ug/L	N	
Surr. 1 (Bromobenzene)	102	%	N		Unidentified Peaks	>10		N	

TEST METHOD: EPA 8021B

013 Site: RW-1 Date Sampled: 7/24/14 09:30 Analysis Date: 7/30/14 W MHM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	28.9	ug/L	N		Benzene	7.2	ug/L	N	
Toluene	86.5	ug/L	N		Ethylbenzene	426	ug/L	N	
Xylenes, Total	1,440	ug/L	N		1,3,5-Trimethylbenzene	11.1	ug/L	N	
1,2,4-Trimethylbenzene	966	ug/L	N		Naphthalene	119	ug/L	N	
Surr. 1 (Bromobenzene)	87	%	N		Unidentified Peaks	> 10		N	

TEST METHOD: EPA 8021B

014 Site: Duplicate (SB-6A) Date Sampled: 7/24/14 Analysis Date: 7/30/14 W MHM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	23.4	ug/L	N		Benzene	9.5	ug/L	N	
Toluene	< 5.0	ug/L	N		Ethylbenzene	100	ug/L	N	
Xylenes, Total	355	ug/L	N		1,3,5-Trimethylbenzene	< 5.0	ug/L	N	
1,2,4-Trimethylbenzene	340	ug/L	N		Naphthalene	29.9	ug/L	N	
Surr. 1 (Bromobenzene)	96	%	N		Unidentified Peaks	>10		N	

CLIENT: WaiteHeindel Environmental Mgt
PROJECT: Spillanes
REPORT DATE: 8/8/2014

WORK ORDER: **1407-14622**
DATE RECEIVED: 07/25/2014

TEST METHOD: EPA 8260C

015 Site: SB-28 Date Sampled: 7/24/14 12:50 Analysis Date: 8/5/14 W MHM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Dichlorodifluoromethane	< 50.0	ug/L	A		Chloromethane	< 30.0	ug/L	N	
Vinyl chloride	< 20.0	ug/L	A		Bromomethane	< 50.0	ug/L	A	
Chloroethane	< 50.0	ug/L	A		Trichlorofluoromethane	< 20.0	ug/L	A	
Diethyl ether	< 50.0	ug/L	N		1,1-Dichloroethene	< 10.0	ug/L	A	
Acetone	< 100	ug/L	A		Carbon disulfide	< 50.0	ug/L	A	
Methylene chloride	< 50.0	ug/L	A		t-Butanol	< 200	ug/L	N	
Methyl-t-butyl ether (MTBE)	< 20.0	ug/L	A		trans-1,2-Dichloroethene	< 10.0	ug/L	A	
Di-isopropyl ether (DIPE)	< 20.0	ug/L	N		1,1-Dichloroethane	< 10.0	ug/L	A	
Ethyl-t-butyl ether (ETBE)	< 20.0	ug/L	N		2-Butanone	< 100	ug/L	A	
2,2-Dichloropropane	< 20.0	ug/L	N		cis-1,2-Dichloroethene	< 10.0	ug/L	N	
Bromochloromethane	< 20.0	ug/L	N		Chloroform	< 10.0	ug/L	A	
Tetrahydrofuran	< 100	ug/L	U		1,1,1-Trichloroethane	< 10.0	ug/L	A	
Carbon tetrachloride	< 10.0	ug/L	A		1,1-Dichloropropene	< 10.0	ug/L	N	
Benzene	11.9	ug/L	A		t-Amylmethyl ether (TAME)	< 20.0	ug/L	N	
1,2-Dichloroethane	< 10.0	ug/L	A		Trichloroethene	< 10.0	ug/L	A	
1,2-Dichloropropane	< 20.0	ug/L	A		Dibromomethane	< 20.0	ug/L	N	
Bromodichloromethane	< 5.0	ug/L	A		cis-1,3-Dichloropropene	< 20.0	ug/L	A	
4-Methyl-2-pentanone (MIBK)	< 100	ug/L	N		Toluene	21.9	ug/L	A	
trans-1,3-Dichloropropene	< 20.0	ug/L	A		1,1,2-Trichloroethane	< 10.0	ug/L	A	
Tetrachloroethene	< 10.0	ug/L	A		1,3-Dichloropropane	< 10.0	ug/L	N	
2-Hexanone	< 100	ug/L	N		Dibromochloromethane	< 20.0	ug/L	A	
1,2-Dibromoethane	< 10.0	ug/L	A		Chlorobenzene	< 10.0	ug/L	A	
Ethylbenzene	285	ug/L	A		1,1,1,2-Tetrachloroethane	< 20.0	ug/L	A	
Xylenes, Total	594	ug/L	A		Styrene	< 10.0	ug/L	N	
Bromoform	< 20.0	ug/L	A		Isopropylbenzene	14.9	ug/L	A	
1,1,2,2-Tetrachloroethane	< 20.0	ug/L	A		Bromobenzene	< 10.0	ug/L	N	
n-Propylbenzene	39.7	ug/L	A		1,2,3-Trichloropropane	< 20.0	ug/L	N	
2-Chlorotoluene	< 10.0	ug/L	N		1,3,5-Trimethylbenzene	256	ug/L	A	
4-Chlorotoluene	< 10.0	ug/L	N		t-Butylbenzene	< 10.0	ug/L	A	
1,2,4-Trimethylbenzene	658	ug/L	A		s-Butylbenzene	< 10.0	ug/L	N	
4-Isopropyltoluene	< 10.0	ug/L	A		1,3-Dichlorobenzene	< 10.0	ug/L	A	
1,4-Dichlorobenzene	< 10.0	ug/L	A		n-Butylbenzene	< 20.0	ug/L	A	
1,2-Dichlorobenzene	< 10.0	ug/L	A		1,2-Dibromo-3-Chloropropane	< 50.0	ug/L	A	
1,2,4-Trichlorobenzene	< 20.0	ug/L	A		1,3,5-Trichlorobenzene	< 20.0	ug/L	N	
Hexachlorobutadiene	< 5.0	ug/L	N		Naphthalene	50.4	ug/L	A	
1,2,3-Trichlorobenzene	< 20.0	ug/L	N		Surr. 1 (Dibromofluoromethane)	102	%	N	
Surr. 2 (Toluene d8)	96	%	N		Surr. 3 (4-Bromofluorobenzene)	80	%	N	
Unidentified Peaks	> 10		U						

CLIENT: WaiteHeindel Environmental Mgt
PROJECT: Spillanes
REPORT DATE: 8/8/2014

WORK ORDER: **1407-14622**
DATE RECEIVED: 07/25/2014

TEST METHOD: EPA 8021B

016 Site: SB-29 Date Sampled: 7/24/14 10:38 Analysis Date: 8/1/14 W SJM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	< 2.0	ug/L	N		Benzene	< 1.0	ug/L	N	
Toluene	< 1.0	ug/L	N		Ethylbenzene	1.1	ug/L	N	
Xylenes, Total	3.0	ug/L	N		1,3,5-Trimethylbenzene	< 1.0	ug/L	N	
1,2,4-Trimethylbenzene	1.7	ug/L	N		Naphthalene	< 2.0	ug/L	N	
Surr. 1 (Bromobenzene)	101	%	N		Unidentified Peaks	>10		N	

CLIENT: WaiteHeindel Environmental Mgt
PROJECT: Spillanes
REPORT DATE: 8/8/2014

WORK ORDER: **1407-14622**
DATE RECEIVED: 07/25/2014

TEST METHOD: EPA 8260C

017 Site: MW-1 Date Sampled: 7/24/14 10:55 Analysis Date: 8/5/14 W MHM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Dichlorodifluoromethane	< 50.0	ug/L	A		Chloromethane	< 30.0	ug/L	N	
Vinyl chloride	< 20.0	ug/L	A		Bromomethane	< 50.0	ug/L	A	
Chloroethane	< 50.0	ug/L	A		Trichlorofluoromethane	< 20.0	ug/L	A	
Diethyl ether	< 50.0	ug/L	N		1,1-Dichloroethene	< 10.0	ug/L	A	
Acetone	< 200	ug/L	A		Carbon disulfide	< 50.0	ug/L	A	
Methylene chloride	< 50.0	ug/L	A		t-Butanol	< 200	ug/L	N	
Methyl-t-butyl ether (MTBE)	< 20.0	ug/L	A		trans-1,2-Dichloroethene	< 10.0	ug/L	A	
Di-isopropyl ether (DIPE)	< 20.0	ug/L	N		1,1-Dichloroethane	< 10.0	ug/L	A	
Ethyl-t-butyl ether (ETBE)	< 20.0	ug/L	N		2-Butanone	< 100	ug/L	A	
2,2-Dichloropropane	< 20.0	ug/L	N		cis-1,2-Dichloroethene	< 10.0	ug/L	N	
Bromochloromethane	< 20.0	ug/L	N		Chloroform	< 10.0	ug/L	A	
Tetrahydrofuran	< 100	ug/L	U		1,1,1-Trichloroethane	< 10.0	ug/L	A	
Carbon tetrachloride	< 10.0	ug/L	A		1,1-Dichloropropene	< 10.0	ug/L	N	
Benzene	< 10.0	ug/L	A		t-Amylmethyl ether (TAME)	< 20.0	ug/L	N	
1,2-Dichloroethane	< 10.0	ug/L	A		Trichloroethene	< 10.0	ug/L	A	
1,2-Dichloropropane	< 20.0	ug/L	A		Dibromomethane	< 20.0	ug/L	N	
Bromodichloromethane	< 5.0	ug/L	A		cis-1,3-Dichloropropene	< 20.0	ug/L	A	
4-Methyl-2-pentanone (MIBK)	< 100	ug/L	N		Toluene	18.1	ug/L	A	
trans-1,3-Dichloropropene	< 20.0	ug/L	A		1,1,2-Trichloroethane	< 10.0	ug/L	A	
Tetrachloroethene	< 10.0	ug/L	A		1,3-Dichloropropane	< 10.0	ug/L	N	
2-Hexanone	< 100	ug/L	N		Dibromochloromethane	< 20.0	ug/L	A	
1,2-Dibromoethane	< 10.0	ug/L	A		Chlorobenzene	< 10.0	ug/L	A	
Ethylbenzene	511	ug/L	A		1,1,1,2-Tetrachloroethane	< 20.0	ug/L	A	
Xylenes, Total	2,640	ug/L	A		Styrene	< 10.0	ug/L	N	
Bromoform	< 20.0	ug/L	A		Isopropylbenzene	35.7	ug/L	A	
1,1,2,2-Tetrachloroethane	< 20.0	ug/L	A		Bromobenzene	< 10.0	ug/L	N	
n-Propylbenzene	136	ug/L	A		1,2,3-Trichloropropane	< 20.0	ug/L	N	
2-Chlorotoluene	< 10.0	ug/L	N		1,3,5-Trimethylbenzene	194	ug/L	A	
4-Chlorotoluene	< 10.0	ug/L	N		t-Butylbenzene	< 10.0	ug/L	A	
1,2,4-Trimethylbenzene	890	ug/L	A		s-Butylbenzene	< 10.0	ug/L	N	
4-Isopropyltoluene	< 10.0	ug/L	A		1,3-Dichlorobenzene	< 10.0	ug/L	A	
1,4-Dichlorobenzene	< 10.0	ug/L	A		n-Butylbenzene	< 20.0	ug/L	A	
1,2-Dichlorobenzene	< 10.0	ug/L	A		1,2-Dibromo-3-Chloropropane	< 50.0	ug/L	A	
1,2,4-Trichlorobenzene	< 20.0	ug/L	A		1,3,5-Trichlorobenzene	< 20.0	ug/L	N	
Hexachlorobutadiene	< 5.0	ug/L	N		Naphthalene	152	ug/L	A	
1,2,3-Trichlorobenzene	< 20.0	ug/L	N		Surr. 1 (Dibromofluoromethane)	100	%	N	
Surr. 2 (Toluene d8)	96	%	N		Surr. 3 (4-Bromofluorobenzene)	81	%	N	
Unidentified Peaks	> 10		U						

CLIENT: WaiteHeindel Environmental Mgt
PROJECT: Spillanes
REPORT DATE: 8/8/2014

WORK ORDER: **1407-14622**
DATE RECEIVED: 07/25/2014

TEST METHOD: EPA 8021B

018 Site: Trip Blank Date Sampled: 7/23/14 10:30 Analysis Date: 7/30/14 W MHM

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Methyl-t-butyl ether (MTBE)	< 2.0	ug/L	N		Benzene	< 1.0	ug/L	N	
Toluene	< 1.0	ug/L	N		Ethylbenzene	< 1.0	ug/L	N	
Xylenes, Total	< 2.0	ug/L	N		1,3,5-Trimethylbenzene	< 1.0	ug/L	N	
1,2,4-Trimethylbenzene	< 1.0	ug/L	N		Naphthalene	< 2.0	ug/L	N	
Surr. 1 (Bromobenzene)	117	%	N		Unidentified Peaks	0		N	

Report Summary of Qualifiers and Notes

Sample -016 was analyzed by Method EPA 8021B due to laboratory error.

ENDYNE, INC.
160 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

CHAIN-OF-CUSTODY-RECORD

№ 70332

Special Reporting Instructions/PO#: Spillanes 938561 2014

Project Name: Spillanes	Client/Contact Name: Wendy Krembs	Sampler Name: Stefan Christie
State of Origin: VT ✓ NY __ NH __ Other __	Phone #: 802 860-9400 x103	Phone #: 802-860 9400
Endyne WO # 1407-14622	Mailing Address: WHEM	Billing Address: WHEM

Sample Location	Matrix	GRAB	COMP	Date/Time Sampled	Sample Containers No.	Sample Containers Type/Size	Sample Preservation	Analysis Required	FieldResults/Remarks	Due Date
SB-6A	H2O	✓		7/24/14 0925	2	40ml	HCL/ice	19		
SB-11	↓	↓		1130	↓	↓	↓	19		
SB-12	↓	↓		1353	↓	↓	↓	19		
SB-15	↓	↓		1320	↓	↓	↓	19		
SB-16	↓	↓		1340	↓	↓	↓	19		
SB-21	↓	↓		1115	↓	↓	↓	19		
SB-25	↓	↓		0950	↓	↓	↓	19		
SB-27	↓	↓		1426	↓	↓	↓	19		
SB-32	↓	↓		1408	↓	↓	↓	19		
SB-40	↓	↓		1150	↓	↓	↓	19		

Relinquished by:	Date/Time	Received by:	Date/Time	Received by:	Date/Time
Stef Christie	7/25 0845			Lauren Martin	7/25/14 0845

1	pH	6	TKN	11	Total Solids	16	Sulfate	21	1664 TPH/FOG	26	8270 PAH Only
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	8015 GRO	27	8081 Pest
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	8015 DRO	28	8082 PCB
4	Nitrite N	9	BOD	14	Turbidity	19	VT PCF	24	8260B	29	PP13 Metals
5	Nitrate N	10	Alkalinity	15	Conductivity	20	VOC Halocarbons	25	8270 B/N or Acid	30	Total RCRA8
31	Metals (Total, Diss.) Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Tl, U, V, Zn										
32	TCLP (volatiles, semi-volatiles, metals, pesticides, herbicides)					33	Other				
34	Corrosivity	35	Ignitability	36	Reactivity	37	Other				
38	Other										

LAB USE ONLY
Delivery: Client
Temp: 5.0
Comment:

(White - Laboratory / Yellow - Client)

ENDYNE, INC.
160 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

CHAIN-OF-CUSTODY-RECORD

№ 70331

Special Reporting Instructions/PO#: Spillanes 93856.1 2014

Project Name: Spillanes	Client/Contact Name: Wendy Krembs	Sampler Name: Stefan Christie
State of Origin: VT ✓ NY __ NH __ Other __	Phone #: 802-860-9400 x103	Phone #: 802 860 9400
Endyne WO # 1407-14622	Mailing Address: WHEM	Billing Address: WHEM

Sample Location	Matrix	GRAB	COMP	Date/Time Sampled	Sample Containers No.	Sample Containers Type/Size	Sample Preservation	Analysis Required	FieldResults/Remarks	Due Date
MW-110	W20	✓		7/24/14 1305	2	40mL	HCL/ice	19		
MW-113	↓	↓		1235	↓	↓	↓	19		
RW-1				0930				19		
duplicate (SB-6A)				—				19		
(MS) ~~TMP~~ SB-28				1250				24		
SB-29				1038				24		
MW-1				1055				24		
trip blank	↓	↓		7/23/14 1030	1	40mL	HCL/ice	24		

Relinquished by:	Date/Time	Received by:	Date/Time	Received by:	Date/Time
[illegible]	7/25/14 0845			[illegible]	7/25/14 0845

1	pH	6	TKN	11	Total Solids	16	Sulfate	21	1664 TPH/FOG	26	8270 PAH Only
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	8015 GRO	27	8081 Pest
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	8015 DRO	28	8082 PCB
4	Nitrite N	9	BOD	14	Turbidity	19	VT PCF	24	8260B	29	PP13 Metals
5	Nitrate N	10	Alkalinity	15	Conductivity	20	VOC Halocarbons	25	8270 B/N or Acid	30	Total RCRA8
31	Metals (Total, Diss.) Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Tl, U, V, Zn										
32	TCLP (volatiles, semi-volatiles, metals, pesticides, herbicides)					33	Other				
34	Corrosivity	35	Ignitability	36	Reactivity	37	Other				
38	Other										

LAB USE ONLY
Delivery: Client
Temp: 5.0
Comment:

(White - Laboratory / Yellow - Client)