

ROSS ENVIRONMENTAL ASSOCIATES, INC.

Hydrogeology, Water Quality, GIS Planning, Remediation, Regulatory  
Compliance & Permitting, Environmental Site Assessments, Petroleum  
Investigations, and Radon Mitigation



31 July 2013

Mr. Gilles Desjarlais  
Desjarlais Fuels  
P.O. Box 99  
Troy, Vermont 05868

RE: *Groundwater Quality Monitoring Report – June 2013*  
*Former Newport Center Corner Store (SMS site # 2007-3636)*

Dear Mr. Desjarlais,

On 13 June 2013, Ross Environmental Associates, Inc. (**R.E.A.**) completed groundwater quality sampling at the Former Newport Center Corner Store located on the corner of Vermont Route 105 and Cross Road in Newport Center, Vermont (**Figure 1 & Figure 2**, Attachment A). This annual sampling event was completed as outlined in a letter from the state project manager, Gerold Noyes, dated 12 October 2012. The sampling event was completed in accordance with the Vermont Department of Environmental Conservation (VT DEC) guidelines.

Contaminant concentrations in groundwater beneath the site continue to remain above the Vermont Groundwater Enforcement Standard (VGES). The highest concentration of petroleum contamination was detected in the sample collected from MW-3, which is located on the eastern side of the building parking lot in the vicinity of the former pump island (**Figure 3**, Attachment A). In accordance with the VT DEC's request, MW-4, MW-5, MW-6 and MW-7 were not sampled based on previous non-detect sampling events.

The findings of this sampling event are summarized below:

- The VGES for naphthalene was exceeded in the groundwater sample collected from MW-2a.
- The VGES for methyl-tert-butyl-ether (MtBE), benzene and naphthalene were exceeded in the MW-3 sample.
- MtBE was detected below the corresponding VGES in the MW-1 sample.
- MtBE, benzene, toluene, ethylbenzene, total xylenes, 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene were detected below the corresponding VGES in the MW-2a sample.
- Toluene, ethylbenzene, total xylenes, 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene were detected below their corresponding VGESs in the MW-3 sample.
- Benzene, 1,3,5-trimethylbenzene and total xylenes were detected below the corresponding VGESs in the MW-8R sample.
- Groundwater flow in the unconfined surficial aquifer at the site was generally toward the south.

A copy of site maps showing approximate monitoring well locations (**Figure 3**), ground water flow direction (**Figure 4**), and contaminant distribution (**Figure 5**) are included in Attachment A. Tables summarizing ground-water elevation data (**Table 1**), groundwater analytical results (**Table 2**) and field measurement data (**Table 3**) are included in Attachment B. Time-series graphs summarizing historical water quality data are included in Attachment C, and laboratory analytical reports are included in Attachment D.

## Ground-Water Elevations and Flow Direction

On 13 June 2013, the ground-water flow in the unconfined surficial aquifer at the site was toward the south-southwest, with an average estimated hydraulic gradient of approximately four percent (between MW-3 and MW-1). Water-level measurements were collected from the monitoring wells to assist in determining an accurate groundwater flow direction. Water-level measurements and elevation calculations for 13 June 2013 and are presented in **Table 1**, Attachment B. On 13 June 2013, ground-water depths ranged from 0.71 (MW-1) to 4.57 (MW-8R) feet below the top of casing (TOC). Static water-table elevations were computed for each monitoring well by subtracting the corrected or measured depth-to-water readings from the surveyed top-of-casing (TOC) elevations, which are relative to an arbitrary site datum of 100.00 feet.

## Ground-Water Sampling and Analysis

Contaminant concentrations in groundwater beneath the site continue to remain above the Vermont Groundwater Enforcement Standards (VGESs)<sup>1</sup> for several volatile petroleum compounds. Total petroleum contaminant concentrations in MW-1 showed a decrease from 31 micrograms per Liter (ug/L) during the June 2012 sampling event to 24 ug/L during the June 2013 sampling event. Total petroleum contaminant concentrations in MW-2a showed a decrease from 261 micrograms per Liter (ug/L) during the June 2012 sampling event to 216 ug/L during the June 2013 sampling event. Total contaminant concentrations in MW-3 decreased from 6,454 µg/L in June 2012 to 2,723 µg/L in June 2013. Total contaminant concentrations in MW-8R showed a decrease from 115.1 ug/L in the June 2012 sampling event, to 5.5 ug/L in the June 2013 sampling event.

Benzene was detected at 1,700 micrograms per liter (µg/L) in MW-3 which exceeds the corresponding VGES of 5.0 µg/L. Naphthalene was detected at 36 and 59 µg/L in MW-2a and MW-3, respectively, which exceed the corresponding VGES of 20 µg/L. Methyl-tert-Butyl-Ether (MtBE) was detected at 540 µg/L in MW-3, which exceeds the corresponding VGES of 40 µg/L.

Contaminant concentrations for toluene, ethylbenzene, total xylenes, 1,3,5-trimethylbenzene, and 1,2,4-trimethylbenzene were detected below their corresponding VGESs in the MW-3 and MW-2A samples. Contaminant concentrations for MtBE and benzene were detected below the corresponding VGES in the MW-2A sample. MtBE was detected below the VGES in the sample collected from MW-1. Benzene, total xylenes and 1,3,5-trimethylbenzene were detected below the corresponding VGES in the MW-8R sample.

No volatile petroleum compounds were detected above laboratory method detection limits in the trip-blank sample and analytical results for the blind field duplicate, collected from MW-2A, were within the EPA's acceptable difference of 30% of the original sample. The groundwater analytical results are presented in **Table 2**, Attachment B and time-series graphs summarizing historical water quality data are included in Attachment C. Copies of the laboratory analytical reports are included as Attachment D.

Prior to sample collection, **R.E.A** field personnel measured the product thickness/water level in each monitoring well and purged approximately three to five standing volumes of water from each well prior to recharge and sampling. Monitoring well samples were collected either by pumping water through dedicated Teflon tubing directly from the well using a peristaltic pump or pouring water directly from dedicated bailer into 40-milliliter glass vials with Teflon-lined septum lids. Each sample vial was preserved with hydrochloric acid to reduce the pH to less than 2 standard units (su). Immediately after sample collection, field measurements were obtained for pH, specific conductivity, temperature, total dissolved solids (TDS) and oxidation reduction potential (ORP). A summary of the field measurement data is included on **Table 3**, in Attachment B.

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<sup>1</sup>The Vermont DEC has established groundwater enforcement standards for eight petroleum related VOCs, as follows: benzene - 5 ug/L; toluene - 1,000 ug/L; ethylbenzene - 700 ug/L; xylenes - 10,000 ug/L; MtBE - 40 ug/L; naphthalene – 20 ug/L and 1,3,5-trimethyl benzene & 1,2,4-trimethyl benzene – 350 ug/L combined .

This sampling event included the collection of groundwater samples from four onsite monitoring wells (MW-1, MW-2A, MW-3, and MW-8R). MW-4 and MW-5, MW-6 and MW-7 were not sampled per the VT DEC request to not sample off-site wells with five consecutive sampling rounds being non-detect (ND). All samples were analyzed for the possible presence of volatile petroleum compounds in accordance with U.S. EPA Method 8021B. All samples were shipped under chain-of-custody in an ice-filled cooler to AMRO Laboratories, Inc. of Merrimack, New Hampshire for laboratory analysis.

**Recommendations**

Based on the enclosed data, **R.E.A.** recommends the following:

1. Groundwater monitoring should continue on an annual basis with the next sampling event being conducted in June 2014. Samples should be collected from monitoring wells MW-1, MW-2A, MW-3, and MW-8R and analyzed for the possible presence of volatile petroleum compounds in accordance with U.S. EPA Method 8021B.
2. Depth to water (DTW) measurements should be collected from the off-site MW-4, MW-5, and MW-7 during the June 2013 sampling event to aid in groundwater flow calculations.
3. A summary report should be completed following the completion of the next groundwater sampling event, which should include a summary of significant field observations, appropriate figures depicting ground water flow and contaminant distribution, and recommendations for future monitoring.

\*\*\*\*\*

Please call me if you have any questions or concerns regarding the enclosed data or recommendations.

Sincerely,  
**Ross Environmental Associates, Inc.**



James Gascoyne  
Senior Scientist

Attachments

Cc. Mr. Gerold Noyes - VT DEC  
Mr. Roland Brassuer – Property Owner

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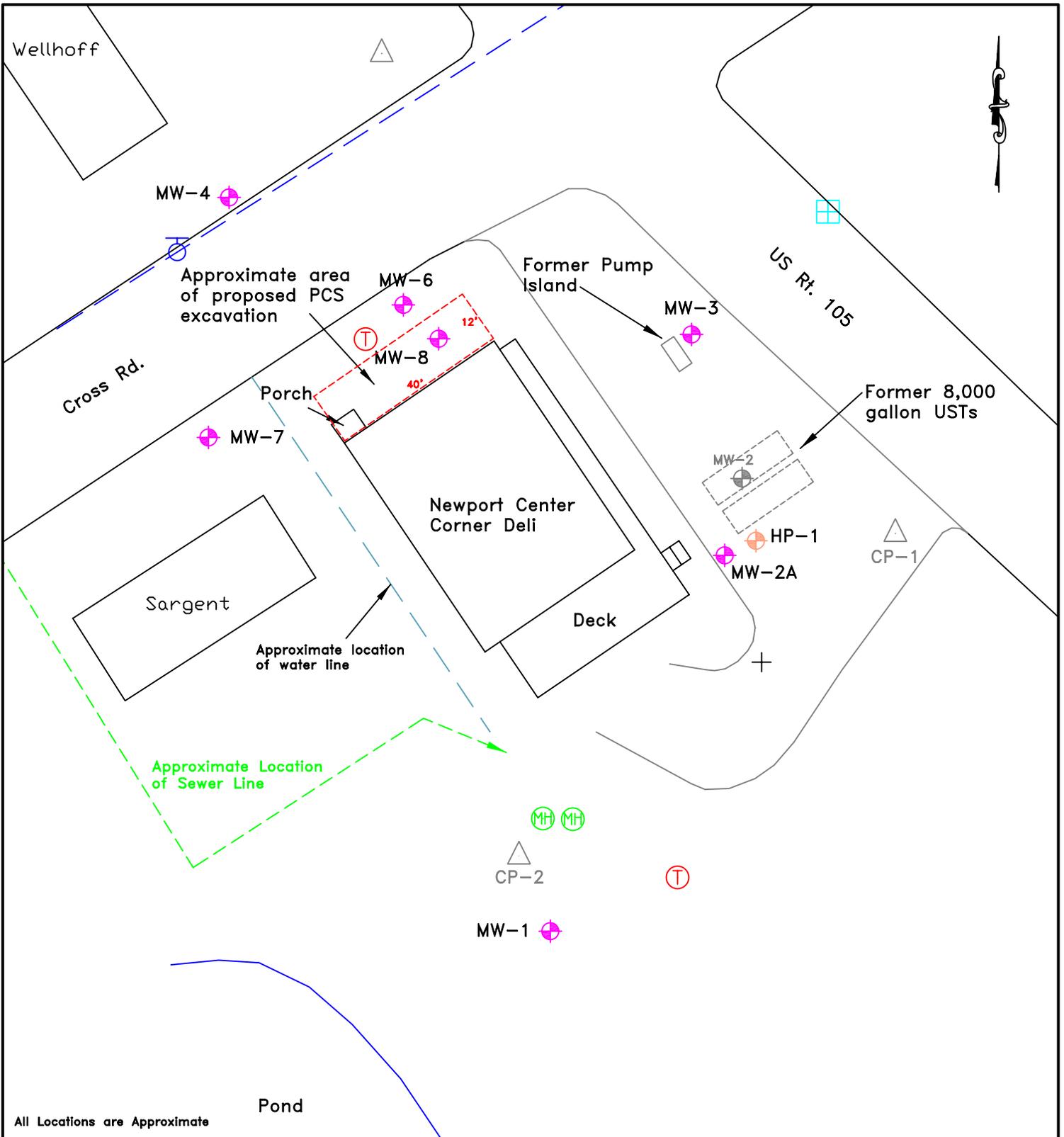


Former Newport Center Corner Store

**Figure 2**  
**Former Newport Center Corner Store**  
**Intersection of VT Route 105/Cross Road**  
**Newport Center, VT**

Map Source:  
 Orthophotograph # 4407206  
 USDA. Photo Date. 2003

0 50 100 200 300 400 Meters



All Locations are Approximate

	Monitoring Well Location		Utility Pole
	Underground Grease Trap		Catch Basin
	Water Line Curb Stop		Sewer Manhole
	Survey Point		Hand point
	Former Monitoring Well Location (destroyed during excavation)		

Scale: 1" = 30'

Date: 10 January 2009

File Name: 26-136fig

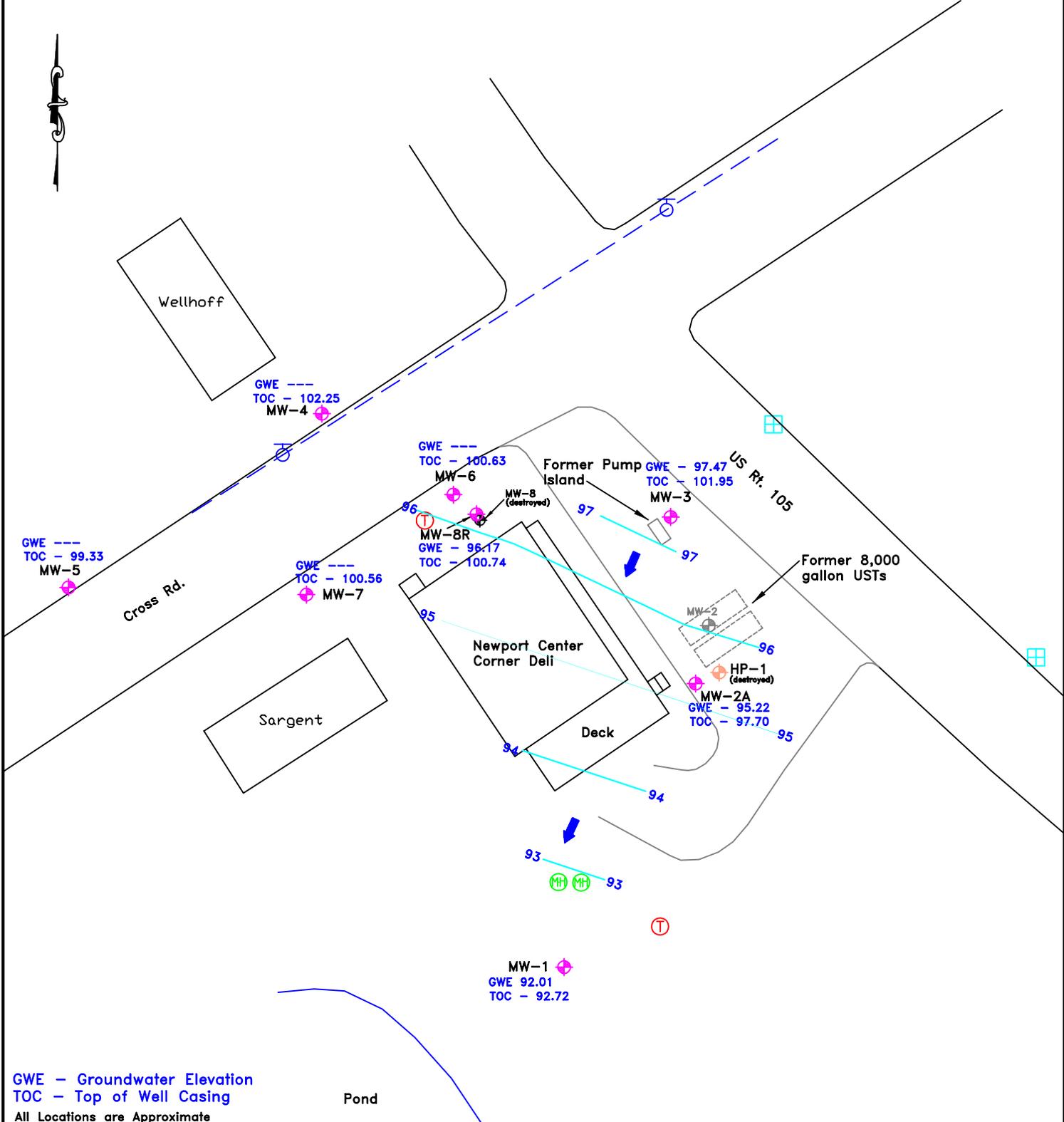
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**FIGURE 3.**  
**PROPOSED AREA OF EXCAVATION**  
 (with monitoring well locations)

Newport Center Corner Deli - Newport Center, VT



Ross Environmental Associates, Inc.  
 P.O. Box 1533 Stowe, Vt 05672  
 (802) 253-4280



GWE - Groundwater Elevation  
 TOC - Top of Well Casing  
 All Locations are Approximate

	Monitoring Well Location		Utility Pole
	Underground Grease Trap		Catch Basin
	Water Line Curb Stop		Sewer Manhole
	Survey Point		Hand point
	Former Monitoring Well Location (destroyed during excavation)		

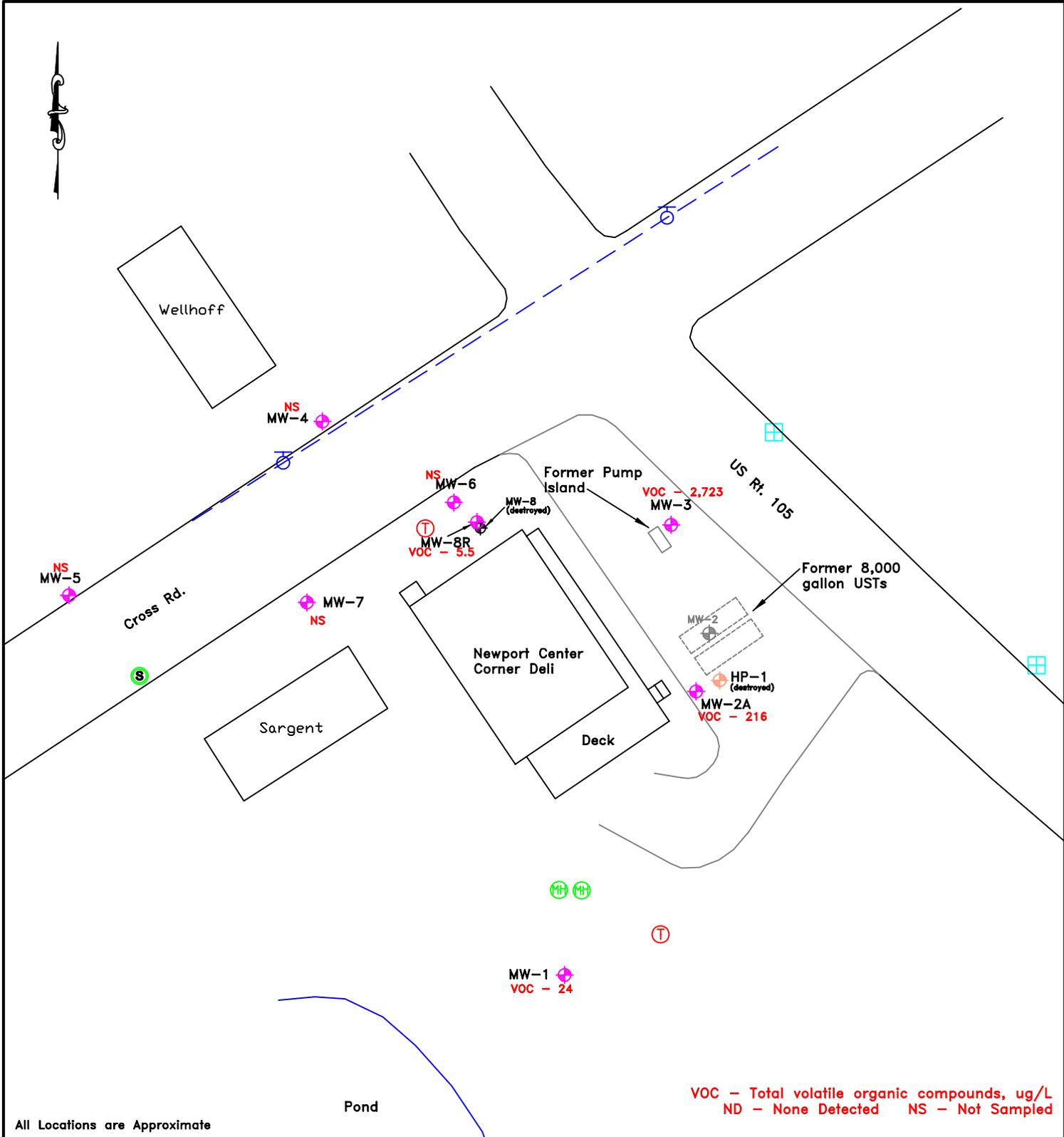
Scale: 1" = 40'

Date: 8 July 2009

File Name: 26-136fig

Drawn By: MBM

**FIGURE 4.**  
**GROUND WATER DISTRIBUTION**  
 (Monitoring Date: 13 June 2013)  
 Newport Center Corner Deli - Newport Center, VT



All Locations are Approximate

<b>Legend:</b>	Monitoring Well Location	Utility Pole
Underground Grease Trap	Catch Basin	
Water Line Curb Stop	Sewer Manhole	
Survey Point	Hand point	
Former Monitoring Well Location (destroyed during excavation)		

<b>Scale:</b>	1" = 40'	<b>Date:</b>	8 July 2009
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<b>File Name:</b>	26-136fig	<b>Drawn By:</b>	MBM
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**FIGURE 5.**  
 CONTAMINANT DISTRIBUTION  
 (Monitoring Date: 13 June 2013)  
 Newport Center Corner Deli - Newport Center, VT



*Ross Environmental Associates, Inc.*  
 P.O. Box 1533 Stowe, Vt 05672  
 (802) 253-4280

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**TABLE 1**  
**GROUND WATER ELEVATION CALCULATIONS**

Former Newport Center Corner Store  
Newport Center, Vermont

Monitoring Date: 13 June 2013

Well I.D.	Top of Casing Elevation (ft)	Depth to Water (feet, TOC)	Water Table Elevation (ft)
MW-1	92.72	0.71	92.01
MW-2A	97.70	2.48	95.22
MW-3	101.95	4.48	97.47
MW-4	102.25	-	-
MW-5	99.33	-	-
MW-6	100.63	-	-
MW-7	100.56	-	-
MW-8R	100.74	4.57	96.17

All values reported in feet relative to arbitrary site datum of 100.00 feet  
Site resurveyed after excavation activities near MW-8, (now MW-8R) on 8 July 2009

**TABLE 2  
GROUND-WATER ANALYTICAL RESULTS**

Former Newport Center Corner Store  
Newport Center, Vermont

Monitoring Date: 13 June 2013

Parameter	MtBE	Benzene	Toluene	Ethyl-benzene	Total Xylenes	1,3,5-TMB	1,2,4-TMB	Naphtha-lene	Total VOCs
MW-1	24	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<1.0	ND<2.0	24
MW-2A	1.1	1.0	6.6	26	98	10	37	36	216
MW-3	540	1,700	21	230	400	33	280	59	2,723
MW-8R	ND<1.0	1.2	ND<1.0	ND<1.0	2.9	1.4	ND<1.0	ND<2.0	5.5
<b>VGES</b>	<b>40</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>350</b>		<b>20</b>	<b>--</b>
<b>QA/QC Samples</b>									
MW-2A	1.1	1.0	6.6	26	98	10	37	36	216
Dup (MW-2A)	1.4	1.4	8	33	121	12	47	47	271
<b>% Difference</b>	<b>27.3</b>	<b>40.0</b>	<b>24.2</b>	<b>26.9</b>	<b>23.5</b>	<b>20.0</b>	<b>27.0</b>	<b>30.6</b>	<b>25.6</b>
Trip Blank	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<1.0	ND<2.0	ND

Notes: All results reported as micrograms per liter (µg/L), unless indicated otherwise.  
 ND: None detected at indicated detection limit.  
 Shaded values indicate exceedance of Vermont Groundwater Enforcement standard (VGES).

**TABLE 3**  
**FIELD MEASUREMENT DATA**

Former Newport Center Corner Store  
Newport Center, VT

Monitoring Date: 13 June 2013

Well ID	pH (su)	temperature (°C)	Specific conductivity (µS/cm)	ORP (mV)	TDS (ppm)	Comments
MW-1	10.14	11.52	885.00	-133.40	0.77	good recharge
MW-2A	10.55	12.1	1,035	-89	1	purged dry, good recharge
MW-3	9.48	13.2	2,186	-80	2	mild odor
MW-8R	8.93	12.0	1157	-53	1	purged dry, good recharge

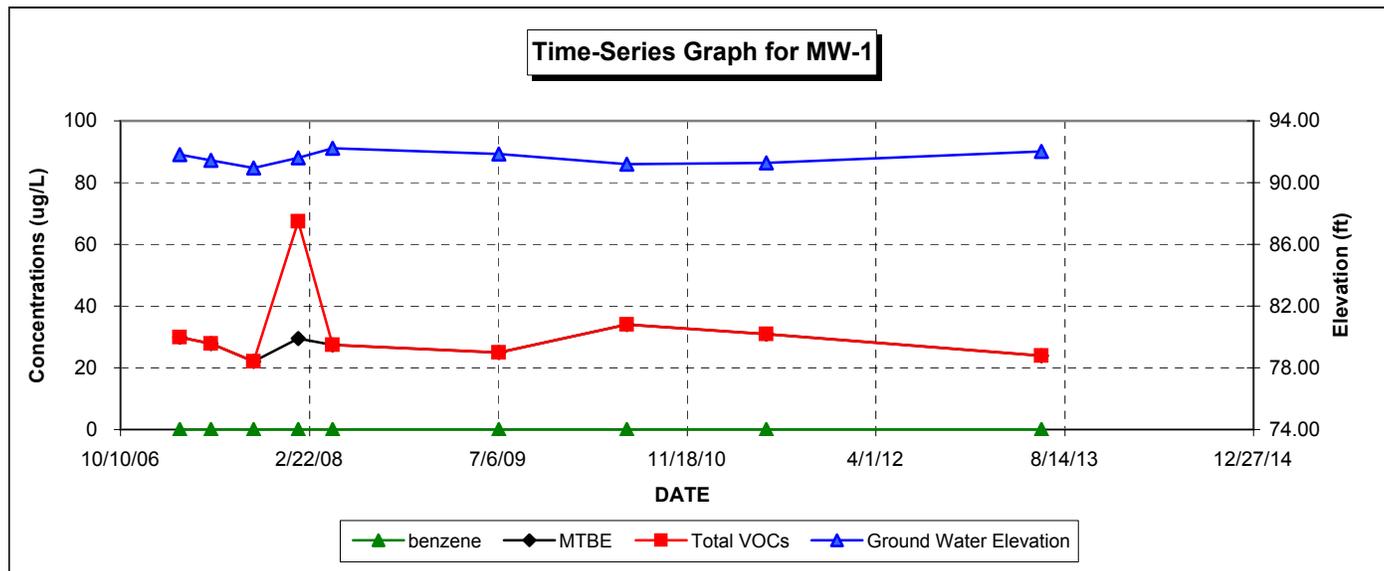
pH reported in standard units (s.u.).

Specific conductivity reported in microsiemens per centimeter (µS/cm) or millisiemens per centimeter (mS/cm).

Oxidation-reduction potential (ORP) reported in millivolts (mV).

Total dissolved solids (TDS) reported in parts per million (ppm) or parts per (ppt) thousand.

# ATTACHMENT

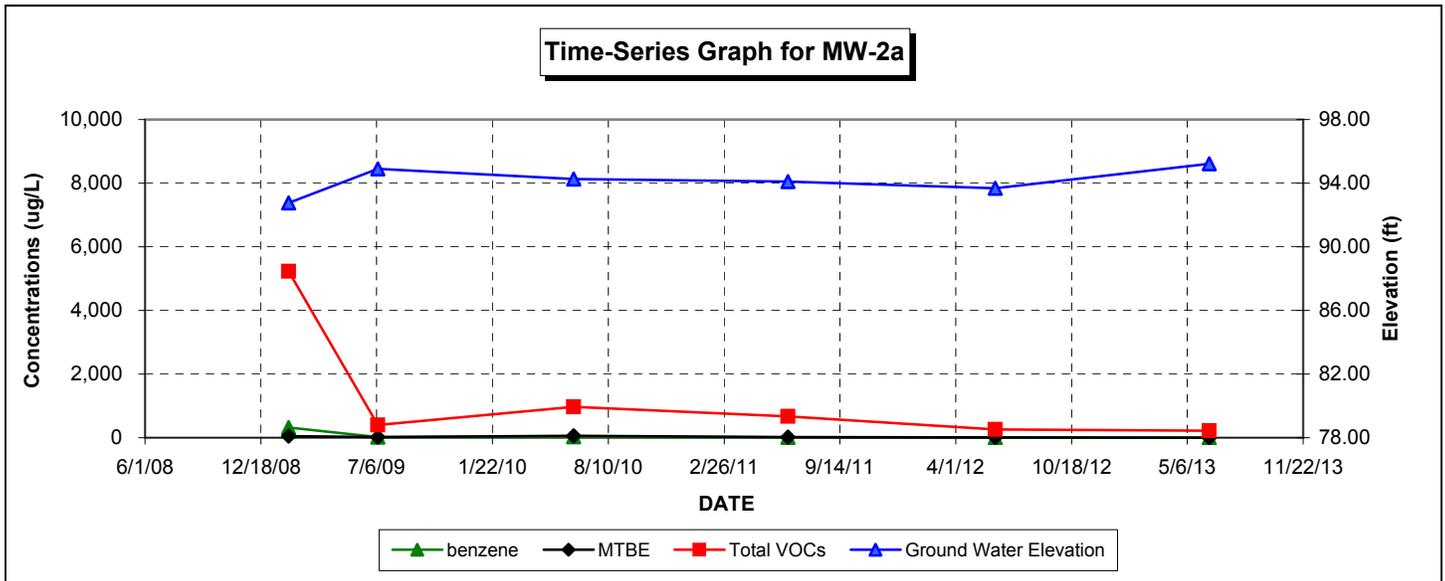


### Summary of Ground Water Analytical Results for MW-1

Former Newport Center Corner Store  
Newport Center, Vermont

Date	MTBE	benzene	toluene	ethyl benzene	total xylenes	1,3,5-TMB	1,2,4-TMB	naphthalene	Total VOCs	Ground Water Elevation
3/16/2007	30	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<1.0	ND<2.0	30	91.82
6/6/2007	27.8	ND<1.0	ND<1.0	ND<1.0	ND<2.1	ND<1.0	ND<1.0	ND<2.1	27.8	91.46
9/27/2007	22	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<1.0	ND<2.1	22	90.94
1/24/2008	29.5	ND<2.0	4.8	3.7	24.0	ND<2.0	5.5	ND<4.0	67.5	91.61
4/23/2008	27.4	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<1.0	ND<2.0	27.4	92.22
7/8/2009	25	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<1.0	ND<1.0	25	91.84
6/11/2010	34	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<1.0	ND<1.0	34	91.21
6/16/2011	31	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<1.0	ND<1.0	31	91.27
6/13/2013	24	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<1.0	ND<1.0	24	92.01
<b>VGES</b>	<b>40</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>350</b>	<b>20</b>	<b>---</b>	<b>---</b>	<b>---</b>

Notes: Results given in micrograms per liter (µg/L), unless indicated otherwise.  
 ND- None detected at indicated detection limit.  
 UIP: Unidentified Peaks.  
 VGES - Vermont Groundwater Enforcement Standards

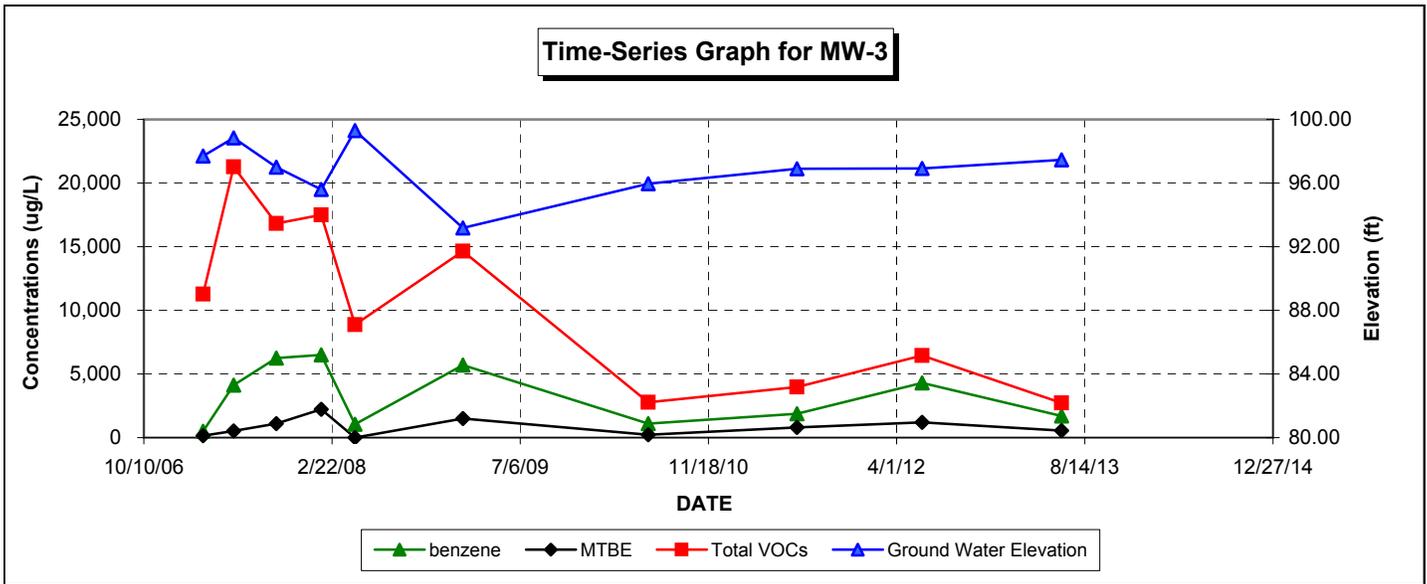


### Summary of Ground Water Analytical Results for MW-2a

Former Newport Center Corner Store  
Newport Center, Vermont

Date	MTBE	benzene	toluene	ethyl benzene	total xylenes	1,3,5-TMB	1,2,4-TMB	naphthalene	Total VOCs	Ground Water Elevation
2/4/2009	47	320	86	1,300	1,980	170	890	440	5,233	92.76
7/8/2009	18	20	120	41	145	14	21	19	398.0	94.91
6/11/2010	60	26	76	160	420	35	100	95	972.0	94.27
6/16/2011	17	5.8	78	87	288	32	98	64	669.8	94.10
6/8/2012	7.8	3.2	17	33	108	7.6	41	43	260.6	93.68
6/13/2013	1.1	1.0	7	26	98	10.0	37	36	215.7	95.22
<b>VGES</b>	<b>40</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>350</b>	<b>20</b>	<b>---</b>	<b>---</b>	<b>---</b>

Notes: Results given in micrograms per liter ( $\mu\text{g/L}$ ), unless indicated otherwise.  
 ND- None detected at indicated detection limit.  
 UIP: Unidentified Peaks.  
 VGES - Vermont Groundwater Enforcement Standards

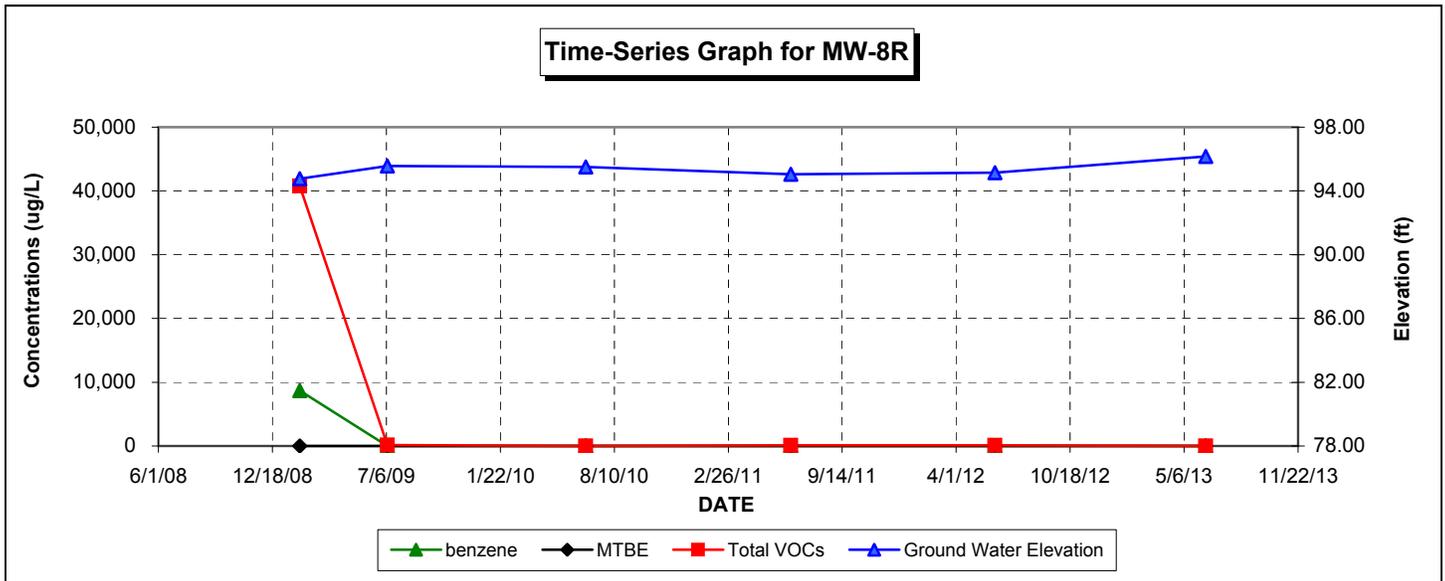


**Summary of Ground Water Analytical Results for MW-3**

Former Newport Center Corner Store  
Newport Center, Vermont

Date	MTBE	benzene	toluene	ethyl benzene	total xylenes	1,3,5-TMB	1,2,4-TMB	naphthalene	Total VOCs	Ground Water Elevation
3/16/2007	160	490	1,100	420	5,900	680	2,300	230	11,280	97.71
6/6/2007	519	4,120	4,800	1,800	7,480	649	1,420	479	21,267	98.85
9/27/2007	1,100	6,250	834	1,510	4,430	666	1,670	366	16,826	97.00
1/24/2008	2,220	6,510	1,170	1,500	3,990	547	1,280	283	17,500	95.60
4/23/2008	ND<400	1,050	1,080	871	4,190	605	1,080	ND<400	8,876	99.30
2/4/2009	1,500	5,700	1,700	1,400	3,020	350	800	190	14,660	93.17
6/11/2010	230	1,100	13	330	744	82	230	56	2,785	95.97
7/11/2011	790	1,880	23	352	560	76	241	55	3,977	96.90
6/8/2012	1200	4,300	27	680	909	48	410	80	6,454	96.92
6/13/2013	540	1,700	21	230	400	33	280	59	2,723	97.47
<b>VGES</b>	<b>40</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>350</b>	<b>20</b>	<b>---</b>	<b>---</b>	<b>---</b>

Notes: Results given in micrograms per liter (µg/L), unless indicated otherwise.  
 ND- None detected at indicated detection limit.  
 UIP: Unidentified Peaks.  
 VGES - Vermont Groundwater Enforcement Standards



**Summary of Ground Water Analytical Results for MW-8 vs. MW-8R**

Former Newport Center Corner Store  
Newport Center, Vermont

Date	MTBE	benzene	toluene	ethyl benzene	total xylenes	1,3,5-TMB	1,2,4-TMB	naphtha-lene	Total VOCs	Ground Water Elevation
2/4/2009	ND<100	8,700	14,000	3,000	11,600	640	2,400	430	40,770	94.76
7/8/2009	ND<1.0	11	30	16	49	14	6.3	3.8	130.1	95.56
6/21/2010	ND<1.0	ND < 1.0	ND < 1.0	ND < 1.0	ND < 2.0	ND < 1.0	ND < 1.0	ND < 1.0	ND	95.51
6/16/2011	ND<1.0	15	15	8.4	39	5.7	5	ND < 1.0	88.1	95.04
6/8/2012	ND<1.0	22	17	11	56	8.1	1.0	6.1	115.1	95.14
6/13/2013	ND<1.0	1.2	ND<1.0	ND<1.0	2.9	1.4	ND<1.0	ND<1.0	5.5	96.17
<b>VGES</b>	<b>40</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>350</b>	<b>20</b>	<b>---</b>	<b>---</b>	<b>---</b>

Notes: Results given in micrograms per liter ( $\mu\text{g/L}$ ), unless indicated otherwise.  
 ND- None detected at indicated detection limit.  
 UIP: Unidentified Peaks.  
 VGES - Vermont Groundwater Enforcement Standards

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**CLIENT:** Ross Environmental Associates  
**Project:** 26-136 Newport Corner Store  
**Lab Order:** 1306041  
**Date Received:** 6/19/2013

**Work Order Sample Summary**

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<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Collection Date</b>	<b>Collection Time</b>
1306041-01A	MW-1	6/13/2013	1:50 PM
1306041-02A	MW-2A	6/13/2013	1:20 PM
1306041-03A	MW-3	6/13/2013	12:50 PM
1306041-04A	MW-8R	6/13/2013	12:00 PM
1306041-05A	Dup	6/13/2013	12:00 AM
1306041-06A	TB	6/17/2013	2:30 PM

## DATA COMMENT PAGE

### Organic Data Qualifiers

ND	Indicates compound was analyzed for, but not detected at or above the reporting limit.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than the method detection limit.
H	Method prescribed holding time exceeded.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
B	This flag is used when the analyte is found in the associated blank as well as in the sample.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
#	See Case Narrative

### Micro Data Qualifiers

TNTC	Too numerous to count
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### Inorganic Data Qualifiers

ND or U	Indicates element was analyzed for, but not detected at or above the reporting limit.
J	Indicates a value greater than or equal to the method detection limit, but less than the quantitation limit.
H	Indicates analytical holding time exceedance.
B	Indicates that the analyte is found in the associated blank, as well as in the sample.
MSA	Indicates value determined by the Method of Standard Addition
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
PS	The analyte was below the Reporting Limit but has significant matrix interference as noted by the poor recovery of the Post Digestion Spike.
#	See Case Narrative
*	MCL Exceeded

#### Report Comments:

1. Soil, sediment and sludge sample results are reported on a "dry weight" basis.
2. Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

**AMRO Environmental Laboratories Corp.**

Date: 24-Jun-13

**CLIENT:** Ross Environmental Associates  
**Project:** 26-136 Newport Corner Store

**Lab Order:** 1306041**Lab ID:** 1306041-01**Collection Date:** 6/13/2013 1:50:00 PM**Collection Time:****Client Sample ID:** MW-1**Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**EPA 8260B AROMATIC VOLATILES BY GC/MS****SW8260B**

Analyst: DH

Methyl tert-butyl ether	24	1.0		µg/L	1	6/20/2013 5:09:00 PM
Benzene	ND	1.0		µg/L	1	6/20/2013 5:09:00 PM
Toluene	ND	1.0		µg/L	1	6/20/2013 5:09:00 PM
Ethylbenzene	ND	1.0		µg/L	1	6/20/2013 5:09:00 PM
m,p-Xylene	ND	2.0		µg/L	1	6/20/2013 5:09:00 PM
o-Xylene	ND	2.0		µg/L	1	6/20/2013 5:09:00 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/20/2013 5:09:00 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/20/2013 5:09:00 PM
Naphthalene	ND	2.0		µg/L	1	6/20/2013 5:09:00 PM
Surr: Dibromofluoromethane	106	68-122		%REC	1	6/20/2013 5:09:00 PM
Surr: 1,2-Dichloroethane-d4	109	74-124		%REC	1	6/20/2013 5:09:00 PM
Surr: Toluene-d8	96.5	69-121		%REC	1	6/20/2013 5:09:00 PM
Surr: 4-Bromofluorobenzene	90.1	62-129		%REC	1	6/20/2013 5:09:00 PM

**Lab ID:** 1306041-02**Collection Date:** 6/13/2013 1:20:00 PM**Collection Time:****Client Sample ID:** MW-2A**Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**EPA 8260B AROMATIC VOLATILES BY GC/MS****SW8260B**

Analyst: DH

Methyl tert-butyl ether	1.1	1.0		µg/L	1	6/20/2013 5:46:00 PM
Benzene	1.0	1.0		µg/L	1	6/20/2013 5:46:00 PM
Toluene	6.6	1.0		µg/L	1	6/20/2013 5:46:00 PM
Ethylbenzene	26	1.0		µg/L	1	6/20/2013 5:46:00 PM
m,p-Xylene	71	2.0		µg/L	1	6/20/2013 5:46:00 PM
o-Xylene	27	2.0		µg/L	1	6/20/2013 5:46:00 PM
1,3,5-Trimethylbenzene	10	1.0		µg/L	1	6/20/2013 5:46:00 PM
1,2,4-Trimethylbenzene	37	1.0		µg/L	1	6/20/2013 5:46:00 PM
Naphthalene	36	2.0		µg/L	1	6/20/2013 5:46:00 PM
Surr: Dibromofluoromethane	106	68-122		%REC	1	6/20/2013 5:46:00 PM
Surr: 1,2-Dichloroethane-d4	109	74-124		%REC	1	6/20/2013 5:46:00 PM
Surr: Toluene-d8	97.9	69-121		%REC	1	6/20/2013 5:46:00 PM
Surr: 4-Bromofluorobenzene	101	62-129		%REC	1	6/20/2013 5:46:00 PM

**AMRO Environmental Laboratories Corp.**

Date: 24-Jun-13

**CLIENT:** Ross Environmental Associates  
**Project:** 26-136 Newport Corner Store

**Lab Order:** 1306041**Lab ID:** 1306041-03**Collection Date:** 6/13/2013 12:50:00 PM**Collection Time:****Client Sample ID:** MW-3**Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**EPA 8260B AROMATIC VOLATILES BY GC/MS****SW8260B**Analyst: **DH**

Methyl tert-butyl ether	540	10		µg/L	10	6/20/2013 7:39:00 PM
Benzene	1,700	10		µg/L	10	6/20/2013 7:39:00 PM
Toluene	21	10		µg/L	10	6/20/2013 7:39:00 PM
Ethylbenzene	230	10		µg/L	10	6/20/2013 7:39:00 PM
m,p-Xylene	370	20		µg/L	10	6/20/2013 7:39:00 PM
o-Xylene	30	20		µg/L	10	6/20/2013 7:39:00 PM
1,3,5-Trimethylbenzene	33	10		µg/L	10	6/20/2013 7:39:00 PM
1,2,4-Trimethylbenzene	280	10		µg/L	10	6/20/2013 7:39:00 PM
Naphthalene	59	20		µg/L	10	6/20/2013 7:39:00 PM
Surr: Dibromofluoromethane	99.9	68-122		%REC	10	6/20/2013 7:39:00 PM
Surr: 1,2-Dichloroethane-d4	109	74-124		%REC	10	6/20/2013 7:39:00 PM
Surr: Toluene-d8	97.7	69-121		%REC	10	6/20/2013 7:39:00 PM
Surr: 4-Bromofluorobenzene	90.4	62-129		%REC	10	6/20/2013 7:39:00 PM

**Lab ID:** 1306041-04**Collection Date:** 6/13/2013 12:00:00 PM**Collection Time:****Client Sample ID:** MW-8R**Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**EPA 8260B AROMATIC VOLATILES BY GC/MS****SW8260B**Analyst: **DH**

Methyl tert-butyl ether	ND	1.0		µg/L	1	6/21/2013 2:17:00 PM
Benzene	1.2	1.0		µg/L	1	6/21/2013 2:17:00 PM
Toluene	ND	1.0		µg/L	1	6/21/2013 2:17:00 PM
Ethylbenzene	ND	1.0		µg/L	1	6/21/2013 2:17:00 PM
m,p-Xylene	ND	2.0		µg/L	1	6/21/2013 2:17:00 PM
o-Xylene	2.9	2.0		µg/L	1	6/21/2013 2:17:00 PM
1,3,5-Trimethylbenzene	1.4	1.0		µg/L	1	6/21/2013 2:17:00 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/21/2013 2:17:00 PM
Naphthalene	ND	2.0		µg/L	1	6/21/2013 2:17:00 PM
Surr: Dibromofluoromethane	108	68-122		%REC	1	6/21/2013 2:17:00 PM
Surr: 1,2-Dichloroethane-d4	114	74-124		%REC	1	6/21/2013 2:17:00 PM
Surr: Toluene-d8	101	69-121		%REC	1	6/21/2013 2:17:00 PM
Surr: 4-Bromofluorobenzene	96.1	62-129		%REC	1	6/21/2013 2:17:00 PM

**AMRO Environmental Laboratories Corp.**

Date: 24-Jun-13

**CLIENT:** Ross Environmental Associates  
**Project:** 26-136 Newport Corner Store

**Lab Order:** 1306041

**Lab ID:** 1306041-05

**Collection Date:** 6/13/2013

**Collection Time:**

**Client Sample ID:** Dup

**Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**EPA 8260B AROMATIC VOLATILES BY GC/MS**

**SW8260B**

Analyst: DH

Methyl tert-butyl ether	1.4	1.0		µg/L	1	6/20/2013 6:25:00 PM
Benzene	1.4	1.0		µg/L	1	6/20/2013 6:25:00 PM
Toluene	8.2	1.0		µg/L	1	6/20/2013 6:25:00 PM
Ethylbenzene	33	1.0		µg/L	1	6/20/2013 6:25:00 PM
m,p-Xylene	88	2.0		µg/L	1	6/20/2013 6:25:00 PM
o-Xylene	33	2.0		µg/L	1	6/20/2013 6:25:00 PM
1,3,5-Trimethylbenzene	12	1.0		µg/L	1	6/20/2013 6:25:00 PM
1,2,4-Trimethylbenzene	47	1.0		µg/L	1	6/20/2013 6:25:00 PM
Naphthalene	47	2.0		µg/L	1	6/20/2013 6:25:00 PM
Surr: Dibromofluoromethane	105	68-122		%REC	1	6/20/2013 6:25:00 PM
Surr: 1,2-Dichloroethane-d4	106	74-124		%REC	1	6/20/2013 6:25:00 PM
Surr: Toluene-d8	98.0	69-121		%REC	1	6/20/2013 6:25:00 PM
Surr: 4-Bromofluorobenzene	97.8	62-129		%REC	1	6/20/2013 6:25:00 PM

**Lab ID:** 1306041-06

**Collection Date:** 6/17/2013 2:30:00 PM

**Collection Time:**

**Client Sample ID:** TB

**Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**EPA 8260B AROMATIC VOLATILES BY GC/MS**

**SW8260B**

Analyst: DH

Methyl tert-butyl ether	ND	1.0		µg/L	1	6/20/2013 12:20:00 PM
Benzene	ND	1.0		µg/L	1	6/20/2013 12:20:00 PM
Toluene	ND	1.0		µg/L	1	6/20/2013 12:20:00 PM
Ethylbenzene	ND	1.0		µg/L	1	6/20/2013 12:20:00 PM
m,p-Xylene	ND	2.0		µg/L	1	6/20/2013 12:20:00 PM
o-Xylene	ND	2.0		µg/L	1	6/20/2013 12:20:00 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/20/2013 12:20:00 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/20/2013 12:20:00 PM
Naphthalene	ND	2.0		µg/L	1	6/20/2013 12:20:00 PM
Surr: Dibromofluoromethane	104	68-122		%REC	1	6/20/2013 12:20:00 PM
Surr: 1,2-Dichloroethane-d4	107	74-124		%REC	1	6/20/2013 12:20:00 PM
Surr: Toluene-d8	99.5	69-121		%REC	1	6/20/2013 12:20:00 PM
Surr: 4-Bromofluorobenzene	91.8	62-129		%REC	1	6/20/2013 12:20:00 PM