



## The Verterre Group

ENVIRONMENTAL SCIENTISTS AND FIELD SERVICES

Phase (check one)	Type (check one)
<input type="checkbox"/> Site Investigation	<input type="checkbox"/> Work Scope
<input type="checkbox"/> Corrective Action Feasibility Investigation	<input checked="" type="checkbox"/> <b>Technical Report</b>
<input type="checkbox"/> Corrective Action Plan	<input type="checkbox"/> PCF Reimbursement Request
<input type="checkbox"/> Corrective Action Summary Report	<input type="checkbox"/> General Correspondence
<input checked="" type="checkbox"/> Operations & Monitoring Report	

### JUNE 2010 GROUNDWATER MONITORING REPORT

**Sugarhouse Motel  
202 Ethan Allen Highway  
New Haven, Vermont**

**Verterre Project # 09028**

**Date Submitted: August 24, 2010**

Report Prepared for:  
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Written By:

  
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## 1.0 INTRODUCTION

This report was prepared by The Verterre Group (Verterre) to present the results of groundwater monitoring conducted at the Sugarhouse Motel (the SITE) located at 202 Ethan Allen Highway, New Haven, Vermont (the SITE). A SITE Location Map is provided as **Figure 1** and a SITE Plan is provided as **Figure 2**.

The monitoring activities that were conducted include:

- Collection of depth to water measurements used for the calculation of groundwater elevations; and,
- Collection of groundwater samples from accessible monitor wells for the determination of volatile organic compounds (VOCs) by US EPA Method 8021.

The following reporting work was also performed after the above field activities were complete:

- Preparation of a groundwater contour map which illustrates an interpretation of groundwater flow underlying the SITE at the time of sampling;
- Preparation of a contaminant distribution plan;
- Preparation of tables summarizing current and historical data collected; and,
- Completion of this groundwater monitoring report.

## 2.0 BACKGROUND

On August 27, 2009, Verterre oversaw the closure of one (1) 1,000-gallon fuel oil underground storage tank (UST) at the Sugarhouse Motel located at 202 Ethan Allen Highway in New Haven, Vermont. The UST had been removed from service and the property is now being heated using an aboveground storage tank (AST).

There was approximately 20 gallons of water present in the tank, which was transferred to a drum for subsequent disposal. Visibly stained soils were encountered within the tank excavation. When the UST was removed from the ground, visible free phase product was floating atop the groundwater in the tank cavity. Verterre applied absorbent pads and a boom to absorb the free floating product. The booms and pads were placed in a drum for subsequent off-site disposal. The UST was in poor condition with some rust, pitting and one visible hole in the bottom. The State of Vermont Underground Storage Tank Program was notified of the release.

Soil samples were screened with a properly calibrated photoionization detector (PID) and elevated PID readings were recorded throughout the tank cavity. The soils surrounding the UST were silty clays with large rocks. The tank cavity was backfilled with excavated soils and sand fill. Groundwater was encountered in the tank cavity at approximately 6 feet below ground surface.

Based on the observed conditions, Verterre recommended additional investigative actions be conducted in regards to the 1,000 gallon fuel oil UST closure that occurred on August 27, 2009.

Verterre advanced a total of eighteen (7) soil borings on November 18, 2009 using Verterre's Geoprobe<sup>®</sup>. These borings were advanced to a depth ranging from 8 to 8.5 feet below ground surface (bgs). Four (4) of these boring were then converted to monitoring wells.

The four (4) monitor wells were sampled in December 2010 for VOCs by US EPA Method 8021 and TPH-DRO by US EPA Method 8015. The site supply well was also sample for VOCs by US EPA Method 524.2. Because of insufficient groundwater it was not possible to sample MW-2 for TPH-DRO. TPH-DRO was reported above the MDLs in MW-1. Benzene, trimethylbenzenes and naphthalene were reported above their respective Vermont Groundwater Enforcement Standards (VGES) in MW-1. Toluene, ethylbenzene and total xylenes were reported above the MDL but below their respective VGES in MW-1. VOCs were not reported above the MDLs in MW-2, MW-3, MW-4 or the supply well sample. TPH-DRO was not reported above the MDL in MW-3 or MW-4.

Verterre recommended that the monitor wells be re-sampled in the spring of 2010. The SMS also requested that the outlet of the building drain be inspected for evidence of petroleum impact and sampled.

### **3.0 SUMMARY OF GROUNDWATER SAMPLING ACTIVITIES**

Verterre conducted routine groundwater monitoring at the SITE on June 2, 2010. This sampling event included the collection of depth to groundwater data and the collection of groundwater samples for laboratory analysis from monitoring wells MW-1, MW-2, MW-3, MW-4 and the sites supply well. A surface water sample and also collected from the effluent of the buildings perimeter drainage system.

To allow for a representative groundwater sample, each well was purged of three (3) volumes of water with a dedicated bailer. Purge water from the wells was discharged directly to the ground surface. Sampling at each monitoring well was conducted with dedicated bailers.

Quality assurance/quality control (QA/QC) samples collected during this sampling event included one (1) field blank and a duplicate sample from MW-1 (labeled DUP-1). All samples collected for VOC analysis via US EPA Method 8021 were submitted to Resource Laboratories of Portsmouth, New Hampshire.

## 4.0 SAMPLING RESULTS

### 4.1 Water Table Elevation and Flow Direction

Depths to water levels in June 2010 ranged from 3.09 feet below the top of casing (btoc) in MW-2 to 4.95 btoc in MW-3. Groundwater elevation data is presented in **Table 1** and as **Figure 3**. Groundwater elevations were relatively flat but groundwater flow is presumed to be to the west. A slight sheen was noted on MW-1.

### 4.2 Analytical Results

The June 2010 groundwater sampling results are summarized in **Table 2**, the complete analytical laboratory report is provided as **Attachment 1**. A Contaminants Distribution Plan is presented as **Figure 4**.

Contaminants of Concern (COCs) were reported above method detection limits (MDLs) in MW-1 (204 micrograms/liter ( $\mu\text{g/l}$ )). COCs were not reported above the MDLs in MW-2, MW-3, MW-4, the supply well sample (Tap-1) or the surface water sample (Drain-1).

Specifically the following compounds were reported above the MDL but below their respective Vermont Groundwater Enforcement Standards (VGES) in MW-1: benzene (4  $\mu\text{g/l}$ ), toluene (26  $\mu\text{g/l}$ ), ethylbenzene (12  $\mu\text{g/l}$ ), total xylenes (88  $\mu\text{g/l}$ ), trimethylbenzenes (68  $\mu\text{g/l}$ ) and naphthalene (6  $\mu\text{g/l}$ ).

A duplicate sample was collected from MW-1 for VOCs. Both the sample and the duplicate contained silts and a sheen. Additionally the well recharged slowly. The reproducibility of results between the sample and the duplicate was poor with an RPD of 59%. The duplicate result was higher however all results were still below the VGES with the exception of benzene, which, at a concentration of 6  $\mu\text{g/l}$  was slightly above the VGES in the duplicate.

### 4.3 QA/QC Results

The Relative Percent Difference (RPD) calculated for total COCs in MW-1 and its duplicate (DUP-1) was 59%. The elevated RPD calculation was likely due to heavy silts in the well and poor recharge. An RPD of up to 25% is generally considered acceptable for precision.

All laboratory data was evaluated for the following parameters prior to acceptance in this report:

- correct sample ID's;
- analysis date within method specified holding time;
- correct reporting limits;
- acceptable detection limit multipliers; and,
- acceptable surrogate recoveries.

No target analytes were reported above the MDL in the Field Blank.

Based on Verterre's QA/QC evaluation, the data was found to be acceptable.

## 5.0 FINDINGS AND CONCLUSIONS

Based on the activities conducted during this reporting period and the data obtained, the following findings and conclusions were made for the SITE:

- On June 2, 2010, Verterre conducted routine groundwater monitoring. Samples were collected from MW-1, MW-2, MW-3, MW-4, the site supply well (Supply-1) and a surface water sample from the effluent of the buildings perimeter drainage system (Drain-1).
- Benzene, toluene, ethylbenzene, total xylenes, trimethylbenzenes and naphthalene were reported above the MDL but below their respective VGES in MW-1. Benzene was reported slightly above the VGES in a duplicate sample collected from MW-1.
- Both the sample and the duplicate from MW-1 contained silts and a sheen. Additionally the well recharged slowly. The reproducibility of results between the sample and the duplicate was poor with an RPD of 59%.
- VOCs were not reported above the MDLs in MW-2, MW-3, MW-4, the supply well sample (Supply-1) or the surface water sample (Drain-1).
- Soils around the end of the building discharge pipe were screened with a properly calibrated PID and all readings were <0.1 ppmv.

## 6.0 RECOMMENDATIONS

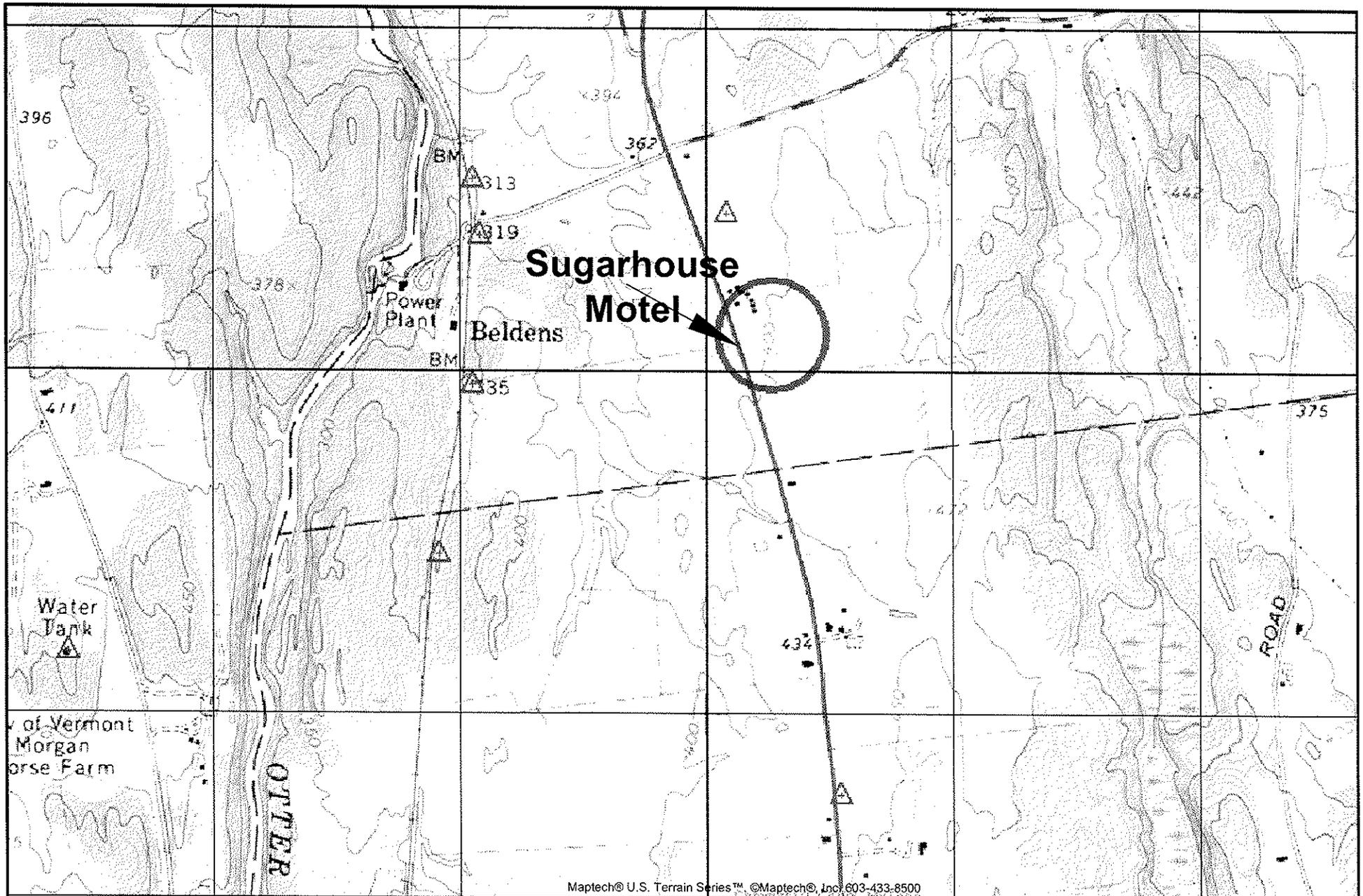
Due to the VOCs present in MW-1, Verterre recommends conducting a confirmatory round of groundwater monitoring in the fall of 2010. The monitor wells (MW-1, MW-2, MW-3 and MW-4) should be sampled for VOCs by US EPA Method 8021. The supply well should be sampled for VOCs by US EPA Method 524.2. If results are below the VGES in that sampling round Verterre will recommend well closure at that time.

*G:\09028\_Sugarhouse Motel\GWR\_0610.doc*

# *Figures*



*The Verterre Group*  
*Environmental Scientists and Field Services*

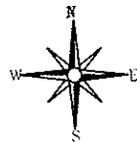


Maptech® U.S. Terrain Series™ ©Maptech®, Inc. 603-433-8500

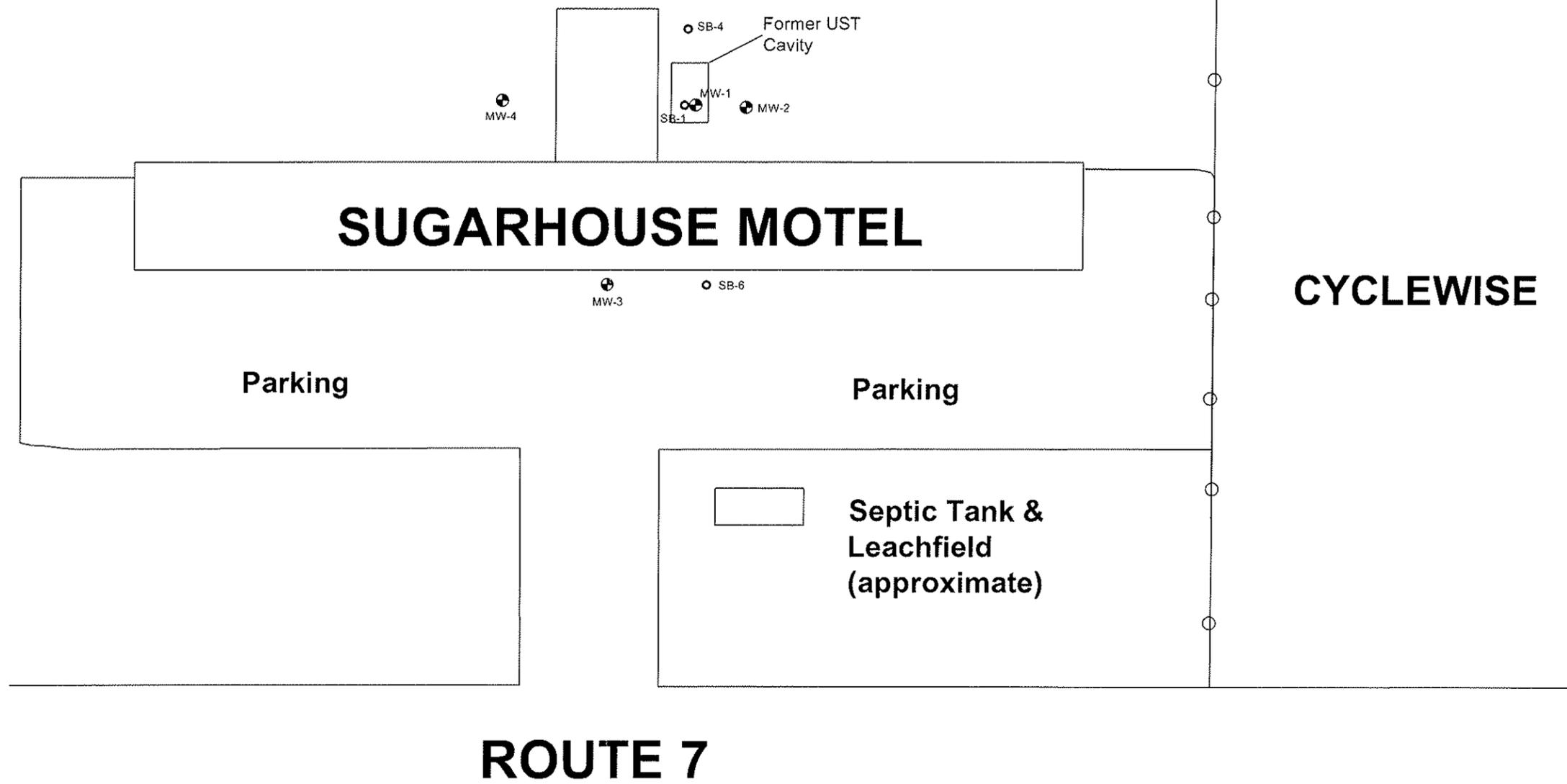
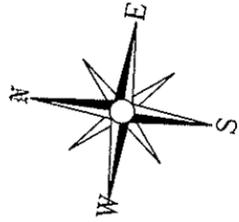
SOURCE: USGS 7.5' Minute Topographic Map Series Middlebury, VT Quadrangle. Created 1963, revised/inspected 1983.

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Fs1:/project/09028/Site Location Map.dwg



Project #09028	DRAWN BY: MER	<b>The Verterre Group</b> 414 Roosevelt Highway - Suite 200 Colchester, Vermont 05446 (802) 654-8663	<b>FIGURE 1</b> <b>SITE LOCATION MAP</b> Sugarhouse Motel 202 Ethan Allen Highway New Haven, VT
	CHECKED BY: SC		
	DATE: 8/28/09		
	SCALE: 1" = 1,000'		



**HOME  
HEALTH &  
HOSPICE,  
(Supply well  
located on  
this property)**

# SUGARHOUSE MOTEL

Parking

Parking

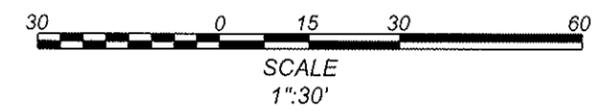
Septic Tank &  
Leachfield  
(approximate)

**CYCLEWISE**

## ROUTE 7

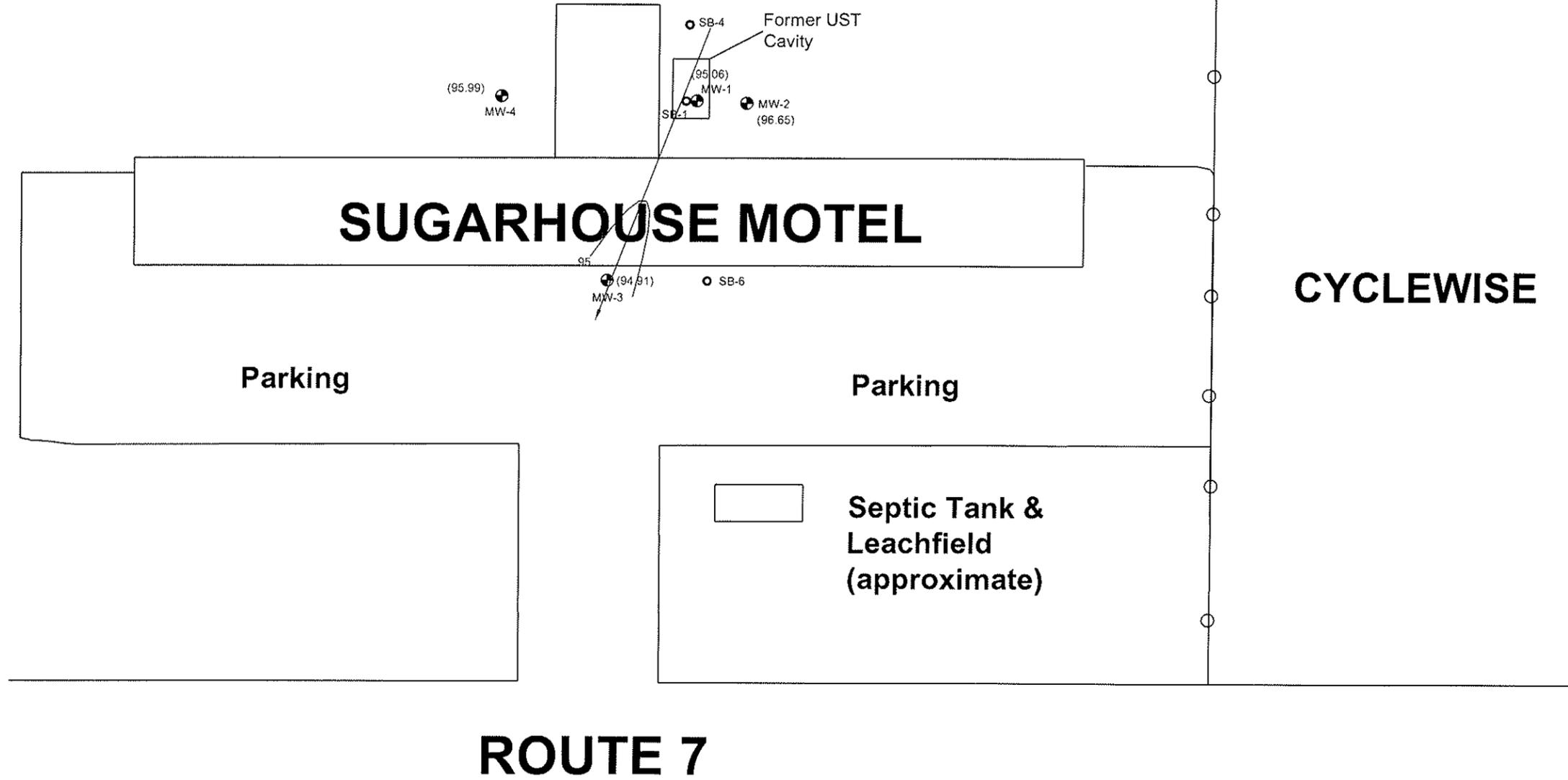
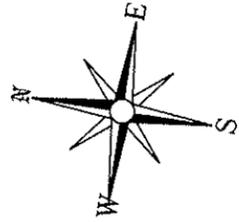
LEGEND

 Bedrock Groundwater monitoring well



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FS1:\project\09028\Site Plan.dwg

PROJECT NO. 09028	CHECKED BY: <u>MR</u>	THE VERTERRE GROUP 414 ROOSEVELT HIGHWAY COLCHESTER, VERMONT (802) 654-8663	FIGURE 2 SITE PLAN  SUGARHOUSE MOTEL NEW HAVEN, VERMONT
	APPROVED BY: <u>MR</u>		
	DRAWN BY: <u>SRC</u>		
	SCALE: 1:30		
	DATE: 01/19/10		



**HOME  
HEALTH &  
HOSPICE,  
(Supply well  
located on  
this property)**

Parking

**SUGARHOUSE MOTEL**

Parking

Septic Tank &  
Leachfield  
(approximate)

**CYCLEWISE**

**ROUTE 7**

**LEGEND**

- Bedrock Groundwater monitoring well
- (94.91) Groundwater Elevation in units of feet as measured on June 2, 2010
- Groundwater contour elevation approximated from June 2, 2010 data
- Groundwater flow direction approximated from June 2, 2010.
- (NS) Not Sampled

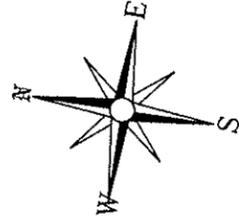


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PROJECT NO. 09028	CHECKED BY: <u>MR</u>
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	DRAWN BY: <u>SRC</u>
	SCALE: 1:30
DATE: 01/19/10	

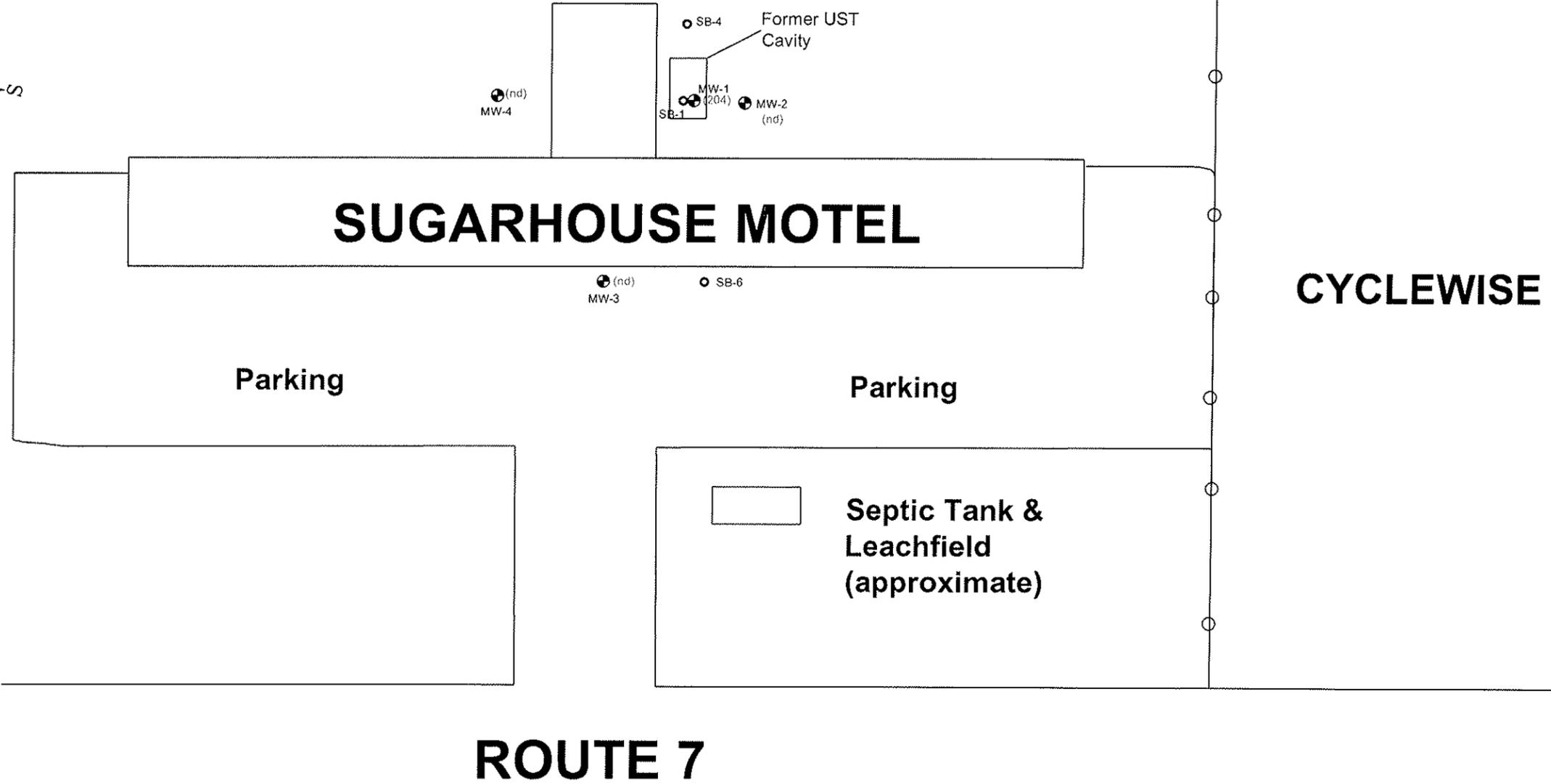
**THE VERTERRE GROUP**  
414 ROOSEVELT HIGHWAY  
COLCHESTER, VERMONT  
(802) 654-8663

**FIGURE 3**  
**GROUNDWATER CONTOUR PLAN**  
June 2, 2010  
SUGARHOUSE MOTEL  
NEW HAVEN, VERMONT



# SUGARHOUSE MOTEL

VE  
ALTH &  
SPICE,  
pply well  
sted on  
property)



### LEGEND

- Bedrock Groundwater monitoring well
 

(204)	Concentration of COC's in units of ug/L as measured on June 2, 2010
(NS)	Not Sampled
(ND)	Not Detected



PROJECT NO. 09028	CHECKED BY: <u>MR.</u>	THE VERTERRE GROUP 414 ROOSEVELT HIGHWAY COLCHESTER, VERMONT (802) 654-8663	FIGURE 4 CONTAMINANTS OF CONCERN June 2, 2010 SUGARHOUSE MOTEL NEW HAVEN, VERMONT
	APPROVED BY: <u>MR.</u>		
	DRAWN BY: <u>SRC</u>		
	DATE: 01/19/10		

# *Tables*



*The Verterre Group*  
*Environmental Scientists and Field Services*

TABLE 1

SUMMARY OF GROUNDWATER ELEVATIONS  
 Sugarhouse Motel  
 New haven, VT  
 SMS #2009-3979  
 June 2, 2010

Well Identification	Top of Riser Elev. (ft.)	Depth to Product (ft.)	Depth to Water (ft.)	Depth of Well (ft.)	Thickness of Water Column (ft.)	Water Table Elev. (ft.)
MW-1	99.38	sheen	4.32	7.60	3.28	95.06
MW-2	99.74	ND	3.09	7.59	4.50	96.65
MW-3	99.86	ND	4.95	6.65	1.70	94.91
MW-4	99.96	ND	3.97	7.03	3.06	95.99

**Average depth to water is 4.08 feet.**

Notes:

1. Elevation data are referenced to a TBM and are in units of feet.
2. ND - Not detected.
3. NM - Not measured.
4. Measurements recorded are referenced to a marking on top of PVC riser for each well. Units are in feet.
5. Depth to fluid measurements were obtained using a Solinst Interface Probe.

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TABLE 2

SUMMARY OF GROUNDWATER QUALITY  
 Sugarhouse Motel  
 New Haven, VT  
 SMS #2009-3979  
 June 2, 2010

Compound	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Trimethylbenzenes (135 & 124)	Naphthalene	Total COC
Sample ID	Concentration (ug/l)							
MW-1	4	26	12	88	<2	68	6	204
MW-2	<2	<2	<2	<4	<2	<4	<5	nd
MW-3	<2	<2	<2	<4	<2	<4	<5	nd
MW-4	<2	<2	<2	<4	<2	<4	<5	nd
Supply-1	<0.5	<0.5	<0.5	<1.0	<0.5	<1.0	<0.5	nd
Drain-1	<2	<2	<2	<4	<2	<4	<5	nd
DUP-1 (MW-1)	<b>6</b>	39	19	151	<2	123	40	378
Field Blank	<2	<2	<2	<4	<2	<4	<5	nd
VGES	5.0	1,000	700	10,000	40	350	20	ne

Notes:

1. VGES - Vermont Groundwater Enforcement Standard.
2. ne - VGES not established.
3. **Bold** and *Italic* numbers indicate concentrations that exceed VGES / VWQS.
4. DUP-1 Duplicate sample of monitoring well MW-1. Collected for Quality Assurance/Quality Control.
5. Monitor well samples were analyzed for VOC's via US EPA Method 8021, and supply well by 524.2.
6. ns - not sampled, nd - not detected, nt - not tested

Relative Percent Difference

RPD for total COCs between MW-1 and DUP-1 was 59%

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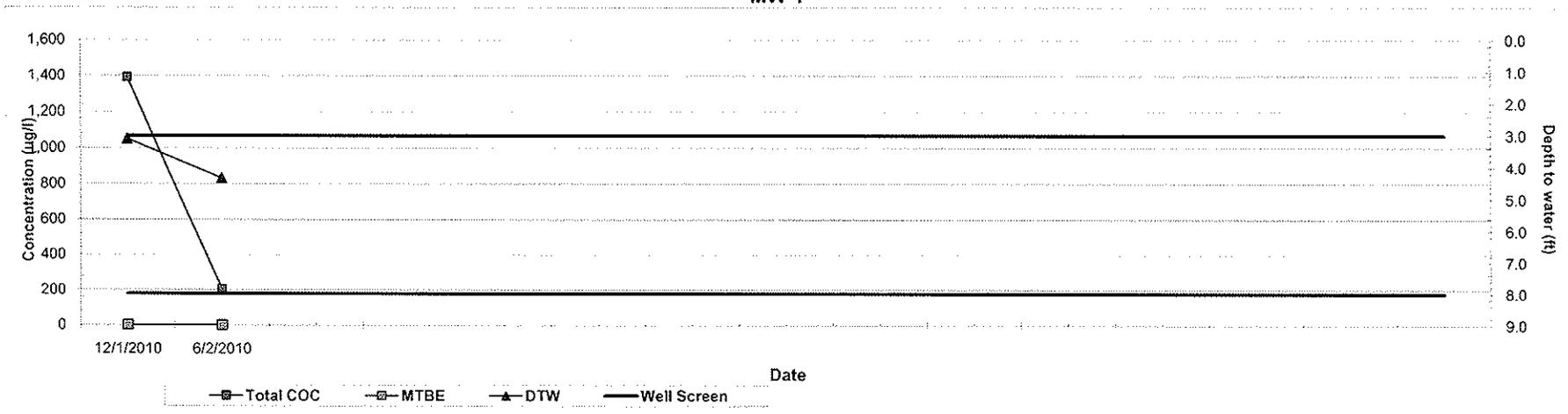
# *Appendix A*



*The Verterre Group*  
*Environmental Scientists and Field Services*

## Groundwater Quality and Elevation Trend Analysis

Sugarhouse Motel  
New Haven, VT  
SMS #2009-3979  
MW-1



Compound	12/1/2010	6/2/2010												
Benzene	25	4												
Toluene	200	26												
Ethylbenzene	73	12												
Total Xylenes	480	88												
MTBE	<2	<2												
TMB (124 & 135)	403	68												
Naphthalene	210	6												
<b>Total COC</b>	<b>1,391</b>	<b>204</b>												
<b>DTW</b>	<b>3.09</b>	<b>4.32</b>												

**Notes:**

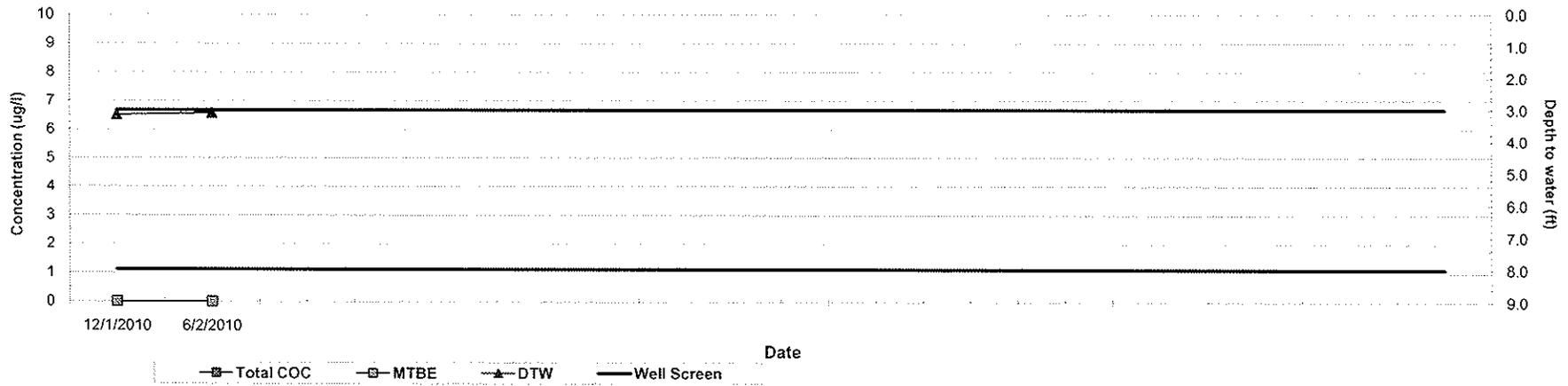
1. Samples tested using EPA Method 8015, 8260, or 8021B.
2. Concentrations are in units of micrograms per liter (µg/l) or parts per billion (ppb).
3. DTW - Depth to water measured using a Solinst interface probe as referenced to the top of PVC riser.
4. nd - Compound not detected above method detection limit. Summation in spreadsheet yields 0; however, actual concentration may be between zero and the method detection limit.  
nt - not tested.  
fp - free product.
5. Wide lines on graph indicate top and bottom of well screen.

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## Groundwater Quality and Elevation Trend Analysis

Sugarhouse Motel  
New Haven, VT  
SMS #2009-3979  
MW-2



Compound	12/1/2010	6/2/2010												
Benzene	<2	<2												
Toluene	<2	<2												
Ethylbenzene	<2	<2												
Total Xylenes	<4	<4												
MTBE	<2	<2												
TMB (124 & 135)	<4	<4												
Naphthalene	<5	<5												
Total COC	nd	nd												
DTW	3.14	3.09												

**Notes:**

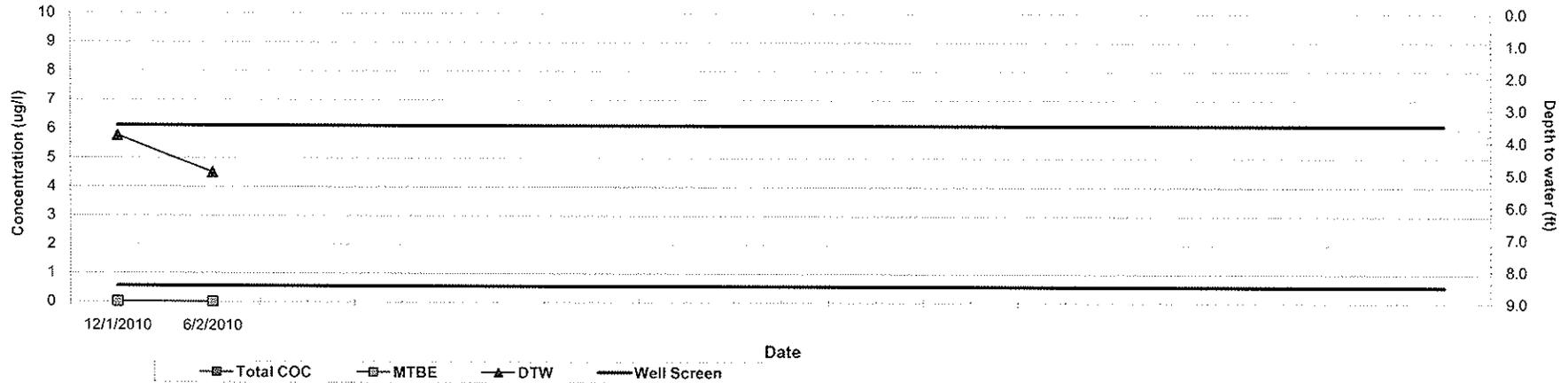
1. Samples tested using EPA Method 8015, 8260, or 8021B.
2. Concentrations are in units of micrograms per liter (ug/l) or parts per billion (ppb).
3. DTW - Depth to water measured using a Solinst interface probe as referenced to the top of PVC riser.
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5. Wide lines on graph indicate top and bottom of well screen.

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## Groundwater Quality and Elevation Trend Analysis

Sugarhouse Motel  
New Haven, VT  
SMS #2009-3979  
MW-3



Compound	12/1/2010	6/2/2010													
Benzene	<2	<2													
Toluene	<2	<2													
Ethylbenzene	<2	<2													
Total Xylenes	<4	<4													
MTBE	<2	<2													
TMB (124 & 135)	<4	<4													
Naphthalene	<5	<5													
Total COC	nd	nd													
DTW	3.81	4.95													

**Notes:**

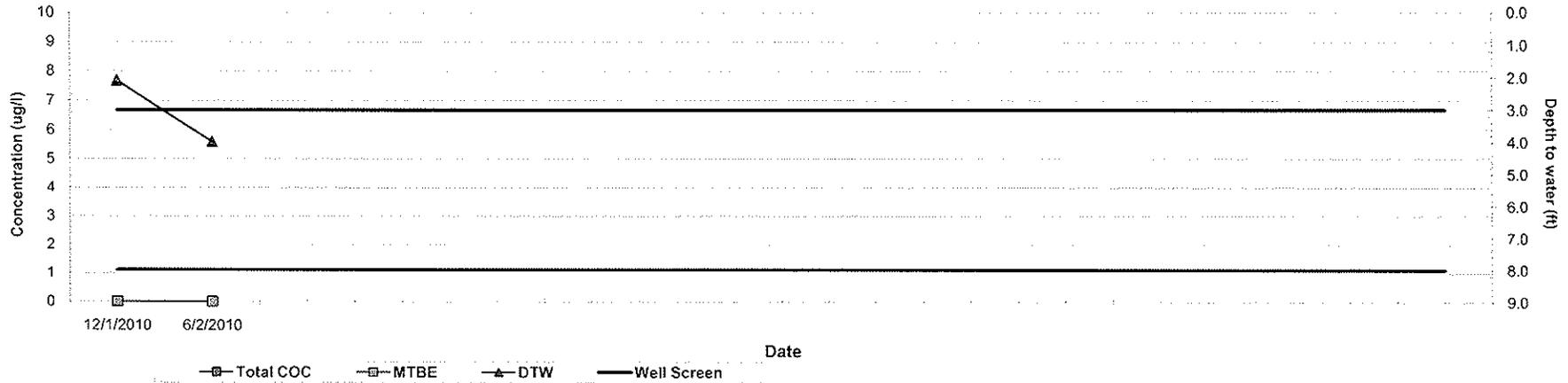
1. Samples tested using EPA Method 8015, 8260, or 8021B.
2. Concentrations are in units of micrograms per liter (ug/l) or parts per billion (ppb).
3. DTW - Depth to water measured using a Solinst interface probe as referenced to the top of PVC riser.
4. nd - Compound not detected above method detection limit. Summation in spreadsheet yields 0; however, actual concentration may be between zero and the method detection limit.
- nt - not tested.
- fp - free product.
5. Wide lines on graph indicate top and bottom of well screen.

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## Groundwater Quality and Elevation Trend Analysis

Sugarhouse Motel  
New Haven, VT  
SMS #2009-3979  
MW-4



Compound	12/1/2010	6/2/2010												
Benzene	<2	<2												
Toluene	<2	<2												
Ethylbenzene	<2	<2												
Total Xylenes	<4	<4												
MTBE	<2	<2												
TMB (124 & 135)	<4	<4												
Naphthalene	<5	<5												
Total COC	nd	nd												
DTW	2.09	3.97												

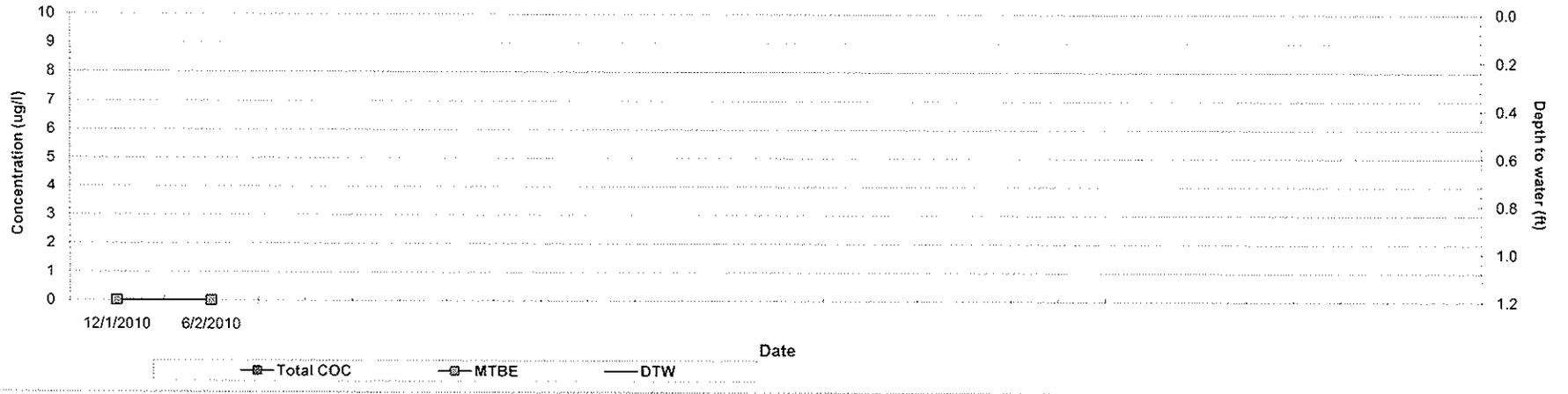
**Notes:**

1. Samples tested using EPA Method 8015, 8260, or 8021B.
2. Concentrations are in units of micrograms per liter (ug/l) or parts per billion (ppb).
3. DTW - Depth to water measured using a Solinst interface probe as referenced to the top of PVC riser.
4. nd - Compound not detected above method detection limit. Summation in spreadsheet yields 0; however, actual concentration may be between zero and the method detection limit.
- nt - not tested.
- fp - free product.
5. Wide lines on graph indicate top and bottom of well screen.

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## Groundwater Quality and Elevation Trend Analysis

Sugarhouse Motel  
New Haven, VT  
SMS #2009-3979  
Supply Well



Compound	12/1/2010	6/2/2010												
Benzene	<0.5	<0.5												
Toluene	<0.5	<0.5												
Ethylbenzene	<0.5	<0.5												
Total Xylenes	<1.0	<1.0												
MTBE	<0.5	<0.5												
TMB (124 & 135)	<1.0	<1.0												
Naphthalene	<0.5	<0.5												
Total COC	nd	nd												

**Notes:**

1. Samples tested using EPA Method 8015, 8260, or 8021B.
2. Concentrations are in units of micrograms per liter (ug/l) or parts per billion (ppb).
3. DTW - Depth to water measured using a Solinst interface probe as referenced to the top of PVC riser.
4. nd - Compound not detected above method detection limit. Summation in spreadsheet yields 0; however, actual concentration may be between zero and the method detection limit.
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# *Attachment 1*



*The Verterre Group*  
*Environmental Scientists and Field Services*

# Laboratory Report

---

## Resource Laboratories, LLC

124 Heritage Avenue #10 Portsmouth, NH 03801

Martha Roy  
The Verterre Group  
414 Roosevelt Highway  
Suite 200  
Colchester, VT 05446

PO Number: None  
Job ID: 19297  
Date Received: 6/3/10

Project: Sugarhouse Motel 09028.PCF02

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Resource Laboratories, LLC Quality Assurance Plan. The Standard Operating Procedures (SOP) are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Resource Laboratories, LLC maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,  
Resource Laboratories, LLC

 (for)

Sue Sylvester  
Principal, General Manager

Date of Approval: 6/9/2010  
Total number of pages: 7

### Resource Laboratories, LLC Certifications

New Hampshire 1732  
Maine NH903

Massachusetts M-NH902

**RL** Resource Laboratories, LLC

Voice: 603-436-2001 Fax: 603-430-2100  
www.reslabs.com

Project ID: Sugarhouse Motel 09028.PCF02

Job ID: 19297

Sample#: 19297-001

Sample ID: MW-1

Matrix: Water

Sampled: 6/2/10 10:41

Parameter	Result	Quant		Instr Dil'n		Analyst	Prep Date	Analysis		Reference
		Limit	Units	Factor	Batch			Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	
benzene	4	2	ug/L	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	
toluene	26	2	ug/L	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	
ethylbenzene	12	2	ug/L	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	
m&p-xylenes	49	2	ug/L	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	
o-xylene	39	2	ug/L	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	
naphthalene	6	5	ug/L	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	
1,3,5-trimethylbenzene	21	2	ug/L	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	
1,2,4-trimethylbenzene	47	2	ug/L	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	
1,2-dichloroethane	< 2	2	ug/L	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	99	78-114	%	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	
toluene-D8 SUR	101	88-110	%	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	
4-bromofluorobenzene SUR	102	86-115	%	1	LMM	1001187	6/5/10	4:17	SW5030B8260B	

Note: The sample pH was greater than 2, indicating inadequate preservation.

Sample#: 19297-002

Sample ID: MW-2

Matrix: Water

Sampled: 6/2/10 10:49

Parameter	Result	Quant		Instr Dil'n		Analyst	Prep Date	Analysis		Reference
		Limit	Units	Factor	Batch			Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	
benzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	
toluene	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	
ethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	
m&p-xylenes	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	
o-xylene	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	
naphthalene	< 5	5	ug/L	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	
1,2-dichloroethane	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	104	78-114	%	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	
toluene-D8 SUR	102	88-110	%	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	
4-bromofluorobenzene SUR	97	86-115	%	1	LMM	1001164	6/3/10	13:41	SW5030B8260B	

Note: The sample pH was greater than 2, indicating inadequate preservation.

Project ID: Sugarhouse Motel 09028.PCF02

Job ID: 19297

Sample#: 19297-003

Sample ID: MW-3

Matrix: Water

Sampled: 6/2/10 10:59

Parameter	Result	Quant		Instr Dil'n		Analyst	Prep Date	Analysis		
		Limit	Units	Factor	Batch			Date	Time	Reference
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	
benzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	
toluene	< 2	2	ug/L	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	
ethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	
m&p-xylenes	< 2	2	ug/L	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	
o-xylene	< 2	2	ug/L	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	
naphthalene	< 5	5	ug/L	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	
1,2-dichloroethane	< 2	2	ug/L	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	111	78-114	%	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	
toluene-D8 SUR	99	88-110	%	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	
4-bromofluorobenzene SUR	100	86-115	%	1	LMM	1001164	6/3/10	16:33	SW5030B8260B	

Note: The sample pH was greater than 2, indicating inadequate preservation.

Sample#: 19297-004

Sample ID: MW-4

Matrix: Water

Sampled: 6/2/10 10:55

Parameter	Result	Quant		Instr Dil'n		Analyst	Prep Date	Analysis		
		Limit	Units	Factor	Batch			Date	Time	Reference
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	
benzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	
toluene	< 2	2	ug/L	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	
ethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	
m&p-xylenes	< 2	2	ug/L	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	
o-xylene	< 2	2	ug/L	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	
naphthalene	< 5	5	ug/L	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	
1,2-dichloroethane	< 2	2	ug/L	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	106	78-114	%	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	
toluene-D8 SUR	100	88-110	%	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	
4-bromofluorobenzene SUR	99	86-115	%	1	LMM	1001164	6/3/10	17:04	SW5030B8260B	

Project ID: Sugarhouse Motel 09028.PCF02

Job ID: 19297

Sample#: 19297-005

Sample ID: Supply-1

Matrix: Water

Sampled: 6/2/10 10:11

Parameter	Result	Quant Limit	Units	Instr Dil'n Factor	Analyst	Prep		Analysis		Reference
						Date	Batch	Date	Time	
dichlorodifluoromethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
chloromethane	< 1.0	1.0	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
vinyl chloride	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
bromomethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
chloroethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
trichlorofluoromethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,1-dichloroethene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
methylene chloride	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
carbon disulfide	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
methyl t-butyl ether (MTBE)	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
trans-1,2-dichloroethene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,1-dichloroethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
2,2-dichloropropane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
cis-1,2-dichloroethene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
chloroform	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
bromochloromethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,1,1-trichloroethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,1-dichloropropene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
carbon tetrachloride	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,2-dichloroethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
benzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
trichloroethene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,2-dichloropropane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
bromodichloromethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
dibromomethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
cis-1,3-dichloropropene	< 0.4	0.4	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
toluene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
trans-1,3-dichloropropene	< 0.4	0.4	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,1,2-trichloroethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,3-dichloropropane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
tetrachloroethene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
dibromochloromethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,2-dibromoethane (EDB)	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
chlorobenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,1,1,2-tetrachloroethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
ethylbenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
m&p-xylenes	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
o-xylene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
styrene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
bromoform	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
isopropylbenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,1,2,2-tetrachloroethane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,2,3-trichloropropane	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
n-propylbenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	

Project ID: Sugarhouse Motel 09028.PCF02

Job ID: 19297

Sample#: 19297-005

Sample ID: Supply-1

Matrix: Water

Sampled: 6/2/10 10:11

Parameter	Result	Quant		Instr Dil'n		Analyst	Prep Date	Analysis		
		Limit	Units	Factor	Batch			Date	Time	Reference
bromobenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,3,5-trimethylbenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
2-chlorotoluene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
4-chlorotoluene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
tert-butylbenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,2,4-trimethylbenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
sec-butylbenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,3-dichlorobenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
4-isopropyltoluene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,4-dichlorobenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,2-dichlorobenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
n-butylbenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,2-dibromo-3-chloropropane (DBCP)	< 0.2	0.2	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,2,4-trichlorobenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
naphthalene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
1,2,3-trichlorobenzene	< 0.5	0.5	ug/L	1	LMM	1001202	6/8/10	13:00	E524.2	
<b>Surrogate Recovery</b>		<b>Limits</b>								
4-bromofluorobenzene SUR	110	70-130	%	1	LMM	1001202	6/8/10	13:00	E524.2	
1,4-dichlorobenzene-D4 SUR	111	70-130	%	1	LMM	1001202	6/8/10	13:00	E524.2	

Sample#: 19297-006

Sample ID: F.B.

Matrix: Water

Sampled: 6/2/10 10:00

Parameter	Result	Quant		Instr Dil'n		Analyst	Prep Date	Analysis		
		Limit	Units	Factor	Batch			Date	Time	Reference
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	
benzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	
toluene	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	
ethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	
m&p-xylenes	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	
o-xylene	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	
naphthalene	< 5	5	ug/L	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	
1,2-dichloroethane	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	100	78-114	%	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	
toluene-D8 SUR	100	88-110	%	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	
4-bromofluorobenzene SUR	97	86-115	%	1	LMM	1001164	6/3/10	13:10	SW5030B8260B	

Project ID: Sugarhouse Motel 09028.PCF02

Job ID: 19297

Sample#: 19297-007

Sample ID: Dup-1

Matrix: Water

Sampled: 6/2/10 12:00

Parameter	Result	Quant		Instr Dil'n		Analyst	Prep Date	Analysis		Reference
		Limit	Units	Factor	Date			Time		
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	
benzene	6	2	ug/L	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	
toluene	39	2	ug/L	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	
ethylbenzene	19	2	ug/L	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	
m&p-xylenes	89	2	ug/L	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	
o-xylene	62	2	ug/L	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	
naphthalene	40	5	ug/L	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	
1,3,5-trimethylbenzene	31	2	ug/L	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	
1,2,4-trimethylbenzene	92	2	ug/L	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	
1,2-dichloroethane	< 2	2	ug/L	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	100	78-114	%	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	
toluene-D8 SUR	99	88-110	%	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	
4-bromofluorobenzene SUR	105	86-115	%	1	LMM	1001187	6/5/10	3:46	SW5030B8260B	

Note: The sample pH was greater than 2, indicating inadequate preservation.

Sample#: 19297-008

Sample ID: Drain-1

Matrix: Water

Sampled: 6/2/10 10:30

Parameter	Result	Quant		Instr Dil'n		Analyst	Prep Date	Analysis		Reference
		Limit	Units	Factor	Date			Time		
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	
benzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	
toluene	< 2	2	ug/L	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	
ethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	
m&p-xylenes	< 2	2	ug/L	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	
o-xylene	< 2	2	ug/L	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	
naphthalene	< 5	5	ug/L	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	
1,2-dichloroethane	< 2	2	ug/L	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	107	78-114	%	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	
toluene-D8 SUR	100	88-110	%	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	
4-bromofluorobenzene SUR	101	86-115	%	1	LMM	1001164	6/3/10	18:04	SW5030B8260B	

Note: The sample pH was greater than 2, indicating inadequate preservation.

