

Stonecipher & Clark
Environmental Solutions, LLC

Fall 2014 Sampling

530 Waits River Road
Bradford, Vermont
SMS #20134379

Fall 2014 Groundwater Sampling Report

530 Waits River Road
Bradford, Vermont
SMS #20134379

Prepared For:
George Pratt
Care of: Stacey Thomson
53 Route 10
Orford, NH 03777

Prepared By:
Stonecipher & Clark Environmental Solutions, LLC
111 Saranac Street, Studio 8
Littleton, New Hampshire 03561

Project# 2014-051
Stonecipher & Clark Environmental Solutions, LLC

Project: 2014-051

December 02, 2014

Mr. Hugo Martinez
Environmental Analyst
State of Vermont
Department of Environmental Conservation
Waste Management & Prevention Division
1 National Life Drive – Davis 1
Montpelier, VT 05620-3704

Subject: 530 Waits River Road, Bradford, Vermont, SMS #20134379-Fall 2014
Sampling

Dear Mr. Martinez:

Attached is a summary report for Fall 2014 groundwater sampling at the above mentioned facility. Water elevations were collected at all on-Site monitoring wells and samples were collected from MW-1. MW-2R remained dry during this round of sampling.

Groundwater

On October 27, S&C performed groundwater sampling. S&C utilized a water level to measure depth to groundwater at the following well locations: MW-1, 3, 4 and 5. MW-2R remained dry. MW-1 was purged of approximately three well volumes of water and allowed to recharge prior to collection of the groundwater sample. The groundwater sample was collected, stored on ice and submitted under proper chain of custody to EAI.

MW-1 exceeded the State of Vermont Groundwater Enforcement Standard for Naphthalene and 1,3,5 Trimethylbenzene. MW-1 also had detectable concentrations of Total Xylenes, Benzene, 1,2,4 Trimethylbenzene and Ethylbenzene at below State of Vermont Groundwater Enforcement Standards.

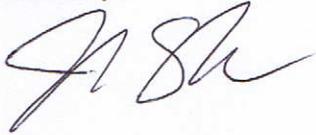
Conclusions/Recommendations

An exceedance occurred in monitoring well MW-1 for Naphthalene and 1,3,5 Trimethylbenzene during the October 2014 sampling round. MW-2R was dry at the time of sampling. S&C recommends continued bi-annual sampling at MW-1 and MW-2R via Method 8021B with respect to the 530 Waits River Road, Bradford, Vermont facility. Sampling should occur following heavy rain events to increase the likelihood of groundwater within the newly installed well MW-2R.

Groundwater was calculated to flow across the site to the east utilizing MW-1, 3, 4 and 5.

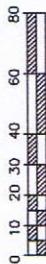
Please contact the undersigned with any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'J Stonecipher', written in a cursive style.

Jennifer Stonecipher
Environmental Project Manager
Stonecipher & Clark Environmental Solutions, LLC

PROJECT NOTES:
 1) BOUNDARY LINES SHOWN ON THIS PLAN ARE BASED ON TOWN OF BRADFORD VERMONT TAX MAPS. ALL PROPERTY LINES ARE APPROXIMATE.
 2) UNDERGROUND UTILITIES WERE MARKED BY DIG SAFE AND LOCATED ON NOV. 26, 2013.
 3) TOPOGRAPHY ON THIS PLAN BASED ON A FIELD SURVEY USING A NIKON MPL-350 TOTAL STATION IN NOV. 2013. ELEVATION REFERENCE TAKEN FROM USGS MAPS.
 4) SOIL BORINGS S81 THROUGH S85 WERE PERFORMED ON NOV. 26, 2013.



SCALE IN FEET: 1" = 40'
 WHEN PLOTTED 11" X 17"

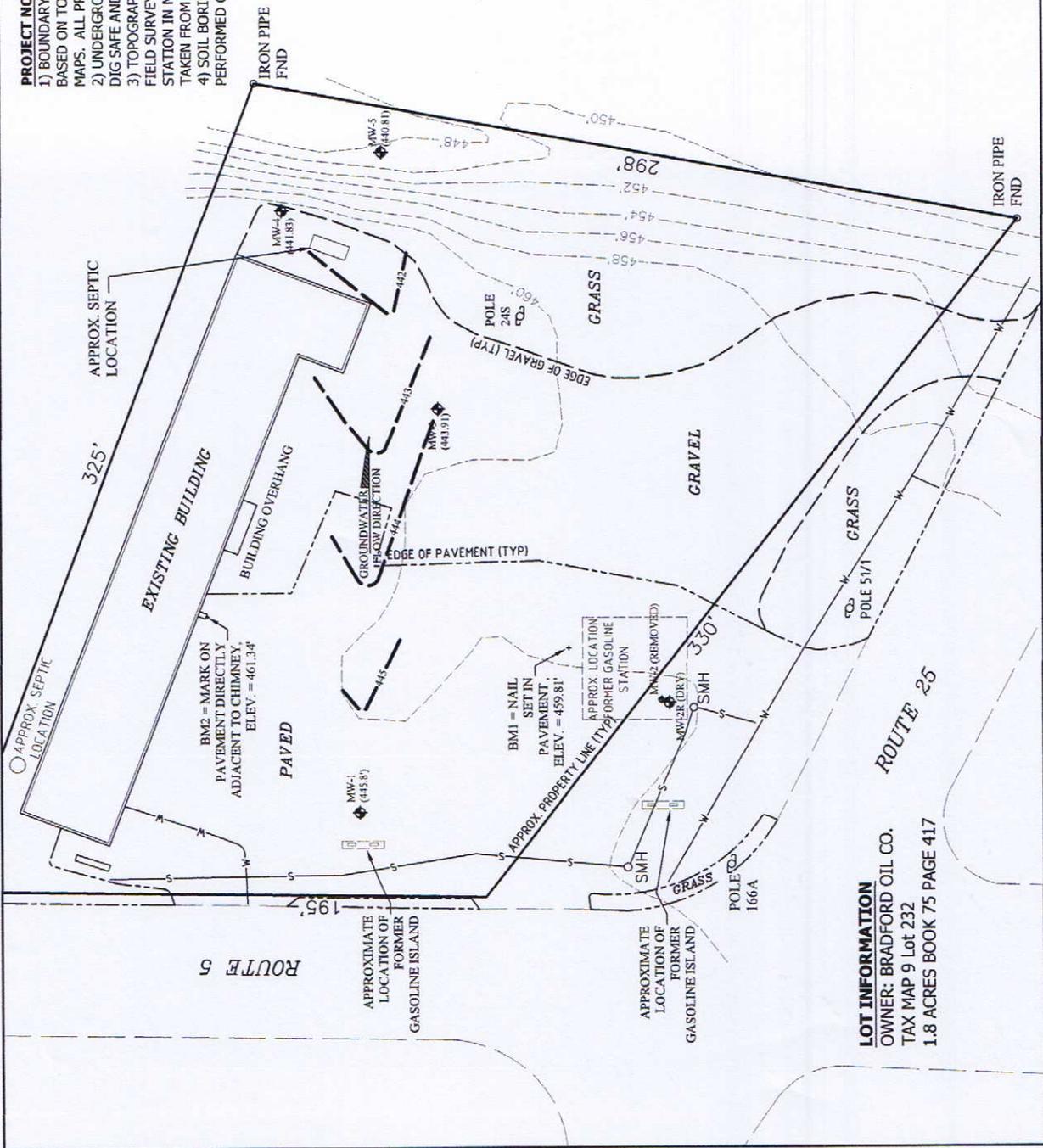
LEGEND

- ◆ MW-2 (041.51) EXISTING MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION
- (NS) NOT SAMPLED
- UTILITY POLE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- + 459.81' SPOT ELEVATION
- 612' CONTOUR LINE
- W — EXISTING WATER LINE
- S — EXISTING SEWER LINE
- GROUNDWATER CONTOUR (OCT 2014 DATA)
- ○ ○ ○ ○ EXISTING SOIL BORING LOCATION AND ID

**FORMER TOMASI CHEVROLET
 GEORGE PRATT PROPERTY
 480 WAITS RIVER ROAD, BRADFORD, VT
 OCTOBER 2014 GROUNDWATER
 SITE PLAN**

BASED ON OCTOBER 2014 DATA
 SHEET 1 OF 1

SMS SITE #2013-4379
 FORMERLY TOMASI CHEVROLET SMS 92-1250 (SMACed)
 EPA ID FORMERLY: VTD98253340 & VTR000008573
 STONECIPHER & CLARK
 ENVIRONMENTAL SOLUTIONS, LLC



LOT INFORMATION
 OWNER: BRADFORD OIL CO.
 TAX MAP 9 Lot 232
 1.8 ACRES BOOK 75 PAGE 417

Groundwater Quality Analytical Results
 2013-028 Bradford Site Investigation

	Groundwater Enforcement Standard	Preventive Action Level	MW-1	MW-1	MW-1
Analytes			12/16/13	8/11/14	10/27/14
Top of Casing			460.03	460.03	460.03
Depth to Water			15.55	15.4	14.23
Water Table Elevation (ft)			444.48	444.63	445.8
RCRA Metals	Concentration (ug/l)		Concentration (ug/l)		
Arsenic	10	1.0	>0.001		
Barium	2,000	1,000			
Cadmium	5	2.5			
Chromium	100	50			
Lead	15	1.5			
Mercury	2	0.5			
Selenium	50	25			
Silver	NS	NS			
Hydrocarbons					
Benzene	5	0.5	3	<1	1
Toluene	1,000	500	<1	<1	<1
Ethylbenzene	700	350	27	50	10
Tota Xylenes	10,000	5,000	45	22	4
Trichloroethylene	5	0.5	<2	<1	
Naphthalene	20	10	74	32	26
n-Propylbenzene	NS	NS	54		
1,2,4 Trimethylbenzene	5	2.5	5		2
1,3,5 Trimethylbenzene	4	2	140		55
sec-Butylbenzene	NS	NS	7		
Bromochloromethane	90	9	<2		
n Butylbenzene	NS	NS	<1		
p-Isopropyltoluene	NS	NS	5		
Isopropylbenzene	NS	NS	55		
MtBE	40	20	<5	<5	<5

NS-No Standard

< Laboratory result below detectable limit

Concentrations listed in **bold** equal to or greater than VTDEC Standards.

Groundwater Quality Analytical Results
 2013-028 Bradford Site Investigation

	Groundwater Enforcement Standard	Preventive Action Level	MW-2	MW-2R	MW-2R
Analytes			12/16/13	8/11/14	10/27/14
Top of Casing			460.15	460.15	460.15
Depth to Water					
Water Table Elevation (ft)					
RCRA Metals	Concentration (ug/l)				
Arsenic	10	1.0	DRY	DRY	DRY
Barium	2,000	1,000			
Cadmium	5	2.5			
Chromium	100	50			
Lead	15	1.5			
Mercury	2	0.5			
Selenium	50	25			
Silver	NS	NS			
Hydrocarbons					
Benzene	5	0.5			
Toluene	1,000	500			
Ethylbenzene	700	350			
Tota Xylenes	10,000	5,000			
Trichloroethylene	5	0.5			
Naphthalene	20	10			
n-Propylbenzene	NS	NS			
1,2,4 Trimethylbenzene	5	2.5			
1,3,5 Trimethylbenzene	4	2			
sec-Butylbenzene	NS	NS			
Bromochloromethane	90	9			
n Butylbenzene	NS	NS			
p-Isopropyltoluene	NS	NS			
Isopropylbenzene	NS	NS			
MtBE	40	20			

NS-No Standard
 < Laboratory result below detectable limit
 Concentrations listed in **bold** equal to or greater than VTDEC Standards.

Groundwater Quality Analytical Results
 2013-028 Bradford Site Investigation

	Groundwater Enforcement Standard	Preventive Action Level	MW-3	MW-3
Analytes			12/16/13	10/27/14
Top of Casing			460.27	460.27
Depth to Water			17.25	16.36
Water Table Elevation (ft)			443.02	443.91
RCRA Metals	Concentration (ug/l)			
Arsenic	10	1.0	<0.001	NOT SAMPLED
Barium	2,000	1,000	0.034	
Cadmium	5	2.5	<0.001	
Chromium	100	50	<0.001	
Lead	15	1.5	<0.001	
Mercury	2	0.5	<0.001	
Selenium	50	25	<0.001	
Silver	NS	NS	<0.001	
Hydrocarbons				
Benzene	5	0.5	<1	
Toluene	1,000	500	<1	
Ethylbenzene	700	350	<1	
Tota Xylenes	10,000	5,000	<2	
Trichloroethylene	5	0.5	<2	
Naphthalene	20	10	<5	
n-Propylbenzene	NS	NS	<1	
1,2,4 Trimethylbenzene	5	2.5	<1	
1,3,5 Trimethylbenzene	4	2	<1	
sec-Butylbenzene	NS	NS	<1	
Bromochloromethane	90	9	<2	
n Butylbenzene	NS	NS	<1	
p-Isopropyltoluene	NS	NS	<1	
Isopropylbenzene	NS	NS	<1	
MtBE	40	20	<5	

NS-No Standard

< Laboratory result below detectable limit

Concentrations listed in **bold** equal to or greater than VTDEC Standards.

Groundwater Quality Analytical Results
2013-028 Bradford Site Investigation

	Groundwater Enforcement Standard	Preventive Action Level	MW-4	MW-4	MW-4
Analytes			12/16/13	1/10/14	10/27/14
Top of Casing			460.33	460.33	460.33
Depth to Water			19.5	17.55	18.5
Water Table Elevation (ft)			440.83	442.78	441.83
RCRA Metals	Concentration (ug/l)				
Arsenic	10	1.0	<0.001	SAMPLED-12.16.13	NOT SAMPLED
Barium	2,000	1,000	0.019		
Cadmium	5	2.5	<0.001		
Chromium	100	50	<0.001		
Lead	15	1.5	<0.001		
Mercury	2	0.5	<0.001		
Selenium	50	25	<0.001		
Silver	NS	NS	<0.001		
Hydrocarbons					
Benzene	5	0.5	<1	NOT ENOUGH SAMPLE FOR VOC ANALYSIS	
Toluene	1,000	500	<1		
Ethylbenzene	700	350	<1		
Tota Xylenes	10,000	5,000	<2		
Trichloroethylene	5	0.5	<2		
Naphthalene	20	10	<5		
n-Propylbenzene	NS	NS	<1		
1,2,4 Trimethylbenzene	5	2.5	<1		
1,3,5 Trimethylbenzene	4	2	<1		
sec-Butylbenzene	NS	NS	<1		
Bromochloromethane	90	9	<2		
n Butylbenzene	NS	NS	<1		
p-Isopropyltoluene	NS	NS	<1		
Isopropylbenzene	NS	NS	<1		
MtBE	40	20	<5		

NS-No Standard

< Laboratory result below detectable limit

Concentrations listed in **bold** equal to or greater than VTDEC Standards.

Groundwater Quality Analytical Results
 2013-028 Bradford Site Investigation

	Groundwater Enforcement Standard	Preventive Action Level	MW-5	MW-5
Analytes			12/16/13	10/27/14
Top of Casing			449.55	449.55
Depth to Water			9.78	8.74
Water Table Elevation (ft)			439.77	440.81
RCRA Metals	Concentration (ug/l)			
Arsenic	10	1.0	<0.001	NOT SAMPLED
Barium	2,000	1,000	0.006	
Cadmium	5	2.5	<0.001	
Chromium	100	50	<0.001	
Lead	15	1.5	<0.001	
Mercury	2	0.5	<0.001	
Selenium	50	25	<0.001	
Silver	NS	NS	<0.001	
Hydrocarbons				
Benzene	5	0.5	<1	
Toluene	1,000	500	<1	
Ethylbenzene	700	350	<1	
Tota Xylenes	10,000	5,000	<2	
Trichloroethylene	5	0.5	<2	
Naphthalene	20	10	<5	
n-Propylbenzene	NS	NS	<1	
1,2,4 Trimethylbenzene	5	2.5	<1	
1,3,5 Trimethylbenzene	4	2	<1	
sec-Butylbenzene	NS	NS	<1	
Bromochloromethane	90	9	<2	
n Butylbenzene	NS	NS	<1	
p-Isopropyltoluene	NS	NS	<1	
Isopropylbenzene	NS	NS	<1	
MtBE	40	20	<5	

NS-No Standard
 < Laboratory result below detectable limit
 Concentrations listed in **bold** equal to or greater than VTDEC Standards.

Jennifer Stonecipher
Stonecipher & Clark Environmental Solutions
Tannery Marketplace, 111 Saranac Street
Littleton, NH 03561



Subject: Laboratory Report

Eastern Analytical, Inc. ID: 137394

Client Identification: Bradford Auction House / 2014-051 | Oct 2014

Date Received: 10/28/2014

Dear Ms. Stonecipher :

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.eailabs.com for a copy of our NELAP certificate and accredited parameters.

The following standard abbreviations and conventions apply to all EAI reports:

- Solid samples are reported on a dry weight basis, unless otherwise noted
- < : "less than" followed by the reporting limit
- > : "greater than" followed by the reporting limit
- %R : % Recovery

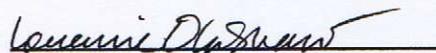
Eastern Analytical Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269) and Vermont (VT1012).

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample(s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,


Lorraine Olashaw, Lab Director

11.4.14
Date

3
of pages (excluding cover letter)



SAMPLE CONDITIONS PAGE

EAI ID#: 137394

Client: **Stonecipher & Clark Environmental Solutions**

Client Designation: **Bradford Auction House / 2014-051 | Oct 2014**

Temperature upon receipt (°C): **4**

Received on ice or cold packs (Yes/No): **Y**

Acceptable temperature range (°C): 0-6

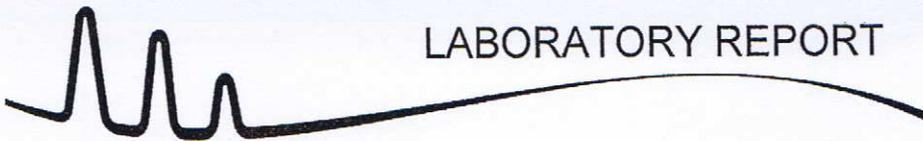
Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
137394.01	MW-1	10/28/14	10/27/14	aqueous		Adheres to Sample Acceptance Policy
137394.02	Trip Blank	10/28/14	10/1/14	aqueous		Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitibility, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis. Immediate analyses, pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite, performed at the laboratory were run outside of the recommended 15 minute hold time.

All results contained in this report relate only to the above listed samples.

References include:

- 1) EPA 600/4-79-020, 1983
- 2) Standard Methods for Examination of Water and Wastewater, 20th Edition, 1998 and 22nd Edition, 2012
- 3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- 4) Hach Water Analysis Handbook, 2nd edition, 1992



LABORATORY REPORT

EAI ID#: 137394

Client: **Stonecipher & Clark Environmental Solutions**

Client Designation: **Bradford Auction House / 2014-051 | Oct 2014**

Sample ID:	MW-1	Trip Blank
Lab Sample ID:	137394.01	137394.02
Matrix:	aqueous	aqueous
Date Sampled:	10/27/14	10/1/14
Date Received:	10/28/14	10/28/14
Units:	ug/l	ug/l
Date of Analysis:	10/29/14	10/29/14
Analyst:	BAM	BAM
Method:	8260B	8260B
Dilution Factor:	1	1
Methyl-t-butyl ether(MTBE)	< 5	< 5
Benzene	1	< 1
1,2-Dichloroethane	< 2	< 2
Toluene	< 1	< 1
1,2-Dibromoethane(EDB)	< 1	< 1
Ethylbenzene	10	< 1
mp-Xylene	4	< 1
o-Xylene	< 1	< 1
1,3,5-Trimethylbenzene	55	< 1
1,2,4-Trimethylbenzene	2	< 1
Naphthalene	26	< 5
4-Bromofluorobenzene (surr)	95 %R	93 %R
1,2-Dichlorobenzene-d4 (surr)	95 %R	97 %R
Toluene-d8 (surr)	93 %R	93 %R

GC/MS analysis was employed for the determination of the 8021B compound list.

