Stonecipher & Clark
Environmental Solutions, LLC

Spring 2014 Groundwater Sampling Report

480 Waits River Road
Bradford, Vermont
SMS #20134379

Spring 2014 Groundwater Sampling Report
480 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
760 Main Street
PO Box 542
Franconia, NH 03580

Project# 2014-020
Stonecipher & Clark Environmental Solutions, LLC

STONECIPHER & CLARK ENVIRONMENTAL SOLUTIONS, LLC
760 Main Street, PO Box 542, Franconia, NH 03580 603.823.9080 www.stonecipherandclark.com

Project: 2014-020

April 15, 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: 480 Waits River Road, Bradford, Vermont, SMS #20134379

Dear Mr. Martinez:

Stonecipher & Clark Environmental Solutions, LLC, (S&C) has completed the Spring 2014 groundwater sampling round at the above mentioned facility. The following wells were sampled via Method 8021 for VOCs on April 04, 2014: MW-3, MW-4, and MW-5. MW-1 and MW-2 were both dry during the sampling round.

An interface probe was utilized to measure depth to groundwater in all wells prior to sampling. The wells were purged of approximately three well volumes of water and allowed to recharge prior to collection of the groundwater sample. Groundwater was encountered at 18.4' in MW-3, 20' in MW-4 and 7.2' in MW-5 below grade during monitoring well sampling.

Groundwater

All three wells remained at below detectable levels for all constituents analyzed with the exception of a below Enforcement Standard concentration of acetone in MW-5.

Free Product

Free product was not encountered at any of the site wells.

Conclusions/Recommendations

Groundwater, based on the April 2014 data retrieved from the Site is calculated to be flowing to the south/southeast.

Although both MW-1 and MW-2 were dry at the time of sampling, based on the below standard concentrations detected in MW-3, MW-4 and MW-5 during the

Spring 2014 round, S&C recommends site closure at this time with respect to the 480 Waits River Road, Bradford, Vermont facility. 480 Waits River Road, Bradford, Vermont

Please contact the undersigned with any questions or concerns.

Sincerely,

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

Groundwater Quality Analytical Results
2013-028 Bradford Site Investigation

	Groundwater Enforcement Standard	Preventive Action Level	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-4	MW-4	MW-4	MW-5	MW-5
Analytes			12/16/13	4/4/14	12/16/13	4/4/14	12/16/13	4/4/14	12/16/13	1/10/14	4/4/14	12/16/13	4/4/14
Top of Casing			460.03	460.03	460.15	460.15	460.27	460.27	460.33	460.33	460.33	449.55	449.5
Depth to Water			15.55				17.25	18.4	19.5	17.55	20	9.78	7.2
Water Table Elevation (ft)			444.48				443.02	441.87	440.83	442.78	440.33	439.77	442.3
RCRA Metals	**Concentration (ug/l)**		**Concentration (ug/l)**										
Arsenic	10	1.0	<0.001				<0.001		<0.001			<0.001	
Barium	2,000	1,000	0.37				0.034		0.019			0.006	
Cadmium	5	2.5	<0.001				<0.001		<0.001			<0.001	
Chromium	100	50	<0.001				<0.001		<0.001			<0.001	
Lead	15	1.5	<0.001				<0.001		<0.001			<0.001	
Mercury	2	0.5	<0.001				<0.001		<0.001			<0.001	
Selenium	50	25	<0.001				<0.001		<0.001			<0.001	
Silver	NS	NS	<0.001				<0.001		<0.001			<0.001	
Hydrocarbons													
Benzene	5	0.5	3				<1	<1		<1	<1	<1	<1
Toluene	1,000	500	<1				<1	<1		<1	<1	<1	<1
Ethylbenzene	700	350	27				<1	<1		<1	<1	<1	<1
Tota Xylenes	10,000	5,000	45				<2	<2		<2	<2	<2	<2
Trichloroethylene	5	0.5	<2				<2	<2		<2	<2	<2	<2
Naphthalene	20	10	**74**				<5	<5		<5	<5	<5	<5
n-Propylbenzene	NS	NS	**54**				<1	<1		<1	<1	<1	<1
1,2,4 Trimethylbenzene	5	2.5	**5**				<1	<1		<1	<1	<1	<1
1,3,5 Trimethylbenzene	4	2	**140**				<1	<1		<1	<1	<1	<1
sec-Butylbenzene	NS	NS	**7**				<1	<1		<1	<1	<1	<1
Bromochloromethane	90	9	<2				<2	<2		<2	<2	<2	<2
n-Butylbenzene	NS	NS	<1				<1	<1		<1	<1	<1	<1
p-Isopropyltoluene	NS	NS	**5**				<1	<1		<1	<1	<1	<1
Isopropylbenzene	NS	NS	**55**				<1	<1		<1	<1	<1	<1
MtBE	40	20	<5				<5	<5		<5	<5	<5	<5

DRY

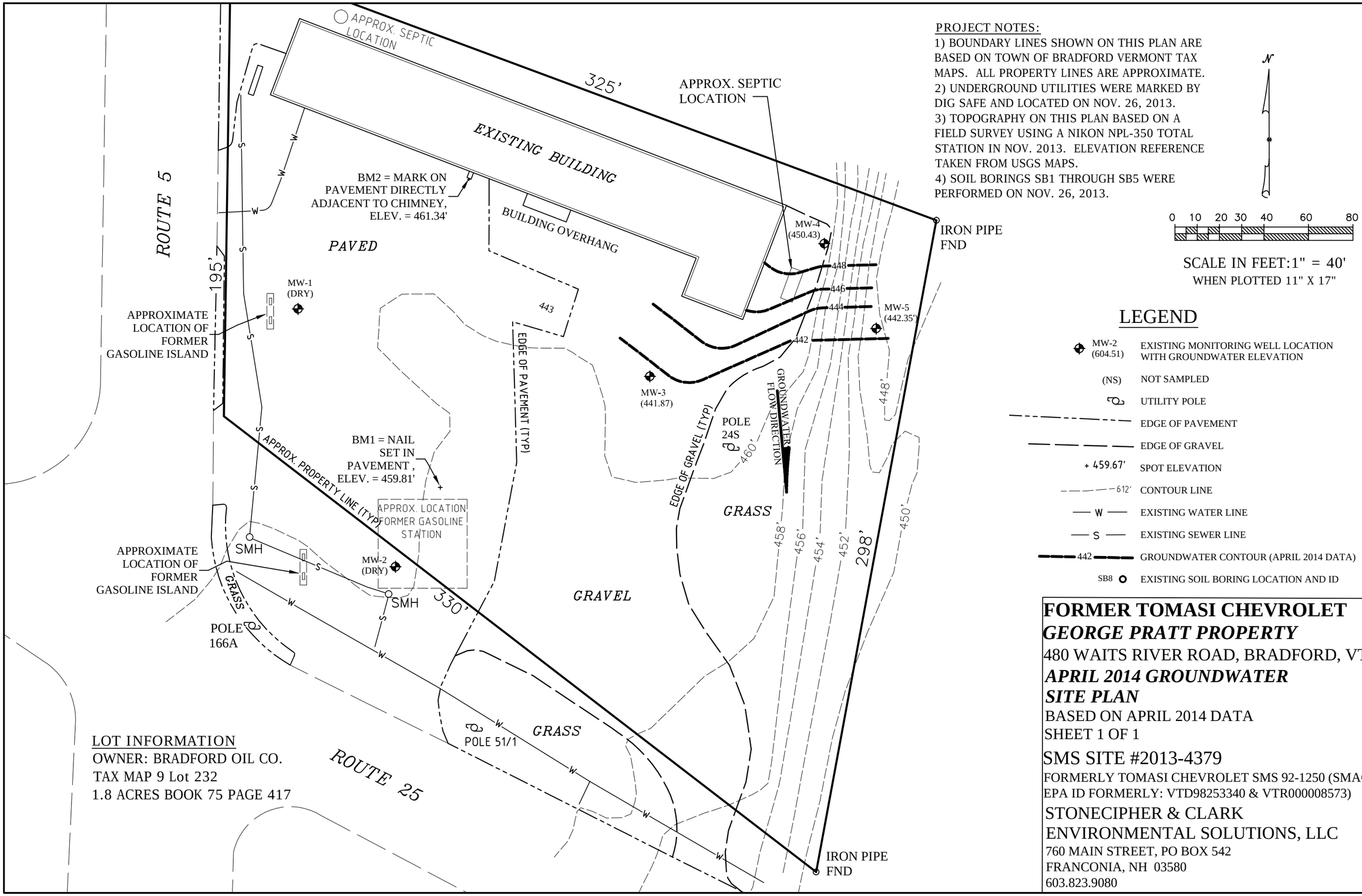
DRY

DRY

SAMPLED-12.16.13

NOT ENOUGH SAMPLE FOR VOC ANALYSIS

NS-No Standard



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 NPL-350 TOTAL STATION IN NOV. 2013. ELEVATION REFERENCE TAKEN FROM USGS MAPS.
4) SOIL BORINGS SB1 THROUGH SB5 WERE PERFORMED ON NOV. 26, 2013.

N

0 10 20 30 40 60 80

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

LEGEND

- MW-2 (604.51) — EXISTING MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION
- (NS) — NOT SAMPLED
- UTILITY POLE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- + 459.67' — SPOT ELEVATION
- 612' — CONTOUR LINE
- W — EXISTING WATER LINE
- S — EXISTING SEWER LINE
- 442 — GROUNDWATER CONTOUR (APRIL 2014 DATA)
- SB8 — EXISTING SOIL BORING LOCATION AND ID

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

FORMER TOMASI CHEVROLET
GEORGE PRATT PROPERTY
480 WAITS RIVER ROAD, BRADFORD, VT
APRIL 2014 GROUNDWATER SITE PLAN
BASED ON APRIL 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
760 MAIN STREET, PO BOX 542
FRANCONIA, NH 03580
603.823.9080

Eastern Analytical, Inc.
professional laboratory & drilling services

Jennifer Stonecipher
Stonecipher & Clark Environmental Solutions
760 Main Street
Franconia , NH 03580

ACCREDITED IN ACCORDANCE WITH nelac

Subject: Laboratory Report

Eastern Analytical, Inc. ID:	130302
Client Identification:	Bradford | 2013-049
Date Received:	4/8/2014

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 | 4.15.14 Date | 4 # of pages (excluding cover letter)

SAMPLE CONDITIONS PAGE

EAI ID#: **130302**

Client: **Stonecipher & Clark Environmental Solutions**

Client Designation: **Bradford | 2013-049**

Temperature upon receipt (°C): 3.1 **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)
130302.01	MW-3	4/8/14	4/4/14	aqueous		Adheres to Sample Acceptance Policy
130302.02	MW-4	4/8/14	4/4/14	aqueous		Adheres to Sample Acceptance Policy
130302.03	MW-5	4/8/14	4/4/14	aqueous		Adheres to Sample Acceptance Policy
130302.04	Trip Blank	4/8/14	3/26/14	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#: **130302**

Client: **Stonecipher & Clark Environmental Solutions**

Client Designation: **Bradford | 2013-049**

Sample ID:	MW-3	MW-4	MW-5	Trip Blank
Lab Sample ID:	130302.01	130302.02	130302.03	130302.04
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	4/4/14	4/4/14	4/4/14	3/26/14
Date Received:	4/8/14	4/8/14	4/8/14	4/8/14
Units:	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	4/9/14	4/9/14	4/9/14	4/9/14
Analyst:	KJP	VG	VG	VG
Method:	8260B	8260B	8260B	8260B
Dilution Factor:	1	1	1	1
Dichlorodifluoromethane	< 5	< 5	< 5	< 5
Chloromethane	< 2	< 2	< 2	< 2
Vinyl chloride	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2
Chloroethane	< 5	< 5	< 5	< 5
Trichlorofluoromethane	< 5	< 5	< 5	< 5
Diethyl Ether	< 5	< 5	< 5	< 5
Acetone	< 10	< 10	**20**	< 10
1,1-Dichloroethene	< 1	< 1	< 1	< 1
Methylene chloride	< 5	< 5	< 5	< 5
Carbon disulfide	< 5	< 5	< 5	< 5
Methyl-t-butyl ether(MTBE)	< 5	< 5	< 5	< 5
trans-1,2-Dichloroethene	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2
2,2-Dichloropropane	< 2	< 2	< 2	< 2
cis-1,2-Dichloroethene	< 2	< 2	< 2	< 2
2-Butanone(MEK)	< 10	< 10	< 10	< 10
Bromochloromethane	< 2	< 2	< 2	< 2
Tetrahydrofuran(THF)	< 10	< 10	< 10	< 10
Chloroform	< 2	< 2	< 2	< 2
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2
Carbon tetrachloride	< 2	< 2	< 2	< 2
1,1-Dichloropropene	< 2	< 2	< 2	< 2
Benzene	< 1	< 1	< 1	< 1
1,2-Dichloroethane	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2
Dibromomethane	< 2	< 2	< 2	< 2
Bromodichloromethane	< 1	< 1	< 1	< 1
4-Methyl-2-pentanone(MIBK)	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 1	< 1	< 1	< 1
Toluene	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2
2-Hexanone	< 10	< 10	< 10	< 10
Tetrachloroethene	< 2	< 2	< 2	< 2
1,3-Dichloropropane	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2
1,2-Dibromoethane(EDB)	< 1	< 1	< 1	< 1
Chlorobenzene	< 2	< 2	< 2	< 2
1,1,1,2-Tetrachloroethane	< 2	< 2	< 2	< 2
Ethylbenzene	< 1	< 1	< 1	< 1
mp-Xylene	< 1	< 1	< 1	< 1
o-Xylene	< 1	< 1	< 1	< 1
Styrene	< 1	< 1	< 1	< 1
Bromoform	< 2	< 2	< 2	< 2
IsoPropylbenzene	< 1	< 1	< 1	< 1

LABORATORY REPORT

EAI ID#: **130302**

Client: **Stonecipher & Clark Environmental Solutions**

Client Designation: **Bradford | 2013-049**

Sample ID:	MW-3	MW-4	MW-5	Trip Blank
Lab Sample ID:	130302.01	130302.02	130302.03	130302.04
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	4/4/14	4/4/14	4/4/14	3/26/14
Date Received:	4/8/14	4/8/14	4/8/14	4/8/14
Units:	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	4/9/14	4/9/14	4/9/14	4/9/14
Analyst:	KJP	VG	VG	VG
Method:	8260B	8260B	8260B	8260B
Dilution Factor:	1	1	1	1
Bromobenzene	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2
1,2,3-Trichloropropane	< 2	< 2	< 2	< 2
n-Propylbenzene	< 1	< 1	< 1	< 1
2-Chlorotoluene	< 2	< 2	< 2	< 2
4-Chlorotoluene	< 2	< 2	< 2	< 2
1,3,5-Trimethylbenzene	< 1	< 1	< 1	< 1
tert-Butylbenzene	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1	< 1	< 1
sec-Butylbenzene	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1
p-Isopropyltoluene	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1
n-Butylbenzene	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 1	< 1	< 1	< 1
Naphthalene	< 5	< 5	< 5	< 5
1,2,3-Trichlorobenzene	< 1	< 1	< 1	< 1
4-Bromofluorobenzene (surr)	**97 %R**	**100 %R**	**96 %R**	**96 %R**
1,2-Dichlorobenzene-d4 (surr)	**102 %R**	**103 %R**	**104 %R**	**103 %R**
Toluene-d8 (surr)	**97 %R**	**94 %R**	**97 %R**	**96 %R**

Diethyl Ether exhibited recovery outside acceptance limits in the Quality Control sample(s). The analyte(s) were not detected in the sample(s).

Page 1 of 1

CHAIN-OF-CUSTODY RECORD

130302

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

SAMPLE I.D.	SAMPLING DATE/TIME *IF COMPOSITE, INDICATE BOTH START & FINISH DATE/TIME	MATRIX (SEE BELOW)	GRAB/*COMPOSITE	VOC: 524.2 BTEX; 524.2 MTBE ONLY; 8260B 624 VTICS; 1, 4 DIOXANE	VOC: 8021B BTEX HALOS	VOC: 8015B GRO MAVPH	SVOC: 8270D 625 SVTICS EDB DBCP ABN A BN PAH	SVOC: TPH8100 LI L2	SVOC: 8015B DRO MAEPH	SVOC: PEST 608 PCB 608 PEST 8081A PCB 8082	SVOC: OIL & GREASE 1664 TPH 1664	TCLP: TCLP 1311 VOC ABN METALS PEST HERB	METALS: DISSOLVED METALS (LIST BELOW)	METALS: TOTAL METALS (LIST BELOW)	INORGANICS: TS TSS TDS SPEC. CON.	INORGANICS: BR Cl F SO_4 NO_2 NO_3 NO_2NO_3	INORGANICS: BOD CBOD T. ALK.	INORGANICS: TKN NH_3 T. PHOS. O. PHOS.	INORGANICS: pH T. RES. CHLORINE	INORGANICS: COD PHENOLS TOC DOC	INORGANICS: TOTAL CYANIDE TOTAL SULFIDE	INORGANICS: REACTIVE CYANIDE REACTIVE SULFIDE FLASHPOINT IGNITABILITY	MICRO: TOTAL COLIFORM E. COLI FECAL COLIFORM	MICRO: ENTEROCOCCI HETEROTROPHIC PLATE COUNT	OTHER	OTHER	OTHER	# OF CONTAINERS	NOTES MEOH VIAL #
MW-3	4/4/14 12:00	GW	G	✓																									2	
MW-4	4/4/14 1:00	GW	G	✓																									2	
MW-5	4/4/14 12:30	GW	G	✓																									2	

MATRIX: A-AIR; S-SOIL; GW-GROUND WATER; SW-SURFACE WATER; DW-DRINKING WATER; WW-WASTE WATER

PRESERVATIVE: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH

PROJECT MANAGER: JENNIFER STONECIPHER

COMPANY: S+C ENVIRONMENTAL

ADDRESS: BOX 542

CITY: FRANCONIA **STATE:** NH **ZIP:** 03580

PHONE: 823-9080 **EXT.:**

FAX: " -9086

E-MAIL: jstonecipher@stoneciperandclark.com

SITE NAME: Bradford

PROJECT #: 2013-049

STATE: NH MA ME (VT) **OTHER:**

REGULATORY PROGRAM: NPDES: RGP POTW STORMWATER OR GWP, OIL FUND, BROWNFIELD OR OTHER:

QUOTE #: **PO #:**

DATE NEEDED: ~~STANDARD~~ ASAP!

QA/QC REPORTING LEVEL

A B C

OR

PRESUMPTIVE CERTAINTY

REPORTING OPTIONS

PRELIMS: (YES) OR NO

IF YES: FAX OR (PDF)

ELECTRONIC OPTIONS

NO FAX E-MAIL PDF EQUIS

TEMP. 3.1 °C

ICE? (YES) NO

METALS: 8 RCRA 13 PP FE, MN PB, CU

OTHER METALS:

SAMPLES FIELD FILTERED? ☐ YES ☑ NO

NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)

TRIP BLANK 3/26/14 7:25

EAS PREPPED

SAMPLER(S): SUSAN CLARK

RELINQUISHED BY: Susan A. Clark	DATE: 4/4/14	TIME: 12:00	RECEIVED BY: Christy 4/6/14	TIME: 9:45	PM- 4/15/14
RELINQUISHED BY: Christy 4/6/14	DATE:	TIME: 14:54	RECEIVED BY:		
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:		

SITE HISTORY: OLD GAS PUMPS

SUSPECTED CONTAMINATION:

FIELD READINGS:

Eastern Analytical, Inc.
professional laboratory & drilling services
25 CHENELL DRIVE | CONCORD, NH 03301 | TEL: 603.228.0525 | 1.800.287.0525 | FAX: 603.228.4591 | E-MAIL: CUSTOMERSERVICE@EAILABS.COM | WWW.EAILABS.COM

(WHITE: ORIGINAL GREEN: PROJECT MANAGER)