PROJECT PHASE (check one)	SUBMITTAL TYPE (check one)
☐ Site Investigation	☐ Work Scope
☐ Corrective Action Feasibility Investigation	☒ **Technical Report**
☐ Corrective Action Plan	☐ PCF Reimbursement Request
☐ Corrective Action Summary Report	☐ General Correspondence
☒ **Operations & Monitoring Report**	

MARCH 2019 POET SYSTEM SAMPLING REPORT
LONDONDERRY CITGO/LONDONDERRY SHOPPING CENTER
5700 ROUTE 100
LONDONDERRY, VERMONT
SMS #1996-2015

Prepared for:

Summit Distributing, LLC
240 Mechanic Street
Lebanon, New Hampshire 03766
Contact: Tom Frawley
Tel: (603) 448-8000
email: tomf@sumd.com

Prepared by:

GeoInsight, Inc.
186 Granite Street, 3rd Floor, Suite A
Manchester, New Hampshire 03101
Contact: Darrin L. Santos, P.G.
Tel: (603) 314-0820
email: dlsantos@geoinc.com

June 13, 2019

GeoInsight Project 5599-002

File: 5599/CVR

GeoInsight®
Environmental Strategy & Engineering

June 13, 2019 GeoInsight Project 5599-002

Michael Nahmias
Sites Management Section
Vermont Department of Environmental Conservation
1 National Life Drive, Main 2
Montpelier, VT 05620

RE: March 2019 POET System Sampling Report
Londonderry Citgo/Londonderry Shopping Center – **SMS #1996-2015**
5700 Route 100
Londonderry, Vermont

Dear Mr. Nahmias:

GeoInsight, Inc. (GeoInsight) prepared this report for Summit Distributing, LLC (Summit) to summarize the March 2019 point-of-entry treatment (POET) system monitoring event performed at the Londonderry Citgo/Londonderry Shopping Center (the Shopping Center) property located at 5700 Route 100 in Londonderry, Vermont. A site locus map is presented as Figure 1 and a site plan is presented as Figure 2.

POET SYSTEM SERVICING

On March 1, 2019, Vermont Water Company serviced the POET systems located at the Shopping Center and Thorne-Thomsen residence. The service included replacing the activated carbon in the system vessels.

POET AND SUPPLY WELL SYSTEM SAMPLING AND ANALYSIS

GeoInsight performed a supply well POET system monitoring event at the Shopping Center site on March 29, 2019. GeoInsight was unable to contact Roger Thorne-Thomsen ahead of the sampling event to schedule the sample with his tenant, so GeoInsight knocked on the door of the residence on March 29, 2019; however, we were unable to obtain access to the residence. The March 2019 POET system sampling data are summarized in Table 1. Table 2 provides a summary of recent and historical POET system influent sample data. The March 2019 analytical report is presented in Attachment A.

NEW HAMPSHIRE
186 Granite Street
3rd Floor, Suite A
Manchester, NH 03101-2643
Tel 603.314.0820

MASSACHUSETTS
1 Monarch Drive
Suite 201
Littleton, MA 01460
Tel 978.679.1600

MAINE
4 Market Place Drive
2nd Floor, Suite 207
York, ME 03909
Tel 207.606.1043

CONNECTICUT
200 Court Street
2nd Floor
Middletown, CT 06457
Tel 860.894.1022

Methyl tert butyl ether (MTBE) and other volatile organic compounds (VOCs) were not detected above laboratory reporting limits in the Shopping Center system influent, effluent, and two mid-point samples collected on March 29, 2019. The laboratory noted that a headspace was present in the vial for Shopping Center influent sample (S.C. INF); this may have caused reported analytical results (not detected above reporting limits) to be biased low.

MTBE in the Shopping Center well (influent) has fluctuated from not detected above the laboratory reporting limits to 7.8 µg/L in sampling completed since September 2010, when 12 µg/L was detected (last result above the drinking water guideline of 11.3 µg/L. There was a short-term increase in MTBE in the Thorne-Thomsen well from 2015 through 2017, and then a decrease in concentrations were noted, and in September 2018, were below the VTDEC drinking water guideline of 11.3 µg/L.

GeoInsight transmitted the results of the March 2019 POET system sampling to the Shopping Center property owner and to the VTDEC Water Supply Division. A letter requesting up-to-date contact information from Mr. Thorne-Thomsen was also sent indicating additional effort will be made to contact him to coordinate POET system sampling at his residence in (September 2019). Copies of the POET system results letters are included in Attachment B.

CONCLUSIONS AND RECOMMENDATIONS

Because of the historical and recent detection of VOCs above laboratory reporting limits in the Shopping Center and Thorne-Thomsen POET system influent samples (raw, untreated supply well water samples), the continued operation of the POET system is warranted and bi-annual POET system sampling appears to be appropriate for monitoring residual VOCs in the supply wells. It should be noted that MTBE concentrations in the Shopping Center Main system influent samples exceeded the VTDEC drinking water guideline (11.3 µg/L) only once since September 2007, when 12 µg/L was detected in September 2010. The Thorne-Thomsen system influent exceeded drinking water guideline at a concentration of 16 µg/L in March 2018 but was below the guideline at 11 ug/L in September 2018 (guideline is 11.3 µg/L). Also, in the Thorne-Thomsen supply well, MTBE concentrations have decreased during each event after September 2016, when 65 µg/L was detected (highest concentration on record since 2001). The most recent data indicates MTBE was not detected in the Shopping Center well (March 2019) .

Sampling of groundwater monitoring wells appears to be warranted biennially at this time and, as requested by the VTDEC, the next groundwater sampling event will be performed in 2020.

If you have questions regarding the contents of this letter report, please call us at (603) 314-0820.

Sincerely,
GEOINSIGHT, INC.

Darrin L. Santos, P.G.
Senior Geologist

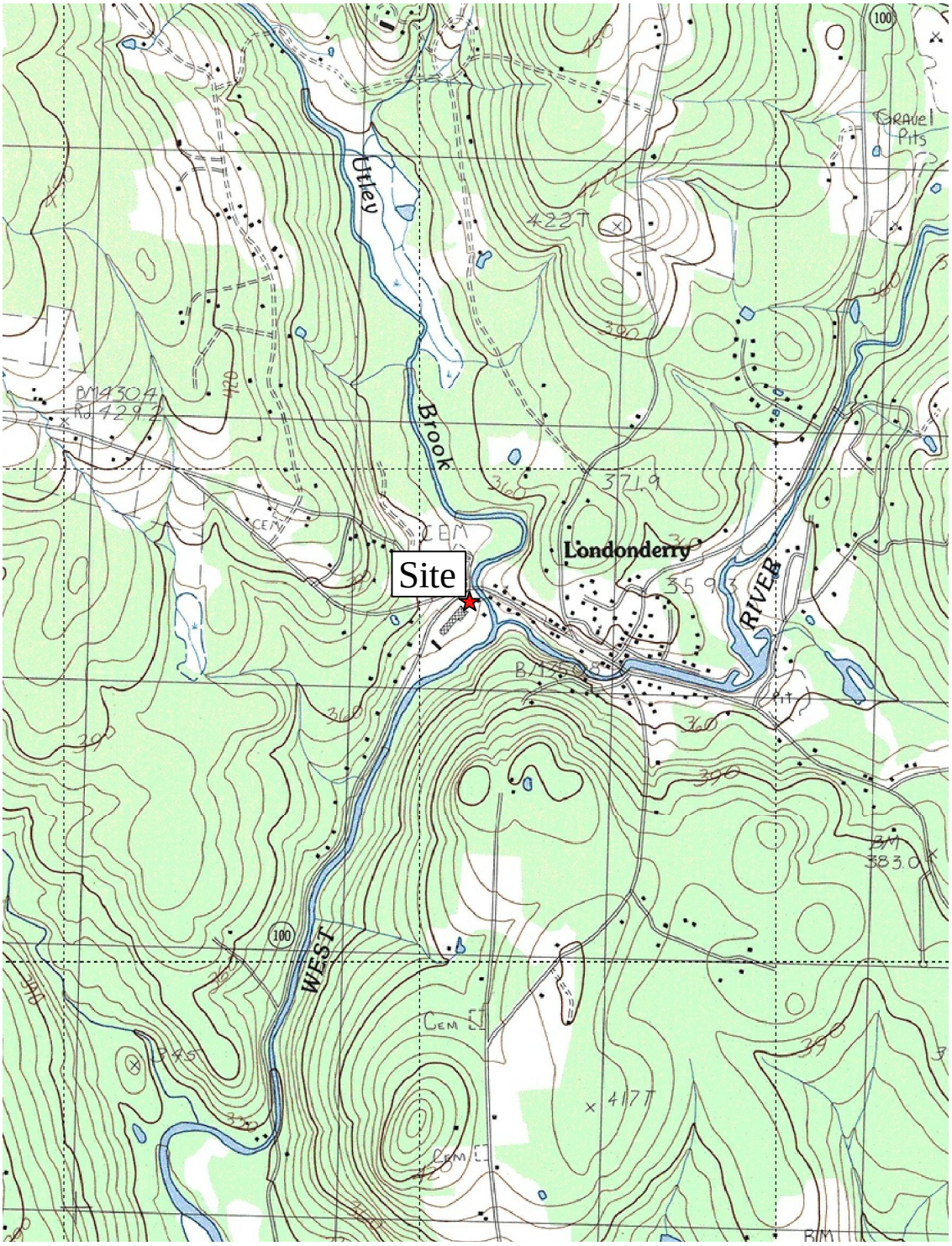
Peter D. Frank, P.G.
Associate/Senior Hydrogeologist

Attachments

cc: Summit Distributing, LLC
5700 Route 100, LLC

\\geonho\NHO_Projects\5599 Summit Londonderry VT\Monitoring\2018\Sept 2018\5599Sept2018.Rpt.doc

FIGURES



SOURCE:

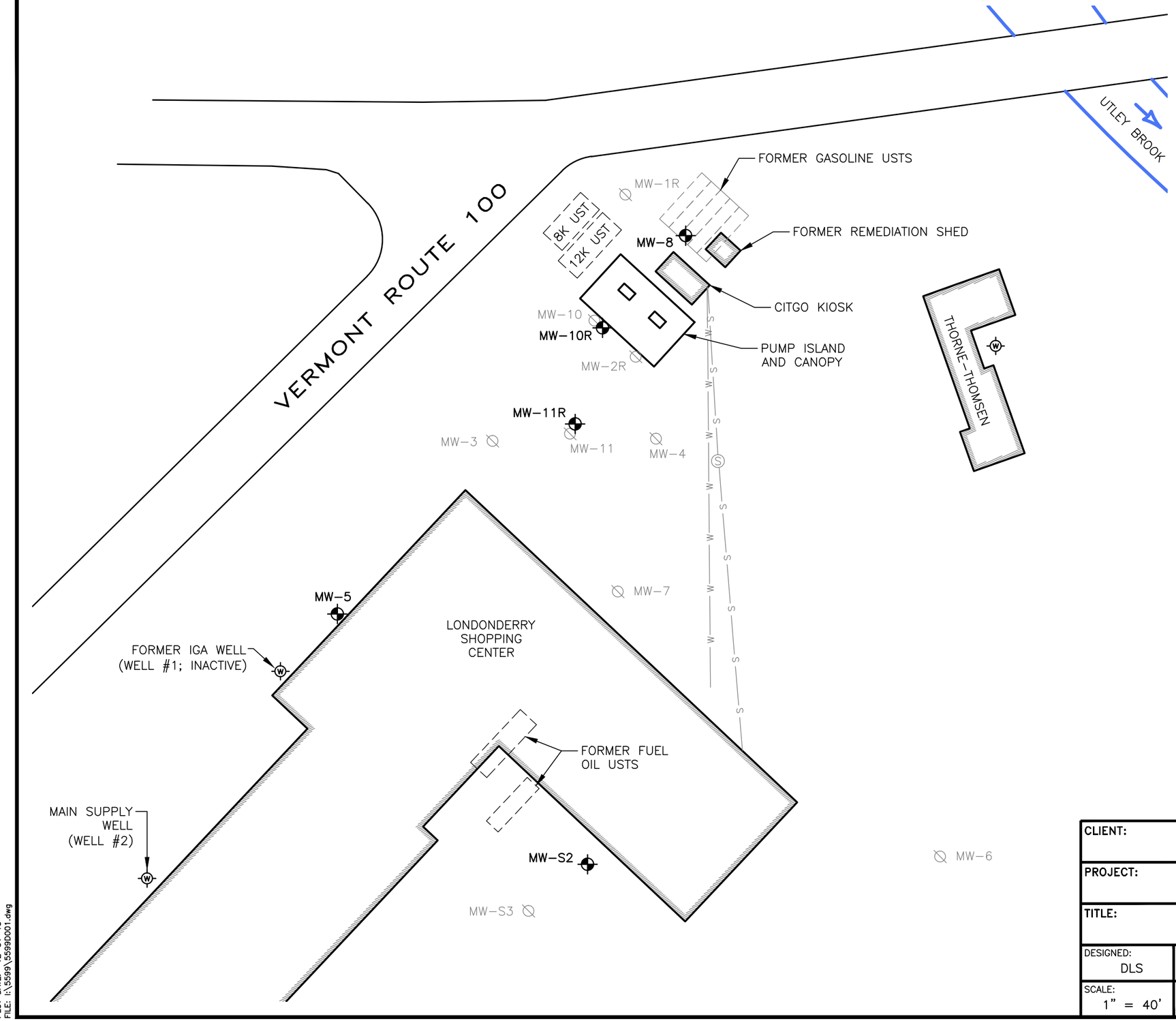
USGS LONDONDERRY, VT QUADRANGLE

0 2000 4000

APPROX. SCALE IN FEET

CLIENT: SUMMIT DISTRIBUTING, LLC				
PROJECT: 5700 ROUTE 100 LONDONDERRY, VERMONT				
TITLE: SITE LOCUS				
DESIGNED: CAE	DRAWN: STM	CHECKED: AWK	APPROVED: BDK	GeoInsight Practical in Nature
SCALE: 1" = 2000'	DATE: 12/29/08	FILE NO.: 5599-LOCUS	PROJECT NO.: 5599-000	FIGURE NO.: 1

PLOT DATE: 7-28-10
FILE: i:\5599\5599-LOCUS.dwg



LEGEND

- MW-1 MONITORING WELL
- MW-1R DECOMMISSIONED MONITORING WELL
- SUPPLY WELL
- SEWER MANHOLE
- SEWER LINE
- WATER LINE

- N -

NOTES:

1. THIS PLAN WAS BASED UPON A SITE PLAN CREATED BY ECS DATED APRIL 04, 2006. ALL SITE FEATURES ARE APPROXIMATE.

0 40 80

APPROX. SCALE IN FEET

CLIENT: SUMMIT DISTRIBUTING, LLC			
PROJECT: 5700 ROUTE 100 LONDONDERRY, VERMONT			
TITLE: SITE PLAN			
DESIGNED: DLS	DRAWN: STM	CHECKED: DLS	APPROVED: PDF
SCALE: 1" = 40'	DATE: 12/31/13	FILE NO.: 5599D001	PROJECT NO.: 5599-000

GeoInsight
Practical in Nature

FIGURE NO.: 2

PLOT DATE: 12-31-13
FILE: I:\5599\5599D001.dwg

TABLES

TABLE 1
SUMMARY OF SUPPLY WELL SAMPLING ANALYTICAL DATA
LONDONDERRY CITGO/LONDONDERRY SHOPPING CENTER
5700 ROUTE 100
LONDONDERRY, VERMONT
SMS #1996-2015

MONITORING DATE: March 29, 2019																
Supply Well	MTBE	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total TMB	Isopropylbenzene	EDB	1,2-DCA	chloromethane	Trichloroethene	Methylene chloride	Chloroform	Bromodichloromethane	Dibromochloromethane
POINT-OF-ENTRY TREATMENT SYSTEM SAMPLING RESULTS																
Shopping Center Main - Influent	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Shopping Center Main - Mid A	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Shopping Center Main - Mid B	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Shopping Center Main - Effluent	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Thorne-Thomsen - Influent	Not sampled.															
Thorne-Thomsen - Mid	Not sampled.															
Thorne-Thomsen - Effluent	Not sampled.															
QUALITY ASSURANCE/QUALITY CONTROL																
Trip Blank	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MCL	***--***	***5***	***1,000***	***700***	***10,000***	***--***	***--***	***0.05***	***5***	***--***	***5***	***5***	***80***		
VHA	***11.3***	***--***	***--***	***--***	***--***	***5.1***	***--***	***--***	***--***	***30***	***--***	***--***	***--***	***--***	***--***
VAL	***--***	***0.5***	***--***	***--***	***--***	***--***	***--***	***--***	***0.5***	***--***	***--***	***--***	***--***	***--***	***--***

NOTES:

1. Results reported in micrograms per liter (µg/L).
2. Bold results indicate an exceedence of the applicable MCL.
3. ND(X) - constituent not detected above laboratory reporting limit noted.
4. MCL - Maximum Contaminant Levels for public water supplies from Chapter 21, Vermont Water Supply Rule (April 25, 2005) or Vermont Department of Health, Drinking Water Guidance (December 2002).
5. VHA - Vermont Health Advisories - guidelines for concentrations of chemicals in drinking water that do not have MCLs; VAL - Vermont Action Levels for eight chemicals of specific health concern in public water systems both established by the Vermont Department of Health (December 2002, revised October 2015).
6. Total TMB - 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
7. EDB - 1,2-dibromoethane; 1,2-DCA - 1,2-dichloroethane; MTBE - methyl tert butyl ether.

TABLE 2
SHOPPING CENTER & THORNE-THOMSEN POET SYSTEM AND ROGERS SUPPLY WELL SAMPLING ANALYTICAL DATA
(2001 TO PRESENT)
LONDONDERRY CITGO/LONDONDERRY SHOPPING CENTER
5700 ROUTE 100
LONDONDERRY, VERMONT
SMS #1996-2015

Supply Well / Drinking Water Standard	Sample Date	MTBE	TAME	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total TMB	Methylene Chloride	Chloromethane
	MCL	--	--	***5***	***1,000***	***700***	***10,000***	--	--	--
	VHA	***11.3***	--	--	--	--	--	***5.1***	***5***	***30***
	VAL	--	--	***0.5***	--	--	--	--	--	--
Shopping Center Main - POET System Influent	01/17/01		NR	**43.9**	ND(1)	ND(1)	ND(1)	ND(2)	NR	NR
	02/14/01	1.4	NR	**33.2**	ND(1)	ND(1)	ND(1)	ND(2)	NR	NR
	03/13/01	2.9	NR	**34.9**	ND(1)	ND(1)	ND(1)	ND(2)	NR	NR
	04/17/01	2	NR	**26.3**	ND(1)	ND(1)	ND(1)	ND(2)	NR	NR
	05/17/01	2.5	NR	**28.2**	ND(1)	ND(1)	1.4	ND(2)	NR	NR
	07/17/01	2.7	NR	**27.2**	ND(1)	ND(1)	ND(1)	ND(2)	NR	NR
	09/25/01	3.6	NR	**36.9**	ND(1)	ND(1)	ND(1)	ND(2)	NR	NR
	11/14/01	2.2	NR	**33.5**	ND(1)	ND(1)	ND(1)	ND(2)	NR	NR
	01/08/02	2.3	NR	**28.1**	ND(1)	ND(1)	ND(1)	ND(2)	NR	NR
	03/26/02	2.8	NR	**27**	ND(1)	ND(1)	ND(1)	ND(2)	NR	NR
	09/05/02	2.1	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	01/03/03	1.9	NR	**8.4**	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	07/18/03	5.6	NR	3.7	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	03/27/03	3.6	NR	**6.2**	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	09/25/03	**15.4**	NR	4.1	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	12/03/03	**13.2**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	03/16/04	**27.7**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	06/16/04	**32.9**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	08/11/04	**96.4**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	12/28/04	**60**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	03/29/05	**61.7**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	06/02/05	**46**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	09/02/05	**34.3**	NR	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	12/07/05	**25.4**	NR	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	03/21/06	**62.6**	NR	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	06/23/06	**16.2**	2.2	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	09/12/06	**22.3**	2.1	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	12/22/06	**16.1**	2.2	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	03/30/07	**14.1**	0.7	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	06/21/07	7.2	NR	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	09/16/07	**11.9**	0.8	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	12/09/07	11.3	1.2	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	03/04/08	10.2	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	06/06/08	6.3	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	10/09/08	9.6	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	1.2	ND(0.5)
	12/31/08	6.3	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(0.5)	ND(0.5)
	04/16/09	2.6	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(0.5)	0.6
	07/16/09	3.1	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	09/21/09	6.1	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	12/10/09	3.1	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	03/23/10	1.9	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	06/30/10	2.9	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	09/08/10	**12**	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	12/13/10	4.5	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	03/28/11	1.5	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	09/22/11	ND(2)	NA	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	NA	NA
	03/20/12	6.4	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	09/19/12	5.6	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	03/29/13	5.4	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	09/30/13	6.8	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	03/26/14	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	2.4	ND(0.5)
	09/26/14	0.9	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	03/19/15	4	NA	ND(2)	ND(2)	ND(2)	ND(4)	ND(4)	NA	NA
	09/18/15	1.5	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	03/30/16	2.2	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	09/16/16	2.1	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	03/17/17	11	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	09/08/17	6.7	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	03/30/17	6.2	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	09/05/18	7.8	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	03/29/19	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)

TABLE 2
SHOPPING CENTER & THORNE-THOMSEN POET SYSTEM AND ROGERS SUPPLY WELL SAMPLING ANALYTICAL DATA
(2001 TO PRESENT)
LONDONDERRY CITGO/LONDONDERRY SHOPPING CENTER
5700 ROUTE 100
LONDONDERRY, VERMONT
SMS #1996-2015

Supply Well / Drinking Water Standard	Sample Date	MTBE	TAME	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total TMB	Methylene Chloride	Chloromethane
	MCL	--	--	***5***	***1,000***	***700***	***10,000***	--	--	--
	VHA	***11.3***	--	--	--	--	--	***5.1***	***5***	***30***
	VAL	--	--	***0.5***	--	--	--	--	--	--
Shopping Center - Well #1 (Inactive, Former IGA Well)	04/10/00	ND(1)	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	05/08/00	ND(1)	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	06/12/00	ND(1)	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	07/17/00	ND(1)	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	08/14/00	ND(1)	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	09/19/00	2.3	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	10/17/00	2.7	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	11/14/00	ND(1)	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	12/13/00	ND(1)	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	01/17/01	1.8	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	02/14/01	ND(1)	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	03/13/01	2.1	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	04/17/01	ND(1)	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	November 2001	1.3	NR	NR	NR	NR	NR	NR	NR	NR
	January 2002	1.2	NR	NR	NR	NR	NR	NR	NR	NR
	Data not available or sampling not conducted until Well #1 was rehabilitated in 2013.									
	09/30/13	ND(0.5)	NA	ND(0.5)	13	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	03/26/14	ND(0.5)	ND(0.5)	ND(0.5)	0.6	ND(0.5)	ND(0.5)	ND(0.5)	2.5	ND(0.5)
	09/26/14	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	3/19/2015[9]	ND(2)	NA	ND(2)	ND(2)	ND(2)	ND(4)	ND(4)	Note 9	NA
	09/18/15	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	03/30/16	Not sampled.								

TABLE 2
SHOPPING CENTER & THORNE-THOMSEN POET SYSTEM AND ROGERS SUPPLY WELL SAMPLING ANALYTICAL DATA
(2001 TO PRESENT)
LONDONDERRY CITGO/LONDONDERRY SHOPPING CENTER
5700 ROUTE 100
LONDONDERRY, VERMONT
SMS #1996-2015

Supply Well / Drinking Water Standard	Sample Date	MTBE	TAME	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total TMB	Methylene Chloride	Chloromethane
	MCL	--	--	***5***	***1,000***	***700***	***10,000***	--	--	--
	VHA	***11.3***	--	--	--	--	--	***5.1***	***5***	***30***
	VAL	--	--	***0.5***	--	--	--	--	--	--
Thorne-Thomsen - POET System Influent	03/22/01	1	NR	4.6	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	09/25/01	1.38	NR	**12**	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	01/08/02	ND(1)	NR	2	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	03/26/02	2.8	NR	**27**	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	09/05/02	2	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	01/03/03	1.2	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	03/27/03	1.6	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	07/18/03	Not sampled.								
	09/25/03	5.5	NR	4.1	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	12/03/03	10.7	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	03/16/04	Not sampled.								
	06/16/04	**28.7**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	08/11/04	Not sampled.								
	12/28/04	**43.9**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	03/29/05	**50.1**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	06/02/05	**36.2**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	09/02/05	**45.1**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	12/07/05	**36.7**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	03/21/06	**33.2**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	06/23/06	**28.6**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	09/12/06	**34.9**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	12/22/06	Not sampled.								
	03/30/07	**40.2**	NR	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	06/21/07	Not sampled.								
	09/16/07	Not sampled.								
	12/09/07	8.6	NR	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	03/04/08	17.6	NR	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	06/06/08	4.1	NR	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	NR	NR
	10/09/08	6.4	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	1.3	ND(0.5)
	12/31/08	3.8	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(0.5)	ND(0.5)
	04/16/09	0.5	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(0.5)	ND(0.5)
	07/16/09	2.1	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	09/21/09	1.9	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	12/10/09	Not sampled.								
	03/23/10	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	06/30/10	2	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	09/08/10	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	1.6
	12/13/10	Not sampled.								
	03/28/11	2.3	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	09/22/11	Not sampled.								
	03/20/12	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	09/19/12	2.3	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	03/29/13	5.5	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	09/30/13	4.9	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	03/26/14	**13**	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	09/26/14	4.9	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	03/19/15	Not sampled.								
	09/18/15	**19**	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	03/30/16	**48**	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	09/06/16	**65**	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	03/17/17	**43**	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	09/08/17	**36**	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	03/30/18	**16**	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	09/05/18	11	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
	03/26/19	Not sampled.								

TABLE 2
SHOPPING CENTER & THORNE-THOMSEN POET SYSTEM AND ROGERS SUPPLY WELL SAMPLING ANALYTICAL DATA
(2001 TO PRESENT)
LONDONDERRY CITGO/LONDONDERRY SHOPPING CENTER
5700 ROUTE 100
LONDONDERRY, VERMONT
SMS #1996-2015

Supply Well / Drinking Water Standard	Sample Date	MTBE	TAME	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total TMB	Methylene Chloride	Chloromethane
	MCL	--	--	***5***	***1,000***	***700***	***10,000***	--	--	--
	VHA	***11.3***	--	--	--	--	--	***5.1***	***5***	***30***
	VAL	--	--	***0.5***	--	--	--	--	--	--
Rogers Residence	03/27/03	1.4	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	03/16/04	**22.1**	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	03/29/05	6.5	NR	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	NR	NR
	12/07/05	0.9	NR	ND(1)	ND(1)	ND(1)	ND(3)	ND(2)	NR	NR
	03/21/06	1.9	NR	ND(1)	ND(1)	ND(1)	ND(3)	ND(2)	NR	NR
	06/23/06	1.5	NR	ND(1)	ND(1)	ND(1)	ND(3)	ND(2)	NR	NR
	09/12/06	1.4	NR	ND(1)	ND(1)	ND(1)	ND(3)	ND(2)	NR	NR
	12/22/06	1	NR	ND(1)	ND(1)	ND(1)	ND(3)	ND(2)	NR	NR
	03/30/07	ND(1)	NR	ND(1)	11.8	1.6	2.7	1	NR	NR
	06/21/07	ND(1)	NR	ND(1)	ND(1)	ND(1)	ND(3)	ND(2)	NR	NR
	09/16/07	ND(1)	NR	ND(1)	ND(1)	ND(1)	ND(3)	ND(2)	NR	NR
	12/06/07	ND(1)	NR	ND(1)	ND(1)	ND(1)	ND(3)	ND(2)	NR	NR
	03/04/08	Not sampled.								
	06/06/08	ND(1)	NR	ND(1)	ND(1)	ND(1)	ND(3)	ND(2)	NR	NR
	10/09/08	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(0.5)	ND(0.5)
	12/31/08	Not sampled.								
	04/16/09	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(0.5)	ND(0.5)
	07/16/09	No longer included in sampling program.								

NOTES:

1. Results reported in micrograms per liter (µg/L); bold results indicate an exceedence of the applicable MCL.
2. NA - not applicable; NR - not reported; POET system - point-of-entry treatment system.
3. ND(X) - constituent not detected above laboratory reporting limit noted.
4. MCL - Maximum Contaminant Levels for public water supplies from Chapter 21, Vermont Water Supply Rule (04/25/05) or Vermont Department of Health, Drinking Water Guidance (December 2002, revised October 2015).
5. VHA - Vermont Health Advisories - guidelines for concentrations of chemicals in drinking water that do not have MCLs; VAL - Vermont Action Levels for eight chemicals of specific health concern in public water systems both established by the Vermont Department of Health (December 2002, revised February 2007).
6. Total TMB - 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
7. MTBE - methyl tert butyl ether; TAME - tertiary amyl ethyl ether.
8. Sampling performed prior to the October 2008 monitoring event was not completed by GeoInsight, Inc. These historical data were obtained from historical reports.
9. The laboratory reported that non-target compounds tetrahydrofuran and methyl ethyl ketone were detected in the 8021 Vermont Petroleum List analysis in the March 2015 Former IGA well sample.

ATTACHMENT A

LABORATORY ANALYTICAL REPORT

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Darrin Santos
GeoInsight, Inc.
186 Granite Street
3rd Floor, Suite A
Manchester, NH 03103

PO Number: None
Job ID: 47997
Date Received: 4/2/19

Project: Londonderry, VT 5599

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 Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures 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.

Absolute Resource Associates 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,
Absolute Resource Associates

Jennifer Lowe
Laboratory Manager

Date of Approval: 4/10/2019
Total number of pages: 12

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Londonderry, VT 5599
Job ID: 47997
Sample#: 47997-001
Sample ID: S.C. EFF
Matrix: Water
Sampled: 3/29/19 11:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
chloromethane	< 1.0	1.0	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
vinyl chloride	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
bromomethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
chloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
trichlorofluoromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,1-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
methylene chloride	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
carbon disulfide	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
methyl t-butyl ether (MTBE)	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
trans-1,2-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,1-dichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
2,2-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
cis-1,2-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
chloroform	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
bromochloromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,1,1-trichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,1-dichloropropene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
carbon tetrachloride	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,2-dichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
benzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
trichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,2-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
bromodichloromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
dibromomethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
cis-1,3-dichloropropene	< 0.40	0.40	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
toluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
trans-1,3-dichloropropene	< 0.40	0.40	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,1,2-trichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,3-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
tetrachloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
dibromochloromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,2-dibromoethane (EDB)	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
chlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,1,1,2-tetrachloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
ethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
m&p-xylenes	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
o-xylene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
styrene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
bromoform	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
isopropylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,1,2,2-tetrachloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,2,3-trichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2

Project ID: Londonderry, VT 5599
Job ID: 47997
Sample#: 47997-001
Sample ID: S.C. EFF
Matrix: Water
Sampled: 3/29/19 11:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
n-propylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
bromobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,3,5-trimethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
2-chlorotoluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
4-chlorotoluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
tert-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,2,4-trimethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
sec-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,3-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
4-isopropyltoluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,4-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,2-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
n-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,2-dibromo-3-chloropropane (DBCP)	< 0.20	0.20	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,2,4-trichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
hexachlorobutadiene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
naphthalene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
1,2,3-trichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:01	E524.2
Surrogate Recovery		**Limits**								
4-bromofluorobenzene SUR	**96**	70-130	%	1	LMM		1900765	4/5/19	15:01	E524.2
1,4-dichlorobenzene-D4 SUR	**95**	70-130	%	1	LMM		1900765	4/5/19	15:01	E524.2

Project ID: Londonderry, VT 5599
Job ID: 47997
Sample#: 47997-002
Sample ID: S.C. MID A
Matrix: Water
Sampled: 3/29/19 11:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
chloromethane	< 1.0	1.0	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
vinyl chloride	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
bromomethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
chloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
trichlorofluoromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,1-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
methylene chloride	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
carbon disulfide	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
methyl t-butyl ether (MTBE)	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
trans-1,2-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,1-dichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
2,2-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
cis-1,2-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
chloroform	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
bromochloromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,1,1-trichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,1-dichloropropene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
carbon tetrachloride	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,2-dichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
benzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
trichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,2-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
bromodichloromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
dibromomethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
cis-1,3-dichloropropene	< 0.40	0.40	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
toluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
trans-1,3-dichloropropene	< 0.40	0.40	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,1,2-trichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,3-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
tetrachloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
dibromochloromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,2-dibromoethane (EDB)	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
chlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,1,1,2-tetrachloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
ethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
m&p-xylenes	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
o-xylene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
styrene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
bromoform	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
isopropylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,1,2,2-tetrachloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,2,3-trichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2

Project ID: Londonderry, VT 5599
Job ID: 47997
Sample#: 47997-002
Sample ID: S.C. MID A
Matrix: Water
Sampled: 3/29/19 11:25

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
n-propylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
bromobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,3,5-trimethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
2-chlorotoluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
4-chlorotoluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
tert-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,2,4-trimethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
sec-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,3-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
4-isopropyltoluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,4-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,2-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
n-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,2-dibromo-3-chloropropane (DBCP)	< 0.20	0.20	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,2,4-trichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
hexachlorobutadiene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
naphthalene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
1,2,3-trichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	15:33	E524.2
Surrogate Recovery		**Limits**								
4-bromofluorobenzene SUR	**97**	70-130	%	1	LMM		1900765	4/5/19	15:33	E524.2
1,4-dichlorobenzene-D4 SUR	**94**	70-130	%	1	LMM		1900765	4/5/19	15:33	E524.2

Project ID: Londonderry, VT 5599
Job ID: 47997
Sample#: 47997-003
Sample ID: S.C. MID B
Matrix: Water
Sampled: 3/29/19 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Analysis Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
chloromethane	< 1.0	1.0	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
vinyl chloride	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
bromomethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
chloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
trichlorofluoromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,1-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
methylene chloride	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
carbon disulfide	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
methyl t-butyl ether (MTBE)	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
trans-1,2-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,1-dichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
2,2-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
cis-1,2-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
chloroform	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
bromochloromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,1,1-trichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,1-dichloropropene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
carbon tetrachloride	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,2-dichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
benzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
trichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,2-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
bromodichloromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
dibromomethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
cis-1,3-dichloropropene	< 0.40	0.40	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
toluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
trans-1,3-dichloropropene	< 0.40	0.40	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,1,2-trichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,3-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
tetrachloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
dibromochloromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,2-dibromoethane (EDB)	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
chlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,1,1,2-tetrachloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
ethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
m&p-xylenes	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
o-xylene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
styrene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
bromoform	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
isopropylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,1,2,2-tetrachloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,2,3-trichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2

Project ID: Londonderry, VT 5599
Job ID: 47997
Sample#: 47997-003
Sample ID: S.C. MID B
Matrix: Water
Sampled: 3/29/19 11:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
n-propylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
bromobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,3,5-trimethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
2-chlorotoluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
4-chlorotoluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
tert-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,2,4-trimethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
sec-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,3-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
4-isopropyltoluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,4-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,2-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
n-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,2-dibromo-3-chloropropane (DBCP)	< 0.20	0.20	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,2,4-trichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
hexachlorobutadiene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
naphthalene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
1,2,3-trichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	16:04	E524.2
Surrogate Recovery		**Limits**								
4-bromofluorobenzene SUR	**99**	70-130	%	1	LMM		1900765	4/5/19	16:04	E524.2
1,4-dichlorobenzene-D4 SUR	**94**	70-130	%	1	LMM		1900765	4/5/19	16:04	E524.2

Project ID: Londonderry, VT 5599
Job ID: 47997
Sample#: 47997-004
Sample ID: S.C. INF
Matrix: Water
Sampled: 3/29/19 11:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
chloromethane	< 1.0	1.0	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
vinyl chloride	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
bromomethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
chloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
trichlorofluoromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,1-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
methylene chloride	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
carbon disulfide	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
methyl t-butyl ether (MTBE)	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
trans-1,2-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,1-dichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
2,2-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
cis-1,2-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
chloroform	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
bromochloromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,1,1-trichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,1-dichloropropene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
carbon tetrachloride	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,2-dichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
benzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
trichloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,2-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
bromodichloromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
dibromomethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
cis-1,3-dichloropropene	< 0.40	0.40	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
toluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
trans-1,3-dichloropropene	< 0.40	0.40	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,1,2-trichloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,3-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
tetrachloroethene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
dibromochloromethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,2-dibromoethane (EDB)	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
chlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,1,1,2-tetrachloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
ethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
m&p-xylenes	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
o-xylene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
styrene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
bromoform	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
isopropylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,1,2,2-tetrachloroethane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,2,3-trichloropropane	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2

Project ID: Londonderry, VT 5599
Job ID: 47997
Sample#: 47997-004
Sample ID: S.C. INF
Matrix: Water
Sampled: 3/29/19 11:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
n-propylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
bromobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,3,5-trimethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
2-chlorotoluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
4-chlorotoluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
tert-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,2,4-trimethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
sec-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,3-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
4-isopropyltoluene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,4-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,2-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
n-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,2-dibromo-3-chloropropane (DBCP)	< 0.20	0.20	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,2,4-trichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
hexachlorobutadiene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
naphthalene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
1,2,3-trichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900765	4/5/19	14:29	E524.2
Surrogate Recovery		**Limits**								
4-bromofluorobenzene SUR	**101**	70-130	%	1	LMM		1900765	4/5/19	14:29	E524.2
1,4-dichlorobenzene-D4 SUR	**94**	70-130	%	1	LMM		1900765	4/5/19	14:29	E524.2

Note: The results were obtained from a vial with headspace.

Project ID: Londonderry, VT 5599
Job ID: 47997
Sample#: 47997-005
Sample ID: Trip Blank
Matrix: Water
Sampled: 3/29/19 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
chloromethane	< 1.0	1.0	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
vinyl chloride	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
bromomethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
chloroethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
trichlorofluoromethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,1-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
methylene chloride	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
carbon disulfide	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
methyl t-butyl ether (MTBE)	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
trans-1,2-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,1-dichloroethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
2,2-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
cis-1,2-dichloroethene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
chloroform	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
bromochloromethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,1,1-trichloroethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,1-dichloropropene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
carbon tetrachloride	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,2-dichloroethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
benzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
trichloroethene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,2-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
bromodichloromethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
dibromomethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
cis-1,3-dichloropropene	< 0.40	0.40	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
toluene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
trans-1,3-dichloropropene	< 0.40	0.40	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,1,2-trichloroethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,3-dichloropropane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
tetrachloroethene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
dibromochloromethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,2-dibromoethane (EDB)	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
chlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,1,1,2-tetrachloroethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
ethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
m&p-xylenes	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
o-xylene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
styrene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
bromoform	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
isopropylbenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,1,2,2-tetrachloroethane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,2,3-trichloropropane	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2

Project ID: Londonderry, VT 5599
Job ID: 47997
Sample#: 47997-005
Sample ID: Trip Blank
Matrix: Water
Sampled: 3/29/19 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
n-propylbenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
bromobenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,3,5-trimethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
2-chlorotoluene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
4-chlorotoluene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
tert-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,2,4-trimethylbenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
sec-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,3-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
4-isopropyltoluene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,4-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,2-dichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
n-butylbenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,2-dibromo-3-chloropropane (DBCP)	< 0.20	0.20	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,2,4-trichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
hexachlorobutadiene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
naphthalene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
1,2,3-trichlorobenzene	< 0.50	0.50	ug/L	1	LMM		1900741	4/4/19	12:24	E524.2
Surrogate Recovery		**Limits**								
4-bromofluorobenzene SUR	**101**	70-130	%	1	LMM		1900741	4/4/19	12:24	E524.2
1,4-dichlorobenzene-D4 SUR	**99**	70-130	%	1	LMM		1900741	4/4/19	12:24	E524.2

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

47997

Company Name: GeoInsight
Company Address: 186 Granite ST 3rd FlSTEA Manchester NH 03101
Report To: Darrin Santos
Phone #: 603-314-0820
Invoice to:
Email:
PO #:

Project Name: Londonderry VT
Project #: 5599
Project Location: NH MA ME (VT)
Accreditation Required? N/Y:
Protocol: RCRA SDWA NPDES MCP NHDES DOD
Reporting Limits: QAPP GW-1 S-1 EPA DW Other
Quote #
❑ NH Reimbursement Pricing

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	Grab (G) or Composite (C)
47997-01	S.C. EFF	2	X			X					3/29/19	11:20	VF	G
-02	S.C. MID A	2	X			X						11:25		
-03	S.C. MID B	2	X			X						11:30		
-04	S.C. INF	2	X			X						11:35		
-05	Trip Blank	1	X			X					3/20/19	—	—	—

ANALYSIS REQUEST

❑ VOC 8260 ❑ VOC 8260 NHDES ❑ VOC 8260 MADEP ❑ VOC 624.1 ❑ VOC BTEX MtBE only ❑ VOC 8021VT ❑ VPH MADEP ❑ GRO 8015 ❑ 1,4-Dioxane ☒ VOC 524.2 ❑ VOC 524.2 NH List ❑ Gases-List: ❑ TPH ❑ DRO 8015 ❑ EPH MADEP ❑ TPH Fingerprint ❑ 8270PAH ❑ 8270ABN ❑ 625.1 ❑ EDB ❑ 8082 PCB ❑ 8081 Pesticides ❑ 608.3 Pest/PCB ❑ O&G 1664 ❑ Mineral O&G 1664 ❑ pH ❑ BOD ❑ Conductivity ❑ Turbidity ❑ Apparent Color ❑ TSS ❑ TDS ❑ TS ❑ TVS ❑ Alkalinity ❑ Acidity ❑ RCRA Metals ❑ Priority Pollutant Metals ❑ TAL Metals ❑ Hardness ❑ Total Metals-list: ❑ Dissolved Metals-list: ❑ Ammonia ❑ COD ❑ TKN ❑ TN ❑ TON ❑ TOC ❑ Ferrous Iron ❑ T-Phosphorus ❑ Bacteria P/A ❑ Bacteria MPN ❑ Enterococci ❑ Cyanide ❑ Sulfide ❑ Nitrate + Nitrite ❑ Ortho P ❑ Phenols ❑ Nitrate ❑ Nitrite ❑ Chloride ❑ Sulfate ❑ Bromide ❑ Fluoride ❑ Corrosivity ❑ Reactive CN ❑ Reactive S- ❑ Ignitibility/FP ❑ TCLP Metals ❑ TCLP VOC ❑ TCLP SVOC ❑ TCLP Pesticide Subcontract: ❑ Grain Size ❑ Herbicides ❑ Asbestos ❑ PFAS

TAT REQUESTED
Priority (24 hr)* ❑
Expedited (48 hr)* ❑
Standard ☒
(10 Business Days)
*Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) DLSantos@GeoInc.com
❑ HARD COPY REQUIRED ❑ EDD

RECEIVED ON ICE ☒ YES ❑ NO
TEMPERATURE 0 °C

CUSTODY RECORD
QSD-01 Revision 11/08/18

	Date	Time		Date	Time
Relinquished by Sampler:	3/29/19	14:00	Received by: GeoCold storage	3/29/19	14:00
Relinquished by:	4/2/19	1155	Received by:	Date	Time
Relinquished by:	Date	Time	Received by Laboratory:	4/2/19	11:55

4/2/19 1315

ATTACHMENT B

PROPERTY OWNER POET SYSTEM SAMPLING LETTERS

GeoInsight®
Environmental Strategy & Engineering

June 13, 2019 GeoInsight Project 5599-002

Rick Bove
5700 Route 100, LLC
218 Overlake Drive
Colchester, VT 05446

RE: Results of march 2019 Supply Well Treatment System Sampling
Londonderry Citgo/Londonderry Shopping Center
Londonderry, Vermont
VTDEC SMS #1996-2015 | WSID 8341

Dear Mr. Bove:

At the request of the Vermont Department of Environmental Conservation (VTDEC), GeoInsight, Inc. (GeoInsight) collected water samples from the supply well point-of-entry treatment (POET) system serving the Londonderry Shopping Center on March 29, 2019 during a monitoring event associated with the Londonderry Citgo/Londonderry Shopping Center site (SMS #1996-2015) in Londonderry, Vermont. The POET system samples were submitted to Absolute Resource Associates, LLC of Portsmouth, New Hampshire for analysis of volatile organic compounds (VOCs) by United States Environmental Protection Agency Method 524.2.

Methyl tertiary butyl ether (MTBE) and other VOCs were not detected above the laboratory reporting limits in the POET system samples, including the system influent, system effluent, and two mid-point samples. Note that the effluent sample is collected after water is treated by the POET system. Also, note Vermont Water Company serviced the POET system including replacing the activated carbon on March 1, 2019.

If you have questions regarding these results, contact me in our Manchester, New Hampshire office at (603) 314-0820.

Sincerely,
GEOINSIGHT, INC.

Darrin L. Santos, P.G.
Senior Geologist

cc: Michael Nahmias, VTDEC
VTDEC Water Supply Division

\\GEONHO\NHO_Projects\5599 Summit Londonderry VT\Monitoring\2019\LSC-R Bove Results3.2019.doc

NEW HAMPSHIRE
186 Granite Street
3rd Floor, Suite A
Manchester, NH 03101-2643
Tel 603.314.0820

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Tel 978.679.1600

MAINE
4 Market Place Drive
2nd Floor, Suite 207
York, ME 03909
Tel 207.606.1043

CONNECTICUT
200 Court Street
2nd Floor
Middletown, CT 06457
Tel 860.894.1022

GeoInsight®
Environmental Strategy & Engineering

June 13, 2019 GeoInsight Project 5599-002

Roger Thorne-Thomsen
2425 Pikes Falls Road
Jamaica, VT 05343-4436

RE: March 2019 Supply Well Treatment System Sampling
Thorne-Thomsen Residence
Londonderry Citgo/Londonderry Shopping Center
Londonderry, Vermont
VTDEC SMS #1996-2015

Dear Mr. Thorne-Thomsen:

At the request of the Vermont Department of Environmental Conservation (VTDEC), GeoInsight, Inc. attempted to collect water samples from your supply well point-of-entry treatment (POET) system during a March 29, 2019 monitoring event associated with the Londonderry Citgo/Londonderry Shopping Center site (SMS #1996-2015) located in Londonderry, Vermont. We made several attempts by email to contact you to schedule a time with your tenant to sample the POET system. Since we had no response to the email messages, we knocked on the door of the residence several times during the March 2019 sampling event. There was no answer at the door, so we were unable to conduct the sampling.

We will make an additional effort to obtain access to the residence in September 2019 prior to the next sampling event. Please contact me with an up-to-date email and phone number to coordinate with you for the September 2019 sampling event. Please note that Vermont Water Company serviced the POET system including replacement of the activated carbon on March 1, 2019.

If you have questions regarding this letter, contact us in our Manchester, New Hampshire office at (603) 314-0820.

Sincerely,
GEOINSIGHT, INC.

Darrin L. Santos, P.G.
Senior Geologist
dlsantos@geoinc.com

cc: VTDEC

\\GEONHO\NHO_Projects\5599 Summit Londonderry VT\Monitoring\2019\Thorne-ThomsenResults3.2019.doc

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