



Hudson Valley
48 Springside Avenue
Poughkeepsie, NY 12603
845.454.2544
www.pve-llc.com

Civil Engineering • Structure Design • Survey • Landscape Architecture • Environmental

April 19, 2019

Daniel Lanners
New York State Dept. of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7014

RECEIVED
JUL 12 2019
Remedial Bureau C

Re: **2nd Quarter 2019 Groundwater Monitoring Report; Apple Valley Shopping Center Superfund Site,**
LaGrange, New York
Index No. II-CERCLA-10224
NYSEC Site #3-14-084
PVE File #560537

Dear Mr. Lanners:

On April 4, 2019, PVE, LLC (PVE) conducted groundwater monitoring activities at the Apple Valley Shopping Center (Figure 1) in accordance with the New York State Department of Environmental Conservation (NYSDEC) approved Interim Remedial Measure (IRM) work plan dated July 2, 2004.

QUARTERLY GROUNDWATER MONITORING

PVE was responsible for sampling system effluent, and one (1) residential supply well during the 2nd Quarter of 2019. Recovery wells are to be sampled once every five (5) quarters, in accordance with NYSDEC correspondence.

Recovery Well Sampling

The remediation system effluent sample (AVS-EFF) and the recovery wells RW-1, RW-2, RW-3 and AV-2 were not sampled, as the system is currently not operating.

Residential Supply Well Sampling

The original IRM Work Plan specifies collection and analysis of samples from supply wells for seven (7) residences of the Woodbridge Estates Subdivision (Figure 3) on a semi-annual basis, assuming access is granted. All but Lot 6 have subsequently been removed from the monitoring program through approved amendments. Despite availability of public water, Lot 6 has not connected to the municipal water supply system.

PVE contacted the owner of Lot 6 and coordinated access. One (1) sample was collected from the supply well on April 4, 2019 from in-line spigots prior to the water softener (no GAC filtration system is present). Water was

PA Corporate	NYC	West Virginia	Ohio	Texas
Waterfront Corporate Park III Suite 101 2000 Georgetowne Drive Sewickley, PA 15143 724.444.1100	108 W 39 th Street Suite 500 New York, NY 10018 646.602.4999	1700 MacCorkle Avenue, S.E Charleston, WV 25314 304.340.4821	1156 E. State Street Salem, OH 44460 330.332.5200	10550 Richmond Avenue Suite 160 Houston, TX 77042 713.375.1400 ext. 456



allowed to run at a tap for at least ten minutes prior to sampling. The sample was labeled, packed on ice, and shipped via courier to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for analysis of volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Method 524.2.

RESULTS

Residential Supply Wells

The total concentration of the contaminants of concern (COC) in the untreated sample at Lot 6 was 2.1 µg/l. Results for COCs are summarized in Table 1. Analytical reports are attached.

DISCUSSION

Despite availability of public water, Lot 6 has not connected to the municipal water supply system. Concentrations of respective contaminants detected in the residential supply well remained below applicable New York State standards.

The next round of quarterly groundwater monitoring is scheduled for August of 2019. If you have any questions, please do not hesitate to contact me.

Sincerely,

PVE, LLC

A handwritten signature in black ink, appearing to read "Chris B. Brown", is positioned above the printed name.

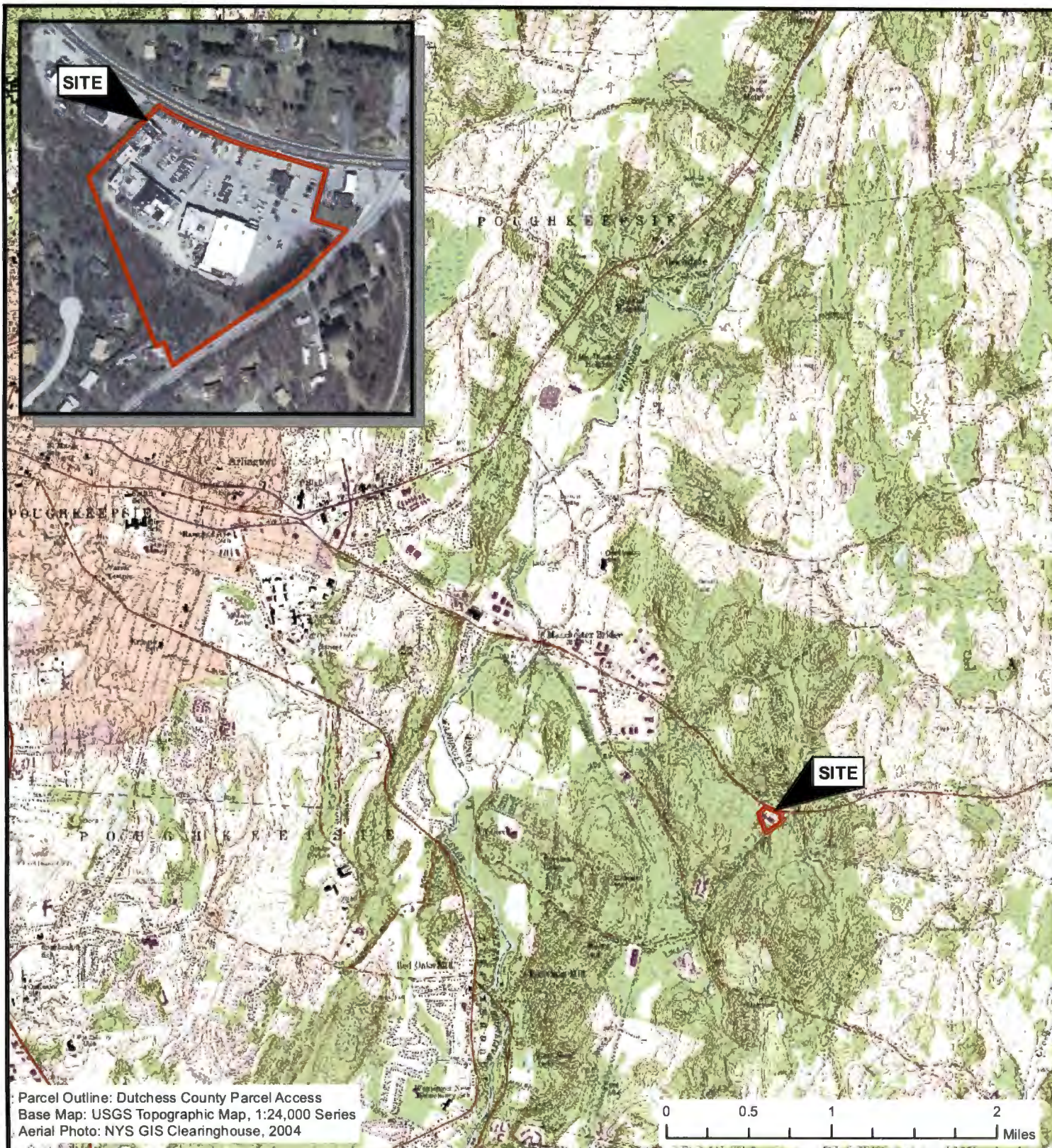
Christopher B. Brown, P.G.
Principal/Director of Environmental Services

CBB/BRW

cc:

James A. Klein, Apple Valley
David Engel, Esq.
Mark Millspaugh, Sterling Environmental
Maureen Schuck, NYSDOH (electronic only)
Dawn Hettrick, NYSDOH
Krista Anders, NYSDOH
Omorogbe, Amen, NYSDEC (electronic only)
D. MacDougal
Gezahegne Bushra, EPA

FIGURES



SITE LOCATION MAP

APPLE VALLEY SHOPPING CENTER
 FREEDOM PLAINS ROAD
 TOWN OF LAGRANGE, DUTCHESS COUNTY, NEW YORK



48 Springside Avenue
 Poughkeepsie, New York 12603
 Phone: (845) 454-2544
 Fax: (845) 454-2655

FIGURE 1



DATE:	01/17/2012
SCALE:	As Indicated
PROJECT NUMBER:	160537

ALL LOCATIONS APPROXIMATE



Legend

- Monitoring Well
- Recovery Well
- Road
- Building Outline
- Tax Parcel Outline

DATA SOURCES
 Tax Parcel Outlines: Dutchess County Real Property
 Tax Service Agency, 2007
 Roads: NYS ITS GIS Program Office, 2014
 Aerial Image: NYS ITS GIS Program Office, 2013

0 25 50 100
 Feet



SELECTED SITE FEATURES APPLE VALLEY SHOPPING CENTER FREEDOM PLAINS ROAD, TOWN OF LAGRANGE DUTCHESS COUNTY, NEW YORK

48 Springside Avenue
 Poughkeepsie, New York 12603
 Phone: (845) 454-2544
 Fax: (845) 454-2655

FIGURE 2



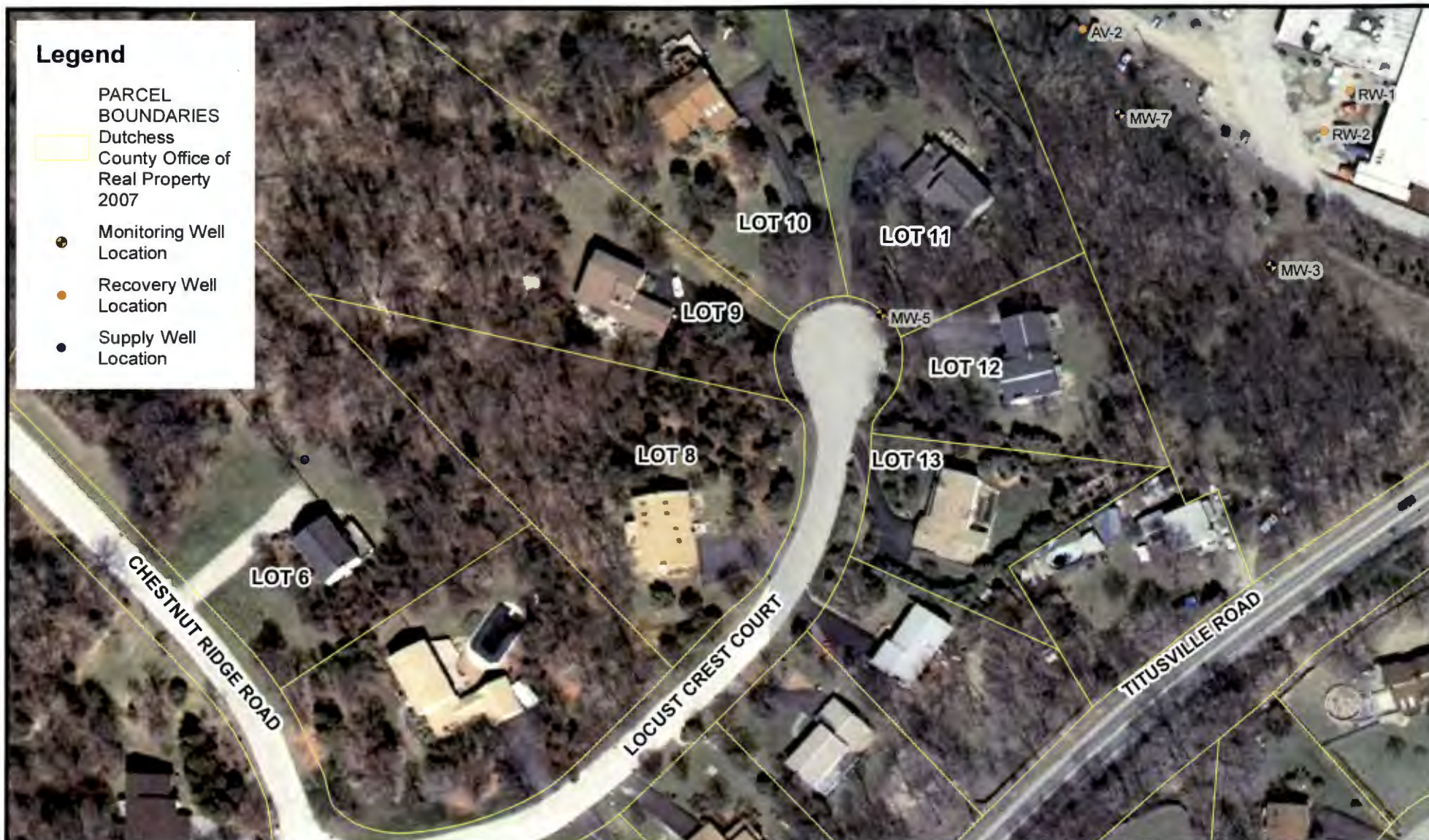
DATE:	01/20/2016
SCALE:	As Indicated
PROJECT NUMBER:	560537

ALL LOCATIONS APPROXIMATE

Legend

PARCEL
BOUNDARIES
Dutchess
County Office of
Real Property
2007

-  Monitoring Well
Location
-  Recovery Well
Location
-  Supply Well
Location



Parcel Outline: Dutchess County Parcel Access

Aerial Photo: NYS GIS Clearinghouse, 2004

RESIDENTIAL LOCATION MAP

APPLE VALLEY SHOPPING CENTER
FREEDOM PLAINS ROAD
TOWN OF LAGRANGE, DUTCHESS COUNTY, NEW YORK



48 Springside Avenue
Poughkeepsie, New York 12603
Phone: (845) 454-2544
Fax: (845) 454-2655

FIGURE 3

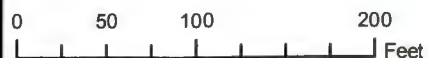


DATE: 4/17/2019

SCALE: As Indicated

PROJECT
NUMBER: 560537

ALL LOCATIONS APPROXIMATE



TABLES

Table 1.

Volatile Organic Compounds (VOCs) in Residential Supply Well Monitoring Samples;
 USEPA Method 524.2; collected **March 1998 through April 2019;**
 Apple Valley Shopping Center, LaGrange, New York;
 PVE File #560537

Sample ID	Dates Sampled	Chemical Constituent				Total COC
		Tetrachloroethene (5 µg/l ¹)	Trichloroethene (5 µg/l ¹)	cis-1,2-Dichloroethene (5 µg/l ¹)	Vinyl Chloride (2 µg/l ¹)	
Lot 6 (Lipka)	1/29/2003	1	ND<0.5	ND < 0.5	ND	1
Lot 6 (Lipka)	8/23/2006	4.5	ND<0.5	0.9 M	ND<0.5	5.4
Lot 6 (Lipka)	2/27/2007	2.6	ND<0.5	0.6	ND<0.5	3.2
Lot 6 (Lipka)	8/7/2007	2.2	0.8	ND < 0.5	ND<0.5	3
Lot 6 (Lipka)	2/27/2008	9.8	0.6	1.3	ND<0.5	11.7
Lot 6 (Lipka)	6/3/2008	3	ND<0.5	0.6	ND<0.5	3.6
Lot 6 (Lipka)	9/5/2008	2.1	ND<0.5	0.6	ND<0.5	2.7
Lot 6 (Lipka)	3/19/2009	2.9	ND<0.5	0.9	ND<0.5	3.8
Lot 6 (Lipka)	8/17/2009	3.7	0.8	1.1	ND<0.5	5.6
Lot 6 (Lipka)	2/4/2010	2.3	ND<0.5	ND<0.5	ND<0.5	2.3
Lot 6 (Lipka)	8/4/2010	1.1	ND<0.5	ND<0.5	ND<0.5	1.1
Lot 6 (Lipka)	2/10/2011	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
Lot 6 (Lipka)	8/9/2011	1.4	ND<0.5	ND<0.5	ND<0.5	1.4
Lot 6 (Lipka)	2/20/2012	2.4	ND<0.5	ND<0.5	ND<0.5	2.4
Lot 6 (Lipka)	8/20/2012	2.1	ND<0.5	0.5	ND<0.5	2.6
Lot 6 (Lipka)	2/28/2013	1.7	ND<0.5	ND<0.5	ND<0.5	1.7
Lot 6 (Lipka)	8/20/2013	1.8	ND<0.5	ND<0.5	ND<0.5	1.8
Lot 6 (Lipka)	1/27/2014	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
Lot 6 (Lipka)	8/20/2014	1.8	ND<0.5	ND<0.5	ND<0.5	1.8
Lot 6 (Lipka)	3/27/2015	1	ND<0.5	0.56	ND<0.5	1.56
Lot 6 (Lipka)	8/11/2015	1	ND<0.5	ND<0.5	ND<0.5	1
Lot 6 (Lipka)	3/29/2016	1.1	ND<0.5	0.9	ND<0.5	2
Lot 6 (Lipka)	2/22/2017	1.1	ND<0.5	0.64	ND<0.5	1.74
Lot 6 (Lipka)	8/18/2017	1.5	ND<0.5	ND<0.5	ND<0.5	1.5
Lot 6 (Lipka)	4/4/2018	0.84	ND<0.5	ND<0.5	ND<0.5	0.84
Lot 6 (Lipka)	12/20/2018	0.8	ND<0.5	1.3	ND<0.5	2.1
Lot 6 (Lipka)	4/4/2019	0.8	ND<0.5	1.3	ND<0.5	2.1
Lot 8	1/29/2003	0.6	ND	ND	ND	0.6
Lot 8	8/22/2006	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND
Lot 8	2/23/2007	0.8	ND < 0.5	ND < 0.5	ND < 0.5	0.8
Lot 9	1/29/2003	0.8	ND	0.6	ND	1.4
Lot 9	2/23/2007	0.9	ND < 0.5	0.6	ND < 0.5	1.5
Lot 9	8/24/2007	0.7	0.5	ND < 0.5	ND < 0.5	1.2
Lot 9	2/29/2008	1.5	1	1.9	ND < 0.5	4.4
Lot 9	9/5/2008	ND<0.5	0.6	0.7	ND<0.5	1.3
Lot 10	September-01	7.8	3.4	4	ND	15.2
Lot 10	March-12	3.7	2.1	2.6	ND	8.4
Lot 10	September-12	ND	ND	ND	ND	ND
Lot 10	April-12	2.1	2.2	1.9	ND	6.2
Lot 10	November-12	1.8	2.2	2.6	ND	6.6
Lot 10	5/18/2004	1.9	2	2	ND	5.9
Lot 10	12/14/2004	3.2	3.3	2.9	ND	9.4

Table 1. **Volatile Organic Compounds (VOCs) in Residential Supply Well Monitoring Samples;**
USEPA Method 524.2; collected March 1998 through April 2019;
Apple Valley Shopping Center, LaGrange, New York;
PVE File #560537

Sample ID	Dates Sampled	Chemical Constituent				Total COC
		Tetrachloroethene (5 µg/l ¹)	Trichloroethene (5 µg/l ¹)	cis-1,2-Dichloroethene (5 µg/l ¹)	Vinyl Chloride (2 µg/l ¹)	
Lot 10	7/13/2005	4.77	3.54	2.85	ND	11.16
Lot 10	8/25/2006	15.4	4.1 M	10.3	ND < 0.5	29.8
Lot 10	8/30/2007	8	3.9	4.6	ND < 0.5	16.5
Lot 10	2/28/2008	12.1	12.1	15.8	ND < 0.5	40
Lot 11 (Alben)	3/18/1998	ND	ND	ND	ND	ND
Lot 11 (Alben)	1/25/2007	2.8	0.5	ND < 0.5	ND < 0.5 S	3.3
Lot 11 (Alben)	8/27/2007	1.6	0.5	ND < 0.5	ND < 0.5	2.1
Lot 11 (Alben)	2/28/2008	20.2	1.3	2	ND < 0.5	23.5
Lot 11 (Alben)	6/26/2008	2.5	1.6	1.9	ND<0.5	6
Lot 11 (Alben)	9/5/2008	0.9	ND<0.5	ND<0.5	ND<0.5	0.9
Lot 11 (Alben)	3/12/2009	1.4	1	1.5	ND<0.5	3.9
Lot 11 (Alben)	9/29/2009	1.4	ND<0.5	ND<0.5	ND<0.5	1.4
Lot 11 (Alben)	2/24/2010	1.2	ND<0.5	ND<0.5	ND<0.5	1.2
Lot 11 (Alben)	8/5/2010	1.2	ND<0.5	ND<0.5	ND<0.5	1.2
Lot 11 (Alben)	3/3/2011	1.4	1.2	1.1	ND<0.5	3.7
Lot 11 (Alben)	8/5/2011	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
Lot 12	1/29/2003	ND < 0.5	ND	ND	ND	ND
Lot 12	9/7/2006	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND
Lot 12	2/21/2007	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND
Lot 12	8/28/2007	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND
Lot 13	2/22/2007	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND
Lot 13	8/21/2007	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND

Notes:

1 - Standards are for groundwater according to 6NYCRR Part 700-705, Class GA Groundwater Standards;

All concentrations are in µg/l;

ND = Not detected above the method detection limit listed;

Boldface type designates those compounds detected at concentrations exceeding NYSDEC standards;

M = Matrix spike recoveries outside QC limits. Matrix bias indicated;

S = Associated LCS outside QC windows;

COC = Contaminants of concern.

ANALYTICAL



Technical Report

prepared for:

PVE, LLC.
48 Springside Avenue
Poughkeepsie NY, 12603
Attention: Conor Tarbell

Report Date: 04/09/2019
Client Project ID: 560537
York Project (SDG) No.: 19D0187

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371

132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 04/09/2019
Client Project ID: 560537
York Project (SDG) No.: 19D0187

PVE, LLC.
48 Springside Avenue
Poughkeepsie NY, 12603
Attention: Conor Tarbell

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 04, 2019 with a temperature of 0.9 C. The project was identified as your project: **560537**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

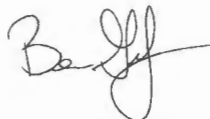
Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
19D0187-01	LIPKA-SW	Water	04/04/2019	04/04/2019

General Notes for York Project (SDG) No.: 19D0187

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

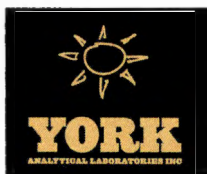
Approved By:



Benjamin Gulizia
Laboratory Director

Date: 04/09/2019





Sample Information

Client Sample ID: LIPKA-SW

York Sample ID: 19D0187-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19D0187

560537

Water

April 4, 2019 8:40 am

04/04/2019

Volatile Organics, 524.2 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-43-2	Benzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
108-86-1	Bromobenzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
74-97-5	Bromochloromethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
75-27-4	Bromodichloromethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
75-25-2	Bromoform	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
74-83-9	Bromomethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
104-51-8	n-Butylbenzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
108-90-7	Chlorobenzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
75-00-3	Chloroethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
67-66-3	Chloroform	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
74-87-3	Chloromethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
95-49-8	2-Chlorotoluene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
124-48-1	Dibromochloromethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
74-95-3	Dibromomethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS



Sample Information

Client Sample ID: LIPKA-SW

York Sample ID: 19D0187-01

York Project (SDG) No.

19D0187

Client Project ID

560537

Matrix

Water

Collection Date/Time

April 4, 2019 8:40 am

Date Received

04/04/2019

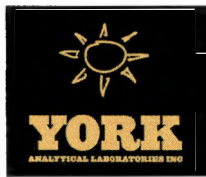
Volatile Organics, 524.2 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LoQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
156-59-2	cis-1,2-Dichloroethylene	1.3		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
100-41-4	Ethyl Benzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
98-82-8	Isopropylbenzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
75-09-2	Methylene chloride	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
91-20-3	Naphthalene	ND		ug/L	2.0	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
103-65-1	n-Propylbenzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS



Sample Information

Client Sample ID: LIPKA-SW

York Sample ID: 19D0187-01

York Project (SDG) No.

19D0187

Client Project ID

560537

Matrix

Water

Collection Date/Time

April 4, 2019 8:40 am

Date Received

04/04/2019

Volatile Organics, 524.2 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-42-5	Styrene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
127-18-4	Tetrachloroethylene	0.8		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
108-88-3	Toluene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.0	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
79-01-6	Trichloroethylene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
75-01-4	Vinyl Chloride	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
95-47-6	* o-Xylene	ND		ug/L	0.5	1	EPA 524.2 Certifications: CTDOH	04/08/2019 12:30	04/09/2019 06:23	RDS
179601-23-1	* p- & m- Xylenes	ND		ug/L	1.0	1	EPA 524.2 Certifications: CTDOH	04/08/2019 12:30	04/09/2019 06:23	RDS
1330-20-7	Xylenes, Total	ND		ug/L	1.5	1	EPA 524.2 Certifications: CTDOH,NELAC-NY10854,NJDEP	04/08/2019 12:30	04/09/2019 06:23	RDS
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	98.4 %	69-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	101 %	79-122							
2037-26-5	Surrogate: SURR: Toluene-d8	98.8 %	81-117							



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
19D0187-01	LIPKA-SW	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.



York Analytical Laboratories, Inc.
120 Research Drive 132-02 89th Ave
Stratford, CT 06815 Queens, NY 11418
clientservices@yorklab.com
www.yorklab.com

Field Chain-of-Custody Record

YORK Project No.

19D0187

Page 1 of 1

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization for YORK to proceed with the analyses requested below
Your signature binds you to YORK's Standard Terms & Conditions

YOUR Information		Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company PVE, LLC	Company "	Company "	Company "	560537	RUSH - Next Day
Address 48 Spring side Avenue Poughkeepsie, NY	Address "	Address "	Address "	YOUR Project Name	RUSH - Two Day
Phone 845-454-2544	Phone "	Phone "	Phone "	AVSC	RUSH - Three Day
Contact Benjamin Wolf	Contact Conor Tarbell	Contact Tara Alvarado	Contact Tara Alvarado		RUSH - Four Day
E-mail bwolf@pve-llc.com	E-mail ctarbell@pve-llc.com	E-mail talvarado@pve-llc.com	E-mail talvarado@pve-llc.com	YOUR PO#:	Standard (5-7 Day) ☒

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Samples Collected by (print your name above and sign below)		Matrix Codes	Samples From	Report / EDD Type (circle selections)	YORK Reg. Comp.
Benjamin Wolf of PVE, LLC		S - soil / solid	New York ☒	Summary Report	Compared to the following Regulation(s) (please fill in)
Benjamin Wolf of PVE, LLC		GW - groundwater	New Jersey	QA Report	
		DW - drinking water	Connecticut	NY ASP A Package	
		WW - wastewater	Pennsylvania	NY ASP B Package	
		O - Oil : Other	Other		

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
LIPKA-SW	GW	4/4/19 / 0840 • 524.2		(3) HCl VOCs
X				

Comments:				Preservation: (check all that apply)		Special Instruction	
				HCl ☒ MeOH ___ HNO ₃ ___ H ₂ SO ₄ ___ NaOH ___ ZnAc ___		Field Filtered ___	
				Ascorbic Acid ___ Other: ___		Lab to Filter ___	
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Benjamin Wolf of PVE, LLC	4/4/19 / 9:50	Chic	4-4-19 9:50	Chic	4-4-19 1522		
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time	Temp. Received at Lab	
				79 Feb 4-4-19 1522		0.9	Degrees C