



Aquatera
Technologies, Inc.

31 January 2014

Ms. Dana Kutz
Pennsylvania Department of Environmental Protection
2 East Main Street
Norristown, PA 19401

RE: The Devereux Foundation
100 Shaw Drive
Glenmoore, PA 19343
Facility ID # 15-25097-9002
eFACTS Primary Facility No 586111

Dear Ms. Lombardo:

Enclosed, please find the Remedial Action Progress Report prepared by Aquaterra Technologies, Inc. (Aquaterra) on behalf of Environmental Control Systems, Inc. (ECS) for the above referenced site. The report presents a summary of site activities including product removal and a quarterly groundwater sampling conducted at this site during the fourth quarter of 2013.

Should you have any questions or comments regarding this report, please contact the either of the undersigned at (610) 431-5733. Thank you.

Respectfully submitted,
AQUATERRA TECHNOLOGIES, INC.

Noelle Stroik
Staff Scientist

Tiffani L. Doerr, P.G.
Senior Hydrogeologist

Enclosure

cc: Diane Drumheller – Devereux
Barb Lippman- ECS
Patricia Condran – USTIF Claim# 2012-0058(M)
Aquaterra Electronic File

By affixing my seal to this document, I am certifying that to the best of my knowledge the information is true and correct. I further certify that I am licensed to practice in the Commonwealth of Pennsylvania and that it is within my professional expertise to verify the correctness of the information.



REMEDIAL ACTION PROGRESS REPORT 4TH QUARTER 2013

THE DEVEREUX SCHOOL 100 SHAW DRIVE GLENMOORE, CHESTER COUNTY, PA FACILITY ID# 15-25097-9002

GENERAL INFORMATION:

ECS Manager:	Barbara Lippmann, President
Aquaterra Project Manager:	Tiffani L. Doerr, P.G.
PADEP Case Manager:	Dana Kutz-PADEP Southeast Region
County:	Chester County
Municipality:	Wallace Township

SITE HISTORY:

- On 21 April 2012, Trammel Testing Company was onsite to perform testing on 3,000 gallon #2 fuel oil underground storage tank (UST) due to a suspected leak. The UST failed the tank test. The tank testing technician verbally notified PADEP Southeast Regional Office of tank failure and suspected release on 21 April 2012; and on 23 April 2012, an initial Notification of Reportable Release form was submitted to PADEP Southeast Regional office.
- During tank removal activities on 27 April 2012, Aquaterra conducted soil sampling from underneath the tank. Four soil samples (H-1 through H-4) were collected from the bottom of the excavation at approximately 10 feet below grade. During excavation activities approximately 20 tons of contaminated soil was removed for disposal.
- On 30 April 2012, Aquaterra collected soil samples from the excavation. Soil sample locations were determined using PADEP's random and systematic soil sampling procedures. A total of 12 soil attainment samples (SS-1 through SS-12) were collected from the excavated area.
- On 4-5 June 2012, Aquaterra conducted a soil boring investigation to characterize soil quality surrounding the former heating oil UST (SB-1 through SB-10).
- On 14/15 June 2012 additional soil was excavated beneath the tank to approximately 25 feet below grade. An additional 107 tons of soil was removed and disposed of at a Soil Safe facility.
- In November 2012, Aquaterra was onsite to oversee the installation of three monitoring wells (MW-1 through MW-3). Two soil samples were collected from each borehole.
- Quarterly groundwater sampling was initiated at the site on 11 December 2012.
- On 11 December 2012, liquid level data were collected from monitoring wells MW-1 through MW-3. Groundwater quality samples were collected from MW-2 and MW-3. A groundwater quality sample was not collected from MW-1 due to the presence of product in the well. Free phase oil was measured in MW-1 at a thickness of 5.66 feet.
- A vacuum truck was onsite on 19 December 2012 to extract the product and groundwater from MW-1. The well was vacuumed until no free phase product was measured. Approximately 32 gallons of product and 124 gallons of contaminated water were removed. Subsequent product removal activities included routine hand bailing and/or pumping, and installation of a passive skimmer.

- On 11-13 March 2013, Aquaterra was onsite to oversee the installation of three monitoring wells (MW-4 through MW-6) and the installation of soil gas vapor point (SG-1). Soil samples were not collected from MW-4 and MW-5 due to PID readings were 0.0 ppm. A soil sample was collected from MW-6 at a depth of 25 feet. Geotechnical sample was also collected from MW-6 at the 27'-29' interval.
- Four soil borings (SB-11 through SB-14) were installed on 26 September 2013. Soil samples were collected for laboratory analysis from SB-11 and SB-12. A soil sample was not collected from SB-13 because all PID readings were 0.0 ppm. A soil sample was not collected from SB-14 due to shallow geoprobe refusal.

SITE INFORMATION:

Well Specifications:

Six four-inch monitoring wells (MW-1 through MW-6).

Groundwater Sampling Frequency:

Quarterly

Groundwater Analytical Method:

EPA Method 8260B (benzene, toluene, ethylbenzene, methyl tertiary-butyl ether (MTBE), isopropylbenzene, naphthalene, 1,2,4-trimethylbenzene (TMB), and 1,3,5-TMB.

RISK ASSESSMENT:

Potentially Sensitive Receptors:

The East Branch of Brandywine Creek is located approximately 1,500 feet to the south-southeast, and a small tributary to the branch is located approximately 2,000 feet east of the site.

Closest Known Well:

The Devereux Foundation has two onsite wells referred to as No.2/MainWell/MW-2 and No.4/Springhouse/MW-4. Both wells were sampled immediately after the release for the 524.2 drinking water analysis – no detections have been reported. The wells are now sampled monthly – no detections have been reported. Seven additional wells are known to be located within a ¼-mile radius of the site. These wells are located across local stream barriers.

Vapor Intrusion Assessment:

Soil gas sampling was conducted on 21 March 2013 and 31 May 2013. All analytes were below the Soil Gas MSCs except for benzene which was above its soil gas MSC in the sample collected on 31 May 2013.

CHARACTERIZATION SUMMARY:

Geology:	The site is underlain by Precambrian Anorthosite. Soil boring and monitoring well installation activities at the site show varying depths of sandy silt and weathered rock.
Depth to Groundwater in Monitoring Wells:	21.57 feet (MW-6) to 29.20 feet (MW-4)
Hydraulic Gradient During Reporting Period:	0.02 feet per foot to the east/northeast
Separate-Phase Hydrocarbons:	SPH has been detected in monitoring well MW-1.
Selected Soil Standards:	Remediation standards have not been selected at this site.
Historical Soil Quality Summary:	Historical soil samples have been analyzed for benzene, toluene, ethylbenzene, total xylenes, MTBE, isopropylbenzene, naphthalene, 1,2,4-TMB, and 1,3,5-TMB. Concentrations of benzene, naphthalene, 1,2,4-TMB, and 1,3,5-TMB were detected above Statewide Health Standard (SHS) medium specific concentrations (MSCs) in multiple samples, all other compounds were below SHS MSCs.
Soil Attainment Summary:	Soil attainment sampling will be conducted at a later date.
Selected Groundwater Standards:	Remediation standards have not been selected at this site.
Historical Groundwater Quality Summary:	The SHS MSCs for benzene, 1,2,4-TMB, and 1,3,5-TMB have been exceeded in at least one historical sample at the site.
Groundwater Attainment Summary:	Groundwater attainment sampling will be performed upon completion of characterization and/or remediation activities.
Geotechnical Data Analysis:	Geotechnical data was collected on 13 March 2013 from MW-6 at the 27'-29' interval. Bulk density was 120.7 pounds per cubic foot (pcf); total porosity was 42.1; effective porosity was 27.4; and fractional organic carbon (foc) was 4.7 %.



Aquifer Testing:

Aquifer testing was conducted in September 2013. Results to be submitted with Remedial Investigation Report (RIR).

SITE ACTIVITIES THIS REPORTING PERIOD:

- Aquaterra conducted site visits on 1 October 2013, 8 October 2013, 4 November 2013 and 14 November 2013 to extract product from MW-1. **Table 1** is a summary of product gauging and recovery data. During the fourth quarter 2013, approximately one gallon of product was removed from the well. A passive skimmer was deployed in the well on 1 October 2013.
- Liquid level data and groundwater quality samples were collected from all site monitoring wells on 14 November 2013. A map depicting groundwater elevation and groundwater analytical data is included as **Figure 1**. Historical groundwater elevation and analytical data is summarized in **Table 2** and the laboratory analytical report is included as **Appendix A**.
- Supply well sampling data were also provided to Aquaterra by Pure-Test Laboratory. Untreated influent samples from supply wells (referred to as MW-2 and MW-4) are collected on a monthly basis. The October, November, and December sample results are included as **Appendix D**.

PROPOSED SITE ACTIVITIES:

- Maintain product removal efforts at MW-1 as needed;
- Collect an additional soil gas sample;
- Maintain quarterly sampling and reporting program;
- Submit a RIR upon completion of proposed characterization activities.

ATTACHMENTS:

Figure 1 Groundwater Monitoring Map (14 November 2013)

Table 1 Product Gauging and Recovery Data Summary

Table 2 Groundwater Sample Data Summary

Appendix A Groundwater Analytical Laboratory Data

BINGAMAN HALL BUILDING

 FORMER
HEATING OIL
TRANSFER LINE

 FORMER
PROPANE
TRANSFER LINE

 FORMER 3,000
GAL. HEATING
OIL UST

SHAW DR.

GRASS

GRASS

LEGEND
MONITORING WELL

69.83	GROUNDWATER ELEVATION (feet)
<1	BENZENE CONCENTRATION (ug/L)
<1	TOLUENE CONCENTRATION (ug/L)
<1	ETHYLBENZENE CONCENTRATION (ug/L)
<1	MTBE CONCENTRATION (ug/L)
<2	ISOPROPYLBENZENE CONCENTRATION (ug/L)
<4	NAPHTHALENE CONCENTRATION (ug/L)
<2	1,2,4 TRIMETHYLBENZENE CONCENTRATION (ug/L)
<2	1,3,5 TRIMETHYLBENZENE CONCENTRATION (ug/L)

 SPH SEPERATE PHASE HYDROCARBONS
[0.03] PRODUCT THICKNESS

70 - GROUNDWATER CONTOUR (feet)

SHAW DR.

MW-4

70.36
4.2
11
7.3
<1
4.0
44
50
20

GRASS

MW-1

SPH
[0.03]

MW-1

70.57
52
100
38
<20
35
270
260
84

MW-1

MW-2

71.94
<1
<5
<1
<1
<5
<1
3.5
1.4

MW-2

PARKING AREA

MW-5

70.10
<1
<5
<1
<1
<5
<1
<1

70
71.0
71.0

MW-6

69.43
<1
<5
<1
<1
<5
<1
<1

MW-6

 GROUNDWATER MONITORING MAP
14 NOVEMBER 2013

 DEVEREUX SCHOOL - BRANDYWINE CAMPUS
290 DEVEREUX ROAD
WALLACE, PENNSYLVANIA

 ENVIRONMENTAL CONTROL SYSTEMS, INC.
AQUATERRA TECHNOLOGIES, INC.

Scale: 1" = 20'

 DATE
1-10-2014

 FIGURE
1

 DRAFTED BY:
JK

 REVIEWED
BY:
TD

 CHECKED
BY:
TD




TABLE 1
PRODUCT GAUGING AND RECOVERY DATA
DEVEREUX SCHOOL
GLENMOORE, PENNSYLVANIA

WELL	DATE	Days Elapsed b/w visits	Pre-Bailing Measurements			Post-Bailing Measurements			RECOVERY (gal)	METHOD OF RECOVERY	SORBENT SOCKS PLACED
			DEPTH TO WATER (ft)	DEPTH TO SPH (ft)	SPH THICKNESS (ft)	DEPTH TO WATER (ft)	DEPTH TO SPH (ft)	SPH THICKNESS (ft)			
MW-1	19-Dec-12		29.31	34.87	5.56	31.24	--	0.00	32	Vac Truck	No
	9-Jan-13	21	29.85	28.11	1.74	--	--	--	--	Gauged Only	No
	27-Feb-13	49	29.13	25.43	3.70	26.27	26.13	0.14	13	Hand Bail	
	* 8-Mar-13	9	26.02	--	0.50	--	--	0.08*	2.5	Hand Bail	
	13-Mar-13	5	26.41	25.89	0.52	--	--	--	1	Hand Bail	Yes
	22-Mar-13	9	25.78	25.37	0.41	25.75	25.54	0.21	1	Hand Bail	Yes
	29-Mar-13	7	25.69	25.32	0.37	25.69	25.62	0.07	0.5	Hand Bail	Yes
	4-Apr-13	6	20.46	20.25	0.21	20.53	20.50	0.03	0.25	Hand Bail	Yes
	12-Apr-13	8	25.84	25.64	0.20	25.68	--	sheen	0.75	Pump	Yes
	19-Apr-13	7	25.86	25.83	0.03	25.80	--	sheen	0.25	Pump	Yes
	28-May-13	39	27.20	26.48	0.72	26.65	--	--	1.5	Pump	Yes
	31-May-13	3	26.76	--	0.00	NP	NP	NP	--	--	Yes
	29-Aug-13	90	24.22	23.23	0.99	24.56	--	--	3	Pump	Yes
	5-Sep-13	7	23.36	23.13	0.23	23.41	--	--	1	Pump	Yes
	+ 23-Sep-13	18	24.82	24.14	0.68	21.31	--	--	1	Pump	Yes
	1-Oct-13	8	25.20	24.72	0.48	--	--	--	--	--	No
	8-Oct-13	7	25.61	25.60	0.01	--	--	--	0.5	Skimmer	No
	25-Oct-13	17	25.75	25.65	0.10	NM	NM	NM	0.04	Skimmer	No
	4-Nov-13	10	26.79	26.74	0.05	26.61	--	--	0.2	Skimmer	No
	14-Nov-13	10	27.65	27.62	0.03	27.44	--	--	NM	Skimmer	No
	2-Jan-14	49	25.03	24.68	0.35	24.75	--	--	0.3	Skimmer/bail	No

Total SPH Recovery: 58.79

Notes:

* On 8 March 2013, Interface probe was malfunctioning. Product thicknesses is based on visual observation using clear bailer.

+ On 1 October 2013, a passive bailer system was installed.

NP = No Product

Average LNAPL recharge is ~ 0.5-2"/week.

NM = Not Measured



TABLE 2

GROUNDWATER SAMPLE DATA SUMMARY

DEVEREUX SCHOOL

GLENMOORE, PENNSYLVANIA



Sample ID	Date	Depth to Water feet	Depth to Product feet	Product Thickness feet	Groundwater Elevation feet	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	MTBE µg/L	Isopropyl-benzene µg/L	Naphthalene µg/L	1,2,4 Trimethylbenzene µg/L	1,3,5 Trimethylbenzene µg/L
MW-1													
Reference Elevation = 98.29	11-Dec-12	34.80	29.14	5.66	68.36	NS-P	NS-P	NS-P	NS-P	NS-P	NS-P	NS-P	NS-P
	21-Mar-13	25.78	25.37	0.41	72.86	40	73	14	<5	5.8	100	210	69
	28-May-13	27.20	26.48	0.72	71.71	41	45	38	<5	20	140	280	88
	29-Aug-13	24.22	23.23	0.99	74.92	93	19	6.6	<1	24	150	91	35
	14-Nov-13	27.65	27.62	0.03	70.67	52	<100	38	<20	35	270	260	84
MW-2													
Reference Elevation = 96.5	11-Dec-12	27.80	-	-	68.70	10	52	35	<1	17	73	140	47
	21-Mar-13	24.49	-	-	72.01	<1	<5	<1	<1	<2	<5	<2	<2
	28-May-13	24.52	-	-	71.98	<1	<5	<1	<1	<1	<5	<1	<1
	29-Aug-13	20.97	-	-	75.53	<1	<5	<1	<1	<1	7.4	<1	<1
	14-Nov-13	24.56	-	-	71.94	<1	<5	<1	<1	<1	<5	3.5	1.4
MW-3													
Reference Elevation = 99.11	11-Dec-12	29.28	-	-	69.83	<1	<1	<1	<1	<2	<4	<2	<2
	21-Mar-13	23.26	-	-	75.85	<1	<5	<1	<1	<2	<5	<2	<2
	28-May-13	25.49	-	-	73.62	<1	<5	<1	<1	<1	<5	<1	<1
	29-Aug-13	21.91	-	-	77.20	<1	<5	<1	<1	<1	<5	<1	<1
	14-Nov-13	25.52	-	-	73.59	<1	<5	<1	<1	<1	<5	<1	<1
MW-4													
Reference Elevation = 99.55	21-Mar-13	27.70	-	-	71.85	18	76	<1	<1	2.9	<5	64	35
	28-May-13	29.00	-	-	70.55	21	84	53	<1	14	84	130	42
	29-Aug-13	25.81	-	-	73.74	22	58	66	<1	21	130	180	56
	14-Nov-13	29.20	-	-	70.35	42	11	7.3	<1	4.0	44	50	20
MW-5													
Reference Elevation = 94.84	21-Mar-13	23.18	-	-	71.66	<1	<5	<1	<1	<2	<5	<2	<2
	28-May-13	24.50	-	-	70.34	<1	<5	<1	<1	<1	<5	<1	<1
	29-Aug-13	21.30	-	-	73.54	<1	<5	<1	<1	<1	<5	1.8	<1
	14-Nov-13	24.74	-	-	70.10	<1	<5	<1	<1	<1	<5	<1	<1
MW-6													
Reference Elevation = 91.00	21-Mar-13	19.82	-	-	71.18	<1	<5	<1	<1	<2	<5	<2	<2
	28-May-13	21.29	-	-	69.71	<1	<5	<1	<1	<1	<5	<1	<1
	29-Aug-13	17.87	-	-	73.13	<1	<5	<1	<1	<1	<5	<1	<1
	14-Nov-13	21.57	-	-	69.43	<1	<5	<1	<1	<1	<5	<1	<1
PADEPACT 2 MSCs (Residential, Used Aquifer, TDS<2,500)						5	1,000	700	20	840	100	15	13
PA Defaults Residential Volatilization to Indoor Air Screen						3,500	490,000	27,000	380,000	NOC	25,000	8,600	7,200

PADEP ACT 2 MSCs = Medium Specific Concentrations (MSCs) for Organic Regulated Substances in Soil as found in Appendix A, Table 3b of the Pennsylvania Land Recycling Program (Pennsylvania Code, Title 25, Chapter 250)

Note: Values in bold exceed standards

NS-P = Not Sampled, Product Present

Top of casing reference elevations are relative to an arbitrary benchmark of 100 feet.



APPENDIX A



Pure-Test
WATER LABORATORY
21st Century Science

Report of Analysis

Mail to: Devereux Beneto Center
PO Box 69
Devereux Road
Glenmoore PA 19343-0069

Lab Number: 204557
Date Reported: 11/5/2013
Fax Number: 610-942-5988
Public Water Supplier ID: 1150037

Analyte	Result	Pass/Fail	Contaminant Level	Analysis				
				Date	Time	Analyst	Method	Reporting Limit
204557-01 Sampled: 10/9/2013 14:25	Sampler: Gerald Weaver	Source: MW- 2 Influent Raw	Devereux Beneto Center					
1,2,4-Trimethylbenzene	<0.0005 mg/L	N/A	N/A	10/16/2013	11:19	gxf	EPA 524.2	0.0005
1,3,5-Trimethylbenzene	<0.0005 mg/L	N/A	N/A	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Isopropylbenzene	<0.0005 mg/L	N/A	N/A	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Methyl tertiary-Butyl Ether	<0.001 mg/L	N/A	N/A	10/16/2013	11:19	gxf	EPA 524.2	0.001
Naphthalene	<0.0005 mg/l	N/A	N/A	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Volatile Organic Chemicals		N/A	N/A				EPA 524.2	1
1,1,1 - Trichloroethane	<0.0005 mg/L	Pass	0.2 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
1,1,2 - Trichloroethane	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
1,1-Dichloroethylene	<0.0005 mg/L	Pass	0.007 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
1,2,4 - Trichlorobenzene	<0.0005 mg/L	Pass	0.07 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
1,2-Dichlorobenzene	<0.0005 mg/L	Pass	0.6 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
1,2-Dichloroethane	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
1,2 - Dichloropropane	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
1,4-Dichlorobenzene	<0.0005 mg/L	Pass	0.6 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Benzene	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Carbon Tetrachloride	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Chlorobenzene	<0.0005 mg/L	Pass	0.1 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
cis-1,2-Dichloroethylene	<0.0005 mg/L	Pass	0.07 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Ethylbenzene	<0.0005 mg/L	Pass	0.7 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Methylene Chloride	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Styrene	<0.0005 mg/L	Pass	0.1 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Tetrachloroethylene	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Toluene	<0.0005 mg/L	Pass	1.0 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
trans1,2-Dichloroethylene	<0.0005 mg/L	Pass	0.1 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Trichloroethylene	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Vinyl Chloride	<0.0005 mg/L	Pass	0.002 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Xylenes, Total	<0.0005 mg/L	Pass	10.0 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
204557-02 Sampled: 10/9/2013 14:25	Sampler: Gerald Weaver	Source: MW- 4 Influent Raw	Devereux Beneto Center					
1,2,4-Trimethylbenzene	<0.0005 mg/L	N/A	N/A	10/16/2013	11:19	gxf	EPA 524.2	0.0005
1,3,5-Trimethylbenzene	<0.0005 mg/L	N/A	N/A	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Isopropylbenzene	<0.0005 mg/L	N/A	N/A	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Methyl tertiary-Butyl Ether	<0.001 mg/L	N/A	N/A	10/16/2013	11:19	gxf	EPA 524.2	0.001
Naphthalene	<0.0005 mg/l	N/A	N/A	10/16/2013	11:19	gxf	EPA 524.2	0.0005
Volatile Organic Chemicals		N/A	N/A				EPA 524.2	1
1,1,1 - Trichloroethane	<0.0005 mg/L	Pass	0.2 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
1,1,2 - Trichloroethane	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
1,1-Dichloroethylene	<0.0005 mg/L	Pass	0.007 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005
1,2,4 - Trichlorobenzene	<0.0005 mg/L	Pass	0.07 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005



Pure-Test
WATER LABORATORY
21st Century Science

Report of Analysis

Mail to: Devereux Beneto Center
PO Box 69
Devereux Road
Glenmoore PA 19343-0069

Lab Number: 204557
Date Reported: 11/5/2013
Fax Number: 610-942-5988
Public Water Supplier ID: 1150037

Analyte	Result	Pass/Fail	Maximum Contaminant Level	Analysis				Method	Reporting Limit
				Date	Time	Analyst			
1,2-Dichlorobenzene	<0.0005 mg/L	Pass	0.6 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
1,2-Dichloroethane	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
1,2 - Dichloropropane	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
1,4-Dichlorobenzene	<0.0005 mg/L	Pass	0.6 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
Benzene	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
Carbon Tetrachloride	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
Chlorobenzene	<0.0005 mg/L	Pass	0.1 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
cis-1,2-Dichloroethylene	<0.0005 mg/L	Pass	0.07 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
Ethylbenzene	<0.0005 mg/L	Pass	0.7 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
Methylene Chloride	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
Styrene	<0.0005 mg/L	Pass	0.1 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
Tetrachloroethylene	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
Toluene	<0.0005 mg/L	Pass	1.0 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
trans1,2-Dichloroethylene	<0.0005 mg/L	Pass	0.1 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
Trichloroethylene	<0.0005 mg/L	Pass	0.005 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
Vinyl Chloride	<0.0005 mg/L	Pass	0.002 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1
Xylenes, Total	<0.0005 mg/L	Pass	10.0 mg/L	10/16/2013	11:19	gxf	EPA 524.2	0.0005	1

¹ Analysis subcontracted to lab #06-363

This sample data will be forwarded to appropriate agencies to comply with monitoring requirements.



The Maximum Contaminant Level (MCL) is the maximum permissible level of a contaminant in water per the SDWA. Some parameters have no established MCL.
Pure-Test is certified #38-00338 by the Pennsylvania Department of Environmental Protection, #345 by the Maryland Department of the Environment.



Report Approved By:

Andrew T Heist, Lab Technician



Report of Analysis

Mail to: Devereux Beneto Center
PO Box 69
Devereux Road
Glenmoore PA 19343-0069

Lab Number: 205228
Date Reported 11/18/2013
Fax Number: 610-942-5988
Public Water Supplier ID: 1150037

Analyte	Result	Pass/Fail	Maximum Contaminant Level	Analysis					
				Date	Time	Analyst	Method	Reporting Limit	
205228-01 Sampled: 11/4/2013 16:15 Sampler: Gerald Weaver Source: MW- 2 Influent Raw									
Devereux Beneto Center									
1,2,4-Trimethylbenzene	<0.0005 mg/L	N/A	N/A	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,3,5-Trimethylbenzene	<0.0005 mg/L	N/A	N/A	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Isopropylbenzene	<0.0005 mg/L	N/A	N/A	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Methyl tertiary-Butyl Ether	<0.001 mg/L	N/A	N/A	11/8/2013	10:32	gxf	EPA 524.2	0.001	1
Naphthalene	<0.0005 mg/L	N/A	N/A	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Volatile Organic Chemicals		N/A	N/A				EPA 524.2		1
1,1,1 - Trichloroethane	<0.0005 mg/L	Pass	0.2 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,1,2 - Trichloroethane	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,1-Dichloroethylene	<0.0005 mg/L	Pass	0.007 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,2,4, - Trichlorobenzene	<0.0005 mg/L	Pass	0.07 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,2-Dichlorobenzene	<0.0005 mg/L	Pass	0.6 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,2-Dichloroethane	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,2 - Dichloropropane	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,4-Dichlorobenzene	<0.0005 mg/L	Pass	0.6 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Benzene	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Carbon Tetrachloride	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Chlorobenzene	<0.0005 mg/L	Pass	0.1 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
cis-1,2-Dichloroethylene	<0.0005 mg/L	Pass	0.07 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Ethylbenzene	<0.0005 mg/L	Pass	0.7 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Methylene Chloride	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Styrene	<0.0005 mg/L	Pass	0.1 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Tetrachloroethylene	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Toluene	<0.0005 mg/L	Pass	1.0 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
trans1,2-Dichloroethylene	<0.0005 mg/L	Pass	0.1 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Trichloroethylene	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Vinyl Chloride	<0.0005 mg/L	Pass	0.002 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Xylenes, Total	<0.0005 mg/L	Pass	10.0 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
205228-02 Sampled: 11/4/2013 16:15 Sampler: Gerald Weaver Source: MW- 4 Influent Raw									
Devereux Beneto Center									
1,2,4-Trimethylbenzene	<0.0005 mg/L	N/A	N/A	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,3,5-Trimethylbenzene	<0.0005 mg/L	N/A	N/A	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Isopropylbenzene	<0.0005 mg/L	N/A	N/A	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Methyl tertiary-Butyl Ether	<0.001 mg/L	N/A	N/A	11/8/2013	10:32	gxf	EPA 524.2	0.001	1
Naphthalene	<0.0005 mg/L	N/A	N/A	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Volatile Organic Chemicals		N/A	N/A				EPA 524.2		1
1,1,1 - Trichloroethane	<0.0005 mg/L	Pass	0.2 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,1,2 - Trichloroethane	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,1-Dichloroethylene	<0.0005 mg/L	Pass	0.007 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,2,4, - Trichlorobenzene	<0.0005 mg/L	Pass	0.07 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1



Pure-Test
WATER LABORATORY
21st Century Science

Report of Analysis

Mail to: Devereux Beneto Center
PO Box 69
Devereux Road
Glenmoore PA 19343-0069

Lab Number: 265228
Date Reported 11/18/2013
Fax Number: 610-942-5988
Public Water Supplier ID: 1150037

Analyte	Result	Pass/Fail	Maximum Contaminant Level	Analysis				Method	Reporting Limit
				Date	Time	Analyst			
1,2-Dichlorobenzene	<0.0005 mg/L	Pass	0.6 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,2-Dichloroethane	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,2 - Dichloropropane	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
1,4-Dichlorobenzene	<0.0005 mg/L	Pass	0.6 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Benzene	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Carbon Tetrachloride	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Chlorobenzene	<0.0005 mg/L	Pass	0.1 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
cis-1,2-Dichloroethylene	<0.0005 mg/L	Pass	0.07 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Ethylbenzene	<0.0005 mg/L	Pass	0.7 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Methylene Chloride	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Styrene	<0.0005 mg/L	Pass	0.1 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Tetrachloroethylene	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Toluene	<0.0005 mg/L	Pass	1.0 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
trans1,2-Dichloroethylene	<0.0005 mg/L	Pass	0.1 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Trichloroethylene	<0.0005 mg/L	Pass	0.005 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Vinyl Chloride	<0.0005 mg/L	Pass	0.002 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1
Xylenes, Total	<0.0005 mg/L	Pass	10.0 mg/L	11/8/2013	10:32	gxf	EPA 524.2	0.0005	1

¹ Analysis subcontracted to lab #06-363

This sample data will be forwarded to appropriate agencies to comply with monitoring requirements.



The Maximum Contaminant Level (MCL) is the maximum permissible level of a contaminant in water per the SDWA. Some parameters have no established MCL.

Pure-Test is certified #3B-00338 by the Pennsylvania Department of Environmental Protection, #345 by the Maryland Department of the Environment.



Report Approved By:

Andrew T Heist, Lab Technician



Pure-Test
WATER LABORATORY
21st Century Science

Report of Analysis

Mail to: Devereux Beneto Center
PO Box 69
Devereux Road
Glenmoore PA 19343-0069

Lab Number: 206053-01
Date Reported 12/20/2013
Fax Number: 610-942-5988
Public Water Supplier ID: 1150037

Analyte	Result	Pass/Fail	Maximum Contaminant Level	Analysis					Reporting Limit
				Date	Time	Analyst	Method		
Sampled: 12/5/2013 12:00 Sampler: Gerald Weaver Source: MW- 2 Influent Raw Devereux Beneto Center									
1,2,4-Trimethylbenzene	<0.0005 mg/L	N/A	N/A	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
1,3,5-Trimethylbenzene	<0.0005 mg/L	N/A	N/A	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Isopropylbenzene	<0.0005 mg/L	N/A	N/A	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Methyl tertiary-Butyl Ether	<0.001 mg/L	N/A	N/A	12/10/2013	09:31	gxf	EPA 524.2	0.001	1
Naphthalene	<0.0005 mg/l	N/A	N/A	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Volatile Organic Chemicals		N/A	N/A				EPA 524.2		1
1,1,1 - Trichloroethane	<0.0005 mg/L	Pass	0.2 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
1,1,2 - Trichloroethane	<0.0005 mg/L	Pass	0.005 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
1,1-Dichloroethylene	<0.0005 mg/L	Pass	0.007 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
1,2,4, - Trichlorobenzene	<0.0005 mg/L	Pass	0.07 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
1,2-Dichlorobenzene	<0.0005 mg/L	Pass	0.6 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
1,2-Dichloroethane	<0.0005 mg/L	Pass	0.005 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
1,2 - Dichloropropane	<0.0005 mg/L	Pass	0.005 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
1,4-Dichlorobenzene	<0.0005 mg/L	Pass	0.6 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Benzene	<0.0005 mg/L	Pass	0.005 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Carbon Tetrachloride	<0.0005 mg/L	Pass	0.005 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Chlorobenzene	0.0007 mg/L	Pass	0.1 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
cis-1,2-Dichloroethylene	<0.0005 mg/L	Pass	0.07 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Ethylbenzene	<0.0005 mg/L	Pass	0.7 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Methylene Chloride	<0.0005 mg/L	Pass	0.005 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Sterene	<0.0005 mg/L	Pass	0.1 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Tetrachloroethylene	<0.0005 mg/L	Pass	0.005 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Toluene	<0.0005 mg/L	Pass	1.0 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
trans1,2-Dichloroethylene	<0.0005 mg/L	Pass	0.1 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Trichloroethylene	<0.0005 mg/L	Pass	0.005 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Vinyl Chloride	<0.0005 mg/L	Pass	0.002 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1
Xylenes, Total	<0.0005 mg/L	Pass	10.0 mg/L	12/10/2013	09:31	gxf	EPA 524.2	0.0005	1

1 Analysis subcontracted to lab #06-003

This sample data will be forwarded to appropriate agencies to comply with monitoring requirements.



The Maximum Contaminant Level (MCL) is the maximum permissible level of a contaminant in water per the SDWA. Some parameters have no established MCL.

Pure-Test is certified #38-0038 by the Pennsylvania Department of Environmental Protection, #345 by the Maryland Department of the Environment.



Report Approved By:

Andrew T Heist, Lab Technician