

ENVIRONMENTAL CHARACTERIZATION
PROGRESS REPORT

**United Tire Service
(East Penn Tire and Battery)
4094 Chestnut Street
Emmaus, Pennsylvania 18049
Facility ID# 39-27735
USTIF # 20180151**

Submitted To:

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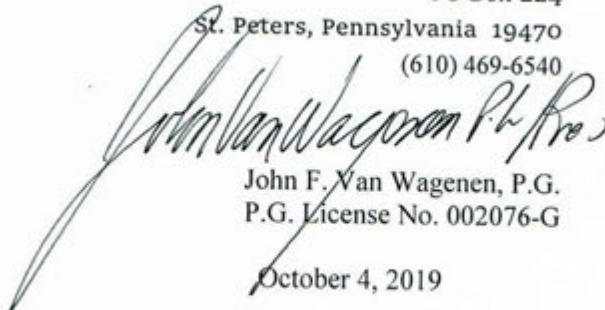
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Project No. WACHTER--002

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1.0 INTRODUCTION

This second environmental characterization progress report details the site investigative methods implemented at the subject property to date in order to perform an environmental characterization pursuant to PA code Chapter 245. The site characterization was performed at the United Tire Service (aka East Penn Tire and Battery) facility located at 4094 Chestnut Street, Emmaus, Pennsylvania (Facility ID# 39-27735) pursuant to correspondence from the Pennsylvania Department of Environmental Protection (PADEP) dated September 18, 2018 and June 10, 2019.

2.0 PROPERTY DESCRIPTION/HISTORY

The subject property is the United Tire Service (UTS) facility located at 4094 Chestnut Street, Emmaus, Pennsylvania (Facility ID# 39-27735), Upper Milford Township, Lehigh County, Pennsylvania (Figures 1 and 2). The subject facility is currently comprised of approximately one acre of land with two buildings, a storage shed and a small building for LP gas, which are utilized as a tire and automotive repair facility and tire storage building. There is one steel aboveground storage tank (300 to 500 gallons) utilized for storage of waste oil located at the rear of the main facility building.

The following summarizes known site historical use and underground storage tank (UST) system conditions/regulatory actions.

- May 20-25, 1993: Four steel underground storage tanks (three gasoline and one kerosene) were removed from the property, known as Fulmers Garage by Boyco Petroleum. The tank closure report is provided in the first progress report dated July 15, 2019. The report indicates that impacted soil encountered during the tank closures was remediated. A total of 33 soil samples were collected for analysis of BTEX (benzene, toluene, ethylbenzene and xylene) and TPH (total petroleum hydrocarbons, EPA method 418.1). The closure report indicates that the soil samples collected at a depth of six feet below the tanks were clean and that groundwater was not encountered. Further detailed information is difficult to assess from the historic closure report. A search on EFACTS did not indicate any records for the subject facility (ID # 39-27735).
- Late 1993: The underground storage tank system which was removed by Coventry Environmental Associates, Inc. (CEA) in 2018 (closure report provided in first progress report) was installed. The UST system was comprised of three 6,000 gallon steel USTs with fiberglass lines and two dispensers (unleaded gasoline).

- 2001: Property was purchased by Kevin Wachter, the current owner of United Tire Service (UTS). Property is utilized as a retail gasoline service station in addition to automotive tire sales and repair.
- August 28, 2018: The existing three 6,000 gallon USTs containing unleaded gasoline were closed by removal of the complete system (tanks, lines and dispensers) by CEA, Inc. One water sample collected in the tank excavation indicated low level dissolved phase impact by petroleum hydrocarbons exceeding the PADEP standards and requiring a site characterization pursuant to PADEP correspondence dated September 18, 2018 (incident # 52370).

3.0 NATURE OF RELEASE

Three 6,000 gallon steel (single wall fiberglass lined) underground storage tanks (USTs) containing unleaded gasoline were removed from one excavation at the subject property in August, 2018. Soil/groundwater samples were collected from the excavation and analyzed for the PADEP short list parameters for unleaded gasoline. The post excavation soil and groundwater sample results indicated all results were below the applicable standards with the exception of low level dissolved phase impact by 1,2,4 trimethylbenzene (2,090 ppb) and 1,3,5 trimethylbenzene (538 ppb) and naphthalene (157 ppb) to the water in the gasoline UST excavation (documented in the site closure report), which exceeded the PADEP residential groundwater standards of 15 (parts per billion) ppb (62 ppb, non-residential), 420 ppb (1,200 ppb, non-residential) and 100 ppb, respectively. The PADEP issued correspondence dated September 18, 2018 requiring a Site Environmental Characterization (SCR). There was no obvious leak location in the UST system and historical records do not indicate a known release from the tank system removed in 2018. It should be noted that one soil sample (SS-4) detected the presence of 1,2 4 trimethylbenzene and 1,3 5 trimethylbenzene which was collected at the fuel line joint.

4.0 GEOLOGY

Based on published literature (Geologic Map of Pennsylvania, PA Topographic and Geologic Survey, 1980) and borehole logging during monitoring well installation, the bedrock at the site is comprised of gray dolomite with shale interbeds of the Cambrian, Leithsville Formation (Figure 3). Competent bedrock, was not encountered during monitoring well installation to a depth of approximately 65 feet bgs. It should be noted that a residential housing development with associated excavation is located on a topographic high approximately 400 feet east of the site. Bedrock excavated at this location is comprised of quartzite of the Hardyston Formation. Due to the lack of nearby bedrock exposure and absence of mapped structural data, the bedrock structural conditions in the site vicinity are not well known. Competent bedrock was not encountered during borehole installation to a depth of approximately 65 feet bgs. Materials overlying the competent bedrock have been completely weathered to a tan silt and clay.

5.0 SOIL QUALITY

In order to evaluate soil quality at the site a total of fourteen soil borings were advanced using both hydraulic geoprobe equipment and the auger/split spoon drilling method in late July through mid September, 2019. In addition, soil samples were collected by split spoon during installation of monitoring wells MW-4, MW-6 and MW-7. The soil samples were field scanned with a photoionization detector (PID) and soil samples were selected based on field observation, preserved and submitted to ALS laboratories (ALS) for analysis of PADEP UST parameters for unleaded gasoline. The drilling logs are provided in Appendix A and the soil analytical results are summarized on Table 1.0.

Findings of the soil quality investigation indicates that site soils exceed the applicable PADEP standards for several compounds. Figure 2.0 shows the known extent of soil impact exceeding the PADEP soil standards. It should be noted that based on PID readings impacted soil extends beyond the extent shown. Impacted soil (petroleum odors, elevated PID readings, staining, analytical detection) was observed at a depth of approximately fifteen to eighteen feet below grade surface (bgs) below the former UST field (soil standards not exceeded). Impacted soil extended vertically in the area immediately southwest of the former tank field with PID readings progressively decreasing with depth and then increasing at a depth of approximately 47 to 52 feet bgs coincident with the depth to the water table at the site. Soil analytical results indicate increased concentrations at this depth range. Additional soil assessment is warranted to define the full extent of the soil impact.

6.0 HYDROGEOLOGY

The closest surface water body to the site is a small tributary stream to the Little Lehigh Creek located approximately 150 feet west of the subject property. Topographic gradient at the site exhibits a slight downward gradient to the northwest toward this tributary stream.

On April 25 and 26, CEA installed a total of three monitoring wells (air rotary and hollow stem auger drilling methods). Based on drilling observation, it appeared that the depth to the groundwater table was substantial and upon discussion with the PADEP, it was decided that the depth of the monitoring wells would be limited to 50 feet (see Appendix A for drilling logs). Upon completion of the monitoring wells, however, it was determined that the water table had been intercepted. Consequently, an additional five monitoring wells were installed to a depth of 65 feet bgs (Appendix A). The depth to the water table measured in the wells on four occasions in May and September, 2019 ranged from 47.40 to 60.27 feet below top of PVC casing. The top of PVC casing in each well was surveyed by Schreiter Surveyors to a common on-site datum and the depth to the water level in each well was measured on four occasions. Table 2 summarizes the groundwater depth measurements and well elevation data.

The above data was utilized to calculate water table elevations in each well and thereby determine the direction of groundwater flow across the site. The direction of the groundwater flow based on the water level data is shown on Figures 4.0 and 5.0. Determination of the ground water flow direction at the site based on the available data indicates a component of flow is to the east, southwest and south. It should be noted that this direction is not coincident with topography and the area surface drainage system.

7.0 GROUNDWATER QUALITY

Following well installation, water was purged from all site monitoring wells and a groundwater sample was collected within the upper two feet of the water column from each well utilizing new, dedicated polyethylene bailers on three occasions (May 9, 2109, May 21, 2019 and September 12, 2019) and immediately placed in laboratory provided, sterile containers and delivered to ALS Laboratories, Inc. in an iced cooler for analysis. The water samples were analyzed for the PADEP-UST required parameters for unleaded gasoline parameters. MW-1 was not sampled on May 21 and September 12, 2019 and MW-2 on September 12, 2019 due to insufficient quantity of water.

Analytical results of the groundwater samples are summarized in Tables 3.0 through 5.0. Review of the data indicates that groundwater from monitoring wells MW-1, MW-4, MW-5, MW-6, MW-7 and MW-8 (downgradient of the former gasoline USTs) exceeds the residential statewide health standards for several compounds.

8.0 RECEPTOR EVALUATION

The general site area surrounding the subject property is comprised of mixed residential and commercial properties. The following provides a discussion of the possible sensitive receptors at the subject property via potential exposure pathways.

Groundwater Supply Wells: Based on a well search performed by Envirosearch, site reconnaissance by CEA, discussion with the property owner, and discussion with a representative of Upper Milford Township (Kyle Walbert) the subject property and site vicinity is served by private groundwater supply wells for a potable source of water. Non community public supply wells identified by the Envirosearch search and CEA within a one quarter mile radius of the site include (see Figure 6.0):

- Louies Bakery (ID 3), 0.104 miles NE (4033 Chestnut St.). Contact with the bakery reports that the owner has been provided the survey form; no response received to date.
- Lehigh Valley Baptist Church (ID A), 0.123 miles NNW direction (4702 Colebrook Ave). Non-compliance primarily for inorganic compounds. Well #1 is 215 feet deep with 182 feet of casing (170 feet to bedrock). Well #2 is 157 feet deep with 69 feet to static water level. Supply well #2 was sampled on July 7, 2019 and indicated the absence of parameter concentrations (Not Detectable).
- Clemens Food Group (ID 5), 0.126 miles N direction (4591 Colebrook Ave). Non-compliance for several volatile organic, inorganic and microbial compounds. Well depth is 142 feet with a static water level of 35 feet. Facility has been provided a survey form and contacted by CEA; no response received to date.
- Elite Sports Academy (ID A7), 0.131 NNW direction (4651 Colebrook Ave). Non-compliance for inorganics and microbial compounds. Well is 180 feet deep with 60 feet of casing (50 foot static water level). Facility has been provided a survey form and contacted by CEA; no response received to date.

- Big Woodys Restaurant (ID 12), 0.246 miles NE direction (3941 Chestnut St.). Site supply well sampled on July 19, 2019 and indicated Not Detectable results.
- Yocos Restaurant (4042 Chestnut Street). Sampling of the facility supply well on August 7, 2019 indicated the presence of 3.7 ppb of MTBE. The owner (Gary Iacocca) has been notified and CEA is in process of obtaining necessary public water supply (PWS) permit from the PADEP to modify the existing treatment system with GAC and ultraviolet light (bacterial disinfection). Well construction data is not known and well head is below grade.
- Trivet Restaurant (4102 Chestnut Street) is located across Buckeye Road from the subject site. Site supply well sampled on August 15, 2019 and indicated Not Detectable results. Well construction data is not known and well head is below grade.
- Chestnut Court Mall (4030 Chestnut Street) includes Dunkin Donuts and a café. Well sampling was conducted on August 7, 2019 and indicated Not Detectable results.
- It should be noted that Buckeye pipeline is located at a distance of 0.517 Miles, west direction (non-community system) and has reported non-compliance with numerous volatile organic compounds.

The closest connection to the public water supply line is located at the intersection of Allen Street and Indian Creek Road, approximately 3,000 feet north of the site. The township representative indicated that there are plans to extend the line to the new residential development currently under construction to the east of the site within two years. He was not aware of any problems with the groundwater supply wells in the site vicinity and indicated that there is no ordinance limiting or excluding the installation/use of private groundwater supply wells. However, the housing development in the area of Mink Road located approximately 600 feet southeast of the site is served by the Lehigh County Water Authority (LCWA). LCWA was contacted (Andrew Moore) by CEA and has indicated that the authority utilizes two wells which are located approximately 0.6 miles southeast of the subject location (4475 Fairview Court). Sampling of both wells by CEA

on July 16, 2019 indicated the absence of parameter concentrations (PADEP UST unleaded gasoline compounds).

The subject site utilizes a groundwater supply well (well head below grade) reported to be located approximately 50 feet northwest from the rear of the main facility building (approximately 120 feet west of the former UST field). The property owner has indicated no water quality problems with the site water supply and sampling of the well on July 8, 2019 has indicated the absence of impact (PADEP UST unleaded gasoline parameters).

Pursuant to PADEP technical regulations, CEA has canvassed the area surrounding the site (see extent of survey in Figure 6.0) for private wells using a survey form on July 5, 2019. In addition, CEA conducted a door to door survey of properties which did not respond to the survey on July 19, 2019 (Chestnut St., Colebrook Ave and Miller Ave). A total of 33 supply wells have been sampled to date (one well result is pending). It should be noted that two well owners have denied permission to sample their well for unknown reasons (4671 Buckeye Road and 4001 Miller Ave). The property at 4671 Buckeye Road had utilized a cistern prior to installing a supply well in 2016. Findings of the private well investigation is summarized as follows (see Table 6.0).

- The private well located at 4050 Miller Ave (immediately north of the site) has been sampled for PADEP –UST unleaded gasoline parameters (EPA Method 524.2) and resulting analytical data indicated the presence of 4.3 parts per billion (ppb) of methyl tertiary butyl ether (MTBE). Consequently, a bottled water service has been delivered to the well owner (Tim Anger) and a granular activated carbon (GAC) treatment system was installed on July 18, 2019.
- The private well located at 4030 Miller Ave indicated the presence of 1 ppb of MTBE on August 29, 2019. A GAC treatment system was installed on the well on September 18, 2019.

- The private well located at 4054 Chestnut Street, a vacant/inactive property located adjacent to the subject site to the northeast was sampled on August 27, 2019 and indicated the presence of 11.8 ppb of MTBE. The well is not currently utilized and a treatment system has not been installed.

The four private supply wells which have been impact by MTBE are adjacent to each other in a direction to the north-northeast of the site. It should be noted that further investigation into the Speedway service station located to the northeast of the subject site (4002 Chestnut Street) is warranted. Available government records reviewed by CEA did not indicate a significant hydrocarbon release from the site, however, since this site is also a potential source of MTBE impact to the subsurface, further investigation is warranted (PADEP file review).

Volatile Organic Vapors: Based on the available information, the concern for impact to indoor air quality is limited. Should the additional investigative data indicate that a soil vapor intrusion investigation is warranted, then the necessary soil vapor investigation will be implemented pursuant to the applicable regulations.

Soil: Impacted soil exceeding the PADEP standards has been encountered at the site. Additional investigation is necessary to define the complete extent of soil impact. Current exposure potential to impacted soil is very limited.

Surface Water: A small tributary stream is located in the site vicinity. Based on the findings of the initial site characterization, no concern for impact to the stream is apparent.

Ecological Exposure: There is no readily apparent concern for impact to ecological receptors.

9.0 PROPOSED ADDITIONAL INVESTIGATION

Based on the soil quality impact detected at the site CEA proposes to install an additional six soil borings at the site as shown on Figure 2.0 utilizing the auger/spoon drilling method. Soil samples from each boring will be collected for laboratory analysis based on field observation and will be submitted for laboratory analysis of PADEP unleaded gasoline parameters. Boring depth will be limited to 60 feet unless PID readings indicate that the boring needs to be advanced deeper.

In order to further evaluate the impact to groundwater quality CEA propose to install a total of four additional monitoring wells (MW-9 through MW-12) to a total anticipated depth of 70 feet below grade surface (bgs) to provide further contaminant plume definition at the site as shown on Figure 2.0. One well is proposed to be installed off-site and will require permission from the property owner. The wells will be installed utilizing the air rotary and auger drilling method, since it is possible that competent bedrock may be encountered (drilling into the bedrock will be limited to the extent possible). The four inch diameter wells are anticipated to be constructed with 40 feet of solid riser, 30 feet of screen and surface flush manways. The wells will be surveyed for relative elevation and the water table depth in each well will be measured and the direction of groundwater flow will be evaluated.

Following well installation, three well volumes of water will be purged from all monitoring wells and a groundwater sample will collected within the upper two feet of the water column from each well utilizing new, dedicated polyethylene bailers on two occasions for submittal to a state certified laboratory to be analyzed for the PADEP-UST required parameters for unleaded gasoline. Based the findings of the groundwater flow and quality investigation, additional wells will be installed in order to provide the necessary plume definition, if warranted.

Following completion of the groundwater and soil quality assessment, an investigation into the deeper bedrock aquifer is warranted and will require the installation of wells into the bedrock. Furthermore, hydraulic testing may be warranted to evaluate site hydrogeology, contaminant migration and remedial technologies.

10 SCHEDULE

CEA anticipates the proposed program can be completed within five months, as follows.

Assuming no additional investigative activities are required other than those proposed herein, the site characterization report is anticipated to be completed by February 28, 2020.

October, 2019:

- Professional property survey, off-site access agreement and PADOT authorizations, if needed.
- Installation of additional soil borings and monitoring wells.
- Installation of treatment system at Yuccos restaurant, including re-sampling of the supply well.
- Continue to pursue sampling of private wells .
- PADEP file review of Speedway service station and Buckeye pipeline facility (geology/hydrogeologic data of general area).

November, 2019:

- Sampling of the site monitoring wells and data evaluation.
- Possible installation of additional soil borings and monitoring wells.

December, 2019:

- Installation of bedrock aquifer monitoring wells.
- Possible vapor intrusion assessment (required interval between sampling events could extend program).

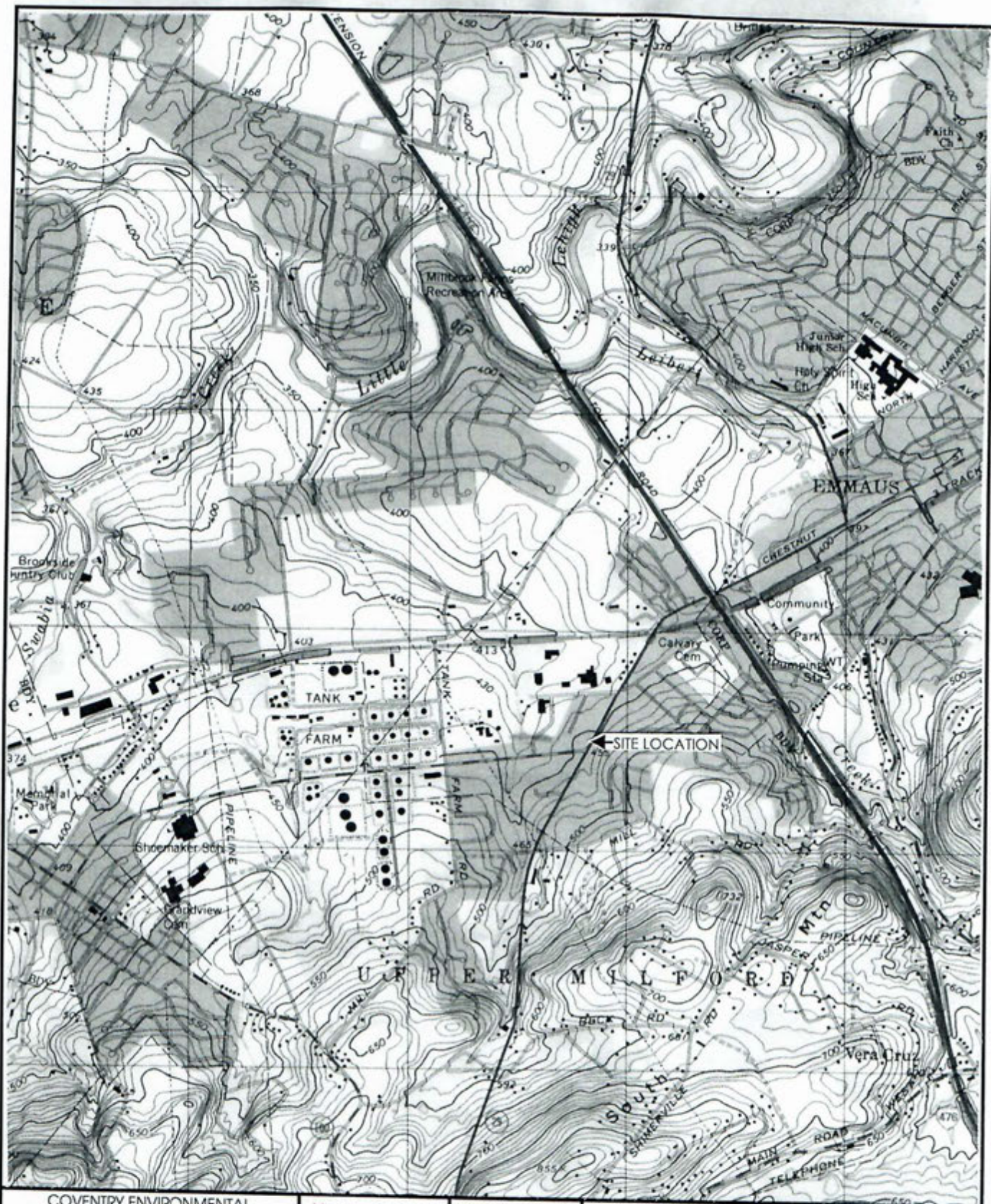
January, 2020:

- Sampling of site monitoring wells and data analysis.
- Possible hydraulic testing/data analysis.

February, 2020:

- Data analysis and SCR preparation.

FIGURES



COVENTRY ENVIRONMENTAL
ASSOCIATES, INC.

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St. Peters, PENNSYLVANIA 19470

job no.
WACHTER--001

date: 3/1/19

drawn by:
jvw

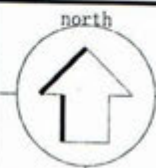
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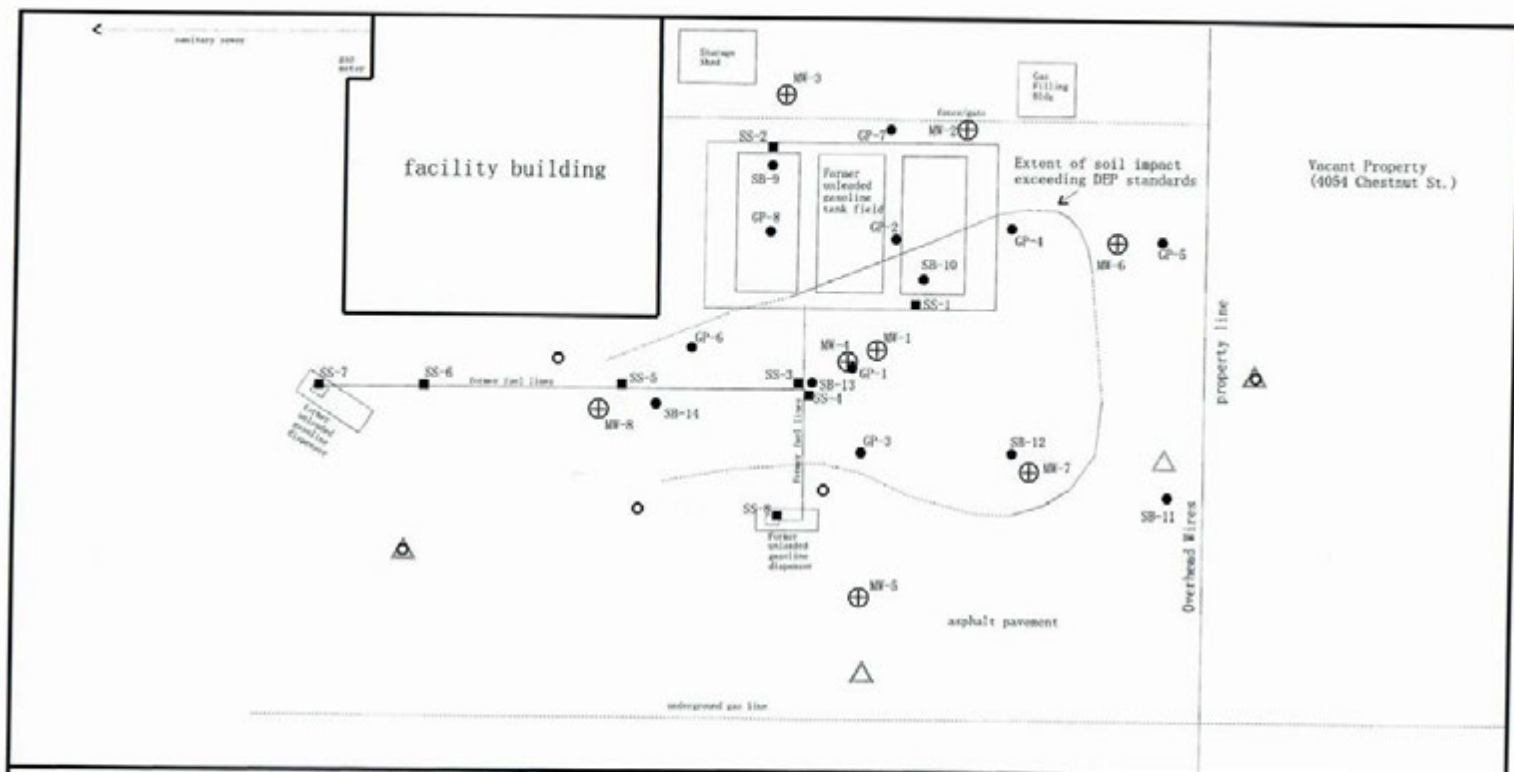
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drawing no.
1.0

United Tire Service
4094 Chestnut Street
Emmaus, Pennsylvania

site location map





Chestnut Street

- Proposed Soil Boring
- △ Proposed Monitoring Well

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St. Peters, Pennsylvania

job no.
WACHTER-002

scale:
1" = 20' (approx)

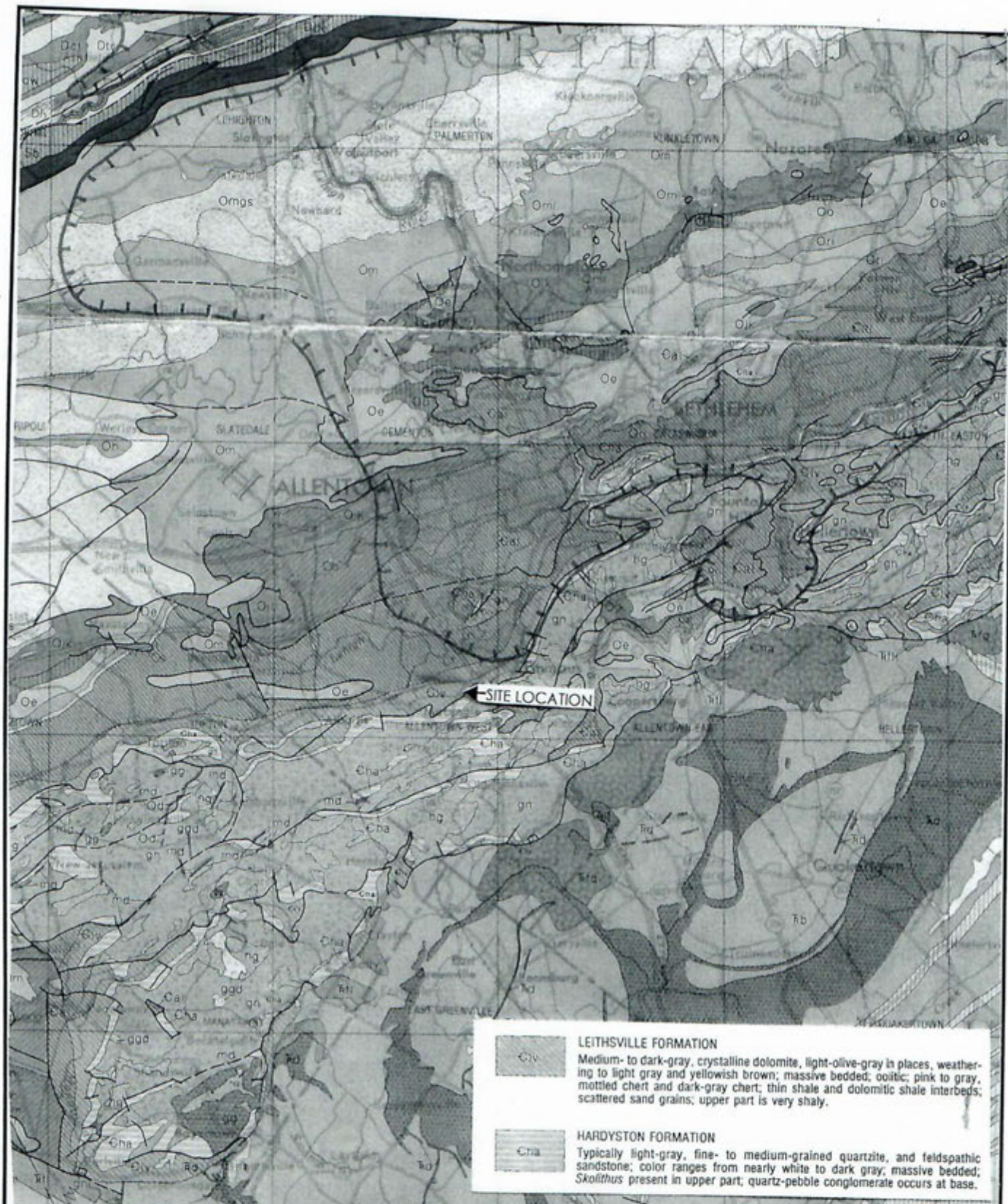
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United Tire Service
4094 Chestnut Street
Emmaus, Pennsylvania
(facility ID 39-27735)

TITLE:

Site Plan





COVENTRY ENVIRONMENTAL
ASSOCIATES, INC.

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St. Peters, PENNSYLVANIA 19470

Job no.
WACHTER-001

date: 3/1/19

drawn by:
jvw

checked by:

scale:
1" = 4 miles (approx)

drawing no.
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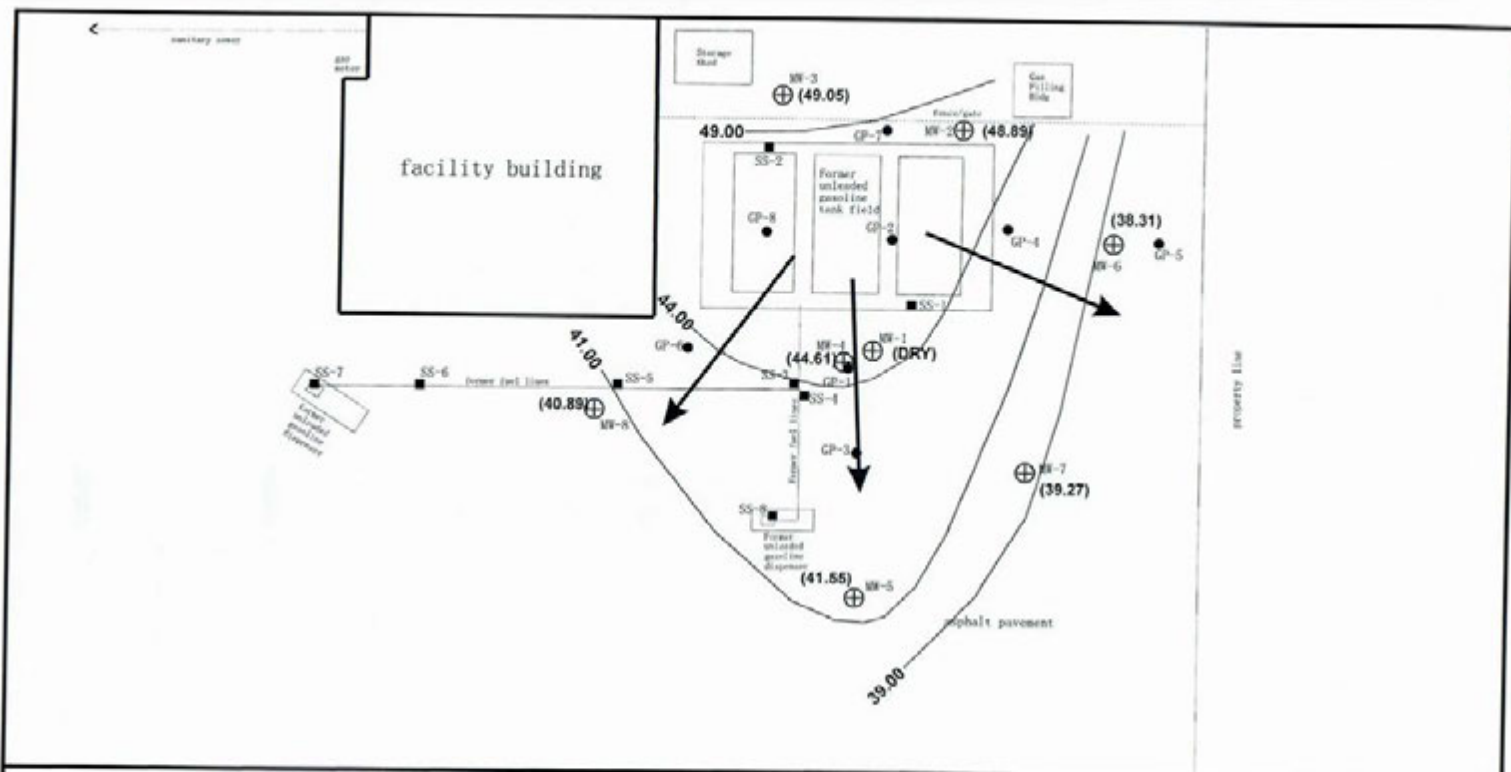
TITLE:

Site Geology Map

United Tire Service
4094 Chestnut Street
Emmaus, Pennsylvania

north





Chestnut Street

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St. Peters, Pennsylvania

Job no.
WACHTER-002

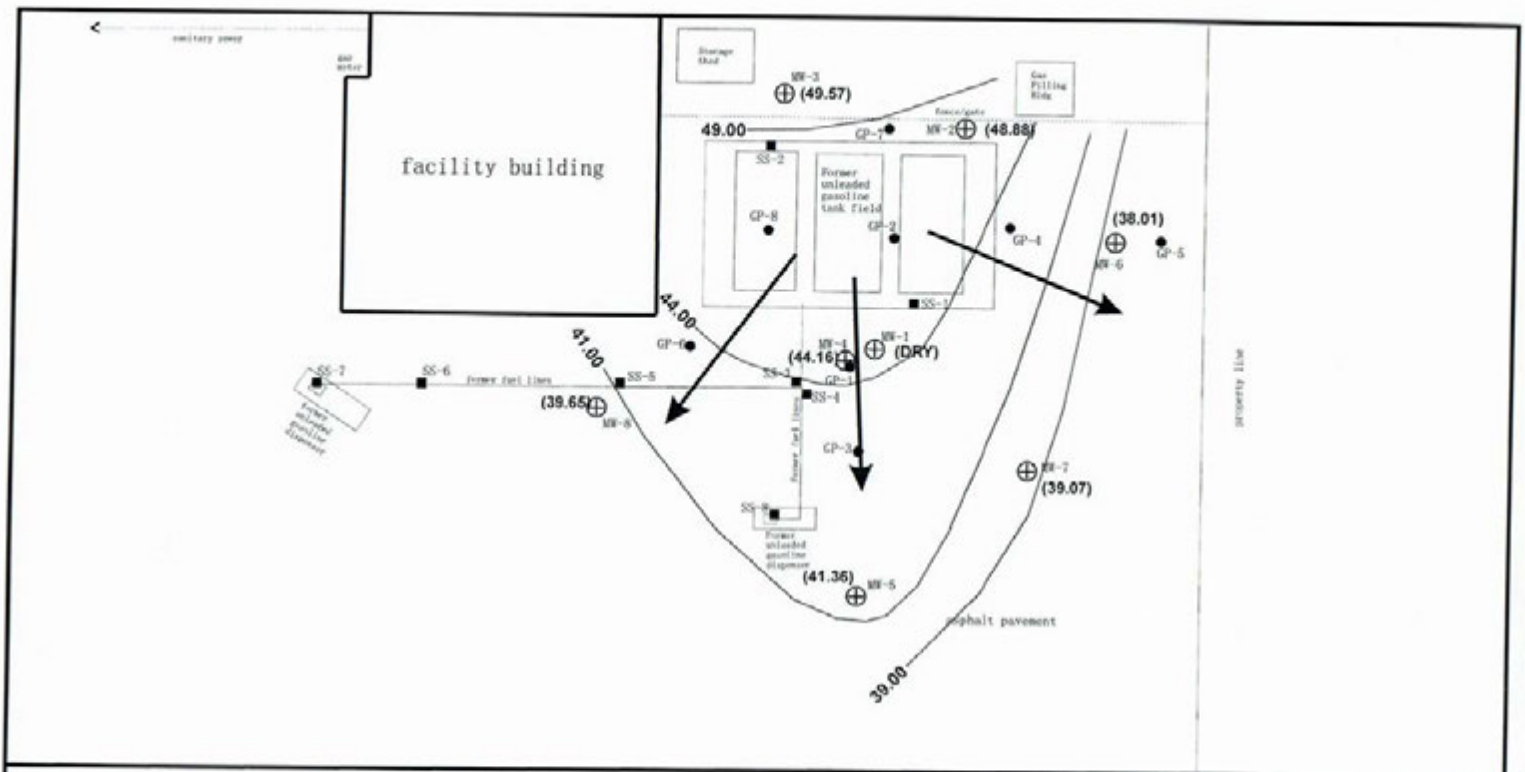
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drawing no.
4.0

United Tire Service
4094 Chestnut Street
Emmaus, Pennsylvania
(facility ID 39-27735)

TITLE:
Groundwater Flow Direction
Sept. 6, 2019





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job no.
WACHTER-002

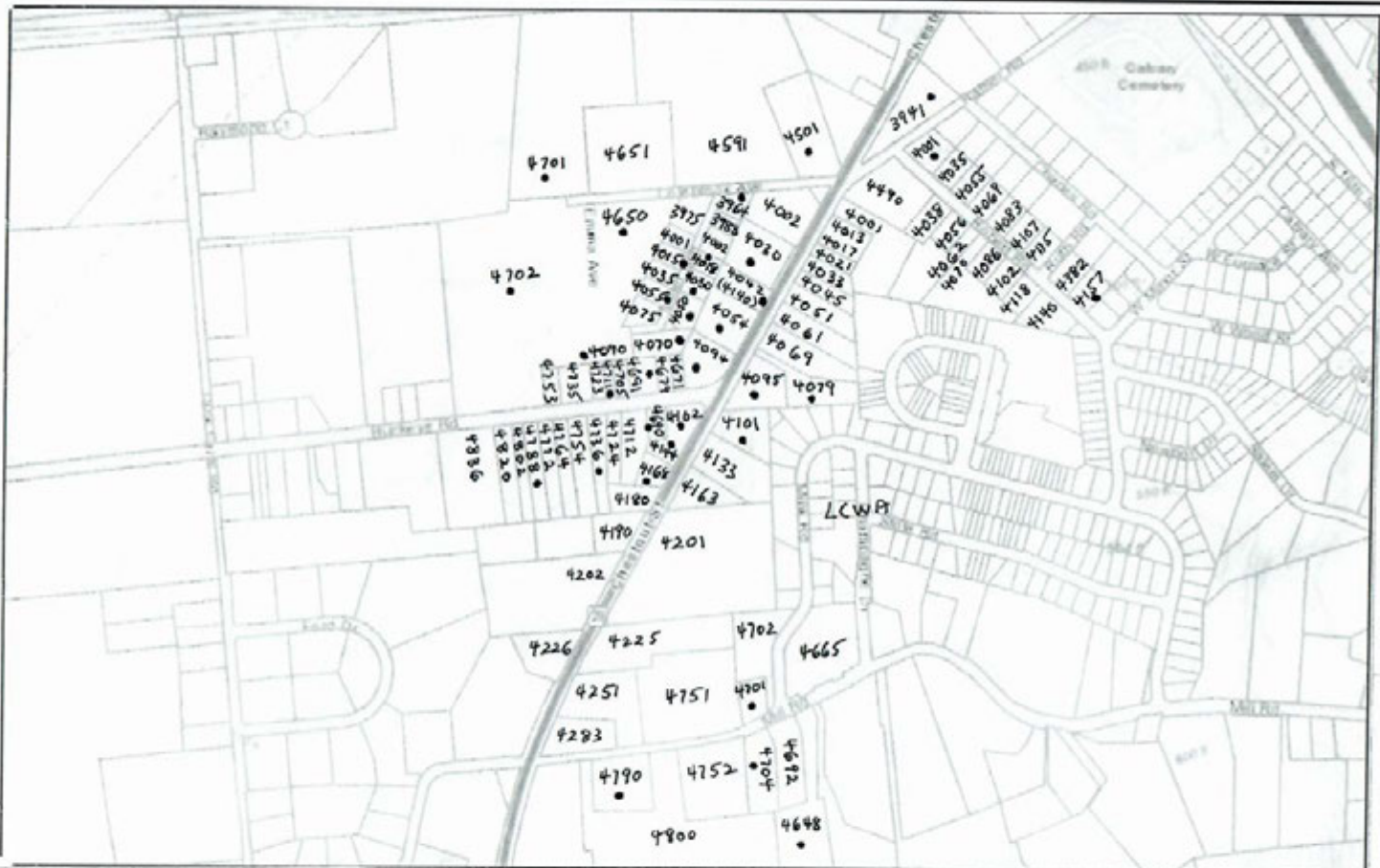
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drawing no.
5.0

United Tire Service
4094 Chestnut Street
Emmaus, Pennsylvania
(facility ID 39-27735)

TITLE:
Groundwater Flow Direction
Sept. 12, 2019





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PO Box 224
St. Peters, Pennsylvania

job no.
VACITER-002

scale:
1" = 600' (approx)

drawing no.
6.0

United Tire Service
4094 Chestnut Street
Emmaus, Pennsylvania
(facility ID 39-27735)

TITLE:
DRAFT
Area of Private Well Survey
• Indicates well sampled



TABLES

Table 1.0
Soil Analytical Data Summary
United Tire Service
Emmaus, Pennsylvania

Parameter/ Sample I.D.	GP-1	GP-1-2	GP-2	GP-2-2	GP-3	GP-4	GP-5	GP-6	GP-7	MP-A-26	MP-A-27	MP-A-30	MP-A-31	MP-A-37	MP-A-40	MP-A-41	MP-A-47	MP-A-48	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	PADEP Standard*
Benzene	3400	508	ND	ND	ND	8,000	ND	ND	ND	5.3	48.9	1680	516	334	637	408	ND	8,270	ND	ND	ND	ND	ND	ND	ND	ND	300
Ethylbenzene	157,000	564	509	ND	ND	65,000	ND	ND	ND	33.7	89.6	488	97.6	147	145	477	ND	597	ND	ND	ND	ND	ND	ND	ND	ND	50,000
Cumene	15,900	ND	106	ND	ND	10,200	ND	ND	ND	ND	4.6	34	ND	8.2	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	400,000
MTBE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	14.3	33.3	274	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,000
Naphthalene	75,000	147	ND	ND	ND	28,500	ND	ND	ND	80.2	173	192	133	109	96.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25,000
Toluene	147,000	391	ND	ND	ND	170,000	ND	ND	ND	2.9	114	3639	733	1290	1020	1170	ND	7540	ND	ND	ND	ND	ND	ND	ND	ND	100,000
Xylenes	1,000,000	1,300	ND	ND	ND	104,000	ND	ND	ND	60.3	293	3360	638	810	879	2300	ND	3060	ND	ND	ND	ND	ND	ND	ND	ND	1,000,000
1,2,4 Trimethylbenzene	419,000	315	2,050	ND	ND	171,000	ND	ND	ND	61.8	193	962	175	271	152	398	ND	394	ND	ND	ND	99	ND	ND	ND	ND	8,000
1,3,5 Trimethylbenzene	114,000	148	ND	ND	ND	55,300	ND	ND	ND	13.1	40.9	168	40.2	36.7	40.8	306	ND	148	ND	ND	ND	49.8	ND	ND	ND	ND	50,000
Sample Depth (ft)	12	66	17	36	16	16	20	16	16	20	25	31	37	47	56	54	47	28	19	10	3	3	3	3	3	3	

Notes: All results reported in ug/kg
 * PADEP residential, unsaturated soil standard.
 ND Denotes Not Detected above the laboratory limit of detection.
 NA Denotes Not Analyzed

Table 1.0, Con't
Soil Analytical Data Summary
United Tire Service
Emmaus, Pennsylvania

<i>Parameter/ Sample I.D.</i>	SB-9- 16	SB-9- 21	SB-9- 50	SB-10- 24	SB-10- 48	SB-11- 25	SB-11- 54	SB-12- 19	SB-12- 25	SB-12- 31	SB-12- 50	SB-13- 21	SB-13- 52	SB-14- 21	SB-14- 52	PADEP Standard*
Benzene	ND	ND	ND	ND	1350	188	72.2	4330	34,200	9,480	5,250	ND	2,620	ND	656	500
Ethylbenzene	ND	ND	ND	ND	725	ND	295	12,700	37,000	1,040	770	ND	687	ND	238	70,000
Cumene	233	ND	ND	ND	ND	ND	ND	1,470	4,260	ND	ND	ND	ND	ND	ND	600,000
MTBE	ND	ND	ND	ND	ND	ND	ND	ND	ND	127	693	ND	729	ND	1,460	2,000
Naphthalene	ND	ND	ND	ND	ND	ND	ND	3370	7,320	ND	ND	ND	ND	ND	542	25,000
Toluene	ND	ND	ND	ND	4,520	76.6	350	38,500	166,000	12,100	6,710	ND	5,430	ND	1,060	100,000
Xylenes	ND	ND	ND	ND	3,490	303	1,660	73,900	220,000	5,870	3,770	ND	3,450	ND	946	1,000,000
1,2,4 Trimethylbenzene	ND	ND	ND	ND	589	68.8	564	28,400	72,000	648	495	ND	609	ND	344	8,400
1,3,5 Trimethylbenzene	ND	ND	ND	ND	174	ND	187	8,770	22,400	169	122	ND	146	ND	96.1	74,000
Sample Depth (ft)	16	21	50	24	48	25	54	19	25	31	50	21	52	21	52	

Notes: All results reported in ug/kg

* PADEP residential, unsaturated soil standard..

ND Denotes Not Detected above the laboratory limit of detection.

NA Denotes Not Analyzed

Table 2.0
Water Level Data Summary
United Tire Service
Emmaus, Pennsylvania

Well #/ PVC Elevation	May 9, 2019		May 21, 2109		July 31, 2019		Sept 6, 2019		Sept 12, 2019	
	Depth to Water (FT)	W.L. Elevation (FT)	Depth to Water (FT)	W.L. Elevation (FT)	Depth to Water (FT)	W.L. Elevation (FT)	Depth to Water (FT)	W.L. Elevation (FT)	Depth to Water (FT)	W.L. Elevation (FT)
MW-1 (98.57)	50.34	48.23	50.70	47.87	DRY	--	DRY	--	DRY	--
MW-2 (98.94)	49.12	49.82	47.40	51.54	48.36	52.04	50.05	48.89	50.06	48.88
MW-3 (98.99)	49.17	49.82	47.24	51.75	48.05	52.33	49.94	49.05	49.42	49.57
MW-4 (98.71)	--	--	--	--	--	--	54.1	44.61	54.55	44.16
MW-5 (99.03)	--	--	--	--	--	--	57.48	41.55	57.67	41.36
MW-6 (98.28)	--	--	--	--	--	--	59.97	38.31	60.27	38.01
MW-7 (98.70)	--	--	--	--	--	--	59.43	39.27	59.63	39.07
MW-8 (99.05)	--	--	--	--	--	--	58.16	40.89	59.40	39.65

Table 3
Groundwater Analytical Data Summary
(May 9, 2019)
United Tire Service
Emmaus, Pennsylvania

<i>Parameter/ Sample I.D.</i>	MW-1	MW-2	MW-3	PADEP Standard*
Benzene	7090	ND	ND	5
Ethylbenzene	835	ND	ND	700
Cumene	52.7	ND	ND	840
MTBE	918	ND	9.6	20
Naphthalene	43	ND	3.9	100
Toluene	10,100	ND	ND	1,000
Xylene	9500	ND	3.7	10,000
1,2,4 Trimethylbenzene	1800	ND	ND	15
1,3,5 Trimethylbenzene	862	ND	ND	420
Notes: All results reported in Parts Per Billion (ppb). * PADEP statewide health groundwater standard for a used aquifer in a residential setting. ND Denotes Not Detected above the laboratory limit of detection. NA Denotes Not Analyzed				

Table 4
Groundwater Analytical Data Summary
(May 21, 2019)
United Tire Service
Emmaus, Pennsylvania

<i>Parameter/ Sample I.D.</i>	MW-1	MW-2	MW-3	PADEP Standard*
Benzene	NA	ND	ND	5
Ethylbenzene	NA	ND	ND	700
Cumene	NA	ND	ND	840
MTBE	NA	ND	10.9	20
Naphthalene	NA	ND	ND	100
Toluene	NA	ND	ND	1,000
Xylene	NA	ND	ND	10,000
1,2,4 Trimethylbenzene	NA	ND	ND	15
1,3,5 Trimethylbenzene	NA	ND	ND	420
Notes: All results reported in Parts Per Billion (ppb). * PADEP statewide health groundwater standard for a used aquifer in a residential setting. ND Denotes Not Detected above the laboratory limit of detection. NA Denotes Not Analyzed				

Table 5
Groundwater Analytical Data Summary
(September 12, 2019)
United Tire Service
Emmaus, Pennsylvania

<i>Parameter/ Sample I.D.</i>	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	PADEP Standard*
Benzene	NA	NA	ND	12,500	ND	74.2	9970	12200	5
Ethylbenzene	NA	NA	ND	3,230	ND	4.3	2470	2800	700
Cumene	NA	NA	ND	126	ND	ND	136	103	840
MTBE	NA	NA	12.2	1340	58.7	ND	235	21900	20
Naphthalene	NA	NA	ND	406	ND	ND	ND	415	100
Toluene	NA	NA	ND	21,400	ND	12.6	12,300	25,400	1,000
Xylene	NA	NA	ND	16,900	ND	10.7	13,500	14,500	10,000
1,2,4 Trimethylbenzene	NA	NA	ND	2430	ND	ND	2510	1880	15
1,3,5 Trimethylbenzene	NA	NA	ND	778	ND	1.5	702	531	420

Notes: All results reported in Parts Per Billion (ppb).ND

* PADEP statewide health groundwater standard for a used aquifer in a residential setting.

ND Denotes Not Detected above the laboratory limit of detection.

NA Denotes Not Analyzed

Table 6.0
Supply Well Survey Summary
United Tire Service
Emmaus, Pennsylvania

<i>Property ID</i>	Date Survey Delivered	Owner Response / Date	Well Sampled / Date	Date Owner Notified	Chemical Detection	Date Potable Water Provided	Treatment System Installation Date
Tim Anger 4050 Miller	7/5/19	7/5/19	7/8/19	7/11/19	MTBE, 4.3 ppb	7/12/19	7/18/19
UTS 4094 Chestnut	NA	NA	7/8/19	7/11/19	ND	NA	NA
Pierfy 4015 Miller	7/5/19	7/10/19	7/15/19	7/19/19	ND	NA	NA
Miller 3964 Miller	7/5/19	7/10/19	7/15/19	7/19/19	ND	NA	NA
V&C 4095 Chestnut	7/5/19	7/10/19	7/15/19	7/19/19	ND	NA	NA
Eisenhardt 4079 Chestnut	7/5/19	7/10/19	7/15/19	7/19/19	ND	NA	NA
Druckenmiller 4168 Chestnut	7/5/19	7/10/19	7/15/19	7/19/19	ND	NA	NA
JAS 4501 Colebrook	7/5/19	7/10/19	7/15/19	7/19/19	ND	NA	NA
Mech-Plus 4701 Colebrook	7/5/19	7/10/19	7/15/19	7/19/19	ND	NA	NA
Staufer 4701 Mill	7/8/19	7/11/19	7/15/19	7/19/19	ND	NA	NA
Washer 4704 Mill	7/8/19	7/11/19	7/15/19	7/19/19	ND	NA	NA
Macilwrath 4648 Mill	7/8/19	7/11/19	7/15/19	7/19/19	ND	NA	NA
LCWA 4475 Fairview Ct	NA	Auth. 7/16/19	7/16/19	7/19/19	ND	NA	NA
Guethle 4691 Buckeye	7/5/19	7/17/19	7/18/19	7/23/19	ND	NA	NA
Tom Anger 4090 Miller	7/5/19	7/17/19	7/18/19	7/23/19	ND	NA	NA
Gable 4650 Colebrook	7/5/19	7/17/19	7/18/19	7/23/19	ND	NA	NA
Hammett 4702 Colebrook	7/5/19	7/17/19	7/18/19	7/23/19	ND	NA	NA

Armas 4070 Miller	7/5/19	7/17/19	7/18/19	7/23/19	ND	NA	
Stauffer 4788 Buckeye	7/5/19	7/18/19	7/18/19	7/23/19	ND	NA	NA
4018 Miller	7/5/19	7/18/19	7/18/19	7/23/19	ND	NA	NA
Tim Anger 4050 Miller	POST GAC TREATMENT		7/18/19	7/23/19	ND	7/12/19	7/18/19
Abdelfatah 4101 Chestnut	7/19/19	7/19/19	7/19/19	7/23/19	ND	NA	NA
Baker 4711 Buckeye	7/5/19	7/19/19	7/19/19	7/23/19	ND	NA	NA
Woodys 3941 Chestnut	7/5/19	7/19/19	7/19/19	7/23/19	ND	NA	NA
Conklin 4001 Robert	7/5/19	7/22/19	7/22/19	7/29/19	ND	NA	NA
Herbein 4790 Mill	7/5/19	7/30/19	7/31/19	8/8/19	ND	NA	NA
Boyer 4055 Miller	7/5/19	7/29/19	8/1/19	8/7/19	ND	NA	NA
O'Brien 4030 Miller	7/5/19	8/5/19	8/7/19	8/13/19	ND	NA	NA
Tantaro's/strip mall 4030 Chestnut	7/5/19	8/6/19	8/7/19	8/13/19	ND	NA	NA
Iacocca/Yuccos 4042 Chestnut (4140 Chestnut)	7/5/19	8/6/19	8/7/19	8/13/19	MTBE 3.7 PPB		
4102 Chestnut Trivet	7/5/19	8/14/19	8/15/19	8/25/19	ND	NA	NA
4144 Chestnut Rental	7/5/19	8/14/19	8/15/19	9/3/19	ND	NA	NA
4690 Buckeye Rental	7/5/19	8/14/19	8/15/19	8/25/19	ND	NA	NA
4054 Chestnut Vacant	7/5/19	8/27/19	8/27/19	9/6/19	11.8 PPB MTBE	NOT	USED
O'Brien Re-sample 4030 Miller	7/5/19	8/5/19	8/29/19	9/6/19	1 PPB MTBE	NA	9/18/19
Mevicar 4157 Robert	7/5/19	9/3/19	9/6/19	9/10/19	ND	NA	NA
4144 Chestnut Rental Re-sample	7/5/19	9/5/19	9/26/19 (9/6/19 ATTEMPTED)	10/2/19	ND	NA	NA
4736 Buckeye	7/5/19	9/25/19	10/3/19 (9/26/19 ATTEMPTED)				

APPENDIX A

Drilling Logs

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.				BORING NO: GP-1	
DRILLING LOG					
PROJECT nO: WACHTER-002		DATE: 7/31/19		DRILLING METHOD: geoprobe	
PROJECT TITLE: United Tire Service			DRILLING COMPANY: Garber		
PROJECT LOCATION: 4094 Chestnut Street Emmaus,, PA			BOREHOLE DIAMETER (IN): 2 inch		WATER LEVEL (FT):
			WEATHER CONDITIONS: dry, hot		LOGGED BY: jvw
DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS	
0	Gravel	0		no petroleum odor/staining	
—	Moist to dry, brown silty clay with some small limestone gravel	0			
4		0			
—	Moist, brown/gray silty clay with limestone gravel	0		No petroleum odor, no staining	
8	same lithology	0			
—		639		moderate petroleum odor/staining	
		715			
12	same lithology, very firm	1881	@ 12'	strong petroleum odor/staining	
—		783			
		511			
		650			
		683			
16	no recovery, gravel in liner (torn/crushed)	70	@16'	slight petroleum odor	
—					
20	no recovery, gravel in liner (torn/crushed)				
—					
24	no recovery, gravel in liner (torn/crushed), end boring				
—					
28					
—					
32					
—					
36					
—					
40					

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

BORING NO:
GP-2

DRILLING LOG

PROJECT NO:	WACHTER--002	DATE:	7/31/19	DRILLING METHOD:	geoprobe
PROJECT TITLE:	United Tire Service			DRILLING COMPANY:	Garber
PROJECT LOCATION:	4094 Chestnut Street Emmaus,, PA			BOREHOLE DIAMETER (IN):	2 inch
				WEATHER CONDITIONS:	dry, hot
				WATER LEVEL (FT):	
				LOGGED BY:	jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS
0	Backfill gravel	0		no petroleum odor/staining
—		0		
4		0		
—		0		
8		0		
—		0		No petroleum odor, no staining
12	Backfill gravel	0		
—		0		
16	Brown silty clay with some limestone gravel, wet	36		strong petroleum odor/staining
—		422	@ 17'	strong petroleum odor/staining
		272		
20	no recovery, gravel in liner (torn/crushed),	16	@ 20'	slight petroleum odor
—				
24	end boring			
—				
28				
—				
32				
—				
36				
—				
40				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

BORING NO:
GP-3

DRILLING LOG

PROJECT nO:	WACHTER--002	DATE:	7/31/19	DRILLING METHOD:	geoprobe
PROJECT TITLE:	United Tire Service			DRILLING COMPANY:	Garber
PROJECT LOCATION:	4094 Chestnut Street Emmaus,, PA			BOREHOLE DIAMETER (IN):	WATER LEVEL (FT):
				2 inch	
				WEATHER CONDITIONS:	LOGGED BY:
				dry, hot	jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS
0	Gravel	0		No petroleum odor/staining
—	Moist to dry, brown silty clay with some small limestone gravel	0		
4		0		
—	Moist, brown/gray silty clay with limestone gravel	0		No petroleum odor, no staining
8	same lithology	0		
—		0		No petroleum odor/staining
12	same lithology, very firm	0		
—		0		No petroleum odor/staining
16	end boring, refusal	0	@ 16'	
—				
20				
—				
24				
—				
28				
—				
32				
—				
36				
—				
40				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

BORING NO:
GP-4

DRILLING LOG

PROJECT NO:	WACHTER--002	DATE:	8/1/19	DRILLING METHOD:	geoprobe
PROJECT TITLE:	United Tire Service			DRILLING COMPANY:	Garber
PROJECT LOCATION:	4094 Chestnut Street Emmaus,, PA			BOREHOLE DIAMETER (IN):	WATER LEVEL (FT):
				2 inch	
				WEATHER CONDITIONS:	LOGGED BY:
				dry, hot	jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS
0	Moist to dry, brown silty clay with some small limestone gravel			No petroleum odor/staining
—		0		
4	poor recovery, mix concrete and gravel	0		
—		0		No petroleum odor, no staining
8	poor recoery, gravel	0		
—		0		No petroleum odor/staining
12	poor recovery	0		
—		0		No petroleum odor/staining
16	brown silty clay end boring, refusal	700	@ 16'	strong petroleum odor/staining
—				
20				
—				
24				
—				
28				
—				
32				
—				
36				
—				
40				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

BORING NO:
GP-5

DRILLING LOG

PROJECT NO:	WACHTER-002	DATE:	8/1/19	DRILLING METHOD:	geoprobe
PROJECT TITLE:	United Tire Service			DRILLING COMPANY:	Garber
PROJECT LOCATION:	4094 Chestnut Street Emmaus, PA			BOREHOLE DIAMETER (IN):	WATER LEVEL (FT):
				2 inch	
				WEATHER CONDITIONS:	LOGGED BY:
				dry, hot	jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS
0	Gravel	0		No petroleum odor/staining
—	Moist to dry, brown silty clay with some small limestone gravel	0		
4		0		
—	Moist, brown/gray silty clay with limestone gravel	0		No petroleum odor, no staining
8	same lithology	0		
—		0		No petroleum odor/staining
12		0		
—		0		No petroleum odor/staining
16	same lithology, very firm	0		
—		0		No petroleum odor/staining
20	end boring, refusal	0	@ 20'	
—				
24				
—				
28				
—				
32				
—				
36				
—				
40				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

BORING NO:
GP-6

DRILLING LOG

PROJECT nO:	WACHTER-002	DATE:	8/1/19	DRILLING METHOD:	geoprobe
PROJECT TITLE:	United Tire Service			DRILLING COMPANY:	Garber
PROJECT LOCATION:	4094 Chestnut Street Emmaus,, PA			BOREHOLE DIAMETER (IN): 2 inch	WATER LEVEL (FT):
				WEATHER CONDITIONS: dry, hot	LOGGED BY: jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS
0	Gravel			
—	Moist to dry, brown silty clay with some small limestone gravel	0		No petroleum odor/staining
4		0		
—	Moist, brown/gray silty clay with limestone gravel	0		No petroleum odor, no staining
8	same lithology	0		
—		0		No petroleum odor/staining
12	same lithology, very firm	0		
—		0		No petroleum odor/staining
16	end boring	0	@ 16'	No petroleum odor/staining
—				
20				
—				
24				
—				
28				
—				
32				
—				
36				
—				
40				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

BORING NO:
GP-7

DRILLING LOG

PROJECT NO: WACHTER--002 DATE: 8/1/19 DRILLING METHOD: geoprobe

PROJECT TITLE: United Tire Service DRILLING COMPANY: Garber

PROJECT LOCATION: 4094 Chestnut Street
Emmaus,, PA BOREHOLE DIAMETER (IN): 2 inch WATER LEVEL (FT):

WEATHER CONDITIONS: dry, hot LOGGED BY: jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS
0	Gravel	0		No petroleum odor/staining
—	Moist to dry, brown silty clay with some small limestone gravel	0		
4		0		
—	Moist, brown/gray silty clay with limestone gravel	0		No petroleum odor, no staining
8	same lithology	0		
—		0		No petroleum odor/staining
12	same lithology, very firm	0		
—		0		No petroleum odor/staining
16	end boring	0	@ 16'	No petroleum odor/staining
—				
20				
—				
24				
—				
28				
—				
32				
—				
36				
—				
40				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

BORING NO:
GP-8

DRILLING LOG

PROJECT NO:	WACHTER--002	DATE:	8/1/19	DRILLING METHOD:	geoprobe
PROJECT TITLE:	United Tire Service			DRILLING COMPANY:	Garber
PROJECT LOCATION:	4094 Chestnut Street Emmaus,, PA			BOREHOLE DIAMETER (IN):	WATER LEVEL (FT):
				2 inch	
				WEATHER CONDITIONS:	LOGGED BY:
				dry, hot	jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS
0	Backfill gravel	0		no petroleum odor/staining
—		0		
4		0		
—		0		
8		0		
—		0		No petroleum odor, no staining
12	Backfill gravel	0		
—				
16	no recovery, limestone gravel in liner (torn/crushed),			
—				
20	no recovery, limestone gravel in liner (torn/crushed)			
—				
24	end boring			
—				
28				
—				
32				
—				
36				
—				
40				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

BORING NO:
SB-9

DRILLING LOG

PROJECT NO:	WACHTER--002	DATE:	9/16/19	DRILLING METHOD:	AUGER/SPOON
PROJECT TITLE:	United Tire Service			DRILLING COMPANY:	Garber
PROJECT LOCATION:	4094 Chestnut Street Emmaus,, PA			BOREHOLE DIAMETER (IN):	8 inch
				WEATHER CONDITIONS:	dry, hot
				LOGGED BY:	jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS
0	Backfill Gravel	0		no petroleum odor/staining
—		0		
6		0		
—		0		
12				spoon 10-12', no recovery, gravel blockage
—				spoon 13-15', no recovery, gravel blockage
18	Moist to dry, brown silty clay with some small limestone gravel	39 642 156 304 460 10 4.8 3.1 0.3 2.4 2.1 1.4	@ 16'	spoons 15-21', black staining, strong petroleum odor from 15 to 17'
24	Moist, brown/gray silty clay with limestone gravel	0.2 1 0 0.4	@ 21'	Slight petroleum odor, no staining at 19'
—	same lithology			spoon 25 to 27', no petroleum odor
30				
—	same lithology, very firm			
36	same lithology			
—				
42		0.3 3.3 2.6		spoon 40-42', no petroleum odor
—				
48		0.4 1.2 0 0	@ 50'	spoon 48 -50', no petroleum odor
—	end boring			Tremie grout borehole
54				
—				
60				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

BORING NO:
SB-10

DRILLING LOG

PROJECT NO:	WACHTER--002	DATE:	9/16/19	DRILLING METHOD:	AUGER/SPOON
PROJECT TITLE:	United Tire Service			DRILLING COMPANY:	Garber
PROJECT LOCATION:	4094 Chestnut Street Emmaus,, PA			BOREHOLE DIAMETER (IN):	WATER LEVEL (FT):
				8 inch	
				WEATHER CONDITIONS:	LOGGED BY:
				dry, hot	jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS
0	Backfill Gravel			
—		0		no petroleum odor/staining
6		0		
—		0		
12		0		
—				
18	Moist to dry, brown silty clay with some small limestone gravel	167 89		spoon 16-18', black staining, moderate petroleum odor
—				
24		9.3 6.3 3 14.2	@ 24'	spoon 22 to 24', no petroleum odor/stain
—	same lithology			
30				
—				
36				
—				
42	same lithology	14 56 8.6 19 15 10 36		spoons 40-44', no petroleum odor
—				
48		103 65 34 30	@48'	spoon 48 -50', no petroleum odor
—	end boring			
54				Tremie grout borehole
—				
60				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

BORING NO:
SB-11

DRILLING LOG

PROJECT NO:	WACHTER-002	DATE:	9/17/19	DRILLING METHOD:	AUGER/SPOON
PROJECT TITLE:	United Tire Service			DRILLING COMPANY:	Garber
PROJECT LOCATION:	4094 Chestnut Street Emmaus,, PA			BOREHOLE DIAMETER (IN):	8 inch
				WEATHER CONDITIONS:	dry, hot
					WATER LEVEL (FT):
					LOGGED BY:
					jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS
0	Moist to dry, brown silty clay with some small limestone gravel	0		no petroleum odor/staining
—		0		PID readings from auger cuttings
6		0		
—		0		
12		0		
—		0		
18		0		
—		0		
24	same lithology	1.9 0.9 1.4 1.7 0.6	@ 25'	spoons 25 to 29', no petroleum odor/stain
—				
30				PID readings from auger cuttings
—		1.7		
36		0.9		
—		2		
42				
—		3.7		
48	same lithology	23 44 34 58		spoon 48 -50', no petroleum odor
—				
54	end boring	64	@54'	spoon 52 -54', no petroleum odor/stain , limited recovery , refusal on rock (? bedrock)
—				
60				Drum cont. cuttings, Tremie grout borehole void

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

BORING NO:
SB-12

DRILLING LOG

PROJECT NO:	WACHTER--002	DATE:	9/17/19	DRILLING METHOD:	AUGER/SPOON
PROJECT TITLE:	United Tire Service			DRILLING COMPANY:	Garber
PROJECT LOCATION:	4094 Chestnut Street Emmaus,, PA			BOREHOLE DIAMETER (IN):	8 inch
				WEATHER CONDITIONS:	dry, hot
					LOGGED BY: jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS
0	Asphalt			
—	Black gravel and silty clay	0		no petroleum odor/staining
				PID readings from auger cuttings
6		0		
—		0.8		
12	Moist to dry, brown silty clay with some small limestone gravel	1.7		
—				
18		1142 338 2980 1248 3950 1898 2875 2882 2169 2762 3142 855 3982 2370 589 319 190 704 70 157 57	@ 19'	spoons 17 to 31', strong petroleum odor from 17 to 27 '
—				
24				
—	same lithology		@ 25'	
30			@31'	slight petroleum odor
—				
36				
—				
42		92 203 130		spoon 40-42' no odor/stain
—				
48	same lithology	98 68 98	@50'	spoon 48 -50', no petroleum odor
—				
54				
—	end boring	51 59 37		spoon 55 -57', no petroleum odor/stain
60				Drum cont. cuttings, Tremie grout borehole void

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

BORING NO:
SB-13

DRILLING LOG

PROJECT nO:	WACHTER--002	DATE:	9/18/19	DRILLING METHOD:	AUGER/SPOON
PROJECT TITLE:	United Tire Service			DRILLING COMPANY:	Garber
PROJECT LOCATION:	4094 Chestnut Street Emmaus,, PA			BOREHOLE DIAMETER (IN):	8 inch
				WEATHER CONDITIONS:	clear, warm
					WATER LEVEL (FT):
					LOGGED BY:
					jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS
0	Backfill gravel	0		no petroleum odor/staining
—		1.4		PID readings from auger cuttings
6	Moist to dry, brown silty clay with some small limestone gravel	2.8		
—		0.3		
—		0.9		
12		6.1		
—		2		spoons 14 to 16', no petroleum odor/stain
18		3.1		
—	same lithology	2.3		
—		9.4	@ 21'	spoons 20 - 24', no odor/stain
24		0.5		
—		0.4		
—		0.2		
—		0.7		
30		0		PID readings from auger cuttings
—		0.3		
36		0.4		
—		0.7		
42		0		
—		3.5		
48				
—	same lithology	46		spoon 50 -52', no petroleum odor
—	end boring	52		
54		74	@52'	
—				
60				Drum conf. cuttings, Tremie grout borehole void

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

BORING NO:
SB-14

DRILLING LOG

PROJECT NO: WACHTER--002	DATE: 9/18/19	DRILLING METHOD: AUGER/SPOON
PROJECT TITLE: United Tire Service	DRILLING COMPANY: Garber	
PROJECT LOCATION: 4094 Chestnut Street Emmaus,, PA	BOREHOLE DIAMETER (IN): 8 inch	WATER LEVEL (FT):
	WEATHER CONDITIONS: clear, warm	LOGGED BY: jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID	SAMPLE	COMMENTS
0	Moist to dry, brown silty clay with some small limestone gravel	0		no petroleum odor/staining
—		1.2		PID readings from auger cuttings
6		0.7		
—		0.6		
12		0.3		
—		0.2		
18				
—	same lithology	2	@ 21'	spoon 20 - 22', no odor/stain
		3.3		
		1.7		
24		1.6		
—		2		
30		0.7		PID readings from auger cuttings
—		4		
36		6.7		
—		3.2		
42		4		
—		0.4		
48		5		
—	same lithology	15.1		spoon 50 -52', no petroleum odor
—	end boring	17.5		
54		19.2	@52'	
—				
60				Drum cont. cuttings, Tremie grout borehole void

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

DRILLING LOG

BORING NO:
mw-1

PROJECT NO:
UTS-02

DATE:
4/15/19

DRILLING METHOD: air rotary

PROJECT TITLE: United Tire Service

DRILLING COMPANY: Garber well drilling

PROJECT LOCATION:
United Tire Service
4094 Chestnut St
Emmaus, PA

BOREHOLE DIAMETER (IN):
8

WATER LEVEL (FT):

WEATHER CONDITIONS:
dry, warm

LOGGED BY:
jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	well design	PID	COMMENTS
0	tan, silty clay, dry			
-			0	no petroleum odor
10			360	moderate petroleum odor
-			443	
20			221	
-	same lithology, moist		26	slight petroleum odor
-				
30			1	no petroleum odor

40				
-	- same lithology, moist		0	no petroleum odor
50	- end boring @ 50.8 feet.			well construction: 50 feet total well depth surface flush manhole 2 inch diameter 40 feet solid casing (tremie grout) 10 feet 0.02" screen
-				
60				
-				
70				
-				
80				
-				
90				
-				
100				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

DRILLING LOG

BORING NO:
mw-2

PROJECT NO:
UTS-02

DATE:
4/15/19

DRILLING METHOD:
air rotary

PROJECT TITLE:
United Tire Service

DRILLING COMPANY:
Garber well drilling

PROJECT LOCATION:
United Tire Service
4094 Chestnut St
Emmaus, PA

BOREHOLE DIAMETER (IN):
8

WATER LEVEL (FT):

WEATHER CONDITIONS:
dry, warm

LOGGED BY:
jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	well design	PID	COMMENTS
0	tan, silty clay, dry			
-			0	no petroleum odor
10				
-			0.2	
20			25	slight petroleum odor
-	same lithology, moist		3.7	no petroleum odor
-				
30				
---			0	no petroleum odor
40			0	
-	- same lithology, moist		0	no petroleum odor
50	- end boring @ 50 feet.			well construction: 50 feet total well depth surface flush manhole 2 inch diameter 40 feet solid casing (tremie grout) 10 feet 0.02" screen
-				
60				
-				
70				
-				
80				
-				
90				
-				
100				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.
DRILLING LOG

BORING NO: mw-3

PROJECT NO: UTS-02

DATE: 4/15/19

DRILLING METHOD: air rotary

PROJECT TITLE: United Tire Service

DRILLING COMPANY: Garber well drilling

PROJECT LOCATION:
 United Tire Service
 4094 Chestnut St
 Emmaus, PA

BOREHOLE DIAMETER (IN): 8

WATER LEVEL (FT):

WEATHER CONDITIONS:
 dry, warm

LOGGED BY: jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	well design	PID	COMMENTS
0	tan, silty clay, dry			
—			0	no petroleum odor
10			0	
—				
20			0	no petroleum odor
—	same lithology, moist			
—				
30			0	no petroleum odor
—				
40			0	no petroleum odor
—	- same lithology, moist			
50	- end boring @ 50 feet.		0	no petroleum odor
—				
60				well construction: 50 feet total well depth surface flush manhole 2 inch diameter 40 feet solid casing (tremie grout) 10 feet 0.02" screen
—				
70				
—				
80				
—				
90				
—				
100				

APPENDIX E

Laboratory Analytical Data

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

DRILLING LOG

BORING NO:
mw-4

PROJECT NO:
UTS-02

DATE:
8/26/19

DRILLING METHOD: Air Rotary/Auger

PROJECT TITLE: United Tire Service

DRILLING COMPANY: Garber well drilling

PROJECT LOCATION:
United Tire Service
4094 Chestnut St
Emmaus, PA

BOREHOLE DIAMETER (IN):
8

WATER LEVEL (FT):

WEATHER CONDITIONS:
dry, warm

LOGGED BY:
jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	well design	PID	COMMENTS
0	tan, silty clay, dry			Air rotary to 16 feet
10				
20	same lithology, moist, some LS gravel		14 21 27 65 sample 20'	spoon 16-18 ft, gravel in spoon, no recovery spoon 18-20, slight petroleum odor
30			85 94 105 120 135 147 155 160 165 170 175 180 185 190 195 200 205 210 215 220 225 230 235 240 245 250 255 260 265 270 275 280 285 290 295 300 305 310 315 320 325 330 335 340 345 350 355 360 365 370 375 380 385 390 395 400 405 410 415 420 425 430 435 440 445 450 455 460 465 470 475 480 485 490 495 500 505 510 515 520 525 530 535 540 545 550 555 560 565 570 575 580 585 590 595 600 605 610 615 620 625 630 635 640 645 650 655 660 665 670 675 680 685 690 695 700 705 710 715 720 725 730 735 740 745 750 755 760 765 770 775 780 785 790 795 800 805 810 815 820 825 830 835 840 845 850 855 860 865 870 875 880 885 890 895 900 905 910 915 920 925 930 935 940 945 950 955 960 965 970 975 980 985 990 995 1000	spoons 22-32 ft, slight petroleum odor
40			37 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212 214 216 218 220 222 224 226 228 230 232 234 236 238 240 242 244 246 248 250 252 254 256 258 260 262 264 266 268 270 272 274 276 278 280 282 284 286 288 290 292 294 296 298 300 302 304 306 308 310 312 314 316 318 320 322 324 326 328 330 332 334 336 338 340 342 344 346 348 350 352 354 356 358 360 362 364 366 368 370 372 374 376 378 380 382 384 386 388 390 392 394 396 398 400 402 404 406 408 410 412 414 416 418 420 422 424 426 428 430 432 434 436 438 440 442 444 446 448 450 452 454 456 458 460 462 464 466 468 470 472 474 476 478 480 482 484 486 488 490 492 494 496 498 500 502 504 506 508 510 512 514 516 518 520 522 524 526 528 530 532 534 536 538 540 542 544 546 548 550 552 554 556 558 560 562 564 566 568 570 572 574 576 578 580 582 584 586 588 590 592 594 596 598 600 602 604 606 608 610 612 614 616 618 620 622 624 626 628 630 632 634 636 638 640 642 644 646 648 650 652 654 656 658 660 662 664 666 668 670 672 674 676 678 680 682 684 686 688 690 692 694 696 698 700 702 704 706 708 710 712 714 716 718 720 722 724 726 728 730 732 734 736 738 740 742 744 746 748 750 752 754 756 758 760 762 764 766 768 770 772 774 776 778 780 782 784 786 788 790 792 794 796 798 800 802 804 806 808 810 812 814 816 818 820 822 824 826 828 830 832 834 836 838 840 842 844 846 848 850 852 854 856 858 860 862 864 866 868 870 872 874 876 878 880 882 884 886 888 890 892 894 896 898 900 902 904 906 908 910 912 914 916 918 920 922 924 926 928 930 932 934 936 938 940 942 944 946 948 950 952 954 956 958 960 962 964 966 968 970 972 974 976 978 980 982 984 986 988 990 992 994 996 998 1000	spoon 35-37 ft, slight petroleum odor
50	- same lithology, moist		37 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118 120 122 124 126 128 130 132 134 136 138 140 142 144 146 148 150 152 154 156 158 160 162 164 166 168 170 172 174 176 178 180 182 184 186 188 190 192 194 196 198 200 202 204 206 208 210 212 214 216 218 220 222 224 226 228 230 232 234 236 238 240 242 244 246 248 250 252 254 256 258 260 262 264 266 268 270 272 274 276 278 280 282 284 286 288 290 292 294 296 298 300 302 304 306 308 310 312 314 316 318 320 322 324 326 328 330 332 334 336 338 340 342 344 346 348 350 352 354 356 358 360 362 364 366 368 370 372 374 376 378 380 382 384 386 388 390 392 394 396 398 400 402 404 406 408 410 412 414 416 418 420 422 424 426 428 430 432 434 436 438 440 442 444 446 448 450 452 454 456 458 460 462 464 466 468 470 472 474 476 478 480 482 484 486 488 490 492 494 496 498 500 502 504 506 508 510 512 514 516 518 520 522 524 526 528 530 532 534 536 538 540 542 544 546 548 550 552 554 556 558 560 562 564 566 568 570 572 574 576 578 580 582 584 586 588 590 592 594 596 598 600 602 604 606 608 610 612 614 616 618 620 622 624 626 628 630 632 634 636 638 640 642 644 646 648 650 652 654 656 658 660 662 664 666 668 670 672 674 676 678 680 682 684 686 688 690 692 694 696 698 700 702 704 706 708 710 712 714 716 718 720 722 724 726 728 730 732 734 736 738 740 742 744 746 748 750 752 754 756 758 760 762 764 766 768 770 772 774 776 778 780 782 784 786 788 790 792 794 796 798 800 802 804 806 808 810 812 814 816 818 820 822 824 826 828 830 832 834 836 838 840 842 844 846 848 850 852 854 856 858 860 862 864 866 868 870 872 874 876 878 880 882 884 886 888 890 892 894 896 898 900 902 904 906 908 910 912 914 916 918 920 922 924 926 928 930 932 934 936 938 940 942 944 946 948 950 952 954 956 958 960 962 964 966 968 970 972 974 976 978 980 982 984 986 988 990 992 994 996 998 1000	spoon 40-42 ft
60			130 135 140 145 150 155 160 165 170 175 180 185 190 195 200 205 210 215 220 225 230 235 240 245 250 255 260 265 270 275 280 285 290 295 300 305 310 315 320 325 330 335 340 345 350 355 360 365 370 375 380 385 390 395 400 405 410 415 420 425 430 435 440 445 450 455 460 465 470 475 480 485 490 495 500 505 510 515 520 525 530 535 540 545 550 555 560 565 570 575 580 585 590 595 600 605 610 615 620 625 630 635 640 645 650 655 660 665 670 675 680 685 690 695 700 705 710 715 720 725 730 735 740 745 750 755 760 765 770 775 780 785 790 795 800 805 810 815 820 825 830 835 840 845 850 855 860 865 870 875 880 885 890 895 900 905 910 915 920 925 930 935 940 945 950 955 960 965 970 975 980 985 990 995 1000	spoons 45-51 ft, slight petroleum odor
70	- end boring @ 65 feet.		21 113 67 140 sample 30'	spoon 54-56 ft, slight petroleum odor
80			47 49 50 51	spoon 63-65, slight petroleum odor
90				
100				well construction: 65 feet total well depth surface flush manhole 4 inch diameter 40 feet solid casing (tremie grout) 25 feet 0.02" screen

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.
DRILLING LOG

BORING NO: mw-5

PROJECT NO:
UTS-02

DATE: 8/27/19

DRILLING METHOD: Auger

PROJECT TITLE: United Tire Service

DRILLING COMPANY: Garber well drilling

PROJECT LOCATION:
United Tire Service
4094 Chestnut St
Emmaus, PA

BOREHOLE DIAMETER (IN):
8

WATER LEVEL (FT):

WEATHER CONDITIONS:
dry, warm

LOGGED BY:
jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	well design	PID	COMMENTS
0	tan, silty clay, dry			
—			0	no petroleum odor - PID readings from auger cuttings
10			0	
—				
20	same lithology, moist, some LS gravel		0	no petroleum odor
—				
—			0	
30			0	no petroleum odor
—				
40	- same lithology, moist		0	
—				
50			0	no petroleum odor
—				
60			0	
—				
—	- end boring @ 65 feet.		0	no petroleum odor
70				
—				
80				well construction: 65 feet total well depth surface flush manhole 4 inch diameter 40 feet solid casing (tremie grout) 25 feet 0.02" screen
—				
90				
—				
100				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.
DRILLING LOG

BORING NO: mw-6

PROJECT NO:
UTS-02

DATE: 8/28/19

DRILLING METHOD: Auger

PROJECT TITLE: United Tire Service

DRILLING COMPANY: Garber well drilling

PROJECT LOCATION:
United Tire Service
4094 Chestnut St
Emmaus, PA

BOREHOLE DIAMETER (IN):
8

WATER LEVEL (FT):

WEATHER CONDITIONS:
dry, warm

LOGGED BY:
jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	well design	PID	COMMENTS
0	tan, silty clay, dry			No petroleum odor PID readings from auger cuttings
10				
20				
	same lithology, moist, some LS gravel			spoons 23-27 ft, slight to moderate petroleum odor
30				spoon 30-32 ft, no petroleum odor
				note: PID readings from auger cuttings between spoon samples
40				
	- same lithology, moist			spoon 45-47 ft, no petroleum odor
50				
60				
	- end boring @ 65 feet.			
70				
80				well construction: 65 feet total well depth surface flush manhole 4 inch diameter 40 feet solid casing (tremie grout) 25 feet 0.02" screen
90				
100				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

DRILLING LOG

BORING NO:
mw-7

PROJECT NO:
UTS-02

DATE:
8/28/19

DRILLING METHOD: Auger

PROJECT TITLE: United Tire Service

DRILLING COMPANY: Garber well drilling

PROJECT LOCATION:
United Tire Service
4094 Chestnut St
Emmaus, PA

BOREHOLE DIAMETER (IN):
8

WATER LEVEL (FT):

WEATHER CONDITIONS:
dry, warm

LOGGED BY:
jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	well design	PID	COMMENTS
0	tan, silty clay, dry			No petroleum odor PID readings from auger cuttings
10				
20				slight petroleum odor
30	same lithology, moist, some LS gravel			spoon 25-29 ft, moderate petroleum odor note: PID not operating
40				
50	- same lithology, moist			
60				
70	- end boring @ 65 feet.			
80				well construction: 65 feet total well depth surface flush manhole 4 inch diameter 40 feet solid casing (tremie grout) 25 feet 0.02" screen
90				
100				

COVENTRY ENVIRONMENTAL ASSOCIATES, INC.

DRILLING LOG

BORING NO:
mw-8

PROJECT NO:
UTS-02

DATE:
8/29/19

DRILLING METHOD: Auger

PROJECT TITLE: United Tire Service

DRILLING COMPANY: Garber well drilling

PROJECT LOCATION:
United Tire Service
4094 Chestnut St
Emmaus, PA

BOREHOLE DIAMETER (IN):
8

WATER LEVEL (FT):

WEATHER CONDITIONS:
dry, warm

LOGGED BY:
jvw

DEPTH (FT)	LITHOLOGIC DESCRIPTION	well design	PID	COMMENTS
0	tan, silty clay, dry			
—			0.3	No petroleum odor
			0.6	PID readings from auger cuttings
10			6.7	slight petroleum odor
—			6.8	
20			0.3	No petroleum odor
—	same lithology, moist, some LS gravel		4.9	
			15.3	
30			5	
—			0.4	
40			3.9	No petroleum odor
—	- same lithology, moist		5.8	
50			10	
—			2.7	No Petroleum odor
60			1.2	
—			5	
65	- end boring @ 65 feet.		4	
70				
—				
80				well construction: 65 feet total well depth surface flush manhole 4 inch diameter 40 feet solid casing (tremie grout) 25 feet 0.02" screen
—				
90				
—				
100				

APPENDIX B

Laboratory Data Sheets

ANALYTICAL RESULTS

Workorder: 3033054 UTS

Lab ID: 3033054001

Sample ID: MW-1

Date Collected: 5/9/2019 13:30

Matrix: Ground Water

Date Received: 5/9/2019 21:21

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	7090	1,2	ug/L	200	SW846 8260B			5/17/19 04:07	PDK	A
Ethylbenzene	835		ug/L	10.0	SW846 8260B			5/15/19 07:28	PDK	A
Isopropylbenzene	52.7		ug/L	10.0	SW846 8260B			5/15/19 07:28	PDK	A
Methyl t-Butyl Ether	918		ug/L	10.0	SW846 8260B			5/15/19 07:28	PDK	A
Naphthalene	43.0		ug/L	20.0	SW846 8260B			5/15/19 07:28	PDK	A
Toluene	10100		ug/L	200	SW846 8260B			5/17/19 04:07	PDK	A
Total Xylenes	9500		ug/L	600	SW846 8260B			5/17/19 04:07	PDK	A
1,2,4-Trimethylbenzene	1800		ug/L	10.0	SW846 8260B			5/15/19 07:28	PDK	A
1,3,5-Trimethylbenzene	862		ug/L	10.0	SW846 8260B			5/15/19 07:28	PDK	A
Surrogate Recoveries										
1,2-Dichloroethane-d4 (S)	113		%	62 - 133	SW846 8260B			5/15/19 07:28	PDK	A
1,2-Dichloroethane-d4 (S)	115		%	62 - 133	SW846 8260B			5/17/19 04:07	PDK	A
4-Bromofluorobenzene (S)	99.8		%	79 - 114	SW846 8260B			5/17/19 04:07	PDK	A
4-Bromofluorobenzene (S)	100		%	79 - 114	SW846 8260B			5/15/19 07:28	PDK	A
Dibromofluoromethane (S)	105		%	78 - 116	SW846 8260B			5/17/19 04:07	PDK	A
Dibromofluoromethane (S)	112		%	78 - 116	SW846 8260B			5/15/19 07:28	PDK	A
Toluene-d8 (S)	102		%	76 - 127	SW846 8260B			5/17/19 04:07	PDK	A
Toluene-d8 (S)	106		%	76 - 127	SW846 8260B			5/15/19 07:28	PDK	A



Jessica Lee Smith
Project Coordinator

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Report ID: 3033054 - 5/17/2019

ANALYTICAL RESULTS

Workorder: 3033054 UTS

Lab ID: 3033054002

Sample ID: MW-2

Date Collected: 5/9/2019 13:45

Matrix: Ground Water

Date Received: 5/9/2019 21:21

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			5/15/19 07:05	PDK	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			5/15/19 07:05	PDK	A
Isopropylbenzene	ND		ug/L	1.0	SW846 8260B			5/15/19 07:05	PDK	A
Methyl t-Butyl Ether	ND		ug/L	1.0	SW846 8260B			5/15/19 07:05	PDK	A
Naphthalene	ND		ug/L	2.0	SW846 8260B			5/15/19 07:05	PDK	A
Toluene	ND		ug/L	1.0	SW846 8260B			5/15/19 07:05	PDK	A
Total Xylenes	ND		ug/L	3.0	SW846 8260B			5/15/19 07:05	PDK	A
1,2,4-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			5/15/19 07:05	PDK	A
1,3,5-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			5/15/19 07:05	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	115		%	62 - 133	SW846 8260B			5/15/19 07:05	PDK	A
4-Bromofluorobenzene (S)	102		%	79 - 114	SW846 8260B			5/15/19 07:05	PDK	A
Dibromofluoromethane (S)	116		%	78 - 116	SW846 8260B			5/15/19 07:05	PDK	A
Toluene-d8 (S)	106		%	76 - 127	SW846 8260B			5/15/19 07:05	PDK	A



Jessica Lee Smith
Project Coordinator

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Report ID: 3033054 - 5/17/2019



ALS Environmental



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State Certifications: FL E871113, WA C999, MD 128, VA 460157, WV DW 9961-C, WV 343

ANALYTICAL RESULTS

Workorder: 3033054 UTS

Lab ID: 3033054003

Sample ID: MW-3

Date Collected: 5/9/2019 14:00

Matrix: Ground Water

Date Received: 5/9/2019 21:21

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			5/15/19 06:42	PDK	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			5/15/19 06:42	PDK	A
Isopropylbenzene	ND		ug/L	1.0	SW846 8260B			5/15/19 06:42	PDK	A
Methyl t-Butyl Ether	9.6		ug/L	1.0	SW846 8260B			5/15/19 06:42	PDK	A
Naphthalene	3.9		ug/L	2.0	SW846 8260B			5/15/19 06:42	PDK	A
Toluene	ND		ug/L	1.0	SW846 8260B			5/15/19 06:42	PDK	A
Total Xylenes	3.7		ug/L	3.0	SW846 8260B			5/15/19 06:42	PDK	A
1,2,4-Trimethylbenzene	4.7		ug/L	1.0	SW846 8260B			5/15/19 06:42	PDK	A
1,3,5-Trimethylbenzene	1.0		ug/L	1.0	SW846 8260B			5/15/19 06:42	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	115		%	62 - 133	SW846 8260B			5/15/19 06:42	PDK	A
4-Bromofluorobenzene (S)	100		%	79 - 114	SW846 8260B			5/15/19 06:42	PDK	A
Dibromofluoromethane (S)	112		%	78 - 116	SW846 8260B			5/15/19 06:42	PDK	A
Toluene-d8 (S)	106		%	76 - 127	SW846 8260B			5/15/19 06:42	PDK	A

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ANALYTICAL RESULTS

Workorder: 3033054 UTS

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3033054001	1	MW-1	SW846 8260B	Benzene
pH - Methods for the analysis of volatile organics require that the sample be preserved to a pH less than 2 using HCl. This sample had a pH greater than 2 when received by the lab.				
3033054001	2	MW-1	SW846 8260B	Benzene
VTC - The GCMS volatiles analysis was performed at a dilution due to the level of target compounds.				

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**CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS**
**ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.**



61

SAMPLER INSTRUCTIONS ON THE BACK									
Client Name: County Env. Assoc			Container Type: gal			4 3 0 3 3 0 5 4 *			
Address: PO Box 224 St. Peters, PA 19420			Container Size: 1/2 gal			(completed by Receiving Lab) W.O. Temp: 0 Therm ID: 401			
Contact: John Van Doren			ANALYSES/METHOD REQUESTED			Courier/Tracking #:			
Phone: 610-484-4540						Purchase Order #:			
Project Name: UTS						Project Comments:			
Bill To: same									
TAT ☒ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.			11061 unsealed gal			ALS Field Services: ☐ Pickup ☐ Labor ☐ Composite Sampling ☐ Rental Equipment Other:			
Date Required: _____ Approved? _____									
Email? ☐ -Y									
Fax? ☐ -Y No: _____									
Sample Description/Location (as it will appear on the lab report)		Date Collected m/d/yyyy	Time M:PM	*G or C	*Matrix	Enter Number of Containers Per Sample or Field Results Below.		Sample/COC Comments	
1 MU-1		5/9/19	1:30	G	Gal	1			
2 MU-2			1:45			2			
3 MU-3			2:00			2			
4									
5									
6									
7									
8									
9									
10									
SAMPLED BY (Please Print): John Van Doren				Sampler Comments:					
Relinquished By / Company Name		Date	Time	Received By / Company Name		Date	Time		
1 John Van Doren		5/9/19	1:12	2 Chris Edener		5/9/19	1:12		
3 Chris Edener		5/9/19	1:00	4 COMMON COURIER (ALS COURIER)		5/9/19	2:12		
6 COMMON COURIER (ALS COURIER)				5 [Signature]		5/9/19	2:12		
7				8					
9				10					
Data Deliverables: ☐ Standard ☐ CLP/USE ☐ USACE/DOO				Special Processing USACE ☐ Navy ☐		State Samples Collected In ☐ NY ☐ NJ ☐ PA ☐ NC			
Reportable to PADEP? Yes ☐ No ☐				Sample Disposal Lab ☐ Special ☐		PWSID # _____			
EDDS: Format type _____						Other _____			

ALS SHIPPING ADDRESS: 301 Felling Mill Road, Middletown, PA 17057

Date 11/18

ANALYTICAL RESULTS

Workorder: 3035503 UST Testing

Lab ID: 3035503001

Date Collected: 5/21/2019 12:00

Matrix: Ground Water

Sample ID: MW-2

Date Received: 5/22/2019 20:29

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			5/25/19 07:43	DD	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			5/25/19 07:43	DD	A
Isopropylbenzene	ND		ug/L	1.0	SW846 8260B			5/25/19 07:43	DD	A
Methyl t-Butyl Ether	ND		ug/L	1.0	SW846 8260B			5/25/19 07:43	DD	A
Naphthalene	ND		ug/L	2.0	SW846 8260B			5/25/19 07:43	DD	A
Toluene	ND		ug/L	1.0	SW846 8260B			5/25/19 07:43	DD	A
Total Xylenes	ND		ug/L	3.0	SW846 8260B			5/25/19 07:43	DD	A
1,2,4-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			5/25/19 07:43	DD	A
1,3,5-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			5/25/19 07:43	DD	A
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	116		%	62 - 133	SW846 8260B			5/25/19 07:43	DD	A
4-Bromofluorobenzene (S)	103		%	79 - 114	SW846 8260B			5/25/19 07:43	DD	A
Dibromofluoromethane (S)	102		%	78 - 116	SW846 8260B			5/25/19 07:43	DD	A
Toluene-d8 (S)	87.1		%	76 - 127	SW846 8260B			5/25/19 07:43	DD	A



Jessica Lee Smith
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3035503 UST Testing

Lab ID: 3035503002

Date Collected: 5/21/2019 12:30

Matrix: Ground Water

Sample ID: MW-3

Date Received: 5/22/2019 20:29

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			5/25/19 08:06	DD	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			5/25/19 08:06	DD	A
Isopropylbenzene	ND		ug/L	1.0	SW846 8260B			5/25/19 08:06	DD	A
Methyl t-Butyl Ether	10.9	1	ug/L	1.0	SW846 8260B			5/25/19 08:06	DD	A
Naphthalene	ND		ug/L	2.0	SW846 8260B			5/25/19 08:06	DD	A
Toluene	ND		ug/L	1.0	SW846 8260B			5/25/19 08:06	DD	A
Total Xylenes	ND		ug/L	3.0	SW846 8260B			5/25/19 08:06	DD	A
1,2,4-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			5/25/19 08:06	DD	A
1,3,5-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			5/25/19 08:06	DD	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	115		%	62 - 133	SW846 8260B			5/25/19 08:06	DD	A
4-Bromofluorobenzene (S)	105		%	79 - 114	SW846 8260B			5/25/19 08:06	DD	A
Dibromofluoromethane (S)	101		%	78 - 116	SW846 8260B			5/25/19 08:06	DD	A
Toluene-d8 (S)	85.9		%	76 - 127	SW846 8260B			5/25/19 08:06	DD	A



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ANALYTICAL RESULTS

Workorder: 3035503 UST Testing

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3035503002	1	MW-3	SW846 8260B	Methyl t-Butyl Ether

The QC sample type MS for method SW846 8260B was outside the control limits for the analyte Methyl t-Butyl Ether. The % Recovery was reported as 118 and the control limits were 69 to 115.

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34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

Page ____ of ____
Counter: _____
Tracking #: _____



Co. Name: County Env UTSSOC
Contact (Print): John Conklyn Phone: 610-469-6540
Address: PO Box 224
St. Peters, CA 19470

Bill to (if different than Report to): Same PO#: _____

Project Name/ID: UTS ALS Quote #: _____

TAT: ☒ Normal-Standard TAT is 10-12 business days.
☐ Rush-Subject to ALS approval and surcharges.

Date Required: _____
Approved By: _____

Email? ☒ Yes ☐ No
Fax? ☒ Yes ☐ No

Sample Description/Location (See & fill in on the laboratory)	COC Comments	Sample Date /	Military Time	% air C	% Moisture
1 <u>MW-1</u>		<u>5/21/19</u>	<u>1200</u>	<u>6.00</u>	<u>2</u>
2 <u>MW-3</u>		<u>5/21/19</u>	<u>1215</u>	<u>6.00</u>	<u>2</u>
3					
4					
5					
6					
7					
8					

Enter Number of Containers Per Analysis

SAMPLED BY (Please Print):

John Conklyn

Project Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 <u>John Conklyn</u>	<u>5/21/19</u>	<u>1341</u>	2 <u>Benny W. Williams</u>	<u>5/21/19</u>	<u>1341</u>
3 <u>Benny W. Williams</u>	<u>5/22/19</u>	<u>1600</u>	4 <u>John Conklyn</u>	<u>5/22/19</u>	<u>1600</u>
5 <u>John Conklyn</u>	<u>5/22/19</u>	<u>1600</u>	6 <u>COMMON COURIER / ALS COURIER</u>		
7 <u>COMMON COURIER / ALS COURIER</u>			8 <u>John Conklyn</u>	<u>5/21/19</u>	<u>1600</u>
9			10		

Data Deliverables
☐ Standard
☐ CLP-like
☐ NA-Reduced
☐ NA-Full

SDWA

Form 10

yes ☐ no ☐

yes ☐ no ☐

yes ☐ no ☐

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yes ☐ no ☐

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ANALYTICAL RESULTS

Workorder: 3057651 UTS

Lab ID: 3057651001

Sample ID: MW-3

Date Collected: 9/12/2019 08:00

Matrix: Water

Date Received: 9/12/2019 21:32

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			9/18/19 03:21	VLM	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			9/18/19 03:21	VLM	A
Isopropylbenzene	ND		ug/L	1.0	SW846 8260B			9/18/19 03:21	VLM	A
Methyl t-Butyl Ether	12.2		ug/L	1.0	SW846 8260B			9/18/19 03:21	VLM	A
Naphthalene	ND		ug/L	2.0	SW846 8260B			9/18/19 03:21	VLM	A
Toluene	ND		ug/L	1.0	SW846 8260B			9/18/19 03:21	VLM	A
Total Xylenes	ND		ug/L	3.0	SW846 8260B			9/18/19 03:21	VLM	A
1,2,4-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			9/18/19 03:21	VLM	A
1,3,5-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			9/18/19 03:21	VLM	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	110		%	62 - 133	SW846 8260B			9/18/19 03:21	VLM	A
4-Bromofluorobenzene (S)	112		%	79 - 114	SW846 8260B			9/18/19 03:21	VLM	A
Dibromofluoromethane (S)	101		%	78 - 116	SW846 8260B			9/18/19 03:21	VLM	A
Toluene-d8 (S)	86		%	76 - 127	SW846 8260B			9/18/19 03:21	VLM	A


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Report ID: 3057651 - 9/23/2019

ANALYTICAL RESULTS

Workorder: 3057651 UTS

Lab ID: 3057651002

Sample ID: MW-4

Date Collected: 9/12/2019 11:40

Matrix: Water

Date Received: 9/12/2019 21:32

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	12500		ug/L	200	SW846 8260B			9/19/19 00:55	PDK	B
Ethylbenzene	3230		ug/L	200	SW846 8260B			9/19/19 00:55	PDK	B
Isopropylbenzene	126		ug/L	5.0	SW846 8260B			9/18/19 06:03	VLM	A
Methyl t-Butyl Ether	1340		ug/L	200	SW846 8260B			9/19/19 00:55	PDK	B
Naphthalene	406		ug/L	10.0	SW846 8260B			9/18/19 06:03	VLM	A
Toluene	21400		ug/L	200	SW846 8260B			9/19/19 00:55	PDK	B
Total Xylenes	16900		ug/L	600	SW846 8260B			9/19/19 00:55	PDK	B
1,2,4-Trimethylbenzene	2430		ug/L	200	SW846 8260B			9/19/19 00:55	PDK	B
1,3,5-Trimethylbenzene	778		ug/L	5.0	SW846 8260B			9/19/19 00:55	PDK	B
								9/18/19 06:03	VLM	A
Surrogate Recoveries										
	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	101		%	62 - 133	SW846 8260B			9/18/19 06:03	VLM	A
1,2-Dichloroethane-d4 (S)	113		%	62 - 133	SW846 8260B			9/19/19 00:55	PDK	B
4-Bromofluorobenzene (S)	97.6		%	79 - 114	SW846 8260B			9/19/19 00:55	PDK	B
4-Bromofluorobenzene (S)	98.8		%	79 - 114	SW846 8260B			9/18/19 06:03	VLM	A
Dibromofluoromethane (S)	103		%	78 - 116	SW846 8260B			9/19/19 00:55	PDK	B
Dibromofluoromethane (S)	97.3		%	78 - 116	SW846 8260B			9/18/19 06:03	VLM	A
Toluene-d8 (S)	99.8		%	76 - 127	SW846 8260B			9/19/19 00:55	PDK	B
Toluene-d8 (S)	94.6		%	76 - 127	SW846 8260B			9/18/19 06:03	VLM	A

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ANALYTICAL RESULTS

Workorder: 3057651 UTS

Lab ID: 3057651003

Sample ID: MW-5

Date Collected: 9/12/2019 09:15

Matrix: Water

Date Received: 9/12/2019 21:32

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			9/18/19 03:44	VLM	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			9/18/19 03:44	VLM	A
Isopropylbenzene	ND		ug/L	1.0	SW846 8260B			9/18/19 03:44	VLM	A
Methyl t-Butyl Ether	58.7		ug/L	1.0	SW846 8260B			9/18/19 03:44	VLM	A
Naphthalene	ND		ug/L	2.0	SW846 8260B			9/18/19 03:44	VLM	A
Toluene	ND		ug/L	1.0	SW846 8260B			9/18/19 03:44	VLM	A
Total Xylenes	ND		ug/L	3.0	SW846 8260B			9/18/19 03:44	VLM	A
1,2,4-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			9/18/19 03:44	VLM	A
1,3,5-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			9/18/19 03:44	VLM	A
Surrogate Recoveries										
1,2-Dichloroethane-d4 (S)	111		%	62 - 133	SW846 8260B			9/18/19 03:44	VLM	A
4-Bromofluorobenzene (S)	104		%	79 - 114	SW846 8260B			9/18/19 03:44	VLM	A
Dibromofluoromethane (S)	103		%	78 - 116	SW846 8260B			9/18/19 03:44	VLM	A
Toluene-d8 (S)	97.6		%	76 - 127	SW846 8260B			9/18/19 03:44	VLM	A


Jessica Lee Smith
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Mexico: Monterrey

Report ID: 3057651 - 9/23/2019

ANALYTICAL RESULTS

Workorder: 3057651 UTS

Lab ID: 3057651004

Sample ID: MW-6

Date Collected: 9/12/2019 11:15

Matrix: Water

Date Received: 9/12/2019 21:32

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	74.2		ug/L	1.0	SW846 8260B			9/18/19 04:08	VLM	A
Ethylbenzene	4.3		ug/L	1.0	SW846 8260B			9/18/19 04:08	VLM	A
Isopropylbenzene	ND		ug/L	1.0	SW846 8260B			9/18/19 04:08	VLM	A
Methyl t-Butyl Ether	ND		ug/L	1.0	SW846 8260B			9/18/19 04:08	VLM	A
Naphthalene	ND		ug/L	2.0	SW846 8260B			9/18/19 04:08	VLM	A
Toluene	12.6		ug/L	1.0	SW846 8260B			9/18/19 04:08	VLM	A
Total Xylenes	10.7		ug/L	3.0	SW846 8260B			9/18/19 04:08	VLM	A
1,2,4-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			9/18/19 04:08	VLM	A
1,3,5-Trimethylbenzene	1.5		ug/L	1.0	SW846 8260B			9/18/19 04:08	VLM	A
Surrogate Recoveries										
	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	112		%	62 - 133	SW846 8260B			9/18/19 04:08	VLM	A
4-Bromofluorobenzene (S)	111		%	79 - 114	SW846 8260B			9/18/19 04:08	VLM	A
Dibromofluoromethane (S)	104		%	78 - 116	SW846 8260B			9/18/19 04:08	VLM	A
Toluene-d8 (S)	90.5		%	76 - 127	SW846 8260B			9/18/19 04:08	VLM	A


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Report ID: 3057651 - 9/23/2019

ANALYTICAL RESULTS

Workorder: 3057651 UTS

Lab ID: 3057651005

Sample ID: MW-7

Date Collected: 9/12/2019 10:30

Matrix: Water

Date Received: 9/12/2019 21:32

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	9970		ug/L	50.0	SW846 8260B			9/19/19 00:32	PDK	B
Ethylbenzene	2470		ug/L	50.0	SW846 8260B			9/19/19 00:32	PDK	B
Isopropylbenzene	136		ug/L	1.0	SW846 8260B			9/18/19 04:31	VLM	A
Methyl t-Butyl Ether	235		ug/L	50.0	SW846 8260B			9/19/19 00:32	PDK	B
Naphthalene	ND		ug/L	200	SW846 8260B			9/20/19 14:07	TMP	B
Toluene	12300		ug/L	100	SW846 8260B			9/20/19 14:07	TMP	B
Total Xylenes	13500		ug/L	150	SW846 8260B			9/19/19 00:32	PDK	B
1,2,4-Trimethylbenzene	2510		ug/L	50.0	SW846 8260B			9/19/19 00:32	PDK	B
1,3,5-Trimethylbenzene	702		ug/L	50.0	SW846 8260B			9/19/19 00:32	PDK	B
Surrogate Recoveries										
	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	105		%	62 - 133	SW846 8260B			9/18/19 04:31	VLM	A
1,2-Dichloroethane-d4 (S)	109		%	62 - 133	SW846 8260B			9/19/19 00:32	PDK	B
1,2-Dichloroethane-d4 (S)	106		%	62 - 133	SW846 8260B			9/20/19 14:07	TMP	B
4-Bromofluorobenzene (S)	108		%	79 - 114	SW846 8260B			9/20/19 14:07	TMP	B
4-Bromofluorobenzene (S)	110		%	79 - 114	SW846 8260B			9/18/19 04:31	VLM	A
4-Bromofluorobenzene (S)	103		%	79 - 114	SW846 8260B			9/19/19 00:32	PDK	B
Dibromofluoromethane (S)	104		%	78 - 116	SW846 8260B			9/18/19 04:31	VLM	A
Dibromofluoromethane (S)	102		%	78 - 116	SW846 8260B			9/19/19 00:32	PDK	B
Dibromofluoromethane (S)	108		%	78 - 116	SW846 8260B			9/20/19 14:07	TMP	B
Toluene-d8 (S)	88.2		%	76 - 127	SW846 8260B			9/18/19 04:31	VLM	A
Toluene-d8 (S)	104		%	76 - 127	SW846 8260B			9/20/19 14:07	TMP	B
Toluene-d8 (S)	86		%	76 - 127	SW846 8260B			9/19/19 00:32	PDK	B


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Report ID: 3057651 - 9/23/2019

ANALYTICAL RESULTS

Workorder: 3057651 UTS

Lab ID: 3057651006

Sample ID: MW-8

Date Collected: 9/12/2019 10:00

Matrix: Water

Date Received: 9/12/2019 21:32

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	12200		ug/L	500	SW846 8260B			9/19/19 01:18	PDK	B
Ethylbenzene	2800		ug/L	500	SW846 8260B			9/19/19 01:18	PDK	B
Isopropylbenzene	103		ug/L	5.0	SW846 8260B			9/18/19 05:40	VLM	A
Methyl t-Butyl Ether	21900		ug/L	500	SW846 8260B			9/19/19 01:18	PDK	B
Naphthalene	415		ug/L	10.0	SW846 8260B			9/18/19 05:40	VLM	A
Toluene	25400		ug/L	500	SW846 8260B			9/19/19 01:18	PDK	B
Total Xylenes	14500		ug/L	1500	SW846 8260B			9/19/19 01:18	PDK	B
1,2,4-Trimethylbenzene	1880		ug/L	500	SW846 8260B			9/19/19 01:18	PDK	B
1,3,5-Trimethylbenzene	531		ug/L	5.0	SW846 8260B			9/18/19 05:40	VLM	A
Surrogate Recoveries										
1,2-Dichloroethane-d4 (S)	112		%	62 - 133	SW846 8260B			9/19/19 01:18	PDK	B
1,2-Dichloroethane-d4 (S)	100		%	62 - 133	SW846 8260B			9/18/19 05:40	VLM	A
4-Bromofluorobenzene (S)	113		%	79 - 114	SW846 8260B			9/19/19 01:18	PDK	B
4-Bromofluorobenzene (S)	96.7		%	79 - 114	SW846 8260B			9/18/19 05:40	VLM	A
Dibromofluoromethane (S)	103		%	78 - 116	SW846 8260B			9/19/19 01:18	PDK	B
Dibromofluoromethane (S)	104		%	78 - 116	SW846 8260B			9/18/19 05:40	VLM	A
Toluene-d8 (S)	95.5		%	76 - 127	SW846 8260B			9/18/19 05:40	VLM	A
Toluene-d8 (S)	96.5		%	76 - 127	SW846 8260B			9/19/19 01:18	PDK	B


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Mexico: Monterrey



301 Fulling Mill Road
Middletown, PA 17057
P. 717-944-5543
F. 717-944-1430

CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS
ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.



of

Client Name: County Env Assoc

Address: PO Box 224
St Peters, PA 19470

Contact: John W. Unger
Phone: 610-469-1650

Project Name: UTS
Bill To: same

TAT: ☒ Normal-Standard TAT is 10-12 business days.
☐ Rush-Subject to ALS approval and surcharges.

Date Required: _____ Approved? _____

Email? ☐ -Y

Fax? ☐ -Y No: _____

Sample Type: glass
Container: Vial
Preserve: HCL

(completed by Receiving Lab)
W.O. Temp: 21°C Therm ID: 402
Analyst Initials: SAS

Courtesy/Tracking #: _____

Purchase Order #: _____

Project Comments: _____

ANALYSIS/METHOD REQUESTED

Enter Number of Containers Per Sample or Field Results Below.

Sample/COC Comments

Sample Description/Location (as it appears in the report)	Date Collected m/d/yyyy	Time mm:ss	Vials	Containers
1 <u>MW-3</u>	<u>9/12/19</u>	<u>8:00</u>	<u>5</u>	<u>1</u>
2 <u>MW-4</u>	<u>9/12/19</u>	<u>11:15</u>	<u>1</u>	<u>2</u>
3 <u>MW-5</u>	<u>9/12/19</u>	<u>11:15</u>	<u>1</u>	<u>2</u>
4 <u>MW-6</u>	<u>9/12/19</u>	<u>11:45</u>	<u>1</u>	<u>2</u>
5 <u>MW-7</u>	<u>9/12/19</u>	<u>10:30</u>	<u>1</u>	<u>2</u>
6 <u>MW-8</u>	<u>9/12/19</u>	<u>10:10</u>	<u>1</u>	<u>2</u>
7				
8				
9				
10				

SAMPLED BY (Please Print):

John W. Unger

Sampler Comments: _____

Requisitioned By / Company Name

Date

Time

Received By / Company Name

Date

Time

Data Deliverables
☐ Standard
☐ CLP No
☐ USACE/DOO

Special Processing
USACE ☐

State Samples Collected in
☐ NY
☐ NJ
☐ PA

Reportable to PADEP?

Yes ☐ No ☐

Sample Disposal

Lab ☐

Special ☐

PWSID #

EDDS: Format Type

Other

*G=Gas; C=Composite

**Matrix: A=Air; DW=Drinking Water; GW=Groundwater; CL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Waste-water

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Middletown, PA 17057

Rev 06/18

ALS

ANALYTICAL RESULTS

Workorder: 3048835 UTS

Lab ID: 3048835001

Date Collected: 7/31/2019 11:30

Matrix: Solid

Sample ID: GP-1

Date Received: 7/31/2019 21:12

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	2410		ug/kg	734	SW846 8260B	7/31/19 11:30	PDK	8/2/19 06:26	PDK	A
Ethylbenzene	157000		ug/kg	3670	SW846 8260B	7/31/19 11:30	PDK	8/3/19 05:00	PDK	A
Isopropylbenzene	15900		ug/kg	734	SW846 8260B	7/31/19 11:30	PDK	8/2/19 06:26	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	734	SW846 8260B	7/31/19 11:30	PDK	8/2/19 06:26	PDK	A
Naphthalene	79400		ug/kg	1470	SW846 8260B	7/31/19 11:30	PDK	8/2/19 06:26	PDK	A
Toluene	147000		ug/kg	3670	SW846 8260B	7/31/19 11:30	PDK	8/3/19 05:00	PDK	A
Total Xylenes	1090000		ug/kg	11000	SW846 8260B	7/31/19 11:30	PDK	8/3/19 05:00	PDK	A
1,2,4-Trimethylbenzene	419000		ug/kg	3670	SW846 8260B	7/31/19 11:30	PDK	8/3/19 05:00	PDK	A
1,3,5-Trimethylbenzene	134000		ug/kg	734	SW846 8260B	7/31/19 11:30	PDK	8/2/19 06:26	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	134		%	71 - 146	SW846 8260B	7/31/19 11:30	PDK	8/2/19 06:26	PDK	A
1,2-Dichloroethane-d4 (S)	64.3	1	%	71 - 146	SW846 8260B	7/31/19 11:30	PDK	8/3/19 05:00	PDK	A
4-Bromofluorobenzene (S)	94.9		%	46 - 138	SW846 8260B	7/31/19 11:30	PDK	8/2/19 06:26	PDK	A
4-Bromofluorobenzene (S)	93.8		%	46 - 138	SW846 8260B	7/31/19 11:30	PDK	8/3/19 05:00	PDK	A
Dibromofluoromethane (S)	78.9		%	42 - 143	SW846 8260B	7/31/19 11:30	PDK	8/2/19 06:26	PDK	A
Dibromofluoromethane (S)	63.8		%	42 - 143	SW846 8260B	7/31/19 11:30	PDK	8/3/19 05:00	PDK	A
Toluene-d8 (S)	72.3		%	54 - 141	SW846 8260B	7/31/19 11:30	PDK	8/3/19 05:00	PDK	A
Toluene-d8 (S)	126		%	54 - 141	SW846 8260B	7/31/19 11:30	PDK	8/2/19 06:26	PDK	A
WET CHEMISTRY										
Moisture	23.1		%	0.1	S2540G-11			8/2/19 09:10	AXD	
Total Solids	76.9		%	0.1	S2540G-11			8/2/19 09:10	AXD	



Jessica Lee Smith
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ANALYTICAL RESULTS

Workorder: 3048835 UTS

Lab ID: 3048835002

Date Collected: 7/31/2019 12:00

Matrix: Solid

Sample ID: GP-1-2

Date Received: 7/31/2019 21:12

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	558		ug/kg	61.0	SW846 8260B	7/31/19 12:00	PDK	8/2/19 04:15	PDK	A
Ethylbenzene	564		ug/kg	61.0	SW846 8260B	7/31/19 12:00	PDK	8/2/19 04:15	PDK	A
Isopropylbenzene	ND		ug/kg	61.0	SW846 8260B	7/31/19 12:00	PDK	8/2/19 04:15	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	61.0	SW846 8260B	7/31/19 12:00	PDK	8/2/19 04:15	PDK	A
Naphthalene	147		ug/kg	122	SW846 8260B	7/31/19 12:00	PDK	8/2/19 04:15	PDK	A
Toluene	581		ug/kg	61.0	SW846 8260B	7/31/19 12:00	PDK	8/2/19 04:15	PDK	A
Total Xylenes	1200		ug/kg	183	SW846 8260B	7/31/19 12:00	PDK	8/2/19 04:15	PDK	A
1,2,4-Trimethylbenzene	535		ug/kg	61.0	SW846 8260B	7/31/19 12:00	PDK	8/2/19 04:15	PDK	A
1,3,5-Trimethylbenzene	148		ug/kg	61.0	SW846 8260B	7/31/19 12:00	PDK	8/2/19 04:15	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	104		%	71 - 146	SW846 8260B	7/31/19 12:00	PDK	8/2/19 04:15	PDK	A
4-Bromofluorobenzene (S)	111		%	46 - 138	SW846 8260B	7/31/19 12:00	PDK	8/2/19 04:15	PDK	A
Dibromofluoromethane (S)	95.5		%	42 - 143	SW846 8260B	7/31/19 12:00	PDK	8/2/19 04:15	PDK	A
Toluene-d8 (S)	109		%	54 - 141	SW846 8260B	7/31/19 12:00	PDK	8/2/19 04:15	PDK	A
WET CHEMISTRY										
Moisture	23.1		%	0.1	S2540G-11			8/2/19 09:10	AXD	
Total Solids	76.9		%	0.1	S2540G-11			8/2/19 09:10	AXD	



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ANALYTICAL RESULTS

Workorder: 3048835 UTS

Lab ID: 3048835003

Date Collected: 7/31/2019 14:00

Matrix: Solid

Sample ID: GP-2

Date Received: 7/31/2019 21:12

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	41.9	SW846 8260B	7/31/19 14:00	PDK	8/2/19 04:37	PDK	A
Ethylbenzene	509		ug/kg	41.9	SW846 8260B	7/31/19 14:00	PDK	8/2/19 04:37	PDK	A
Isopropylbenzene	316		ug/kg	41.9	SW846 8260B	7/31/19 14:00	PDK	8/2/19 04:37	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	41.9	SW846 8260B	7/31/19 14:00	PDK	8/2/19 04:37	PDK	A
Naphthalene	ND		ug/kg	83.7	SW846 8260B	7/31/19 14:00	PDK	8/2/19 04:37	PDK	A
Toluene	ND		ug/kg	41.9	SW846 8260B	7/31/19 14:00	PDK	8/2/19 04:37	PDK	A
Total Xylenes	ND		ug/kg	126	SW846 8260B	7/31/19 14:00	PDK	8/2/19 04:37	PDK	A
1,2,4-Trimethylbenzene	2050		ug/kg	41.9	SW846 8260B	7/31/19 14:00	PDK	8/2/19 04:37	PDK	A
1,3,5-Trimethylbenzene	ND		ug/kg	41.9	SW846 8260B	7/31/19 14:00	PDK	8/2/19 04:37	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	96.2		%	71 - 146	SW846 8260B	7/31/19 14:00	PDK	8/2/19 04:37	PDK	A
4-Bromofluorobenzene (S)	103		%	46 - 138	SW846 8260B	7/31/19 14:00	PDK	8/2/19 04:37	PDK	A
Dibromofluoromethane (S)	89.1		%	42 - 143	SW846 8260B	7/31/19 14:00	PDK	8/2/19 04:37	PDK	A
Toluene-d8 (S)	104		%	54 - 141	SW846 8260B	7/31/19 14:00	PDK	8/2/19 04:37	PDK	A
WET CHEMISTRY										
Moisture	17.1		%	0.1	S2540G-11			8/2/19 09:10	AXD	
Total Solids	82.9		%	0.1	S2540G-11			8/2/19 09:10	AXD	



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ANALYTICAL RESULTS

Workorder: 3048835 UTS

Lab ID: 3048835004

Date Collected: 7/31/2019 14:30

Matrix: Solid

Sample ID: GP-2-2

Date Received: 7/31/2019 21:12

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	48.9	SW846 8260B	7/31/19 14:30	PDK	8/2/19 04:59	PDK	A
Ethylbenzene	ND		ug/kg	48.9	SW846 8260B	7/31/19 14:30	PDK	8/2/19 04:59	PDK	A
Isopropylbenzene	ND		ug/kg	48.9	SW846 8260B	7/31/19 14:30	PDK	8/2/19 04:59	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	48.9	SW846 8260B	7/31/19 14:30	PDK	8/2/19 04:59	PDK	A
Naphthalene	ND		ug/kg	97.8	SW846 8260B	7/31/19 14:30	PDK	8/2/19 04:59	PDK	A
Toluene	ND		ug/kg	48.9	SW846 8260B	7/31/19 14:30	PDK	8/2/19 04:59	PDK	A
Total Xylenes	ND		ug/kg	147	SW846 8260B	7/31/19 14:30	PDK	8/2/19 04:59	PDK	A
1,2,4-Trimethylbenzene	ND		ug/kg	48.9	SW846 8260B	7/31/19 14:30	PDK	8/2/19 04:59	PDK	A
1,3,5-Trimethylbenzene	ND		ug/kg	48.9	SW846 8260B	7/31/19 14:30	PDK	8/2/19 04:59	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	95.6		%	71 - 146	SW846 8260B	7/31/19 14:30	PDK	8/2/19 04:59	PDK	A
4-Bromofluorobenzene (S)	101		%	46 - 138	SW846 8260B	7/31/19 14:30	PDK	8/2/19 04:59	PDK	A
Dibromofluoromethane (S)	85.2		%	42 - 143	SW846 8260B	7/31/19 14:30	PDK	8/2/19 04:59	PDK	A
Toluene-d8 (S)	98.8		%	54 - 141	SW846 8260B	7/31/19 14:30	PDK	8/2/19 04:59	PDK	A
WET CHEMISTRY										
Moisture	27.2		%	0.1	S2540G-11			8/2/19 09:10	AXD	
Total Solids	72.8		%	0.1	S2540G-11			8/2/19 09:10	AXD	



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ANALYTICAL RESULTS

Workorder: 3048835 UTS

Lab ID: 3048835005

Date Collected: 7/31/2019 15:30

Matrix: Solid

Sample ID: GP-3

Date Received: 7/31/2019 21:12

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	69.2	SW846 8260B	7/31/19 15:30	PDK	8/2/19 05:21	PDK	A
Ethylbenzene	ND		ug/kg	69.2	SW846 8260B	7/31/19 15:30	PDK	8/2/19 05:21	PDK	A
Isopropylbenzene	ND		ug/kg	69.2	SW846 8260B	7/31/19 15:30	PDK	8/2/19 05:21	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	69.2	SW846 8260B	7/31/19 15:30	PDK	8/2/19 05:21	PDK	A
Naphthalene	ND		ug/kg	138	SW846 8260B	7/31/19 15:30	PDK	8/2/19 05:21	PDK	A
Toluene	ND		ug/kg	69.2	SW846 8260B	7/31/19 15:30	PDK	8/2/19 05:21	PDK	A
Total Xylenes	ND		ug/kg	208	SW846 8260B	7/31/19 15:30	PDK	8/2/19 05:21	PDK	A
1,2,4-Trimethylbenzene	ND		ug/kg	69.2	SW846 8260B	7/31/19 15:30	PDK	8/2/19 05:21	PDK	A
1,3,5-Trimethylbenzene	ND		ug/kg	69.2	SW846 8260B	7/31/19 15:30	PDK	8/2/19 05:21	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	80.4		%	71 - 146	SW846 8260B	7/31/19 15:30	PDK	8/2/19 05:21	PDK	A
4-Bromofluorobenzene (S)	83		%	46 - 138	SW846 8260B	7/31/19 15:30	PDK	8/2/19 05:21	PDK	A
Dibromofluoromethane (S)	72.3		%	42 - 143	SW846 8260B	7/31/19 15:30	PDK	8/2/19 05:21	PDK	A
Toluene-d8 (S)	81.4		%	54 - 141	SW846 8260B	7/31/19 15:30	PDK	8/2/19 05:21	PDK	A
WET CHEMISTRY										
Moisture	23.9		%	0.1	S2540G-11			8/2/19 09:10	AXD	
Total Solids	76.1		%	0.1	S2540G-11			8/2/19 09:10	AXD	



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ANALYTICAL RESULTS

Workorder: 3048835 UTS

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3048835001	1	GP-1	SW846 8260B	1,2-Dichloroethane-d4

The surrogate 1,2-Dichloroethane-d4 for method SW846 8260B was outside of control limits. The % Recovery was reported as 64.3 and the control limits were 71 to 146. This result was reported at a dilution of 2500.

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**CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS**
ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

C
A



of

Monday, August 05, 2019 4:34:10 PM
Page 11 of 12

Client Name: <u>Country Env. Assoc.</u>		Container Type: <u>5 gal</u>		Container Size: <u>5 gal</u>		Material: <u>Soil</u>		Analysis Method Requested		W.O. Temp: <u>52</u> Therm ID: <u>38</u>		Analyst Initials: <u>JD</u>	
Address: <u>PO Box 224</u> <u>St. Peters, PA 19470</u>		Contact: <u>John Van Wageningen</u>		Phone: <u>610-469-6540</u>		Project Name: <u>UTS</u>		Bill To: <u>Same</u>		Courier/Tracking #:		Purchase Order #:	
TAT: ☒ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.		Date Required: <u>Approved?</u>		Email: ☐ Y ☐ N		Fax: ☐ Y ☐ N		ALS Field Services: ☐ Pickup ☐ Labor ☐ Composite Sampling ☐ Rental Equipment Other:		Project Comments:			
Sample Description/Location (as it will appear on the lab report)		Date Collected mm/dd/yyyy		Time hh:mm		V or C		Matrix		Enter Number of Containers Per Sample or Field Results Below		Sample/COC Comments	
1	GP-1	7/31/19	11:30	G	50	1	1	2					
2	GP-1-2		12:00			1	1	2					
3	GP-2		12:00			1	1	2					
4	GP-2-2		12:30			1	1	2					
5	GP-3		12:30			1	1	2					
6													
7													
8													
9													
10													

SAMPLED BY (Please Print): <u>John Van Wageningen</u>		Sampler Comments:	
Relinquished By / Company Name	Date	Time	Received By / Company Name
<u>John Van Wageningen</u>	<u>7-31-19</u>	<u>1800</u>	<u>Beverly Magnum</u>
<u>Beverly Magnum</u>	<u>7-31-19</u>	<u>1800</u>	<u>ALS</u>

Data Deliverables		Special Processing		State Samples Collected In	
☐ Standard	☐ CLP-like	USACE ☐	☐ NY	☐ NJ	☐ PA
☐ USACE/DOO					
Reportable to PAGEP?		Sample Disposal			
Yes ☐ No ☐		Lab ☐			
PWSID #		Special ☐			
ECDS: Format Type				other	

* Gas/Gas, G/Composite ** Matrix: A=Air; DW=Drinking Water; GW=Groundwater; OL=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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ALS

ANALYTICAL RESULTS

Workorder: 3049064 VTS 08/01/19

Lab ID: 3049064001

Date Collected: 8/1/2019 09:30

Matrix: Solid

Sample ID: GP-4

Date Received: 8/1/2019 22:18

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	5080		ug/kg	248	SW846 8260B	8/1/19 09:30	TMP	8/6/19 18:35	TMP	C
Ethylbenzene	69400		ug/kg	2480	SW846 8260B	8/1/19 09:30	VLM	8/8/19 07:09	VLM	C
Isopropylbenzene	10200		ug/kg	248	SW846 8260B	8/1/19 09:30	TMP	8/6/19 18:35	TMP	C
Methyl t-Butyl Ether	ND		ug/kg	248	SW846 8260B	8/1/19 09:30	TMP	8/6/19 18:35	TMP	C
Naphthalene	28500		ug/kg	496	SW846 8260B	8/1/19 09:30	TMP	8/6/19 18:35	TMP	C
Toluene	178000		ug/kg	2480	SW846 8260B	8/1/19 09:30	VLM	8/8/19 07:09	VLM	C
Total Xylenes	394000		ug/kg	7440	SW846 8260B	8/1/19 09:30	VLM	8/8/19 07:09	VLM	C
1,2,4-Trimethylbenzene	177000		ug/kg	2480	SW846 8260B	8/1/19 09:30	VLM	8/8/19 07:09	VLM	C
1,3,5-Trimethylbenzene	55300		ug/kg	2480	SW846 8260B	8/1/19 09:30	VLM	8/8/19 07:09	VLM	C
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	89.4		%	71 - 146	SW846 8260B	8/1/19 09:30	VLM	8/8/19 07:09	VLM	C
1,2-Dichloroethane-d4 (S)	298	1	%	71 - 146	SW846 8260B	8/1/19 09:30	TMP	8/6/19 18:35	TMP	C
4-Bromofluorobenzene (S)	83.5		%	46 - 138	SW846 8260B	8/1/19 09:30	VLM	8/8/19 07:09	VLM	C
4-Bromofluorobenzene (S)	141	3	%	46 - 138	SW846 8260B	8/1/19 09:30	TMP	8/6/19 18:35	TMP	C
Dibromofluoromethane (S)	82.6		%	42 - 143	SW846 8260B	8/1/19 09:30	VLM	8/8/19 07:09	VLM	C
Dibromofluoromethane (S)	123		%	42 - 143	SW846 8260B	8/1/19 09:30	TMP	8/6/19 18:35	TMP	C
Toluene-d8 (S)	82.3		%	54 - 141	SW846 8260B	8/1/19 09:30	VLM	8/8/19 07:09	VLM	C
Toluene-d8 (S)	148	2	%	54 - 141	SW846 8260B	8/1/19 09:30	TMP	8/6/19 18:35	TMP	C
WET CHEMISTRY										
Moisture	21.8		%	0.1	S2540G-11			8/5/19 11:50	AXD	
Total Solids	78.2		%	0.1	S2540G-11			8/5/19 11:50	AXD	



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ANALYTICAL RESULTS

Workorder: 3049064 VTS 08/01/19

Lab ID: 3049064002

Date Collected: 8/1/2019 10:40

Matrix: Solid

Sample ID: GP-5

Date Received: 8/1/2019 22:18

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	68.0	SW846 8260B	8/1/19 10:40	TMP	8/6/19 18:57	TMP	C
Ethylbenzene	ND		ug/kg	68.0	SW846 8260B	8/1/19 10:40	TMP	8/6/19 18:57	TMP	C
Isopropylbenzene	ND		ug/kg	68.0	SW846 8260B	8/1/19 10:40	TMP	8/6/19 18:57	TMP	C
Methyl t-Butyl Ether	ND		ug/kg	68.0	SW846 8260B	8/1/19 10:40	TMP	8/6/19 18:57	TMP	C
Naphthalene	ND		ug/kg	408	SW846 8260B	8/1/19 10:40	TMP	8/6/19 18:57	TMP	C
Toluene	ND		ug/kg	68.0	SW846 8260B	8/1/19 10:40	TMP	8/6/19 18:57	TMP	C
Total Xylenes	ND		ug/kg	204	SW846 8260B	8/1/19 10:40	TMP	8/6/19 18:57	TMP	C
1,2,4-Trimethylbenzene	ND		ug/kg	136	SW846 8260B	8/1/19 10:40	TMP	8/6/19 18:57	TMP	C
1,3,5-Trimethylbenzene	ND		ug/kg	68.0	SW846 8260B	8/1/19 10:40	TMP	8/6/19 18:57	TMP	C
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	134		%	71 - 146	SW846 8260B	8/1/19 10:40	TMP	8/6/19 18:57	TMP	C
4-Bromofluorobenzene (S)	127		%	46 - 138	SW846 8260B	8/1/19 10:40	TMP	8/6/19 18:57	TMP	C
Dibromofluoromethane (S)	125		%	42 - 143	SW846 8260B	8/1/19 10:40	TMP	8/6/19 18:57	TMP	C
Toluene-d8 (S)	132		%	54 - 141	SW846 8260B	8/1/19 10:40	TMP	8/6/19 18:57	TMP	C
WET CHEMISTRY										
Moisture	17.4		%	0.1	S2540G-11			8/5/19 11:50	AXD	
Total Solids	82.6		%	0.1	S2540G-11			8/5/19 11:50	AXD	



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ANALYTICAL RESULTS

Workorder: 3049064 VTS 08/01/19

Lab ID: 3049064003

Sample ID: GP-6

Date Collected: 8/1/2019 11:30

Matrix: Solid

Date Received: 8/1/2019 22:18

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	64.0	SW846 8260B	8/1/19 11:30	TMP	8/6/19 19:19	TMP	C
Ethylbenzene	ND		ug/kg	64.0	SW846 8260B	8/1/19 11:30	TMP	8/6/19 19:19	TMP	C
Isopropylbenzene	ND		ug/kg	64.0	SW846 8260B	8/1/19 11:30	TMP	8/6/19 19:19	TMP	C
Methyl t-Butyl Ether	ND		ug/kg	64.0	SW846 8260B	8/1/19 11:30	TMP	8/6/19 19:19	TMP	C
Naphthalene	ND		ug/kg	128	SW846 8260B	8/1/19 11:30	TMP	8/6/19 19:19	TMP	C
Toluene	ND		ug/kg	64.0	SW846 8260B	8/1/19 11:30	TMP	8/6/19 19:19	TMP	C
Total Xylenes	ND		ug/kg	192	SW846 8260B	8/1/19 11:30	TMP	8/6/19 19:19	TMP	C
1,2,4-Trimethylbenzene	ND		ug/kg	64.0	SW846 8260B	8/1/19 11:30	TMP	8/6/19 19:19	TMP	C
1,3,5-Trimethylbenzene	ND		ug/kg	64.0	SW846 8260B	8/1/19 11:30	TMP	8/6/19 19:19	TMP	C
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	142		%	71 - 146	SW846 8260B	8/1/19 11:30	TMP	8/6/19 19:19	TMP	C
4-Bromofluorobenzene (S)	139	1	%	46 - 138	SW846 8260B	8/1/19 11:30	TMP	8/6/19 19:19	TMP	C
Dibromofluoromethane (S)	135		%	42 - 143	SW846 8260B	8/1/19 11:30	TMP	8/6/19 19:19	TMP	C
Toluene-d8 (S)	141		%	54 - 141	SW846 8260B	8/1/19 11:30	TMP	8/6/19 19:19	TMP	C
WET CHEMISTRY										
Moisture	24.8		%	0.1	S2540G-11			8/5/19 11:50	AXD	
Total Solids	75.2		%	0.1	S2540G-11			8/5/19 11:50	AXD	



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Report ID: 3049064 - 8/8/2019

ANALYTICAL RESULTS

Workorder: 3049064 VTS 08/01/19

Lab ID: 3049064004

Sample ID: GP-7

Date Collected: 8/1/2019 12:40

Matrix: Solid

Date Received: 8/1/2019 22:18

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	47.6	SW846 8260B	8/1/19 12:40	TMP	8/6/19 19:41	TMP	C
Ethylbenzene	ND		ug/kg	47.6	SW846 8260B	8/1/19 12:40	TMP	8/6/19 19:41	TMP	C
Isopropylbenzene	ND		ug/kg	47.6	SW846 8260B	8/1/19 12:40	TMP	8/6/19 19:41	TMP	C
Methyl t-Butyl Ether	ND		ug/kg	47.6	SW846 8260B	8/1/19 12:40	TMP	8/6/19 19:41	TMP	C
Naphthalene	ND		ug/kg	95.2	SW846 8260B	8/1/19 12:40	TMP	8/6/19 19:41	TMP	C
Toluene	ND		ug/kg	47.6	SW846 8260B	8/1/19 12:40	TMP	8/6/19 19:41	TMP	C
Total Xylenes	ND		ug/kg	143	SW846 8260B	8/1/19 12:40	TMP	8/6/19 19:41	TMP	C
1,2,4-Trimethylbenzene	ND		ug/kg	47.6	SW846 8260B	8/1/19 12:40	TMP	8/6/19 19:41	TMP	C
1,3,5-Trimethylbenzene	ND		ug/kg	47.6	SW846 8260B	8/1/19 12:40	TMP	8/6/19 19:41	TMP	C
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	125		%	71 - 146	SW846 8260B	8/1/19 12:40	TMP	8/6/19 19:41	TMP	C
4-Bromofluorobenzene (S)	120		%	46 - 138	SW846 8260B	8/1/19 12:40	TMP	8/6/19 19:41	TMP	C
Dibromofluoromethane (S)	115		%	42 - 143	SW846 8260B	8/1/19 12:40	TMP	8/6/19 19:41	TMP	C
Toluene-d8 (S)	121		%	54 - 141	SW846 8260B	8/1/19 12:40	TMP	8/6/19 19:41	TMP	C
WET CHEMISTRY										
Moisture	18.4		%	0.1	S2540G-11			8/5/19 11:50	AXD	
Total Solids	81.6		%	0.1	S2540G-11			8/5/19 11:50	AXD	



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Report ID: 3049064 - 8/8/2019

ANALYTICAL RESULTS

Workorder: 3049064 VTS 08/01/19

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3049064001	1	GP-4	SW846 8260B	1,2-Dichloroethane-d4
The surrogate 1,2-Dichloroethane-d4 for method SW846 8260B was outside of control limits. The % Recovery was reported as 298 and the control limits were 71 to 146. This result was reported at a dilution of 250.				
3049064001	2	GP-4	SW846 8260B	Toluene-d8
The surrogate Toluene-d8 for method SW846 8260B was outside of control limits. The % Recovery was reported as 148 and the control limits were 54 to 141. This result was reported at a dilution of 250.				
3049064001	3	GP-4	SW846 8260B	4-Bromofluorobenzene
The surrogate 4-Bromofluorobenzene for method SW846 8260B was outside of control limits. The % Recovery was reported as 141 and the control limits were 46 to 138. This result was reported at a dilution of 250.				
3049064003	1	GP-6	SW846 8260B	4-Bromofluorobenzene
The surrogate 4-Bromofluorobenzene for method SW846 8260B was outside of control limits. The % Recovery was reported as 139 and the control limits were 46 to 138. This result was reported at a dilution of 50.				

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Report ID: 3049064 - 8/8/2019



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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.



of

Client Name: Country Env. Assoc.
Address: PO Box 224
St. Peters PA 19470
Contact: John Van Orsingen
Phone: 610-489-6540
Project Name: UTS
BRI To: same

Container Type: 40L 40L 40L
Container Size: 40L 40L 40L
Preserve: Meat None DI

Information (Completed by Receiving Lab)

W.O. Temp: 22 Therm ID: 328
Analyst Initials: JAS

Courier/Tracking #:

Purchase Order #:

Project Comments:

ANALYSIS METHOD REQUESTED

TAT: ☒ Normal-Standard TAT is 10-12 business days.
☐ Rush-Subject to ALS approval and surcharges.
Date Required: _____ Approved? _____
Email? ☐ -Y
Fax? ☐ -Y No: _____

ALS Field Services: ☐ Pickup ☐ Labor
☐ Composite Sampling ☐ Rental Equipment
Other: _____

Sample Description/Location
(as it will appear on the lab report)

Date Collected
m/d/yyyy

Time
hh:mm

G or C

Matrix

SO

1

2

3

4

5

6

7

8

9

10

Enter Number of Containers Per Sample or Field Results Below.

Sample/COC Comments

SAMPLED BY (Please Print):

John Van Orsingen

Sampler Comments:

Relinquished By / Company Name

Date

Time

Received By / Company Name

Date

Time

Data Deliverables

☐ Standard
☐ CLP-like
☐ USACE/DOO

Special Processing

USACE ☐

State

Samples

Collected in

☐ NY

☐ NJ

☐ PA

Reportable to PADEP?

Yes ☐ No ☐

Sample Disposal

Lab ☐

Special ☐

other

PWSID #

EDDS: Form Type

* G=Grab; C=Composite

** Matrix - AL=Air; DW=Drinking Water; GW=Groundwater; O=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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ANALYTICAL RESULTS

Workorder: 3054336 VTS

Lab ID: 3054336001

Sample ID: MW-4-20

Date Collected: 8/26/2019 09:30

Matrix: Solid

Date Received: 8/27/2019 21:12

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	5.3		ug/kg	2.6	SW846 8260B	8/26/19 09:30	JTH	8/30/19 06:10	PDK	B
Ethylbenzene	35.7		ug/kg	2.6	SW846 8260B	8/26/19 09:30	JTH	8/30/19 06:10	PDK	B
Isopropylbenzene	ND		ug/kg	2.6	SW846 8260B	8/26/19 09:30	JTH	8/30/19 06:10	PDK	B
Methyl t-Butyl Ether	ND		ug/kg	2.6	SW846 8260B	8/26/19 09:30	JTH	8/30/19 06:10	PDK	B
Naphthalene	60.2		ug/kg	2.6	SW846 8260B	8/26/19 09:30	JTH	8/30/19 06:10	PDK	B
Toluene	2.9		ug/kg	2.6	SW846 8260B	8/26/19 09:30	JTH	8/30/19 06:10	PDK	B
Total Xylenes	60.3		ug/kg	7.8	SW846 8260B	8/26/19 09:30	JTH	8/30/19 06:10	PDK	B
1,2,4-Trimethylbenzene	61.8		ug/kg	2.6	SW846 8260B	8/26/19 09:30	JTH	8/30/19 06:10	PDK	B
1,3,5-Trimethylbenzene	15.1		ug/kg	2.6	SW846 8260B	8/26/19 09:30	JTH	8/30/19 06:10	PDK	B
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	92.2		%	56 - 124	SW846 8260B	8/26/19 09:30	JTH	8/30/19 06:10	PDK	B
4-Bromofluorobenzene (S)	103		%	51 - 128	SW846 8260B	8/26/19 09:30	JTH	8/30/19 06:10	PDK	B
Dibromofluoromethane (S)	99.2		%	62 - 123	SW846 8260B	8/26/19 09:30	JTH	8/30/19 06:10	PDK	B
Toluene-d8 (S)	101		%	59 - 131	SW846 8260B	8/26/19 09:30	JTH	8/30/19 06:10	PDK	B
WET CHEMISTRY										
Moisture	18.0		%	0.1	S2540G-11			8/29/19 07:00	AXD	
Total Solids	82.0		%	0.1	S2540G-11			8/29/19 07:00	AXD	



Jessica Lee Smith
Project Coordinator

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Report ID: 3054336 - 9/9/2019

ANALYTICAL RESULTS

Workorder: 3054336 VTS

Lab ID: 3054336002

Sample ID: MW-4-25

Date Collected: 8/26/2019 10:30

Matrix: Solid

Date Received: 8/27/2019 21:12

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	48.9		ug/kg	3.5	SW846 8260B	8/26/19 10:30	JTH	8/30/19 06:35	PDK	B
Ethylbenzene	99.6		ug/kg	3.5	SW846 8260B	8/26/19 10:30	JTH	8/30/19 06:35	PDK	B
Isopropylbenzene	4.6		ug/kg	3.5	SW846 8260B	8/26/19 10:30	JTH	8/30/19 06:35	PDK	B
Methyl t-Butyl Ether	ND		ug/kg	3.5	SW846 8260B	8/26/19 10:30	JTH	8/30/19 06:35	PDK	B
Naphthalene	123		ug/kg	3.5	SW846 8260B	8/26/19 10:30	JTH	8/30/19 06:35	PDK	B
Toluene	114		ug/kg	3.5	SW846 8260B	8/26/19 10:30	JTH	8/30/19 06:35	PDK	B
Total Xylenes	293		ug/kg	10.4	SW846 8260B	8/26/19 10:30	JTH	8/30/19 06:35	PDK	B
1,2,4-Trimethylbenzene	193		ug/kg	3.5	SW846 8260B	8/26/19 10:30	JTH	8/30/19 06:35	PDK	B
1,3,5-Trimethylbenzene	46.9		ug/kg	3.5	SW846 8260B	8/26/19 10:30	JTH	8/30/19 06:35	PDK	B
Surrogate Recoveries										
1,2-Dichloroethane-d4 (S)	90.4		%	56 - 124	SW846 8260B	8/26/19 10:30	JTH	8/30/19 06:35	PDK	B
4-Bromofluorobenzene (S)	106		%	51 - 128	SW846 8260B	8/26/19 10:30	JTH	8/30/19 06:35	PDK	B
Dibromofluoromethane (S)	99.1		%	62 - 123	SW846 8260B	8/26/19 10:30	JTH	8/30/19 06:35	PDK	B
Toluene-d8 (S)	103		%	59 - 131	SW846 8260B	8/26/19 10:30	JTH	8/30/19 06:35	PDK	B
WET CHEMISTRY										
Moisture	22.9		%	0.1	S2540G-11			8/29/19 07:00	AXD	
Total Solids	77.1		%	0.1	S2540G-11			8/29/19 07:00	AXD	


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Report ID: 3054336 - 9/9/2019

ANALYTICAL RESULTS

Workorder: 3054336 VTS

Lab ID: **3054336003**

Sample ID: **MW-4-31**

Date Collected: 8/26/2019 11:30

Matrix: Solid

Date Received: 8/27/2019 21:12

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	1600		ug/kg	386	SW846 8260B	8/26/19 11:30	JTH	8/31/19 08:04	VLM	A
Ethylbenzene	488		ug/kg	3.4	SW846 8260B	8/26/19 11:30	JTH	8/30/19 07:01	PDK	B
Isopropylbenzene	24.0		ug/kg	3.4	SW846 8260B	8/26/19 11:30	JTH	8/30/19 07:01	PDK	B
Methyl t-Butyl Ether	5.1		ug/kg	3.4	SW846 8260B	8/26/19 11:30	JTH	8/30/19 07:01	PDK	B
Naphthalene	182		ug/kg	3.4	SW846 8260B	8/26/19 11:30	JTH	8/30/19 07:01	PDK	B
Toluene	3610		ug/kg	386	SW846 8260B	8/26/19 11:30	JTH	8/30/19 07:01	PDK	B
Total Xylenes	3260		ug/kg	1160	SW846 8260B	8/26/19 11:30	JTH	8/31/19 08:04	VLM	A
1,2,4-Trimethylbenzene	962		ug/kg	386	SW846 8260B	8/26/19 11:30	JTH	8/31/19 08:04	VLM	A
1,3,5-Trimethylbenzene	168		ug/kg	3.4	SW846 8260B	8/26/19 11:30	JTH	8/31/19 08:04	VLM	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	90.4		%	56 - 124	SW846 8260B	8/26/19 11:30	JTH	8/30/19 07:01	PDK	B
4-Bromofluorobenzene (S)	105		%	51 - 128	SW846 8260B	8/26/19 11:30	JTH	8/30/19 07:01	PDK	B
Dibromofluoromethane (S)	97.8		%	62 - 123	SW846 8260B	8/26/19 11:30	JTH	8/30/19 07:01	PDK	B
Toluene-d8 (S)	103		%	59 - 131	SW846 8260B	8/26/19 11:30	JTH	8/30/19 07:01	PDK	B
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	102		%	71 - 146	SW846 8260B	8/26/19 11:30	JTH	8/31/19 08:04	VLM	A
4-Bromofluorobenzene (S)	83.9		%	46 - 138	SW846 8260B	8/26/19 11:30	JTH	8/31/19 08:04	VLM	A
Dibromofluoromethane (S)	71.7		%	42 - 143	SW846 8260B	8/26/19 11:30	JTH	8/31/19 08:04	VLM	A
Toluene-d8 (S)	83.3		%	54 - 141	SW846 8260B	8/26/19 11:30	JTH	8/31/19 08:04	VLM	A
WET CHEMISTRY										
Moisture	26.8		%	0.1	S2540G-11			8/29/19 07:00	AXD	
Total Solids	73.2		%	0.1	S2540G-11			8/29/19 07:00	AXD	



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Report ID: 3054336 - 9/9/2019

ANALYTICAL RESULTS

Workorder: 3054336 VTS

Lab ID: 3054336004

Sample ID: MW-4-37

Date Collected: 8/26/2019 13:00

Matrix: Solid

Date Received: 8/27/2019 21:12

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	316		ug/kg	3.5	SW846 8260B	8/26/19 13:00	JTH	8/30/19 07:26	PDK	B
Ethylbenzene	97.6		ug/kg	3.5	SW846 8260B	8/26/19 13:00	JTH	8/30/19 07:26	PDK	B
Isopropylbenzene	ND		ug/kg	3.5	SW846 8260B	8/26/19 13:00	JTH	8/30/19 07:26	PDK	B
Methyl t-Butyl Ether	34.2		ug/kg	3.5	SW846 8260B	8/26/19 13:00	JTH	8/30/19 07:26	PDK	B
Naphthalene	133		ug/kg	3.5	SW846 8260B	8/26/19 13:00	JTH	8/30/19 07:26	PDK	B
Toluene	753		ug/kg	99.0	SW846 8260B	8/26/19 13:00	JTH	8/30/19 07:26	PDK	B
Total Xylenes	638		ug/kg	10.6	SW846 8260B	8/26/19 13:00	JTH	8/31/19 06:59	VLM	A
1,2,4-Trimethylbenzene	175		ug/kg	3.5	SW846 8260B	8/26/19 13:00	JTH	8/30/19 07:26	PDK	B
1,3,5-Trimethylbenzene	40.2		ug/kg	3.5	SW846 8260B	8/26/19 13:00	JTH	8/30/19 07:26	PDK	B
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	92.4		%	56 - 124	SW846 8260B	8/26/19 13:00	JTH	8/30/19 07:26	PDK	B
4-Bromofluorobenzene (S)	106		%	51 - 128	SW846 8260B	8/26/19 13:00	JTH	8/30/19 07:26	PDK	B
Dibromofluoromethane (S)	97.3		%	62 - 123	SW846 8260B	8/26/19 13:00	JTH	8/30/19 07:26	PDK	B
Toluene-d8 (S)	103		%	59 - 131	SW846 8260B	8/26/19 13:00	JTH	8/30/19 07:26	PDK	B
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	97.6		%	71 - 146	SW846 8260B	8/26/19 13:00	JTH	8/31/19 06:59	VLM	A
4-Bromofluorobenzene (S)	80.3		%	46 - 138	SW846 8260B	8/26/19 13:00	JTH	8/31/19 06:59	VLM	A
Dibromofluoromethane (S)	71.1		%	42 - 143	SW846 8260B	8/26/19 13:00	JTH	8/31/19 06:59	VLM	A
Toluene-d8 (S)	78.6		%	54 - 141	SW846 8260B	8/26/19 13:00	JTH	8/31/19 06:59	VLM	A
WET CHEMISTRY										
Moisture	22.0		%	0.1	S2540G-11			8/29/19 07:00	AXD	
Total Solids	78.0		%	0.1	S2540G-11			8/29/19 07:00	AXD	



Jessica Lee Smith
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Report ID: 3054336 - 9/9/2019

ANALYTICAL RESULTS

Workorder: 3054336 VTS

Lab ID: 3054336005

Sample ID: MW-4-47

Date Collected: 8/26/2019 14:30

Matrix: Solid

Date Received: 8/27/2019 21:12

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	324		ug/kg	3.2	SW846 8260B	8/26/19 14:30	JTH	8/30/19 07:51	PDK	B
Ethylbenzene	147		ug/kg	3.2	SW846 8260B	8/26/19 14:30	JTH	8/30/19 07:51	PDK	B
Isopropylbenzene	8.2		ug/kg	3.2	SW846 8260B	8/26/19 14:30	JTH	8/30/19 07:51	PDK	B
Methyl t-Butyl Ether	32.7		ug/kg	3.2	SW846 8260B	8/26/19 14:30	JTH	8/30/19 07:51	PDK	B
Naphthalene	109		ug/kg	3.2	SW846 8260B	8/26/19 14:30	JTH	8/30/19 07:51	PDK	B
Toluene	1290		ug/kg	3.2	SW846 8260B	8/26/19 14:30	JTH	8/30/19 07:51	PDK	B
Total Xylenes	810		ug/kg	95.1	SW846 8260B	8/26/19 14:30	JTH	8/31/19 07:21	VLM	A
1,2,4-Trimethylbenzene	271		ug/kg	9.7	SW846 8260B	8/26/19 14:30	JTH	8/30/19 07:51	PDK	B
1,3,5-Trimethylbenzene	76.7		ug/kg	3.2	SW846 8260B	8/26/19 14:30	JTH	8/30/19 07:51	PDK	B
Surrogate Recoveries										
1,2-Dichloroethane-d4 (S)	89.4		%	56 - 124	SW846 8260B	8/26/19 14:30	JTH	8/30/19 07:51	PDK	B
4-Bromofluorobenzene (S)	106		%	51 - 128	SW846 8260B	8/26/19 14:30	JTH	8/30/19 07:51	PDK	B
Dibromofluoromethane (S)	96.1		%	62 - 123	SW846 8260B	8/26/19 14:30	JTH	8/30/19 07:51	PDK	B
Toluene-d8 (S)	102		%	59 - 131	SW846 8260B	8/26/19 14:30	JTH	8/30/19 07:51	PDK	B
Surrogate Recoveries										
1,2-Dichloroethane-d4 (S)	109		%	71 - 146	SW846 8260B	8/26/19 14:30	JTH	8/31/19 07:21	VLM	A
4-Bromofluorobenzene (S)	88.2		%	46 - 138	SW846 8260B	8/26/19 14:30	JTH	8/31/19 07:21	VLM	A
Dibromofluoromethane (S)	80.1		%	42 - 143	SW846 8260B	8/26/19 14:30	JTH	8/31/19 07:21	VLM	A
Toluene-d8 (S)	88.7		%	54 - 141	SW846 8260B	8/26/19 14:30	JTH	8/31/19 07:21	VLM	A
WET CHEMISTRY										
Moisture	22.4		%	0.1	S2540G-11			8/29/19 07:00	AXD	
Total Solids	77.6		%	0.1	S2540G-11			8/29/19 07:00	AXD	



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ANALYTICAL RESULTS

Workorder: 3054336 VTS

Lab ID: 3054336006

Sample ID: MW-4-56

Date Collected: 8/26/2019 15:30

Matrix: Solid

Date Received: 8/27/2019 21:12

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	637		ug/kg	90.8	SW846 8260B	8/26/19 15:30	JTH	8/31/19 07:42	VLM	A
Ethylbenzene	145		ug/kg	4.2	SW846 8260B	8/26/19 15:30	JTH	8/30/19 08:16	PDK	B
Isopropylbenzene	5.1		ug/kg	4.2	SW846 8260B	8/26/19 15:30	JTH	8/30/19 08:16	PDK	B
Methyl t-Butyl Ether	274		ug/kg	4.2	SW846 8260B	8/26/19 15:30	JTH	8/30/19 08:16	PDK	B
Naphthalene	96.4		ug/kg	4.2	SW846 8260B	8/26/19 15:30	JTH	8/30/19 08:16	PDK	B
Toluene	1020		ug/kg	90.8	SW846 8260B	8/26/19 15:30	JTH	8/30/19 08:16	PDK	B
Total Xylenes	879		ug/kg	12.5	SW846 8260B	8/26/19 15:30	JTH	8/31/19 07:42	VLM	A
1,2,4-Trimethylbenzene	152		ug/kg	4.2	SW846 8260B	8/26/19 15:30	JTH	8/30/19 08:16	PDK	B
1,3,5-Trimethylbenzene	40.8		ug/kg	4.2	SW846 8260B	8/26/19 15:30	JTH	8/30/19 08:16	PDK	B
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	91		%	56 - 124	SW846 8260B	8/26/19 15:30	JTH	8/30/19 08:16	PDK	B
4-Bromofluorobenzene (S)	109		%	51 - 128	SW846 8260B	8/26/19 15:30	JTH	8/30/19 08:16	PDK	B
Dibromofluoromethane (S)	98		%	62 - 123	SW846 8260B	8/26/19 15:30	JTH	8/30/19 08:16	PDK	B
Toluene-d8 (S)	104		%	59 - 131	SW846 8260B	8/26/19 15:30	JTH	8/30/19 08:16	PDK	B
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	103		%	71 - 146	SW846 8260B	8/26/19 15:30	JTH	8/31/19 07:42	VLM	A
4-Bromofluorobenzene (S)	85		%	46 - 138	SW846 8260B	8/26/19 15:30	JTH	8/31/19 07:42	VLM	A
Dibromofluoromethane (S)	75.7		%	42 - 143	SW846 8260B	8/26/19 15:30	JTH	8/31/19 07:42	VLM	A
Toluene-d8 (S)	83		%	54 - 141	SW846 8260B	8/26/19 15:30	JTH	8/31/19 07:42	VLM	A
WET CHEMISTRY										
Moisture	20.9		%	0.1	S2540G-11			8/29/19 07:00	AXD	
Total Solids	79.1		%	0.1	S2540G-11			8/29/19 07:00	AXD	


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Report ID: 3054336 - 9/9/2019



301 Fulling Mill Road,
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

COC

ALS



of

Client Name: County Env - Assoc
Address: PO Box 224
St. Pater, PA 19470

Container Type: 4601 4601 4601
Container Size: 1/4 1/4 1/4
Preserve: 0.1 1/4 1/4

W.O. Temp: 0 Therm ID: 403

Analyst Initials:

Courier/Tracking #:

Purchase Order #:

Project Comments:

Contact: Dick Van Wagner
Phone: 610-469-6540

Project Name: UTS

Bill To: same

TAT ☒ Normal-Standard TAT is 10-12 business days.
☐ Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? ☐ -Y

Fax? ☐ -Y No:

Sample Description/Location
(as it will appear on the lab report)

Date Collected
m/d/yyyy

Time
hh:mm

10 or C

Matrix

Method

Volume

Enter Number of Containers Per Sample or Field Results Below.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

1 MW-4-20

8/26/19

9:30

6-80

2

1

1

2 MW-4-25

10:30

1

1

2

1

1

3 MW-4-31

11:30

1

1

2

1

1

4 MW-4-37

13:00

1

1

2

1

1

5 MW-4-47

14:30

1

1

2

1

1

6 MW-4-56

15:30

1

1

2

1

1

7

8

9

10

SAMPLED BY (Please Print):

John Van Wagner

Sampler Comments:

Relinquished By / Company Name

Date

Time

Received By / Company Name

ALS

Date

Time

1 John Van Wagner

8-27-19

1700

2 Benjamin M. Wagner

8-27-19

1700

3 Benjamin M. Wagner

8-27-19

1700

4 COMMON COURIER

8-27-19

1700

5 COMMON COURIER

6 COMMON COURIER

7 COMMON COURIER

8 COMMON COURIER

9 COMMON COURIER

10 COMMON COURIER

Data Deliverables

☐ Standard
☐ CLP-like
☐ USACE/DOD

Special Processing
USACE ☐
☐ ☐ ☐

State
Samples
Collected In
☐ NY
☐ NJ
☐ PA

Reportable to PADEP?
Yes ☐ No ☐

Sample Disposal
Lab ☐
Special ☐

PWSID #

EDS: Form Type

other

* Q=Quota; C=Composite

** Matrix: AL=Air; GW=Groundwater; OL=Other Liquid; SL=Sediment; SO=Soil; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Middletown, PA 17057

Rev 04/19

ANALYTICAL RESULTS

Workorder: 3054857 UTS

Lab ID: 3054857001

Sample ID: MW-6-24

Date Collected: 8/28/2019 10:00

Matrix: Solid

Date Received: 8/29/2019 22:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	408		ug/kg	79.0	SW846 8260B	8/28/19 10:00	TMP	9/3/19 16:13	TMP	A
Ethylbenzene	437		ug/kg	79.0	SW846 8260B	8/28/19 10:00	TMP	9/3/19 16:13	TMP	A
Isopropylbenzene	ND		ug/kg	79.0	SW846 8260B	8/28/19 10:00	TMP	9/3/19 16:13	TMP	A
Methyl t-Butyl Ether	ND		ug/kg	79.0	SW846 8260B	8/28/19 10:00	TMP	9/3/19 16:13	TMP	A
Naphthalene	ND		ug/kg	158	SW846 8260B	8/28/19 10:00	TMP	9/3/19 16:13	TMP	A
Toluene	1170		ug/kg	79.0	SW846 8260B	8/28/19 10:00	TMP	9/3/19 16:13	TMP	A
Total Xylenes	2960		ug/kg	237	SW846 8260B	8/28/19 10:00	TMP	9/3/19 16:13	TMP	A
1,2,4-Trimethylbenzene	598		ug/kg	79.0	SW846 8260B	8/28/19 10:00	TMP	9/3/19 16:13	TMP	A
1,3,5-Trimethylbenzene	206		ug/kg	79.0	SW846 8260B	8/28/19 10:00	TMP	9/3/19 16:13	TMP	A
Surrogate Recoveries										
	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	144		%	71 - 146	SW846 8260B	8/28/19 10:00	TMP	9/3/19 16:13	TMP	A
4-Bromofluorobenzene (S)	119		%	46 - 138	SW846 8260B	8/28/19 10:00	TMP	9/3/19 16:13	TMP	A
Dibromofluoromethane (S)	111		%	42 - 143	SW846 8260B	8/28/19 10:00	TMP	9/3/19 16:13	TMP	A
Toluene-d8 (S)	118		%	54 - 141	SW846 8260B	8/28/19 10:00	TMP	9/3/19 16:13	TMP	A
WET CHEMISTRY										
Moisture	25.0		%	0.1	S2540G-11			9/3/19 07:55	AXD	
Total Solids	75.0		%	0.1	S2540G-11			9/3/19 07:55	AXD	


Jessica Lee Smith
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Report ID: 3054857 - 9/10/2019

ANALYTICAL RESULTS

Workorder: 3054857 UTS

Lab ID: 3054857002

Sample ID: MW-6-47

Date Collected: 8/28/2019 11:30

Matrix: Solid

Date Received: 8/29/2019 22:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	63.8	SW846 8260B	8/28/19 11:30	TMP	9/3/19 16:35	TMP	A
Ethylbenzene	ND		ug/kg	63.8	SW846 8260B	8/28/19 11:30	TMP	9/3/19 16:35	TMP	A
Isopropylbenzene	ND		ug/kg	63.8	SW846 8260B	8/28/19 11:30	TMP	9/3/19 16:35	TMP	A
Methyl t-Butyl Ether	ND		ug/kg	63.8	SW846 8260B	8/28/19 11:30	TMP	9/3/19 16:35	TMP	A
Naphthalene	ND		ug/kg	128	SW846 8260B	8/28/19 11:30	TMP	9/3/19 16:35	TMP	A
Toluene	ND		ug/kg	63.8	SW846 8260B	8/28/19 11:30	TMP	9/3/19 16:35	TMP	A
Total Xylenes	ND		ug/kg	191	SW846 8260B	8/28/19 11:30	TMP	9/3/19 16:35	TMP	A
1,2,4-Trimethylbenzene	ND		ug/kg	63.8	SW846 8260B	8/28/19 11:30	TMP	9/3/19 16:35	TMP	A
1,3,5-Trimethylbenzene	ND		ug/kg	63.8	SW846 8260B	8/28/19 11:30	TMP	9/3/19 16:35	TMP	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	120		%	71 - 146	SW846 8260B	8/28/19 11:30	TMP	9/3/19 16:35	TMP	A
4-Bromofluorobenzene (S)	98.4		%	46 - 138	SW846 8260B	8/28/19 11:30	TMP	9/3/19 16:35	TMP	A
Dibromofluoromethane (S)	89.2		%	42 - 143	SW846 8260B	8/28/19 11:30	TMP	9/3/19 16:35	TMP	A
Toluene-d8 (S)	95.5		%	54 - 141	SW846 8260B	8/28/19 11:30	TMP	9/3/19 16:35	TMP	A
WET CHEMISTRY										
Moisture	16.1		%	0.1	S2540G-11			9/3/19 07:55	AXD	
Total Solids	83.9		%	0.1	S2540G-11			9/3/19 07:55	AXD	



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Report ID: 3054857 - 9/10/2019

ANALYTICAL RESULTS

Workorder: 3054857 UTS

Lab ID: **3054857003**

Sample ID: **MW-7-28**

Date Collected: 8/28/2019 16:30

Matrix: Solid

Date Received: 8/29/2019 22:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	5270		ug/kg	56.4	SW846 8260B	8/28/19 16:30	TMP	9/3/19 16:57	TMP	A
Ethylbenzene	597		ug/kg	56.4	SW846 8260B	8/28/19 16:30	TMP	9/3/19 16:57	TMP	A
Isopropylbenzene	ND		ug/kg	56.4	SW846 8260B	8/28/19 16:30	TMP	9/3/19 16:57	TMP	A
Methyl t-Butyl Ether	ND		ug/kg	56.4	SW846 8260B	8/28/19 16:30	TMP	9/3/19 16:57	TMP	A
Naphthalene	ND		ug/kg	113	SW846 8260B	8/28/19 16:30	TMP	9/3/19 16:57	TMP	A
Toluene	7540		ug/kg	56.4	SW846 8260B	8/28/19 16:30	TMP	9/3/19 16:57	TMP	A
Total Xylenes	3660		ug/kg	169	SW846 8260B	8/28/19 16:30	TMP	9/3/19 16:57	TMP	A
1,2,4-Trimethylbenzene	594		ug/kg	56.4	SW846 8260B	8/28/19 16:30	TMP	9/3/19 16:57	TMP	A
1,3,5-Trimethylbenzene	148		ug/kg	56.4	SW846 8260B	8/28/19 16:30	TMP	9/3/19 16:57	TMP	A
Surrogate Recoveries										
	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	118		%	71 - 146	SW846 8260B	8/28/19 16:30	TMP	9/3/19 16:57	TMP	A
4-Bromofluorobenzene (S)	94.6		%	46 - 138	SW846 8260B	8/28/19 16:30	TMP	9/3/19 16:57	TMP	A
Dibromofluoromethane (S)	88.4		%	42 - 143	SW846 8260B	8/28/19 16:30	TMP	9/3/19 16:57	TMP	A
Toluene-d8 (S)	96.8		%	54 - 141	SW846 8260B	8/28/19 16:30	TMP	9/3/19 16:57	TMP	A



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Report ID: 3054857 - 9/10/2019



301 Fulling Mill Road
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS
ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

COC #:

ALS Quote:



(completed by Receiving Lab)

W.O. Temp: 2 Therm ID: 403

Analyst Initials:

Courier/Tracking #:

Purchase Order #:

Project Comments:

ALS Field Services: ☐ Pickup ☐ Labor
☐ Composite Sampling ☐ Rental Equipment
Other:

Client Name: County Env. Assoc.
Address: PO Box 224
St Peters, PA
19470

Contact: John Van Wageningen
Phone: 610-469-6540
Project Name: UTS
Bill To: Same

TAT ☒ Normal-Standard TAT is 10-12 business days.
☐ Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? ☐ Y

Fax? ☐ Y No:

Sample Description/Location
(as it will appear on the lab report)

Date Collected
g/m/yyyy

Time
h:mm

Temp
°C or °F

Matrix

Notes

Other

Remarks

Comments

Analysis

Method

Requested

Enter Number of Containers Per Sample or Field Results Below.

Sample/COC Comments

1 MW-6-24 8/28/19 10:00 6 50 2 1 1

2 MW-6-47 " 11:30 6 50 2 1 1

3 MW-7-28 " 16:30 6 50 2 1 1

4

5

6

7

8

9

10

SAMPLED BY (Please Print):

John Van Wageningen

Sampler Comments:

Relined/Used By / Company Name

Date

Time

Received By / Company Name

Date

Time

1 John Van Wageningen 8/29/19 15:20 2 John Van Wageningen 8/29/19 15:20

3 John Van Wageningen 8/29/19 15:25 4 John Van Wageningen 8/29/19 15:25

5 John Van Wageningen 8/29/19 15:25 6 John Van Wageningen 8/29/19 15:25

7 John Van Wageningen 8/29/19 15:25 8 John Van Wageningen 8/29/19 15:25

9 John Van Wageningen 8/29/19 15:25 9 John Van Wageningen 8/29/19 15:25

10

Data Deliverables
☐ Standard
☐ CLP/SL
☐ USACE/DOO

Special Processing
USACE ☐

State Samples Collected In
☐ NY
☐ NJ
☐ PA

Reportable to PADEP?

Yes ☐ No ☐

PWSID #

EDOS: Format Type

other

* G=Grab, C=Composite

** Matrix - Air/Air, DW=Drinking Water, GW=Groundwater, OL=Oil, OL=Other Liquid, SL=Sludge, SO=Soil, WP=Waste, WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Middletown, PA 17057

Rev 04/19

ANALYTICAL RESULTS

Workorder: 3058339 UTS

Lab ID: 3058339001

Sample ID: SB-9-16

Date Collected: 9/16/2019 09:30

Matrix: Solid

Date Received: 9/17/2019 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	64.2	SW846 8260B	9/16/19 09:30	PDK	9/22/19 17:55	PDK	A
Ethylbenzene	ND		ug/kg	64.2	SW846 8260B	9/16/19 09:30	PDK	9/22/19 17:55	PDK	A
Isopropylbenzene	233		ug/kg	64.2	SW846 8260B	9/16/19 09:30	PDK	9/22/19 17:55	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	64.2	SW846 8260B	9/16/19 09:30	PDK	9/22/19 17:55	PDK	A
Naphthalene	ND		ug/kg	128	SW846 8260B	9/16/19 09:30	PDK	9/22/19 17:55	PDK	A
Toluene	ND		ug/kg	64.2	SW846 8260B	9/16/19 09:30	PDK	9/22/19 17:55	PDK	A
Total Xylenes	ND		ug/kg	192	SW846 8260B	9/16/19 09:30	PDK	9/22/19 17:55	PDK	A
1,2,4-Trimethylbenzene	ND		ug/kg	64.2	SW846 8260B	9/16/19 09:30	PDK	9/22/19 17:55	PDK	A
1,3,5-Trimethylbenzene	ND		ug/kg	64.2	SW846 8260B	9/16/19 09:30	PDK	9/22/19 17:55	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	119		%	71 - 146	SW846 8260B	9/16/19 09:30	PDK	9/22/19 17:55	PDK	A
4-Bromofluorobenzene (S)	110		%	46 - 138	SW846 8260B	9/16/19 09:30	PDK	9/22/19 17:55	PDK	A
Dibromofluoromethane (S)	103		%	42 - 143	SW846 8260B	9/16/19 09:30	PDK	9/22/19 17:55	PDK	A
Toluene-d8 (S)	114		%	54 - 141	SW846 8260B	9/16/19 09:30	PDK	9/22/19 17:55	PDK	A
WET CHEMISTRY										
Moisture	22.4		%	0.1	S2540G-11			9/19/19 08:10	AXD	
Total Solids	77.6		%	0.1	S2540G-11			9/19/19 08:10	AXD	



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Report ID: 3058339 - 9/26/2019

ANALYTICAL RESULTS

Workorder: 3058339 UTS

Lab ID: 3058339002

Sample ID: SB-9-21

Date Collected: 9/16/2019 11:00

Matrix: Solid

Date Received: 9/17/2019 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	65.6	SW846 8260B	9/16/19 11:00	PDK	9/22/19 18:17	PDK	A
Ethylbenzene	ND		ug/kg	65.6	SW846 8260B	9/16/19 11:00	PDK	9/22/19 18:17	PDK	A
Isopropylbenzene	ND		ug/kg	65.6	SW846 8260B	9/16/19 11:00	PDK	9/22/19 18:17	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	65.6	SW846 8260B	9/16/19 11:00	PDK	9/22/19 18:17	PDK	A
Naphthalene	ND		ug/kg	131	SW846 8260B	9/16/19 11:00	PDK	9/22/19 18:17	PDK	A
Toluene	ND		ug/kg	65.6	SW846 8260B	9/16/19 11:00	PDK	9/22/19 18:17	PDK	A
Total Xylenes	ND		ug/kg	197	SW846 8260B	9/16/19 11:00	PDK	9/22/19 18:17	PDK	A
1,2,4-Trimethylbenzene	ND		ug/kg	65.6	SW846 8260B	9/16/19 11:00	PDK	9/22/19 18:17	PDK	A
1,3,5-Trimethylbenzene	ND		ug/kg	65.6	SW846 8260B	9/16/19 11:00	PDK	9/22/19 18:17	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	126		%	71 - 146	SW846 8260B	9/16/19 11:00	PDK	9/22/19 18:17	PDK	A
4-Bromofluorobenzene (S)	123		%	46 - 138	SW846 8260B	9/16/19 11:00	PDK	9/22/19 18:17	PDK	A
Dibromofluoromethane (S)	112		%	42 - 143	SW846 8260B	9/16/19 11:00	PDK	9/22/19 18:17	PDK	A
Toluene-d8 (S)	134		%	54 - 141	SW846 8260B	9/16/19 11:00	PDK	9/22/19 18:17	PDK	A
WET CHEMISTRY										
Moisture	24.3		%	0.1	S2540G-11			9/19/19 08:10	AXD	
Total Solids	75.7		%	0.1	S2540G-11			9/19/19 08:10	AXD	



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Report ID: 3058339 - 9/26/2019

ANALYTICAL RESULTS

Workorder: 3058339 UTS

Lab ID: 3058339003

Sample ID: SB-9-50

Date Collected: 9/16/2019 13:30

Matrix: Solid

Date Received: 9/17/2019 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	78.8	SW846 8260B	9/16/19 13:30	PDK	9/22/19 18:38	PDK	A
Ethylbenzene	ND		ug/kg	78.8	SW846 8260B	9/16/19 13:30	PDK	9/22/19 18:38	PDK	A
Isopropylbenzene	ND		ug/kg	78.8	SW846 8260B	9/16/19 13:30	PDK	9/22/19 18:38	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	78.8	SW846 8260B	9/16/19 13:30	PDK	9/22/19 18:38	PDK	A
Naphthalene	ND		ug/kg	158	SW846 8260B	9/16/19 13:30	PDK	9/22/19 18:38	PDK	A
Toluene	ND		ug/kg	78.8	SW846 8260B	9/16/19 13:30	PDK	9/22/19 18:38	PDK	A
Total Xylenes	ND		ug/kg	237	SW846 8260B	9/16/19 13:30	PDK	9/22/19 18:38	PDK	A
1,2,4-Trimethylbenzene	ND		ug/kg	78.8	SW846 8260B	9/16/19 13:30	PDK	9/22/19 18:38	PDK	A
1,3,5-Trimethylbenzene	ND		ug/kg	78.8	SW846 8260B	9/16/19 13:30	PDK	9/22/19 18:38	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	132		%	71 - 146	SW846 8260B	9/16/19 13:30	PDK	9/22/19 18:38	PDK	A
4-Bromofluorobenzene (S)	133		%	46 - 138	SW846 8260B	9/16/19 13:30	PDK	9/22/19 18:38	PDK	A
Dibromofluoromethane (S)	114		%	42 - 143	SW846 8260B	9/16/19 13:30	PDK	9/22/19 18:38	PDK	A
Toluene-d8 (S)	137		%	54 - 141	SW846 8260B	9/16/19 13:30	PDK	9/22/19 18:38	PDK	A
WET CHEMISTRY										
Moisture	23.4		%	0.1	S2540G-11			9/19/19 08:10	AXD	
Total Solids	76.6		%	0.1	S2540G-11			9/19/19 08:10	AXD	



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Report ID: 3058339 - 9/26/2019

ANALYTICAL RESULTS

Workorder: 3058339 UTS

Lab ID: 3058339004

Sample ID: SB-10-24

Date Collected: 9/16/2019 15:30

Matrix: Solid

Date Received: 9/17/2019 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	50.5	SW846 8260B	9/16/19 15:30	PDK	9/22/19 19:00	PDK	A
Ethylbenzene	ND		ug/kg	50.5	SW846 8260B	9/16/19 15:30	PDK	9/22/19 19:00	PDK	A
Isopropylbenzene	ND		ug/kg	50.5	SW846 8260B	9/16/19 15:30	PDK	9/22/19 19:00	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	50.5	SW846 8260B	9/16/19 15:30	PDK	9/22/19 19:00	PDK	A
Naphthalene	ND		ug/kg	101	SW846 8260B	9/16/19 15:30	PDK	9/22/19 19:00	PDK	A
Toluene	ND		ug/kg	50.5	SW846 8260B	9/16/19 15:30	PDK	9/22/19 19:00	PDK	A
Total Xylenes	ND		ug/kg	151	SW846 8260B	9/16/19 15:30	PDK	9/22/19 19:00	PDK	A
1,2,4-Trimethylbenzene	ND		ug/kg	50.5	SW846 8260B	9/16/19 15:30	PDK	9/22/19 19:00	PDK	A
1,3,5-Trimethylbenzene	ND		ug/kg	50.5	SW846 8260B	9/16/19 15:30	PDK	9/22/19 19:00	PDK	A
Surrogate Recoveries										
1,2-Dichloroethane-d4 (S)	157	1	%	71 - 146	SW846 8260B	9/16/19 15:30	PDK	9/22/19 19:00	PDK	A
4-Bromofluorobenzene (S)	162	3	%	46 - 138	SW846 8260B	9/16/19 15:30	PDK	9/22/19 19:00	PDK	A
Dibromofluoromethane (S)	140		%	42 - 143	SW846 8260B	9/16/19 15:30	PDK	9/22/19 19:00	PDK	A
Toluene-d8 (S)	166	2	%	54 - 141	SW846 8260B	9/16/19 15:30	PDK	9/22/19 19:00	PDK	A
WET CHEMISTRY										
Moisture	23.3		%	0.1	S2540G-11			9/19/19 08:10	AXD	
Total Solids	76.7		%	0.1	S2540G-11			9/19/19 08:10	AXD	



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ANALYTICAL RESULTS

Workorder: 3058339 UTS

Lab ID: 3058339005

Sample ID: SB-10-48

Date Collected: 9/16/2019 17:00

Matrix: Solid

Date Received: 9/17/2019 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	1350		ug/kg	70.0	SW846 8260B	9/16/19 17:00	PDK	9/22/19 19:22	PDK	A
Ethylbenzene	725		ug/kg	70.0	SW846 8260B	9/16/19 17:00	PDK	9/22/19 19:22	PDK	A
Isopropylbenzene	ND		ug/kg	70.0	SW846 8260B	9/16/19 17:00	PDK	9/22/19 19:22	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	70.0	SW846 8260B	9/16/19 17:00	PDK	9/22/19 19:22	PDK	A
Naphthalene	ND		ug/kg	140	SW846 8260B	9/16/19 17:00	PDK	9/22/19 19:22	PDK	A
Toluene	4520		ug/kg	70.0	SW846 8260B	9/16/19 17:00	PDK	9/22/19 19:22	PDK	A
Total Xylenes	3490		ug/kg	210	SW846 8260B	9/16/19 17:00	PDK	9/22/19 19:22	PDK	A
1,2,4-Trimethylbenzene	589		ug/kg	70.0	SW846 8260B	9/16/19 17:00	PDK	9/22/19 19:22	PDK	A
1,3,5-Trimethylbenzene	174		ug/kg	70.0	SW846 8260B	9/16/19 17:00	PDK	9/22/19 19:22	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	129		%	71 - 146	SW846 8260B	9/16/19 17:00	PDK	9/22/19 19:22	PDK	A
4-Bromofluorobenzene (S)	126		%	46 - 138	SW846 8260B	9/16/19 17:00	PDK	9/22/19 19:22	PDK	A
Dibromofluoromethane (S)	110		%	42 - 143	SW846 8260B	9/16/19 17:00	PDK	9/22/19 19:22	PDK	A
Toluene-d8 (S)	133		%	54 - 141	SW846 8260B	9/16/19 17:00	PDK	9/22/19 19:22	PDK	A
WET CHEMISTRY										
Moisture	21.3		%	0.1	S2540G-11			9/19/19 08:10	AXD	
Total Solids	78.7		%	0.1	S2540G-11			9/19/19 08:10	AXD	



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Report ID: 3058339 - 9/26/2019

ANALYTICAL RESULTS

Workorder: 3058339 UTS

Lab ID: 3058339006

Sample ID: SB-11-25

Date Collected: 9/17/2019 09:30

Matrix: Solid

Date Received: 9/17/2019 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	188		ug/kg	59.6	SW846 8260B	9/17/19 09:30	PDK	9/22/19 19:44	PDK	A
Ethylbenzene	ND		ug/kg	59.6	SW846 8260B	9/17/19 09:30	PDK	9/22/19 19:44	PDK	A
Isopropylbenzene	ND		ug/kg	59.6	SW846 8260B	9/17/19 09:30	PDK	9/22/19 19:44	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	59.6	SW846 8260B	9/17/19 09:30	PDK	9/22/19 19:44	PDK	A
Naphthalene	ND		ug/kg	119	SW846 8260B	9/17/19 09:30	PDK	9/22/19 19:44	PDK	A
Toluene	76.6		ug/kg	59.6	SW846 8260B	9/17/19 09:30	PDK	9/22/19 19:44	PDK	A
Total Xylenes	303		ug/kg	179	SW846 8260B	9/17/19 09:30	PDK	9/22/19 19:44	PDK	A
1,2,4-Trimethylbenzene	68.8		ug/kg	59.6	SW846 8260B	9/17/19 09:30	PDK	9/22/19 19:44	PDK	A
1,3,5-Trimethylbenzene	ND		ug/kg	59.6	SW846 8260B	9/17/19 09:30	PDK	9/22/19 19:44	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	110		%	71 - 146	SW846 8260B	9/17/19 09:30	PDK	9/22/19 19:44	PDK	A
4-Bromofluorobenzene (S)	112		%	46 - 138	SW846 8260B	9/17/19 09:30	PDK	9/22/19 19:44	PDK	A
Dibromofluoromethane (S)	95.7		%	42 - 143	SW846 8260B	9/17/19 09:30	PDK	9/22/19 19:44	PDK	A
Toluene-d8 (S)	117		%	54 - 141	SW846 8260B	9/17/19 09:30	PDK	9/22/19 19:44	PDK	A
WET CHEMISTRY										
Moisture	23.9		%	0.1	S2540G-11			9/19/19 08:10	AXD	
Total Solids	76.1		%	0.1	S2540G-11			9/19/19 08:10	AXD	



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Report ID: 3058339 - 9/26/2019

ANALYTICAL RESULTS

Workorder: 3058339 UTS

Lab ID: 3058339007

Sample ID: SB-11-54

Date Collected: 9/17/2019 12:00

Matrix: Solid

Date Received: 9/17/2019 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	72.2		ug/kg	50.8	SW846 8260B	9/17/19 12:00	PDK	9/22/19 20:06	PDK	A
Ethylbenzene	295		ug/kg	50.8	SW846 8260B	9/17/19 12:00	PDK	9/22/19 20:06	PDK	A
Isopropylbenzene	ND		ug/kg	50.8	SW846 8260B	9/17/19 12:00	PDK	9/22/19 20:06	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	50.8	SW846 8260B	9/17/19 12:00	PDK	9/22/19 20:06	PDK	A
Naphthalene	ND		ug/kg	102	SW846 8260B	9/17/19 12:00	PDK	9/22/19 20:06	PDK	A
Toluene	350		ug/kg	50.8	SW846 8260B	9/17/19 12:00	PDK	9/22/19 20:06	PDK	A
Total Xylenes	1660		ug/kg	152	SW846 8260B	9/17/19 12:00	PDK	9/22/19 20:06	PDK	A
1,2,4-Trimethylbenzene	564		ug/kg	50.8	SW846 8260B	9/17/19 12:00	PDK	9/22/19 20:06	PDK	A
1,3,5-Trimethylbenzene	187		ug/kg	50.8	SW846 8260B	9/17/19 12:00	PDK	9/22/19 20:06	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	125		%	71 - 146	SW846 8260B	9/17/19 12:00	PDK	9/22/19 20:06	PDK	A
4-Bromofluorobenzene (S)	126		%	46 - 138	SW846 8260B	9/17/19 12:00	PDK	9/22/19 20:06	PDK	A
Dibromofluoromethane (S)	111		%	42 - 143	SW846 8260B	9/17/19 12:00	PDK	9/22/19 20:06	PDK	A
Toluene-d8 (S)	133		%	54 - 141	SW846 8260B	9/17/19 12:00	PDK	9/22/19 20:06	PDK	A
WET CHEMISTRY										
Moisture	10.8		%	0.1	S2540G-11			9/19/19 08:10	AXD	
Total Solids	89.2		%	0.1	S2540G-11			9/19/19 08:10	AXD	



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Report ID: 3058339 - 9/26/2019

ANALYTICAL RESULTS

Workorder: 3058339 UTS

Lab ID: 3058339008

Sample ID: SB-12-19

Date Collected: 9/17/2019 13:30

Matrix: Solid

Date Received: 9/17/2019 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	4330		ug/kg	315	SW846 8260B	9/17/19 13:30	PDK	9/22/19 21:55	PDK	A
Ethylbenzene	12700		ug/kg	315	SW846 8260B	9/17/19 13:30	PDK	9/22/19 21:55	PDK	A
Isopropylbenzene	1470		ug/kg	315	SW846 8260B	9/17/19 13:30	PDK	9/22/19 21:55	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	315	SW846 8260B	9/17/19 13:30	PDK	9/22/19 21:55	PDK	A
Naphthalene	3370		ug/kg	630	SW846 8260B	9/17/19 13:30	PDK	9/22/19 21:55	PDK	A
Toluene	38500		ug/kg	315	SW846 8260B	9/17/19 13:30	PDK	9/22/19 21:55	PDK	A
Total Xylenes	73900		ug/kg	946	SW846 8260B	9/17/19 13:30	PDK	9/22/19 21:55	PDK	A
1,2,4-Trimethylbenzene	28400		ug/kg	315	SW846 8260B	9/17/19 13:30	PDK	9/22/19 21:55	PDK	A
1,3,5-Trimethylbenzene	8770		ug/kg	315	SW846 8260B	9/17/19 13:30	PDK	9/22/19 21:55	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	136		%	71 - 146	SW846 8260B	9/17/19 13:30	PDK	9/22/19 21:55	PDK	A
4-Bromofluorobenzene (S)	123		%	46 - 138	SW846 8260B	9/17/19 13:30	PDK	9/22/19 21:55	PDK	A
Dibromofluoromethane (S)	110		%	42 - 143	SW846 8260B	9/17/19 13:30	PDK	9/22/19 21:55	PDK	A
Toluene-d8 (S)	133		%	54 - 141	SW846 8260B	9/17/19 13:30	PDK	9/22/19 21:55	PDK	A
WET CHEMISTRY										
Moisture	21.2		%	0.1	S2540G-11			9/19/19 08:10	AXD	
Total Solids	78.8		%	0.1	S2540G-11			9/19/19 08:10	AXD	



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Report ID: 3058339 - 9/26/2019

ANALYTICAL RESULTS

Workorder: 3058339 UTS

Lab ID: 3058339009

Sample ID: SB-12-25

Date Collected: 9/17/2019 14:30

Matrix: Solid

Date Received: 9/17/2019 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	34200		ug/kg	922	SW846 8260B	9/17/19 14:30	PDK	9/22/19 22:17	PDK	A
Ethylbenzene	37000		ug/kg	922	SW846 8260B	9/17/19 14:30	PDK	9/22/19 22:17	PDK	A
Isopropylbenzene	4260		ug/kg	922	SW846 8260B	9/17/19 14:30	PDK	9/22/19 22:17	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	922	SW846 8260B	9/17/19 14:30	PDK	9/22/19 22:17	PDK	A
Naphthalene	7320		ug/kg	1840	SW846 8260B	9/17/19 14:30	PDK	9/22/19 22:17	PDK	A
Toluene	166000		ug/kg	922	SW846 8260B	9/17/19 14:30	PDK	9/22/19 22:17	PDK	A
Total Xylenes	220000		ug/kg	2770	SW846 8260B	9/17/19 14:30	PDK	9/22/19 22:17	PDK	A
1,2,4-Trimethylbenzene	72000		ug/kg	922	SW846 8260B	9/17/19 14:30	PDK	9/22/19 22:17	PDK	A
1,3,5-Trimethylbenzene	22400		ug/kg	922	SW846 8260B	9/17/19 14:30	PDK	9/22/19 22:17	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	146		%	71 - 146	SW846 8260B	9/17/19 14:30	PDK	9/22/19 22:17	PDK	A
4-Bromofluorobenzene (S)	122		%	46 - 138	SW846 8260B	9/17/19 14:30	PDK	9/22/19 22:17	PDK	A
Dibromofluoromethane (S)	104		%	42 - 143	SW846 8260B	9/17/19 14:30	PDK	9/22/19 22:17	PDK	A
Toluene-d8 (S)	125		%	54 - 141	SW846 8260B	9/17/19 14:30	PDK	9/22/19 22:17	PDK	A
WET CHEMISTRY										
Moisture	32.2		%	0.1	S2540G-11			9/19/19 08:10	AXD	
Total Solids	67.8		%	0.1	S2540G-11			9/19/19 08:10	AXD	



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Report ID: 3058339 - 9/26/2019

ANALYTICAL RESULTS

Workorder: 3058339 UTS

Lab ID: 3058339010

Sample ID: SB-12-31

Date Collected: 9/17/2019 15:30

Matrix: Solid

Date Received: 9/17/2019 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	9480		ug/kg	69.9	SW846 8260B	9/17/19 15:30	PDK	9/22/19 20:28	PDK	A
Ethylbenzene	1040		ug/kg	69.9	SW846 8260B	9/17/19 15:30	PDK	9/22/19 20:28	PDK	A
Isopropylbenzene	ND		ug/kg	69.9	SW846 8260B	9/17/19 15:30	PDK	9/22/19 20:28	PDK	A
Methyl t-Butyl Ether	127		ug/kg	69.9	SW846 8260B	9/17/19 15:30	PDK	9/22/19 20:28	PDK	A
Naphthalene	ND		ug/kg	140	SW846 8260B	9/17/19 15:30	PDK	9/22/19 20:28	PDK	A
Toluene	12100		ug/kg	350	SW846 8260B	9/17/19 15:30	JTH	9/25/19 05:51	PDK	A
Total Xylenes	5870		ug/kg	210	SW846 8260B	9/17/19 15:30	PDK	9/22/19 20:28	PDK	A
1,2,4-Trimethylbenzene	648		ug/kg	69.9	SW846 8260B	9/17/19 15:30	PDK	9/22/19 20:28	PDK	A
1,3,5-Trimethylbenzene	169		ug/kg	69.9	SW846 8260B	9/17/19 15:30	PDK	9/22/19 20:28	PDK	A
Surrogate Recoveries										
1,2-Dichloroethane-d4 (S)	131		%	71 - 146	SW846 8260B	9/17/19 15:30	PDK	9/22/19 20:28	PDK	A
1,2-Dichloroethane-d4 (S)	85.4		%	71 - 146	SW846 8260B	9/17/19 15:30	JTH	9/25/19 05:51	PDK	A
4-Bromofluorobenzene (S)	96.9		%	46 - 138	SW846 8260B	9/17/19 15:30	JTH	9/25/19 05:51	PDK	A
4-Bromofluorobenzene (S)	130		%	46 - 138	SW846 8260B	9/17/19 15:30	PDK	9/22/19 20:28	PDK	A
Dibromofluoromethane (S)	74.7		%	42 - 143	SW846 8260B	9/17/19 15:30	JTH	9/25/19 05:51	PDK	A
Dibromofluoromethane (S)	112		%	42 - 143	SW846 8260B	9/17/19 15:30	PDK	9/22/19 20:28	PDK	A
Toluene-d8 (S)	94.1		%	54 - 141	SW846 8260B	9/17/19 15:30	JTH	9/25/19 05:51	PDK	A
Toluene-d8 (S)	132		%	54 - 141	SW846 8260B	9/17/19 15:30	PDK	9/22/19 20:28	PDK	A
WET CHEMISTRY										
Moisture	23.1		%	0.1	S2540G-11			9/19/19 08:10	AXD	
Total Solids	76.9		%	0.1	S2540G-11			9/19/19 08:10	AXD	



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Report ID: 3058339 - 9/26/2019

ANALYTICAL RESULTS

Workorder: 3058339 UTS

Lab ID: 3058339011

Sample ID: SB-12-50

Date Collected: 9/17/2019 17:00

Matrix: Solid

Date Received: 9/17/2019 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	5250		ug/kg	73.4	SW846 8260B	9/17/19 17:00	TMP	9/23/19 18:21	TMP	A
Ethylbenzene	770		ug/kg	73.4	SW846 8260B	9/17/19 17:00	TMP	9/23/19 18:21	TMP	A
Isopropylbenzene	ND		ug/kg	73.4	SW846 8260B	9/17/19 17:00	TMP	9/23/19 18:21	TMP	A
Methyl t-Butyl Ether	693		ug/kg	73.4	SW846 8260B	9/17/19 17:00	TMP	9/23/19 18:21	TMP	A
Naphthalene	ND		ug/kg	147	SW846 8260B	9/17/19 17:00	TMP	9/23/19 18:21	TMP	A
Toluene	6710		ug/kg	73.4	SW846 8260B	9/17/19 17:00	TMP	9/23/19 18:21	TMP	A
Total Xylenes	3770		ug/kg	220	SW846 8260B	9/17/19 17:00	TMP	9/23/19 18:21	TMP	A
1,2,4-Trimethylbenzene	495		ug/kg	73.4	SW846 8260B	9/17/19 17:00	TMP	9/23/19 18:21	TMP	A
1,3,5-Trimethylbenzene	122		ug/kg	73.4	SW846 8260B	9/17/19 17:00	TMP	9/23/19 18:21	TMP	A
Surrogate Recoveries										
	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	84.8		%	71 - 146	SW846 8260B	9/17/19 17:00	TMP	9/23/19 18:21	TMP	A
4-Bromofluorobenzene (S)	92.8		%	46 - 138	SW846 8260B	9/17/19 17:00	TMP	9/23/19 18:21	TMP	A
Dibromofluoromethane (S)	73.6		%	42 - 143	SW846 8260B	9/17/19 17:00	TMP	9/23/19 18:21	TMP	A
Toluene-d8 (S)	96.3		%	54 - 141	SW846 8260B	9/17/19 17:00	TMP	9/23/19 18:21	TMP	A
WET CHEMISTRY										
Moisture	29.0		%	0.1	S2540G-11			9/19/19 08:10	AXD	
Total Solids	71.0		%	0.1	S2540G-11			9/19/19 08:10	AXD	


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ANALYTICAL RESULTS

Workorder: 3058339 UTS

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3058339004	1	SB-10-24	SW846 8260B	1,2-Dichloroethane-d4
The surrogate 1,2-Dichloroethane-d4 for method SW846 8260B was outside of control limits. The % Recovery was reported as 157 and the control limits were 71 to 146. This result was reported at a dilution of 50.				
3058339004	2	SB-10-24	SW846 8260B	Toluene-d8
The surrogate Toluene-d8 for method SW846 8260B was outside of control limits. The % Recovery was reported as 166 and the control limits were 54 to 141. This result was reported at a dilution of 50.				
3058339004	3	SB-10-24	SW846 8260B	4-Bromofluorobenzene
The surrogate 4-Bromofluorobenzene for method SW846 8260B was outside of control limits. The % Recovery was reported as 162 and the control limits were 46 to 138. This result was reported at a dilution of 50.				

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Report ID: 3058339 - 9/26/2019

301 Fulling Mill Road
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS
ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

COC #:

ALS Quot

W.O. Temp: 5 Therm ID: 402
Analyst Initials:

Courier/Tracking #:

Purchase Order #:

Project Comments:

ALS Field Services: ☐ Pickup ☐ Labor
☐ Composite Sampling ☐ Rental Equipment
Other: _____

Sample/COC Comments

Thursday, September 28, 2017 10:09:41 PM
Page 17 of 18

ALS

Client Name:		Address:		Contact:		Phone:		Project Name:		Bill To:		TAT		Date Required:		Email:		Fax:	
County Env Assoc		PO Box 224		John Van Wagoner		610-469-1654		VTS		same		☒ Formal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.		Approved?					
Container Type:		Container Size:		Parameters:		Analyses/Method Requested:		W.O. Temp:		Therm ID:		Analyst Initials:		Courier/Tracking #:		Purchase Order #:		Project Comments:	
glass glass glass		Vial vial 902		DI M2018 N218				5		402									
Sample Description/Location		Date Collected		Time		G/C		Matrix		Enter Number of Containers Per Sample or Field Results Below.		Sample/COC Comments							
(as it will appear on the lab report)		m/d/yyyy		h:m															
1	SB-9-16	9/16/19	9:30	G	SO	2	1	1											
2	SB-9-21		11:00			2	1	1											
3	SB-9-50		13:30			2	1	1											
4	SB-10-24		15:30			2	1	1											
5	SB-10-48		17:00			2	1	1											
6	SB-11-25	9/17/19	9:30			2	1	1											
7	SB-11-54		12:00			2	1	1											
8	SB-12-19		13:30			2	1	1											
9	SB-12-25		14:30			2	1	1											
10	SB-12-31		15:30			2	1	1											
SAMPLER COMMENTS:		Date		Time		Received By / Company Name		Date		Time									
John Van Wagoner		9-17-19		17:40		County Environmental Assoc		9-17-19		17:40									
Relinquished By / Company Name		Date		Time		Received By / Company Name		Date		Time									
John Van Wagoner		9-17-19		17:40		County Environmental Assoc		9-17-19		17:40									
Data Deliverables		Standard		CLP-Rn		USACE/DOO		Special Processing		State Samples Collected in									
								USACE		NY									
										NJ									
										PA									
Reportable to PADEP?		Yes		No		Sample Disposal		Lab		Special									
PWSID #																			
EDDS: Format Type:																			

ALSO SHIPPING ADDRESS: 301 Pulling Mill Road, Middletown, PA 17055

Row 04/19

ANALYTICAL RESULTS

Workorder: 3058737 UTS

Lab ID: 3058737001

Sample ID: SB-13-21

Date Collected: 9/18/2019 09:00

Matrix: Solid

Date Received: 9/18/2019 22:07

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	60.8	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
Ethylbenzene	ND		ug/kg	60.8	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
Isopropylbenzene	ND		ug/kg	60.8	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	60.8	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
Naphthalene	ND		ug/kg	60.8	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
Toluene	ND		ug/kg	122	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
Total Xylenes	ND		ug/kg	60.8	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
1,2,4-Trimethylbenzene	ND		ug/kg	182	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
1,3,5-Trimethylbenzene	ND		ug/kg	60.8	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
Surrogate Recoveries				60.8	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	103		%	71 - 146	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
4-Bromofluorobenzene (S)	113		%	46 - 138	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
Dibromofluoromethane (S)	93.5		%	42 - 143	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
Toluene-d8 (S)	116		%	54 - 141	SW846 8260B	9/18/19 09:00	JTH	9/25/19 00:23	PDK	A
WET CHEMISTRY										
Moisture	23.3		%	0.1	S2540G-11			9/20/19 08:45	AXD	
Total Solids	76.7		%	0.1	S2540G-11			9/20/19 08:45	AXD	



Jessica Lee Smith
Project Coordinator

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Report ID: 3058737 - 9/26/2019

ANALYTICAL RESULTS

Workorder: 3058737 UTS

Lab ID: 3058737002

Sample ID: SB-13-52

Date Collected: 9/18/2019 10:30

Matrix: Solid

Date Received: 9/18/2019 22:07

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	2620		ug/kg	81.5	SW846 8260B	9/18/19 10:30	JTH	9/25/19 00:45	PDK	A
Ethylbenzene	687		ug/kg	81.5	SW846 8260B	9/18/19 10:30	JTH	9/25/19 00:45	PDK	A
Isopropylbenzene	ND		ug/kg	81.5	SW846 8260B	9/18/19 10:30	JTH	9/25/19 00:45	PDK	A
Methyl t-Butyl Ether	729		ug/kg	81.5	SW846 8260B	9/18/19 10:30	JTH	9/25/19 00:45	PDK	A
Naphthalene	ND		ug/kg	163	SW846 8260B	9/18/19 10:30	JTH	9/25/19 00:45	PDK	A
Toluene	5430		ug/kg	81.5	SW846 8260B	9/18/19 10:30	JTH	9/25/19 00:45	PDK	A
Total Xylenes	3450		ug/kg	245	SW846 8260B	9/18/19 10:30	JTH	9/25/19 00:45	PDK	A
1,2,4-Trimethylbenzene	609		ug/kg	81.5	SW846 8260B	9/18/19 10:30	JTH	9/25/19 00:45	PDK	A
1,3,5-Trimethylbenzene	146		ug/kg	81.5	SW846 8260B	9/18/19 10:30	JTH	9/25/19 00:45	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	92.3		%	71 - 146	SW846 8260B	9/18/19 10:30	JTH	9/25/19 00:45	PDK	A
4-Bromofluorobenzene (S)	101		%	46 - 138	SW846 8260B	9/18/19 10:30	JTH	9/25/19 00:45	PDK	A
Dibromofluoromethane (S)	78.5		%	42 - 143	SW846 8260B	9/18/19 10:30	JTH	9/25/19 00:45	PDK	A
Toluene-d8 (S)	103		%	54 - 141	SW846 8260B	9/18/19 10:30	JTH	9/25/19 00:45	PDK	A
WET CHEMISTRY										
Moisture	23.7		%	0.1	S2540G-11			9/20/19 08:45	AXD	
Total Solids	76.3		%	0.1	S2540G-11			9/20/19 08:45	AXD	



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Vancouver · Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey

Report ID: 3058737 - 9/26/2019

ANALYTICAL RESULTS

Workorder: 3058737 UTS

Lab ID: 3058737003

Sample ID: SB-14-21

Date Collected: 9/18/2019 12:00

Matrix: Solid

Date Received: 9/18/2019 22:07

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	64.6	SW846 8260B	9/18/19 12:00	JTH	9/25/19 01:07	PDK	A
Ethylbenzene	ND		ug/kg	64.6	SW846 8260B	9/18/19 12:00	JTH	9/25/19 01:07	PDK	A
Isopropylbenzene	ND		ug/kg	64.6	SW846 8260B	9/18/19 12:00	JTH	9/25/19 01:07	PDK	A
Methyl t-Butyl Ether	ND		ug/kg	64.6	SW846 8260B	9/18/19 12:00	JTH	9/25/19 01:07	PDK	A
Naphthalene	ND		ug/kg	129	SW846 8260B	9/18/19 12:00	JTH	9/25/19 01:07	PDK	A
Toluene	ND		ug/kg	64.6	SW846 8260B	9/18/19 12:00	JTH	9/25/19 01:07	PDK	A
Total Xylenes	ND		ug/kg	194	SW846 8260B	9/18/19 12:00	JTH	9/25/19 01:07	PDK	A
1,2,4-Trimethylbenzene	ND		ug/kg	64.6	SW846 8260B	9/18/19 12:00	JTH	9/25/19 01:07	PDK	A
1,3,5-Trimethylbenzene	ND		ug/kg	64.6	SW846 8260B	9/18/19 12:00	JTH	9/25/19 01:07	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	100		%	71 - 146	SW846 8260B	9/18/19 12:00	JTH	9/25/19 01:07	PDK	A
4-Bromofluorobenzene (S)	108		%	46 - 138	SW846 8260B	9/18/19 12:00	JTH	9/25/19 01:07	PDK	A
Dibromofluoromethane (S)	90.7		%	42 - 143	SW846 8260B	9/18/19 12:00	JTH	9/25/19 01:07	PDK	A
Toluene-d8 (S)	114		%	54 - 141	SW846 8260B	9/18/19 12:00	JTH	9/25/19 01:07	PDK	A
WET CHEMISTRY										
Moisture	18.2		%	0.1	S2540G-11					
Total Solids	81.8		%	0.1	S2540G-11			9/20/19 08:45	AXD	
								9/20/19 08:45	AXD	



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Report ID: 3058737 - 9/26/2019

ANALYTICAL RESULTS

Workorder: 3058737 UTS

Lab ID: 3058737004
Sample ID: SB-14-52

Date Collected: 9/18/2019 14:00 Matrix: Solid
Date Received: 9/18/2019 22:07

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	656		ug/kg	68.0	SW846 8260B	9/18/19 14:00	JTH	9/25/19 04:46	PDK	A
Ethylbenzene	238		ug/kg	68.0	SW846 8260B	9/18/19 14:00	JTH	9/25/19 04:46	PDK	A
Isopropylbenzene	ND		ug/kg	68.0	SW846 8260B	9/18/19 14:00	JTH	9/25/19 04:46	PDK	A
Methyl t-Butyl Ether	1460		ug/kg	68.0	SW846 8260B	9/18/19 14:00	JTH	9/25/19 04:46	PDK	A
Naphthalene	542		ug/kg	136	SW846 8260B	9/18/19 14:00	JTH	9/25/19 04:46	PDK	A
Toluene	1060		ug/kg	68.0	SW846 8260B	9/18/19 14:00	JTH	9/25/19 04:46	PDK	A
Total Xylenes	946		ug/kg	204	SW846 8260B	9/18/19 14:00	JTH	9/25/19 04:46	PDK	A
1,2,4-Trimethylbenzene	344		ug/kg	68.0	SW846 8260B	9/18/19 14:00	JTH	9/25/19 04:46	PDK	A
1,3,5-Trimethylbenzene	96.1		ug/kg	68.0	SW846 8260B	9/18/19 14:00	JTH	9/25/19 04:46	PDK	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	80.5		%	71 - 146	SW846 8260B	9/18/19 14:00	JTH	9/25/19 04:46	PDK	A
4-Bromofluorobenzene (S)	90.7		%	46 - 138	SW846 8260B	9/18/19 14:00	JTH	9/25/19 04:46	PDK	A
Dibromofluoromethane (S)	68.1		%	42 - 143	SW846 8260B	9/18/19 14:00	JTH	9/25/19 04:46	PDK	A
Toluene-d8 (S)	96.1		%	54 - 141	SW846 8260B	9/18/19 14:00	JTH	9/25/19 04:46	PDK	A
WET CHEMISTRY										
Moisture	28.8		%	0.1	S2540G-11			9/20/19 08:45	AXD	
Total Solids	71.2		%	0.1	S2540G-11			9/20/19 08:45	AXD	


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Report ID: 3058737 - 9/26/2019



301 Pulling Mill Road
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS
ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

COC
ALS



of

Client Name: COUNTRY ENV ASSOC.

Address: PO Box 224
St. Peters, PA 19470

Contact: John Van Wagner

Phone: 610-469-6540

Project Name: UTS

Bill To: same

TAT ☒ Normal-Standard TAT is 10-12 business days.
☐ Rush-Subject to ALS approval and surcharges.

Date Required: _____ Approved? _____

Email? ☐ -Y

Fax? ☐ -Y No: _____

Sample Description/Location
(as it will appear on the lab report)

Date Collected
(mm/dd/yy)

Time
(hh:mm)

G or C

Matrix

Notes

Enter Number of Containers Per Sample or Field Results Below.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

W.O. Temp: 60 Therm ID: 402
Analyst Initials: SAS

Courier/Tracking #:

Purchase Order #:

Project Comments:

ALS Field Services: ☐ Pickup ☐ Labor
☐ Composite Sampling ☐ Rental Equipment
Other: _____

Sampler/COC Comments

SAMPLED BY (Please Print):

John Van Wagner

Sampler Comments:

Relinquished By/Company Name

Date

Time

Received By/Company Name

ALS

Date

Time

2-18-19 1743

2-18-19 1743

2-18-19 1743

2-18-19 1743

2-18-19 1743

Reportable to PADEP?

Yes ☐ No ☐

PWSID #

EODS: Formet Type-

other

Standard

CLP-ite

USACE/DOD

Special Processing

USACE

State

Samples

Collected In

NY

NJ

PA

Sample Disposal

Lab

Special

other

G=Gravel C=Composite

M=Matrix A=Air CW=Drinking Water GW=Groundwater OL=Oil O=Other Liquid SL=Sediment SO=Soil WP=Waste W=Water

ALS SHIPPING ADDRESS: 301 Pulling Mill Road, Middletown, PA 17057

Rev 04/19